MANITOBA ENVIRONMENT AND CLIMATE CHANGE

OAM Subprogram – Sherridon Mine Site 2023 Water Quality Summary Report

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EXECUTIVE SUMMARY

Kontzamanis Graumann Smith MacMillan Inc. (KGS Group) was contracted by the Orphaned and Abandoned Mines (OAM) Program of Manitoba Environment and Climate Change (MECC) for engineering services for the management of the Sherridon Mine Site. The 2023 scope of services for the Sherridon Mine Site included surface water quality monitoring on a biweekly basis during open water season within the following water bodies: Sherlett Creek, Camp Lake and Camp Lake discharge, Mixing Zone within Cold Lake, and Cold Lake (part of Kississing Lake). Additionally, spring and fall groundwater monitoring and sampling events at the 12 on-site monitoring wells were completed, as well as additional Sherlett Creek sampling during the two groundwater sampling trips was included in the 2023 monitoring program.

This report describes and provides the results of the 2023 water quality monitoring program for the project. The 2023 water quality monitoring program was the second year of monitoring following the completion of construction activities in August 2021 and represents the fifth full year of Sherlett Creek flow through Camp Lake in the absence of lime treatment.

The Sherridon Reclamation Project was initiated in 2006 with the commissioning of a reclamation plan and associated design for the site by the Province of Manitoba, which included four phases. Before reclamation was initiated, a baseline environmental study was performed in 2008 to assess site conditions prior to the start of reclamation activities, in areas affected and unaffected by the historical discharge from Camp Lake. From 2009 to 2012, reclamation activities commenced at the site and consisted of the relocation of 47 hectares of Sherridon tailings to Camp Lake, and the diversion of Sherlett Creek around Camp Lake to enable the deposition of tailings. From 2012 to 2021, reclamation activities involved the removal of remnant mine waste to decrease acid-generating sources contributing to the degradation of water quality within Camp Lake, as well as monitoring the water quality within Camp Lake to target further reclamation works. Batch lime treatments were used to neutralize pH and manage water quality until August 2018, when flow from Sherlett Creek was reestablished. Water quality modelling completed for the Sherridon Mine Site projects that water quality within Camp Lake will approach that of the inflowing Sherlett Creek over a three to four year period. The model was based on several input terms, including precipitation and flow inputs, which can be variable and may affect the accuracy of the timeline.

Surface water quality in Manitoba is evaluated using the Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG), which is composed of Tier I standards, Tier II objectives, and Tier III guidelines. For the Sherridon Mine Site, the water sampling results are compared against the MWQSOG Tier II objectives and Tier III guidelines. The water sampling results for Camp Lake and the Camp Lake discharge are also compared to the Camp Lake Water Quality Performance Objectives (CLWQPO), which were developed within the Adaptive Management Plan (AMP) that governs the post-construction and post-closure periods of the reclamation project. The CLWQPO represents proposed targets that have been estimated to be achieved within three to four years post-construction considering the influent from Sherlett Creek is maintained and the system operated as designed. Sherlett Creek and Cold Lake water sampling results are compared against the MWQSOG Tier II objectives and Tier III guidelines.

Since monitoring began in 2017, distinct correlations were observed between concentrations of key water quality parameters in Camp Lake and the amount of precipitation, and subsequently, flow through Sherlett

Creek. Compared to the last 10 years, the 2022-2023 water generating year was the driest year and the third consecutive year of lower-than-average precipitation in the region. The 2023 open water sampling season was also deficient in heavy precipitation events. Consequently, the flow through Sherlett Creek was negligible from late July to the end of open water monitoring in mid-late October.

In 2023, a condition was present on Camp Lake where the water level on the lake was artificially raised by the addition of stop logs at the discharge weir. Based on a review of available photographs and water levels measured at the discharge weir, it is estimated that stop logs were in place at the start of the open water monitoring on May 16, 2023. A total of three stop logs are estimated to have been in place on this date based on available information. In combination with the reduced precipitation relative to previous years, the installation of the stop logs resulted in reduced inflows from Sherlett Creek into Camp Lake. Additionally, an estimated two stop logs were added sometime between the July 11 and July 25, 2023 monitoring events. The additional stop logs ended the discharge flow over the Camp Lake weir. Frequent beaver activity was also present at the Notched Cofferdam beginning on July 25 and continuing until the end of monitoring which caused further restricted flow into Camp Lake.

Sherlett Creek represents the background surface water quality before the creek inflows into Camp Lake. Sherlett Creek is essential to the water quality within Camp Lake for several reasons including the continuous supply of alkalinity for neutralizing pH within Camp Lake. In 2023, field pH levels and alkalinity concentrations at the background monitoring station on Sherlett Creek (SC-1) were consistent with previous years. As creek flows became reduced in late summer, field pH levels declined slightly whereas alkalinity concentrations increased (up to 36 mg $CaCO_3$/L compared to 31 mg $CaCO_3$/L in 2022). In accordance with the requirements specified in the AMP, sulphate was added as a key water quality parameter for analysis in 2023. Sulphate has not been analyzed in any other monitoring years except for 2021. Sulphate concentrations in 2023 gradually increased throughout the open water season which is consistent with 2021 results. Total aluminum concentrations were similar to previous years and were below MWQSOG Tier III guidelines except for one sampling event on July 11, 2023. Total iron concentrations were below MWQSOG Tier III guidelines until low flow conditions between July and October where concentrations measured up to 0.52 mg/L (MWQSOG Tier III guideline is 0.30 mg/L). Total suspended solids (TSS) and turbidity results in 2023 showed no seasonal increase during low flow. Consistent since 2017, total cadmium, copper, and zinc concentrations were above their respective MWQSOG Tier II objectives for most of the 2023 open water sampling events. Overall, the metal concentrations at all Sherlett Creek stations were slightly higher in 2023 relative to 2022 but consistent with 2021 concentrations, suggesting that the decreased flows in Sherlett Creek for the third consecutive year may be affecting metal concentrations within the creek.

An important factor to consider in understanding water quality in Camp Lake and its potential effect on water quality in Cold Lake is the magnitude of inflow from Sherlett Creek entering the lake. The winter sampling event completed on February 14, 2023 was the second winter sampling event where water quality did not substantially improve under ice cover, which is attributed to the substantially reduced flows from Sherlett Creek observed in late summer through to fall of 2022. The result of the higher concentrations in winter were starting concentrations in spring that were similar to or slightly higher than concentrations measured during previous springs for many of the key total metals, including aluminum, cadmium, copper, and zinc. A comparison of metal concentrations between winter 2022/2023 and spring 2023 showed that, with the exception of cadmium, all key metals increased, but the increases were generally lower than previous years,

which suggests that runoff had less of an effect on metal concentrations during spring melt. From spring to mid-summer, concentrations of TSS, turbidity, and the key total metals decreased due to maintained flow from Sherlett Creek into Camp Lake until late July, after which concentrations plateaued or slightly increased until the end of open water sampling. Compared to 2022, the increases observed in fall 2023 were on a much lesser scale for turbidity and most of the key metals. Field pH measured below the CLWQPO throughout the open water season except for some stations on October 17, 2023. Turbidity measurements, as well as total iron concentrations, were above the CLWQPO during all sampling events, whereas TSS remained well below the CLWQPO. Sulphate concentrations were generally higher than 2021 results and rapidly increased through the low flow period from July to October. Total aluminum concentrations in all lake basins dropped below the CLWQPO by the end of May and remained below the CLWQPO until the end of open water sampling. At EB-2, concentrations were above the CLWQPO at four additional sampling events after May 30, 2023. At most lake basins, cadmium, copper, and zinc were above the CLWQPO in spring until early August, after which they dropped below the CLWQPO and remained below until the end of open water sampling. CB-1, NB-1, EB-1, and EB-2 fluctuated between being above and below the CLWQPO through September and October.

Discharge flow over the Camp Lake weir ended by the time of the July 25, 2023 monitoring event due to the unauthorized addition of stop logs. As a result of the lack of discharge flow, water quality within Cold Lake could not have been affected by discharge water quality on and after July 25, 2023. It should be noted that samples were collected from the upstream side of the weir after July 25 due to there being no discharge over the weir. Stations included in the Cold Lake mixing zone all had field pH values within the MWQSOG Tier III guideline range throughout open water sampling, while stations located outside the mixing zone varied with some values trending below the Tier III guideline in February and May. Alkalinity concentrations at all Cold Lake stations were maintained at a consistent level throughout 2023. TSS concentrations were also consistent throughout Cold Lake and measured well below the Tier II chronic objective. In spring, turbidity levels in the mixing zone appeared to be affected by the discharge; however, the higher levels did not affect any of the Cold Lake stations outside the mixing zone. Sulphate concentrations in the mixing zone appeared to be affected by discharge concentrations in spring but decreased and stabilized after early July. Cold Lake stations outside the mixing zone were not affected by discharge concentrations. Total iron, cadmium, copper, and zinc within the mixing zone were generally higher in spring (compared to summer/fall), indicating influence from the discharge. Based on comparison to measured background concentrations for the project, water quality in Cold Lake was not affected outside of the mixing zone for any of the key metals.

Groundwater samples were collected from all 12 wells on site during the spring and fall sampling events. This was the third and fourth time that the groundwater monitoring wells have been sampled since installation in January and February 2022. The wells located in the wetland area adjacent to Sherlett Creek, in the vicinity of the historic East Mine Workings Area, showed water quality parameters potentially indicative of exposure to naturally mineralized zones or potential mine waste, with the remaining wells to the north of Sherlett Creek and southwest along the bedrock ridge showing freshwater indicators. In the bedrock wells, higher concentrations were generally measured in the fall 2023 compared to the spring 2023, but this was not observed in the overburden wells. Elevated metal concentrations were observed in most of the monitoring wells; however, no pattern to the distribution could be identified.

The detailed sampling program on Sherlett Creek included sampling of five additional stations (SC-2 to SC-6) during the two groundwater monitoring events in spring and fall. The sampling stations are located upstream

of background monitoring station SC-1, with SC-6 located at the mouth of Sherlett Lake. Previous sampling events on Sherlett Creek have indicated that there is a source of metal contamination that enters the creek downstream of SC-4, and that the highest concentrations are present during periods of lower flows. In 2023, a similar pattern of higher concentrations downstream of SC-4 was noted.

One of the primary objectives of the Sherridon Reclamation Project is to prevent further degradation of Kississing Lake water quality related to runoff and discharge of mining impacted water from the former Sherridon Mine Site. During the 2023 open water season, the mean concentrations of key total metals and key dissolved metals in the Camp Lake discharge were 71% to 96% lower and 78% to 99% lower, respectively, then concentrations measured in September 2008, and the mean discharge pH was higher (pH of 6.9 compared to 3.4) relative to September 2008.

Recommendations for 2024 include continued environmental monitoring and capturing water levels on Camp Lake, as per the requirements of the AMP. No reduction in the sampling frequency is proposed for the 2024 monitoring year.

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STATEMENT OF LIMITATIONS AND CONDITIONS

Limitations

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KGS Group prepared the geo-environmental conclusions and recommendations for this report in a professional manner using the degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. The information contained in this report is based on the information that was made available to KGS Group during the investigation and upon the services described, which were performed within the time and budgetary requirements of Manitoba Environment and Climate Change. As this report is based on the available information, some of its conclusions could be different if the information upon which it is based is determined to be false, inaccurate or contradicted by additional information. KGS Group makes no representation concerning the legal significance of its findings or the value of the property investigated.

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1.0 INTRODUCTION

Kontzamanis Graumann Smith MacMillan Inc. (KGS Group) was contracted by the Orphaned and Abandoned Mines (OAM) Program of Manitoba Environment and Climate Change for engineering services for the management of the Sherridon Mine Site under the OAM Subprogram (Stage 2 RFP #6629-2021-22). This report details the environmental monitoring conducted during the 2023 calendar year at the Sherridon Mine Site (the site).

The Sherridon Mine Site is located on the east shore of Camp Lake, approximately 65 km northeast of Flin Flon, Manitoba (Figure 1). The copper-zinc mine was operated by Sherritt Gordon Mines between 1928 and 1952. The communities of Cold Lake and Sherridon developed in the early 20th century in conjunction with development and operation of the Sherridon Mine. The mine site is since abandoned and is now the responsibility of the Province of Manitoba.

The Sherridon Mine Site underwent a site-wide reclamation that consisted of the relocation of 47 hectares of land-based tailings into Camp Lake commencing in 2009. The final reclamation activities were completed in August 2021. The project is now in post-reclamation phase. The 2023 environmental monitoring year is the second year of water sampling in the post-reclamation phase and builds on the water quality monitoring completed at the site since 2017.

1.1 Scope of Work

The scope of services to satisfy the conditions outlined in KGS Group Technical Proposal No. 20-000-1991 (dated February 12, 2021) and through subsequent Change Orders for the Sherridon Mine Site, are listed as follows:

- Environmental Monitoring (starting in 2022 at spring melt):
  - Water quality monitoring on a biweekly basis during open water season at four separate areas identified in the Terms of Reference: Sherlett Creek (background water quality; one station), Camp Lake (8 stations), Camp Lake discharge and Mixing Zone within Cold Lake (4 stations), and Cold Lake (4 stations).
  - Comparison of water quality results to the Manitoba Water Quality Standards Objectives and Guidelines (MWQSOG).
  - Two groundwater monitoring and sampling programs (spring and fall) at 12 monitoring wells on site.
  - Water sampling at additional stations on Sherlett Creek completed at the time of the groundwater sampling events.
- Preparation of an annual water quality report to include all water sampling results for that year in tabulated format, a discussion of the results relative to historical data, recommendations for future monitoring, and GPS coordinates for each sampling location.

2.0 SITE INFORMATION

2.1 Site Location

The Sherridon Mine Site (the site), is located approximately 65 km northeast of Flin Flon, Manitoba, on the east shore of Camp Lake. The communities of Cold Lake and Sherridon were developed in conjunction with the development and operation of the mine and are still populated despite the closure of the mine in 1952. The communities are accessed by the all-weather road Highway 800, which is an approximately 80 km stretch north from Provincial Trunk Highway (PTH) 10.

The post-reclamation water monitoring program includes the sampling of three distinct water bodies:

- Camp Lake (tailings lake)
- Cold Lake (arm of larger Kississing Lake)
- Sherlett Creek

A site plan for the Sherridon Mine Site is included as Figure 1.

2.2 Background Information

2.2.1 PHASING OF RECLAMATION PROJECT

The Sherridon Reclamation Project was initiated in 2006 with the commissioning of a reclamation plan and associated design for the site by the Province of Manitoba. The overall project commenced with pre-planning investigations, followed by a design study and selection of a recommended approach for long-term site management. The reclamation plan was the product of a multi-step design and approval process, in which several potentially applicable reclamation approaches were evaluated and compared, leading to recommendation of sub-aqueous disposal as the preferred approach (AMP, 2022).

The overall reclamation project includes four phases, which are described as follows (AMP, 2022):

Pre-Construction Phase – A baseline environmental study was conducted to document environmental conditions in Kississing Lake in the 2008 open water season immediately before reclamation work commenced. The pre-construction study was designed to document conditions at that time, identifying ecologically appropriate reference areas in Kississing Lake that have not been affected by the historical discharge from Camp Lake and therefore enabling quantitative assessment of the effects to date and geographic extent of effects.

Construction Phase – The on-site reclamation activities commenced in 2009 and were completed in 2021. The reclamation activities consisted of relocating the majority of the 47 hectares of acid-generating mine waste to Camp Lake, the majority of which was completed between 2009 and 2012. Construction of a cofferdam at the inlet of Sherlett Creek to Camp Lake was required to divert the creek around the lake (through a constructed drainage channel) to enable the tailings disposal to occur. Batch lime treatments were used to manage water quality in Camp Lake after the lake was refilled in 2013.

From 2012 to 2021, construction activities focused on eliminating the pockets of remnant mine waste that remained on-site and continued to contribute to the degradation of water quality within Camp Lake. Monitoring was instrumental during this phase to identify issues associated with the remaining adjacent mine waste and to target further reclamation work. Measuring water quality within Camp Lake was also important in determining the suitability of discharging the treated water from Camp Lake into Cold Lake. Controlled discharges from Camp Lake first began in 2016 and continued until the last batch application of lime in late winter 2018. Flow from Sherlett Creek was reestablished in August 2018, which eliminated the need for batch lime treatments.

Post-Construction Phase – The post construction phase is estimated to span from 2022 to 2026 on the basis of water quality modelling completed for the Sherridon Mine Site by SENES (2008). The water quality model estimated that water quality in Camp Lake will approach that of the inflowing Sherlett Creek over a 3-4 year period after the completion of site reclamation activities (SENES, 2008). The inputs to the model incorporated several factors, including precipitation (hydraulic flows) and background water quality. **Therefore, the timeline for the post-construction phase may be subject to change based on seasonal variations and/or unforeseen alterations.** The 2023 water quality monitoring year was the second year that the site was in post-construction.

Final Closure – Final closure of the site will be completed following demonstration of stable operation of the remediated site.

2.2.2 SUMMARY OF RECLAMATION WORKS

An up-to-date chronology of reclamation work at Sherridon Mine Site as detailed by DJRC (2022) is provided below:

2009 – 2012 – The bulk of the 7 million tonnes of acid-generating mine waste in the Sherridon tailings pile was relocated to the adjacent Camp Lake over the years from 2009 to 2012. The lake was refilled with water from Kississing Lake in 2013. Since remaining mine waste continued to contribute to water quality degradation in Camp Lake, water treatment was used to manage water quality in the lake until Sherlett Creek flow was returned to the lake. Water treatment plant (WTP) sludge that had been deposited in the North basin earlier in the reclamation project was a further contributor to water quality degradation.

2016 – The summer 2016 construction program removed the WTP sludge from the North basin to Trap Lake (located east of Camp Lake), and mill site and causeway waste materials were placed in Camp Lake.

2017 – No reclamation work was completed in 2017.

2018 – Work completed in 2018 included:

- Removal of mine waste adjacent to the access road in a former ore load-out area;
- Construction of a dam to isolate a Glory Hole adjacent to the South basin, where there was the potential for exchange of acid rock drainage (ARD) influenced groundwater with the South basin;
- Earthworks reinforcement and overflow spillway construction at the outlet of Fox Lake, which periodically flows south into the East basin of Camp Lake and contains submerged tailings material;
- Identification and removal of mine waste on the discharge pathway between Fox Lake and Camp Lake;
- Identification and partial removal of remnant mine waste along the north shore of the East basin of Camp Lake;

- Removal of tailings berm (constructed of mine waste) across the inlet to Camp Lake from Sherlett Creek;
- Notching of the cofferdam at the inlet of Camp Lake to restore flows of Sherlett Creek into and though Camp Lake beginning August 12, 2018; and,
  - Installation of flow limitation plates on the inlets of the diversion channel culverts to split Sherlett Creek flow between Camp Lake (normally 85% of flow) and Portage Lake/lower Sherlett Creek (normally 15% of flow).
  - Note: The splitting of flows was a change from the originally proposed project design, which involved routing the entire flow of Sherlett Creek through Camp Lake. The change was initiated as it was documented that fish species had started to use the constructed diversion channel, which prompted the local community to request that flow be maintained through the diversion upon completion of the project.

A total of approximately 15,000 m^3 of mine waste was removed in 2018.

2019 – No reclamation work was completed in 2019.

2020 – Work in 2020 focused on removal of remnant waste along the north shore of the East basin of Camp Lake and around the peninsula separating the East basin from the North basin of Camp Lake (runoff to the East basin primarily, but also to the North and Central basins). A total of approximately 35,000 m^3 of mine waste was removed in 2020.

2021 – Work in 2021 focused on completing removal of remnant mine waste adjacent to the East basin and removal of the access road. All planned construction work was completed in mid-September 2021. A total of approximately 4,000 m^3 of remaining mine waste was removed in 2021.

2022 – The 2022 monitoring year was the first year of post-reclamation monitoring.

2.2.3 WATER QUALITY PROGRAM

The environmental management requirements for managing water quality in Camp Lake have evolved considerably since their inception in 2013. At this time, discharges from Camp Lake into Cold Lake were not occurring and pH was the primary indicator of project performance. In preparation for a planned controlled discharge of treated water from Camp Lake, the sampling and analytical program was expanded in 2015 to include a wider range of water quality parameters (metals, total suspended solids, alkalinity, and toxicity). Sampling was conducted both within Camp Lake and Cold Lake.

The first controlled discharge was conducted in 2016, which triggered an expansion of the water quality program to include evaluation of data against guidelines selected for reference comparison; the Metal Mining Effluent Regulations (now the Metal and Diamond Mining Effluent Regulations (MDMER)) were selected to manage all discharged water quality. Monitoring included frequent sampling during active discharge and less frequent sampling during a period of post-discharge monitoring within Cold Lake. In 2017, further discharge quality parameters were added to the program based on the results of the 2016 discharge sampling (turbidity and iron) and addition of the MWQSOG for reference comparison (aluminum and cadmium). The sampling program included stations within Camp Lake and Cold Lake and began shortly following ice-out and continued throughout the open water season. In 2017, the mixing zone in Cold Lake was established immediately downstream of the discharge. Sampling frequency during discharge periods was increased.

Once flow from Sherlett Creek was re-established in August 2018, sampling in Camp Lake, the Camp Lake discharge, and the mixing zone was completed during the open water season on a weekly basis due to the construction activities and potential for variations in the water quality. Presently, the water quality program at Sherridon Mine occurs biweekly at seven stations within Cold Lake, nine stations within Camp Lake (including the discharge) and one station within Sherlett Creek. As the water quality improves within Camp Lake, water sampling frequency, parameter analysis, and sample locations will decrease in accordance with the AMP.

3.0 2023 ENVIRONMENTAL MONITORING PROGRAM

3.1 Biweekly Water Monitoring Program

The 2023 post-construction water monitoring program included a total of 12 water sampling events completed biweekly from May 16 to October 16, 2023. A winter sampling event was completed on February 14, 2023. Sample location, frequency, depth, and analytical parameters are detailed in Table 1.

TABLE 1: BIWEEKLY SURFACE WATER QUALITY MONITORING PROGRAM

Sample ID	Frequency	Depth	Analytical Parameters
Sherlett Creek (SC-1)	Biweekly from May 16 to October 17, 2023. Once in winter (February 14, 2023).	Surface	pH, alkalinity, total suspended solids (TSS), turbidity, sulphate, total organic carbon (TOC), dissolved organic carbon (DOC), total metals, & dissolved metals.
Sherlett Creek – Additional Stations (SC-2 to SC-6)	Sampled during the two groundwater monitoring events: June 13 & October 3, 2023.	Surface	pH, alkalinity, TSS, turbidity, sulphate, TOC, DOC, total metals, & dissolved metals.
Camp Lake (SB-1, SB-2, CB-1, CB-2, NB-1, NB-2, EB-1, and EB-2)	Biweekly from May 16 to October 17, 2023. Once in winter (February 14, 2023).	0.3 m below surface	pH, alkalinity, TSS, turbidity, sulphate, TOC, DOC, total metals, & dissolved metals.
Camp Lake Discharge [(1)]	Biweekly from May 16 to October 17, 2023. Once in winter (February 14, 2023).	Surface	pH, alkalinity, TSS, turbidity, sulphate, TOC, DOC, total metals, & dissolved metals. Toxicity – sampled every 8 weeks from May 16 to October 17, 2023.
Cold Lake Mixing Zone (CL-3, CL-7, and CL-8)	Biweekly from May 16 to October 17, 2023. Once in winter (February 14, 2023).	0.5 m above lake bottom	pH, alkalinity, TSS, turbidity, sulphate, TOC, DOC, total metals, & dissolved metals.
Cold Lake (CL-2, CL-4, CL-5, and CL-6)	Biweekly from May 16 to October 17, 2023. Once in winter (February 14, 2023).	0.5 m above lake bottom	pH, alkalinity, TSS, turbidity, sulphate, TOC, DOC, total metals, & dissolved metals.

Notes:

1. Camp Lake discharge samples were collected from the discharge flow over the weir until mid-July (July 11, 2023). Thereafter, samples were collected from the upstream side of the weir due to there being no discharge over the weir.

Field chemistry parameters including pH, temperature, electrical conductivity (EC), dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were measured at each sample location.

Water samples collected for laboratory analysis were placed in laboratory supplied containers or sterile carboys and stored immediately on ice in cooler chests for transport to Bureau Veritas (BV) Laboratory in Winnipeg, Manitoba, a Standards Council of Canada (SCC) accredited laboratory. All samples were collected using a fresh pair of disposable nitrile gloves and disinfecting methods were used on sampling equipment between sampling locations to avoid cross contamination between samples.

The water quality results for the Camp Lake stations (including Camp Lake discharge) are compared to the Camp Lake Water Quality Performance Objectives (CLWQPO) developed within the Adaptive Management Plan (Tetra Tech; final dated August 16, 2022). The objectives are target levels for water quality parameters in Camp Lake that have been estimated to be achieved within four years following completion of construction (AMP, 2022). The CLWQPO criteria were developed using the background “plus” approach for many parameters to accommodate the considerable variation in parameter concentrations that occurs in Sherlett Creek. The Adaptive Management Plan is included in Appendix A.

The water quality results for Camp Lake as well as Cold Lake and Sherlett Creek are also compared to Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG) Tier II objectives and Tier III guidelines for the Protection of Aquatic Life (updated July 2011).

3.2 Groundwater Sampling

Groundwater monitoring and sampling during the 2023 open water season included two events completed on June 13, 2023 and October 3, 2023. The groundwater sampling program included 12 monitoring wells located mainly along the north and south shores of Sherlett Creek (Figure 2). The monitoring wells were installed between January 26 and February 5, 2022 (Tetra Tech; April 27, 2022 Memo). There are five wells completed in the overburden (suffix “OB”) and seven wells completed in bedrock (suffix “BR”).

The overburden wells were installed in a wetland area south of the creek and one near the shoreline north of the creek. The distribution of these wells was to evaluate soil conditions on both sides of the creek and the potential interaction of surface water and shallow groundwater in the wetland area and a portion of Sherlett Creek previously noted to have elevated metals concentrations (discussed in Section 4.2.2). The bedrock wells were installed north and south of the creek, as well as in the historic East Mine Working Areas extending to the southeast of Sherlett Creek (Figure 2). The distribution of these monitoring wells was to assess the area of changes in groundwater quality within and away from the historic mine workings, and potential interactions with the surface water systems in the wetland and Sherlett Creek.

At the time of the June and October 2023 groundwater monitoring events, all protective steel well casings were assessed and determined to be in good condition and PVC well stick-ups had sealed protective caps, with the exception of monitoring wells MW-09-OB, MW-10-OB, and MW-11-OB. These three wells consisted only of PVC stick-ups with sealed caps and did not have steel protective casings. Groundwater well conditions were consistent with conditions observed in 2022. Well logs for the monitoring wells are provided in Appendix B.

Sample ID, frequency, well depth, and analytical parameters are detailed in Table 2.

TABLE 2: GROUNDWATER MONITORING PROGRAM

Sample ID	Location	Frequency	Well Depth (mbgs) (1)	Analytical Parameters
MW-01-BR	180 m NE of SC-1	Spring & Fall	10.69	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-02-BR	140 m SE of MW-01-BR	Spring & Fall	9.47	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-03-OB	65 m S of MW-02-BR	Spring & Fall	8.66	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-04-BR	115 m NW of MW-03-OB	Spring & Fall	13.31	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-04-OB	114 m NW of MW-03-OB	Spring & Fall	7.92	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-05-BR	158 m W of MW-04-OB	Spring & Fall	15.24	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-06-BR	250 m SE of MW-05-BR	Spring & Fall	6.60	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-07-BR	390 m SE of MW-06-BR	Spring & Fall	9.40	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-08-BR	128 m S of MW-07-BR	Spring & Fall	15.09	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-09-OB	500 m NW of MW-08-BR	Spring & Fall	5.50	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-10-OB	30 m S of MW-09-OB	Spring & Fall	5.18	General water chemistry, total dissolved solids, total metals, & dissolved metals.
MW-11-OB	40 m NW of MW-10-OB	Spring & Fall	6.80	General water chemistry, total dissolved solids, total metals, & dissolved metals.

Note:

1. Well depth is in meters below ground surface (mbgs).

Water level measurements and field chemistry parameters including pH, temperature, EC, DO, ORP, and turbidity were measured at each of the 12 monitoring wells.

Each groundwater well was purged a minimum of three well volumes or until dry using dedicated disposable bailers. Water levels were allowed to recover to at least 80% of their original levels before groundwater samples were collected. Field equipment was cleaned with isopropyl alcohol and distilled water between samples and new latex or nitrile gloves were used at each well to reduce the potential for cross

contamination so that representative samples could be obtained. Field instruments were tested and calibrated at the beginning of each day.

QA/QC assessment for the groundwater program included two field duplicates, taken from MW-06-BR (June 13, 2023) and MW-03-OB (October 3, 2023), two field blanks, and two trip blanks.

Water samples collected for laboratory analysis were placed in laboratory supplied containers and stored immediately on ice in cooler chests for transport to BV Laboratory in Winnipeg, Manitoba, an SCC accredited laboratory.

The results of the groundwater analysis are compared to the MWQSOG, updated July 2011. Since the wetland water and the water observed in the bedrock openings is assumed to flow towards Sherlett Creek, these guidelines are considered to be an appropriate reference for comparison. Similarly, the shallow groundwater in the overburden and the bedrock is assumed to flow towards Sherlett Creek, thereby interacting with local surface water systems.

Results of the June and October 2023 groundwater sampling events are discussed in Section 4.6.

3.2.1 GROUNDWATER ELEVATIONS

Ground elevations and top of well casing elevations were surveyed during the February 1, 2022 sampling event to determine groundwater flow direction (Tetra Tech; April 27, 2022 Memo). The water level measurements taken in the overburden wells suggested a northerly flow direction in the wetland area, towards Sherlett Creek. The water level measurements taken in the bedrock wells suggested that groundwater flow on the north side of the creek was to the south, towards the creek, while flow on the south side was northerly and easterly, all flowing inwards towards the creek.

Depth to water measurements collected in June and October 2023 were similar to measurements collected in September 2022 and February 2022 and, therefore, groundwater flow direction is anticipated to remain the same.

4.0 RESULTS AND DISCUSSION

The 2023 water quality monitoring program was the second year of monitoring following the completion of construction activities in August 2021. The monitoring program represents the fifth full year of Sherlett Creek flow through Camp Lake in the absence of lime treatment.

The water sampling results for Camp Lake and the Camp Lake discharge are compared against the Camp Lake Water Quality Performance Objectives (CLWQPO), outlined in the Final Adaptive Management Plan (AMP) for the Sherridon Mine Site (dated August 16, 2022) and to the Manitoba Water Quality Standards Objectives and Guidelines (MWQSOG) Tier II objectives and Tier III guidelines, updated July 2011. Water sampling results collected for Sherlett Creek and Cold Lake are compared against the MWQSOG Tier II objectives and Tier III guidelines.

The focus of the following sections is on the key water quality parameters of pH, alkalinity, TSS, turbidity, sulphate, and total fractions of the metals, iron, aluminum, cadmium, copper, and zinc. The results of toxicity testing of the Camp Lake discharge are also provided. The 2023 results for field chemistry are provided in Table 3, general water quality are provided in Table 4, dissolved metals in Table 5, total metals in Table 6, and toxicity results in Table 7. The laboratory Certificates of Analysis (CoA) are included in Appendix C.1 for water quality and in Appendix C.2 for toxicity.

4.1 Precipitation and Observations of Flow

Analyzing annual precipitation patterns has become an important factor in interpreting water quality in Camp Lake and the Camp Lake discharge since environmental monitoring began in 2017. There has been an observable correlation in concentrations of the key water quality parameters in Camp Lake to the amount of flow through Sherlett Creek. Monthly precipitation for the years 2011 to 2023 are summarized in Table 8.

TABLE 8: ESTIMATED MONTHLY PRECIPITATION FOR SHERRIDON, MANITOBA

Month/ Year	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
October	66.4	159.7	29.8	59.9	66.3	228.5	82.8	52.8	51.5	65.2	14.8	8.1
November	35.4	41.3	89.9	31.3	61.1	36.8	56.0	32.6	31.7	44.4	33.4	38.6
December	38.5	25.6	28.3	9.8	39.3	26.2	20.3	27.5	33.0	26.6	34.3	18.0
January	45.3	49.3	53.1	34.2	23.5	25.0	71.0	40.1	52.0	63.2	24.5	13.5
February	20.7	19.7	12.1	23.1	33.4	20.1	14.8	19.1	19.5	29.5	14.1	22.4
March	83.1	23.5	37.5	63.7	74.2	126.0	58.3	19.2	54.9	65.6	28.2	9.9
April	90.2	69.9	67.1	62.2	42.7	97.2	33.6	54.7	98.3	29.9	3.4	22.1
May	38.5	42.1	69.2	51.8	73.1	122.8	45.5	61.2	79.7	77.6	84.1	12.8

Month/ Year	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023
June	147.1	150.0	152.8	74.8	179.1	202.3	145.1	127.9	251.4	101.7	32.1	56.0
July	76.3	86.2	74.2	172.9	125.7	29.7	265.7	109.3	208.0	40.4	47.1	96.8
August	106.6	24.4	22.9	87.7	49.7	23.7	43.2	64.1	64.2	17.1	72.3	30.3
September	34.0	37.6	54.8	122.6	127.7	108.8	78.6	69.9	65.0	12.9	33.3	15.0
Total	**782**	**729.3**	**691.6**	**793.9**	**895.9**	**1047**	**914.9**	**678.4**	**1009**	**574.1**	**421.6**	**343.5**

Notes:

a. Units in millimetres (mm).

b. A water year in the northern hemisphere starts on October 1 and runs to September 30 of the following year (i.e., the 2022 water year started on October 1, 2021; American Meteorological Society, 2012). A water year is defined as the period of precipitation contributing to surface runoff each year, accounting for accumulation of snowfall over winter and release to runoff in spring.

Data and observations of precipitation for 2023 are summarized as follows:

- The 2022-2023 water generating year is the lowest precipitation year of the last 10 years and the third consecutive year of lower-than-average precipitation in the region. The 10-year average for precipitation for the region is 736 mm; total annual precipitation from October 2022 to September 2023 was 344 mm and total annual precipitation for the previous year was 422 mm (Environmental Canada).
- No heavy precipitation events were recorded on any of the sampling dates in 2023.

Due to low precipitation in 2023, the flow through Sherlett Creek was considerably reduced from late July to the end of open water monitoring in mid-late October. Further discussion of Sherlett Creek flows is provided in the below section.

4.1.1 CAMP LAKE WATER LEVEL

Water levels on Camp Lake are a function of the available inflow from Sherlett Creek and precipitation inputs and direct runoff inputs to the lake. Flows on Sherlett Creek are largely influenced by precipitation and runoff conditions.

In 2023, the available inflows into Camp Lake from Sherlett Creek were affected by an addition of stop logs at the Camp Lake discharge weir by an unauthorized party. Beaver activity was also present on Sherlett Creek, which further reduced flows into Camp Lake.

A timeline of observations related to flows and activity on Sherlett Creek are provided as follows:

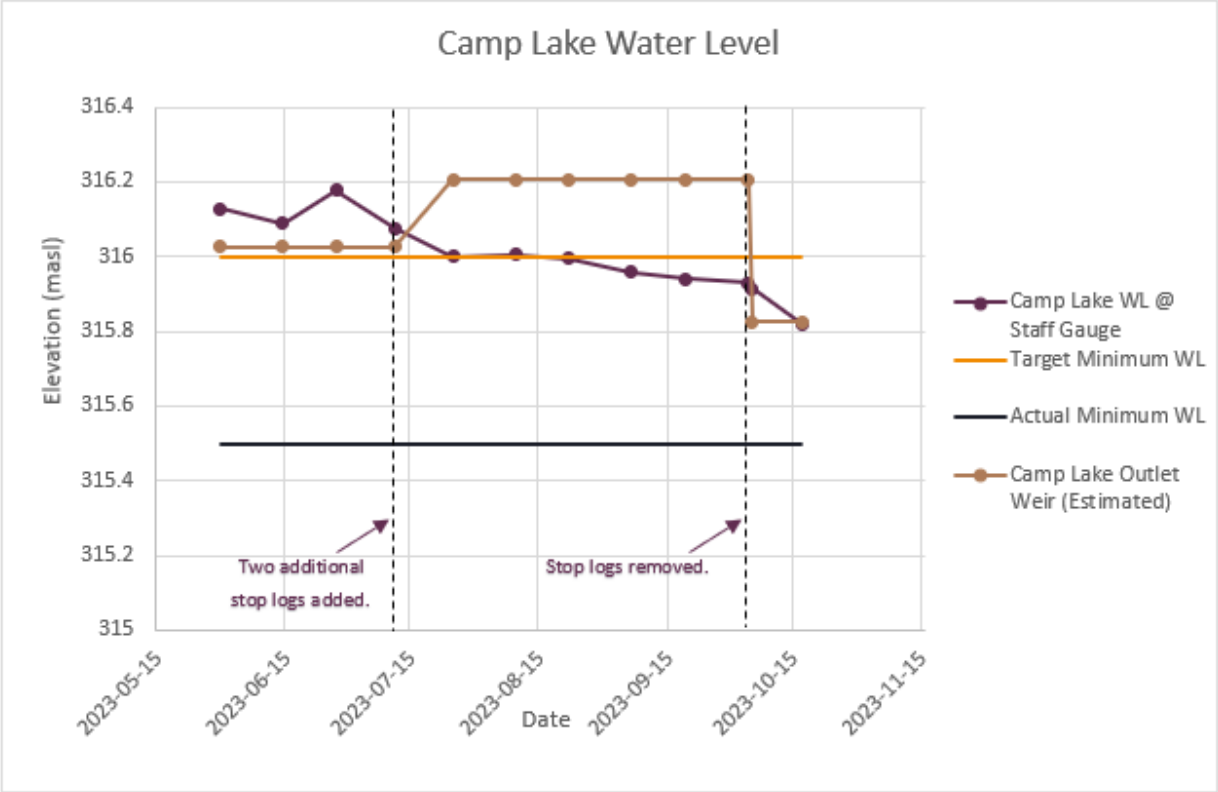
- **May 16, 2023:** Flow on Sherlett Creek and through the Notched Cofferdam into Camp Lake was high (due to spring freshet).
- **May 31 to June 27, 2023:** Flows were steady through June 27 but considerably reduced compared to May 16, 2023.
- **July 11, 2023:** Some branches noted at the Notched Cofferdam; however, branches did not restrict flows.

- **July 25, 2023:** First large beaver dam noted (at Notched Cofferdam). Beaver dam removed to re-establish flow; large inflow noted into Camp Lake afterwards.
- **September 19, 2023:** Beaver dams consistently noted (and removed) at the Notched Cofferdam through this date.
- **August 9, 2023:** Beaver dam also noted upstream on creek at train bridge (i.e., downstream of SC-1).
- **October 4, 2023:** A backflow of water was noted from Camp Lake to Sherlett Creek. A beaver dam was noted in the Diversion Channel and subsequently removed.
- **October 17, 2023:** Small branches and twigs were noted at the Notched Cofferdam. No backflow observed on this date, no flow in or out.

The installation of the stop logs at the Camp Lake discharge resulted in reduced inflows from Sherlett Creek into Camp Lake, which were already reduced relative to previous years on the basis of precipitation. Based on a review of available photographs and water levels measured at the discharge weir, it is estimated that stop logs were in place at the start of the open water monitoring on May 16, 2023. A total of three stop logs are estimated to have been in place on this date based on available information. Additionally, an estimated two stop logs were added sometime between the July 11 and July 25, 2023 monitoring events.

In 2023, water levels were measured on Camp Lake in accordance with the requirements of the AMP. The water levels were recorded during each biweekly sampling event and are shown in Figure 3.

FIGURE 3: CAMP LAKE WATER LEVEL



Notes:

1. Camp Lake outlet weir elevation represents the top of the installed stop logs. Number of stop logs has been estimated based on photographs and measured water levels.

The addition of the stop logs between July 11 and July 25, 2023 ended the discharge flow over the Camp Lake weir. No discharge was present from between these dates until October 4, 2023. On this date, stop logs were noted to have been removed from the weir, also by an unauthorized party. The estimated timeframe for removal of the stop logs is after the collection of water samples but prior to a return inspection by KGS Group and OAM personnel in the afternoon of the same day.

4.2 Sherlett Creek

Key modelling completed for Sherridon Mine Reclamation Project has predicted that water quality in Sherlett Creek will take on a leading role in determining water quality in Camp Lake during the post-construction monitoring phase of the project. As the project moves from the construction phase to post-construction monitoring, water quality in Camp Lake has been estimated to approach that in Sherlett Creek over a period of 4 years (Final AMP; August 16, 2022). This estimation was based on the remediation functioning as designed. Due to the unauthorized alterations to the system in 2022 and 2023, it may take additional time for the project to achieve targets.

4.2.1 SC-1

4.2.1.1 pH and Total Alkalinity

Field pH at SC-1 ranged between 6.61 and 7.61 during the 2023 open water season and 7.39 in winter 2023 (Figure 4). The 2023 field pH values were consistent with field pH values measured previously, which have ranged from 6.5 to 8.0 since 2017.

There has previously been indication of declining pH values during late summer and early fall of 2017, 2021, and 2022. Similar to 2023, these years have been characterized by low flows starting in or around late summer (DJRC, 2022 and KGS Group, 2024). A similar seasonal trend was observed in 2023, where a slight decrease in pH values was noted starting with the reduction in flows (July 11, 2023). Despite the lower flows, all field pH values in 2023 were within the MWQSOG Tier III guideline range (6.5 to 9.0) except for the sample collected on October 31 (field pH 5.29). This sampling event was not a scheduled biweekly event and SC-1 was collected after ice-over had occurred on the creek. In all three previous low flow years, the lower pH values in late fall have recovered over the following winter. This is due to the recovery of alkalinity concentrations within Sherlett Creek which has a direct correlation to the increase of pH levels.

Alkalinity concentrations followed an apparent increasing trend throughout the 2023 open water season, as also observed in 2022 (Figure 5). Concentrations peaked on July 11, 2023 (36 mg $CaCO_3$/L) and remained around 30 mg $CaCO_3$/L for the remainder of open water monitoring. The measured alkalinities were generally within the typical range previously reported (20-30 mg $CaCO_3$/L), except for July and August 2023 (31-36 mg $CaCO_3$/L) and October 3, 2023 (34 mg $CaCO_3$/L). Concentrations that have been higher than the typical range were also recorded in 2017 (up to 37 mg $CaCO_3$/L), winter 2021 (up to 33 mg $CaCO_3$/L) and fall 2022 (up to 31 mg $CaCO_3$/L). The single low value measured on September 13, 2021 (5.1 mg $CaCO_3$/L) was determined to be anomalous (DJRC, 2022).

4.2.1.2 TSS and Turbidity

Total suspended solid concentrations at SC-1 have typically been at or below 4 mg/L since 2017 (DJRC, 2022). Notably, the laboratory analytical detection limit for TSS was lowered from 4 mg/L to 1 mg/L beginning in June 2019 and has remained at 1 mg/L through present.

In 2023, TSS concentrations during low flow periods were comparable to concentrations measured during high flow periods, ranging from <1.0 mg/L to 3.3 mg/L (Figure 6). TSS concentrations therefore appeared to be unaffected by the period of lower flows in late July to fall of 2023. There has been no apparent relation between flow volume and TSS at SC-1 in any of the low flow years including 2023. All measured TSS concentrations in 2023 were well below the MWQSOG Tier II chronic objective of 11.5 mg/L.

Historically, turbidity values have been below 4 NTU, except during the open water season low flow periods in 2017 and 2021. All field turbidity results in 2023 were below 3.1 NTU and no seasonal increase during low flow was observed (Figure 7).

In 2023, field turbidity was fairly consistent with laboratory turbidity results, albeit slightly higher (highest value was 4.10 NTU vs. 3.1 NTU).

4.2.1.3 Sulphate

In accordance with the requirements specified in the AMP, sulphate was added as a key water quality parameter for analysis in 2023. Sulphate has not been analyzed in any other monitoring years except for 2021.

Sulphate is a product of the weathering of sulphide minerals and concentrations measured in the streams and lakes (i.e., background) are generally indicative of sulphide mineralization in the local watershed affecting water quality (DJRC, 2022). Therefore, concentrations observed in Sherlett Creek are likely naturally occurring and not influenced by former mining operations.

Sulphate concentrations gradually increased throughout the open water season, starting at 1.5 mg/L and increasing to 11 mg/L by October (Figure 8). A similar pattern was observed in 2021, where concentrations ranged from <1.0 mg/L in spring to 11 mg/L by end of October.

4.2.1.4 Total Metals

The key total metals of iron, aluminum, cadmium, copper, and zinc are discussed in the following sections. Hardness provides protection against the toxicity of some metals. Starting in 2021, the total concentrations of cadmium, copper, and zinc are compared to MWQSOG Tier II aquatic life criteria using the annual average hardness calculated for Sherlett Creek (using SC-1 hardness; calculated 33.7 mg $CaCO_3$/L for 2023) instead of the 2016 average Cold Lake hardness (59.4 mg $CaCO_3$/L), which was used in previous years' reports. The change was initiated due to elevated concentrations of metals identified within Sherlett Creek in 2021 and past years, which necessitated the evaluation of metals using creek-specific hardness (DJRC, 2022). The use of Sherlett Creek SC-1 hardness is followed for 2023.

The average SC-1 hardness in 2023 was calculated to be 33.7 mg $CaCO_3$/L, which is similar to the hardness calculated in 2021 (31.0 mg $CaCO_3$/L) and 2022 (30.8 mg/L). The resulting total metals Tier II chronic and acute objectives are presented in Table 6.

Iron

Over the past seven years of monitoring (2017-2023), total iron concentrations at SC-1 have typically been below 0.4 mg/L (Figure 9).

High total iron concentrations have been observed during low flow periods. For example, in 2017 and 2021, total iron concentrations up to 1.0 mg/L were observed. In 2022, measured concentrations were up to 0.52 mg/L during the period of lower flows in August to October. A high concentration (0.61 mg/L) was also measured on September 11, 2018, around the time of a heavy rainfall event (DJRC, 2022).

In 2023, total iron concentrations up to 0.52 mg/L were observed in the low flow conditions between August and October. With the exception of the total iron concentration measured on May 16, 2023 (0.32 mg/L), total iron concentrations in May and June were below the MWQSOG Tier III guideline of 0.30 mg/L.

Aluminum

Total aluminum concentrations have generally ranged between 0.02 mg/L and 0.10 mg/L over the last seven years of monitoring (Figure 10). In 2017 and 2021, during low flow periods in September and October, aluminum concentrations were high (up 0.27 mg/L). High concentrations were noted on August 6, 2018 and September 11, 2018 (0.26 mg/L; DJRC, 2022). The high concentration measured on September 11, 2018 was attributed to a heavy rainfall event on the basis of similarly high concentrations recorded for iron, cadmium, copper, and zinc (DJRC, 2022).

With the exception of the total aluminum concentration on July 11, 2023 (0.18 mg/L), all concentrations in 2023 were below the MWQSOG Tier III guideline (0.10 mg/L for pH ≥ 6.5 and 0.005 mg/L for pH < 6.5).

Cadmium

Outside of low flow conditions, total cadmium concentrations have generally ranged between 0.00010 mg/L and 0.00050 mg/L over the last seven years of monitoring (Figure 11). In 2023, higher concentrations (up to 0.00089 mg/L) were measured during the period of lower flows. During the 2022 low flow period, concentrations were observed up to 0.00067 mg/L and during the 2021 low flow period, concentrations were observed up to 0.00075 mg/L.

It has been noted that occasionally higher concentrations were measured in 2018 (on July 24 and September 11 and 13) and 2019 (July 31), which were not traceable to low flow conditions but rather to heavy rainfall events (DJRC, 2022). The higher concentrations were reported to be driven by surface runoff likely from the area of the former East Mine Workings.

Total cadmium concentrations in 2023 were generally above the MWQSOG Tier II chronic objective of 0.00012 mg/L and below the acute objective of 0.00071 mg/L, which is consistent with results since 2017.

Copper

Total copper concentrations have generally ranged between 0.0030 mg/L and 0.020 mg/L over the last seven years of monitoring (Figure 12). Total copper concentrations have been generally above the MWQSOG Tier II chronic and acute objectives since 2017. Higher concentrations were noted during low flow periods or heavy rainfall events as noted for the other metals.

In 2023, concentrations ranged from 0.0055 mg/L to 0.010 mg/L outside of the period of lower flows and increased up to 0.036 mg/L in fall. The higher concentrations in fall were similar to concentrations reported in 2017 and 2022, while concentrations in 2021 appeared to be less affected by low flows. Total copper concentrations have been generally above the MWQSOG Tier II chronic and acute objectives since 2017.

Zinc

Total zinc concentrations have generally ranged between 0.024 mg/L and 0.20 mg/L independent of any low flow or heavy rainfall condition (Figure 13). Concentrations in 2023 were generally above the MWQSOG Tier II chronic and acute objectives (0.0477 mg/L).

Summary

Overall, key parameter concentrations within Sherlett Creek have shown minor variations since monitoring began in 2017. Turbidity and metals have been found to increase with lower flows through the creek and then decrease and stabilize throughout the winter months and into the following open water season. Surface runoff had less of an effect on the creek in 2023 due to extremely low precipitation and no major rainfall events recorded during sampling events. It should be noted that the variations observed in Sherlett Creek throughout the year are on a very small scale when compared to the variations observed in Camp Lake.

4.2.2 ADDITIONAL CREEK SAMPLING STATIONS (SC-2 TO SC-6)

Five additional sampling stations (SC-2 to SC-6) were previously established on Sherlett Creek for the purpose of providing water quality information for the reach of Sherlett Creek between Sherlett Lake and SC-1. The five additional sampling locations are all upstream of SC-1, with SC-6 located at the mouth of Sherlett Lake (Figure 1 and 2).

These stations were initially sampled in 2006 to support project planning and subsequently in 2009, 2017, and 2018 to investigate the potential source(s) of elevated metals concentrations in Sherlett Creek (DJRC, 2022). A more detailed sampling program was completed in 2021 and February 2022 due to receipt of a report from a Sherridon resident of overland flow from the vicinity of the East Mine Workings Area (DJRC, 2022). All available data for SC-1 has indicated that total concentrations of cadmium, copper, and zinc have generally been above one or both of the MWQSOG Tier II chronic and acute objectives consistently throughout open water season monitoring. The higher concentrations have occurred regardless of precipitation or local runoff conditions and have been most notable during periods of low flows, which suggests that there may be another metal source influencing the creek (DJRC, 2022).

The results of the detailed monitoring program conducted in 2021 concluded that the source of metal contamination to the creek appears to be a sub-surface source that enters the creek downstream of SC-4 (DJRC, 2022). The source has been identified as either an inflow of metal contaminated groundwater or direct contact of the creek with the naturally occurring mineralized zone of the Sherridon deposit, which passes directly beneath the creek in this location.

In 2023, total cadmium, copper, and zinc concentrations at stations SC-3, SC-2, and SC-1 were higher than at stations SC-4, SC-5, and SC-6 on all open water sampling dates; however, total metal concentrations at all stations were lower compared to 2021 concentrations but higher than 2022 concentrations, which indicates that the third consecutive year of lower flows in 2023 likely resulted in some increased influence on metals concentrations.

4.3 Camp Lake and Camp Lake Discharge

The Camp Lake Water Quality Performance Objectives (CLWQPO) were created as a means for evaluating the performance of the reclamation works in comparison to the expectations developed during project planning

(AMP, 2022). They are not regulatory limits. The AMP (2022) states that once construction is completed (September 2021), water quality within Camp Lake is expected to gradually approach the objectives over an estimated three to four year period.

An important factor to consider in understanding water quality in Camp Lake and its potential effect on water quality in Cold Lake is the magnitude of Sherlett Creek flow entering the lake. During the 2023 open water season, flows in Sherlett Creek became greatly reduced by late July and were negligible from early August to the end of open water sampling, reflecting low seasonal precipitation and the presence of beaver activity restricting flows. A condition was also present where Camp Lake water level was raised higher than operationally intended due to addition of stop logs at the Camp Lake discharge weir by an unauthorized party. Based on photographic documentation, a total of three stop logs are estimated to have been in place at the start of open water monitoring on May 16, 2023. Additionally, an estimated two stop logs were added sometime between the July 11 and July 25, 2023 monitoring events. The low seasonal precipitation and stop log addition resulted in significantly reduced inflows to Camp Lake from Sherlett Creek.

No discharge over the Camp Lake discharge weir was present from between July 11 and July 25, 2023 until October 4, 2023. On this date, stop logs were noted to have been removed from the weir, also by an unauthorized party, in an apparent response to a backflow of water from Camp Lake to Sherlett Creek on this date.

4.3.1 PH, ALKALINITY AND SULPHATE

4.3.1.1 pH

Throughout the 2023 open water season, field pH within Camp Lake generally remained near neutral (pH = 7.0) (Figure 14). Field pH was measured between 6.68 and 7.12 shortly following ice out at the end of May. Measured values increased slightly from May into June with inflowing of water from Sherlett Creek. The pH levels remained fairly steady until early August when values started to decline together with reduced flows through Camp Lake.

A similar drop in field pH in fall of 2021 was attributed to lower precipitation-based flows in Sherlett Creek from late August through the end of sampling in October (DJRC, 2022). The drop in pH observed in 2022 and 2023 is attributed to lower precipitation-based flows on Sherlett Creek coupled with the presence of stop logs at the discharge weir.

A review of available information and photographs from the 2023 monitoring program determined that a total of three stop logs were estimated to be in place at the start of the open water monitoring on May 16, 2023. The stop logs were added by an individual(s) not known to the project team and resulted in a lake level that was higher than would have been in place if the weir was operated as intended (i.e., without stop logs). The 2023 monitoring year was the second consecutive year that unauthorized stop logs were added to the Camp Lake discharge weir.

The higher lake level coupled with the continuous beaver activity at the notched cofferdam, restricted flow into Camp Lake and appeared to contribute to a decline in pH observed in early August through to fall. However, a decline in field pH values has also been observed in late July during other years when this condition was not present (e.g., 2021). In 2021, 2022, and 2023 field pH values were generally maintained above 6.5 (the minimum MWQSOG Tier III guideline), with the exception of the final sampling event

completed on October 17, 2023, where field pH levels dropped below the guideline (values ranged from 6.32 to 6.48).

Generally, field pH levels in Camp Lake closely tracked the pH in the inflowing Sherlett Creek. Field pH values at Camp Lake discharge averaged 0.2 pH units lower than the SC-1 pH (compared to 0.25 pH units lower in 2022 and 0.2 pH units lower in 2021).

The maintenance of a fairly neutral pH (6.5) in Camp Lake, even during unforeseen low flows, indicates that alkalinity was present in sufficient concentrations needed to neutralize remaining acid sources to the lake. Reduction in acid sources to the lake, as a result of mine waste removed from the shores of Camp Lake through the Sherridon Reclamation Project, coupled with a small amount of surface runoff in 2023, are also key factors in the maintenance of the near-neutral pH.

4.3.1.2 Alkalinity

In all previous sampling years, total alkalinity at SC-1 and all stations in Camp Lake was generally highest under winter ice cover; however, alkalinity measured during the winter sampling event on February 14, 2023 was the lowest concentrations observed since sampling began in 2017. Concentrations ranged from 1.0 mg $CaCO_3$/L to 8.1 mg $CaCO_3$/L compared to 9.2 mg $CaCO_3$/L to 22 mg $CaCO_3$/L in March 2022 and 34 mg $CaCO_3$/L to 80 mg $CaCO_3$/L in February 2021 (Figure 15). In other words, under ice restoration during winter 2022/2023 did not appear to occur to the extent that it has in previous years. The lower alkalinity concentrations in February 2023 are likely due to negligible inflows from Sherlett Creek in fall 2022 continuing through winter. Flow over the Camp Lake weir was not present at the time of the February 2023 winter sampling event, which indicates that available flow through Sherlett Creek and regeneration capabilities were also negligible. In the absence of flows under ice cover, in-lake processes would be solely responsible for regenerating alkalinity within Camp Lake. It has been suggested by DJRC (2022) that bacterial reduction of sulphate may be a predominant source of alkalinity regeneration over winter in the absence of material flows.

In 2021, alkalinity concentrations dropped drastically from winter to spring as a result of metal and acid-contaminated spring runoff, and then slowly regenerated with continued flow from Sherlett Creek, peaking in July. As flow through Sherlett Creek decreased, alkalinity concentrations also decreased. This pattern was observed in 2022 on a much smaller scale. Spring runoff did not cause a drastic drop in alkalinity, which is attributed to construction activities and remnant mine waste removal ending in 2021. Similarly, in 2023 alkalinity concentrations did not drop during spring runoff, conversely, concentrations actually increased from winter to spring, ranging from 7.0 mg $CaCO_3$/L to 16 mg $CaCO_3$/L during the first open water sampling event on May 16, 2023. Concentrations throughout the open water season were comparative to measured concentrations in 2022 and did not peak at the same levels observed in 2020 (23 mg $CaCO_3$/L) and 2021 (22 mg $CaCO_3$/L). Concentrations also never reached concentrations similar to Sherlett Creek during the summer months, which typically has occurred in the past. The lesser extent of alkalinity regeneration in spring through summer is likely due to comparatively lesser inflows from Sherlett Creek, as SC-1 alkalinity remained similar between the three years, albeit slightly higher in 2023. Sherlett Creek flow became negligible a month earlier in 2023 compared to 2021, and inflows prior to that were reduced based on field observations, beaver activity at the notched cofferdam, and Camp Lake water level data.

At the end of the 2023 open water monitoring season, alkalinity concentrations at all Camp Lake stations, including the Camp Lake discharge, declined to near zero, which was only observed in 2017 and 2018 when

flow from Sherlett Creek had not yet been re-established. These low concentrations are notable and are most likely caused by the lower-than-average precipitation levels and reduced Sherlett Creek flows, coupled with the artificially high lake level and beaver activity which further reduced flows into Camp Lake.

Despite the lower alkalinity levels measured throughout 2023, an overall steady neutral pH was maintained within Camp Lake for the majority of the open water season. The exception was the last sampling event on October 17, 2023, when pH dropped to below 6.5 which is directly attributed to the reduction of inflows and depletion of alkalinity to near-zero. The alkalinity supply was otherwise sufficient in neutralizing residual acid sources to the lake.

4.3.1.3 Sulphate

In accordance with the requirements specified in the AMP, sulphate was added as a key water quality parameter for analysis in 2023. Sulphate has not been analyzed in any other monitoring years except for 2021. Sulphate concentrations at Camp Lake discharge closely followed concentrations in Camp Lake throughout the open water season (Figure 18). Concentrations at all stations measured high (up to 220 mg/L) during the winter sampling event and then dropped drastically during spring melt as flow through Sherlett Creek increased. Concentrations remained steady between 100 mg/L and 150 mg/L until early September, after which concentrations steadily increased at all stations until the end of sampling (up to 210 mg/L), reflecting the negligible flows through Sherlett Creek. A similar pattern was observed in 2021 to a lesser extent during the open water season where sulphate concentrations were low during spring and summer (between 29 mg/L to 98 mg/L) and then steadily increased until the end of sampling (up to 170 mg/L). Sulphate concentrations under winter ice cover differed considerably between February 2021, March 2022, and February 2023. Values measured between <1.0 mg/L to 16 mg/L in February 2021 whereas March 2022 had measured concentrations between 140 mg/L to 180 mg/L and February 2023 had measured concentrations between 140 mg/L to 220 mg/L. The large discrepancy between concentrations in winter 2021 and winter 2022 and 2023 is due to the presence/absence of Sherlett Creek inflow. Sherlett Creek flowed continually through winter 2021 whereas there was no flow in Sherlett Creek from the end of August 2021 through to the March 2022 winter sampling data (DJRC, 2022). Similarly, no flow was observed from July 2022 through to the February 2023 winter sampling event. The negligible flows did not allow sulphate concentrations to decrease and recover under ice conditions.

According to DJRC (2022), sulphate concentrations in Camp Lake have decreased considerably as a result of the reclamation works. Prior to reclamation, in January 2008, the sulphate concentrations in Camps Bay (vicinity of CB-2), was 2,050 mg/L and the concentrations in Woods Lake (now part of East basin), was 7,520 mg/L (SENES, 2008). The high concentrations of sulphate are caused by the sulphide mine waste (i.e. tailings) generated through the Sherridon mining operations. During the construction phase of the Project, the majority of the sulphide-bearing mine waste was deposited into Camp Lake. Despite the elimination of run-off sources, the submerged tailings will continue to release sulphate concentrations. However similar to metal concentrations, over time, concentrations are expected to decrease to within the proposed CLWQPO (sulphate: ambient SC-1+7+25%).

4.3.2 TSS, TURBIDITY AND IRON

Since the start of the Sherridon Mine Reclamation Project, local residents have expressed considerable concern regarding the effect of discharges from Camp Lake on the appearance of water in the Cold Lake arm of Kississing Lake, with specific concerns regarding the potential for red staining of boats. Three of the key

parameters measured – TSS, turbidity, and iron – are indicators of water appearance, with iron being a source of red staining.

Prior to August 2018, lime treatments were applied to Camp Lake to manage water quality during the reclamation phase of the project. The lime treatments created a floc that settled on the lake bottom during calm periods but would be resuspended during high wind events and create a red-colored turbidity in the lake (due to particulate iron associated with the floc). Lime has not been used since Sherlett Creek flow was reestablished through Camp Lake in August 2018; however, remnant mine waste remained a source of dissolved and particulate iron to Camp Lake. Since construction and targeted removal of mine waste was completed in 2021, the amount of dissolved and particulate iron, and potentially TSS and turbidity, introduced to Camp Lake from this source is expected to be greatly reduced (DJRC, 2022).

4.3.2.1 TSS

TSS concentrations in 2023 followed a U-shaped pattern, with higher concentrations observed during spring runoff in late May and early June, and also in late summer and into fall (Figure 16). TSS concentrations in spring 2023 were similar to 2022 and were notably lower compared to previous years, remaining below 5 mg/L versus 10 mg/L in spring 2021. Lower spring concentrations are attributed to the absence of active construction occurring on-site and specifically around the East basin where the highest concentrations were observed in 2020 and 2021. TSS concentrations declined throughout the open water season, meeting background Sherlett Creek concentrations at most stations by the early July. By September, concentrations started to increase due to negligible inflow from Sherlett Creek, however, still remaining well below the CLWQPO and MWQSOG Tier II chronic objective of 11.5 mg/L. Notably, TSS concentrations at most stations during the last sampling event in October 2023 were lower than those measured in late fall of 2021 and 2022.

TSS concentrations at the Camp Lake discharge were equal to or below 5.0 mg/L throughout the open water season. Overall, TSS levels at the discharge weir in 2023 were marginally higher relative to 2022, but below the CLWQPO and MWQSOG Tier II chronic objective.

4.3.2.2 Turbidity

Turbidity in spring in all parts of Camp Lake appeared to be influenced by elevated turbidity levels measured in the fall of 2022 and during the winter sampling event on February 14, 2023 (Figure 17). Turbidity levels remained elevated over winter 2022/2023, ranging from 21 NTU to 32 NTU compared to 16 NTU to 27 NTU in winter 2021/2022 and <4 NTU during winter sampling events prior to 2022. In 2022, the higher levels persisted into spring, with turbidity ranging from 16-23 NTU, whereas in 2023 turbidity levels dropped from winter to spring (9.7-18 NTU). The higher levels in winter are attributed to negligible flows under winter ice cover and the drop in turbidity in spring is attributed to the influx of flow through Sherlett Creek. The mechanism for the maintenance of higher turbidity under ice cover is the lack of flushing effect from Sherlett Creek and increased residence time of the lake water with the submerged tailings.

In previous years (2019, 2020, and 2021), turbidity levels increased during spring runoff; however, as turbidity levels were already high in February 2023, flushing from Sherlett Creek in spring was able to decrease values in spring 2023. Turbidity levels continued to decrease through spring/summer, coming close but never reaching background creek levels. Beginning in September, turbidity at all stations on Camp Lake, including the discharge, began to reflect the effects of negligible flow from Sherlett Creek, and levels steadily increased until the end of open water sampling. Levels peaked at 24 NTU which is lower than peak concentrations in fall 2021 (33 NTU) and fall 2022 (42 NTU).

The CLWQPO for turbidity is ambient SC-1 + 25%; calculated CLWQPO values ranged between 0.5 NTU and 9.3 NTU. All turbidity values measured during the 2023 open water season were above the CLWQPO, with values in mid-summer up to 4 times greater than the SC-1 value and values in spring and fall up to 9.5 and 7 times greater, respectively, than that of SC-1.

Overall, the elevated turbidity in Camp Lake characteristic of the previous years has diminished, although has not been eliminated, and turbidity levels are directly affected by the lack of inflow from Sherlett Creek (observed in 2021 – 2023).

4.3.2.3 Iron

Iron is the metal attributed to the discolored water on Camp Lake and staining of boats noted by local residents and is therefore a parameter of particular interest to the project. Staining was a regular occurrence through 2008, prior to the start of reclamation activities (DJRC, 2022). The staining stopped from 2009 through 2017, but then resumed following the resumption of discharges from Camp Lake (DJRC, 2022). No reports of staining were received by the project team during the 2023 monitoring year.

Total iron in Camp Lake, including the discharge, had lower measured concentrations, and showed less variability than concentrations recorded from 2019 – 2022 (Figure 19). Concentrations in winter 2021/2022 ranged from 4.5 mg/L to 6.5 mg/L, while concentrations in winter 2022/2023 ranged from 2.2 mg/L to 3.4 mg/L, showing a drop in concentrations from late fall 2022 values. Concentrations in spring 2023 were notably lower than concentrations measured in spring 2019 – 2022 (up to 1.5-3 times lower).

An increase from winter to spring was observed, however to a much lesser extent compared to previous years. The minimal increase in concentrations from winter to spring indicates a substantial reduction in iron loading to the lake during spring runoff compared to years prior to 2022. The higher concentrations in winter, compared to 2019 – 2021 are the result of low to negligible inflows over the winter 2022/2023 season.

After the first spring sampling event on May 16, 2023, total iron concentrations increased similar to February concentrations before dropping again and remaining relatively stable until the end of sampling in October. This pattern is inconsistent with patterns that have been observed in 2019 – 2022 where concentrations decline rapidly through spring/summer before rapidly increasing in late summer/fall. Concentrations in 2023 declined to the open water season minima by the beginning of September, when concentrations were measured between 1.3 mg/L and 2.6 mg/L, getting close but not quite reaching SC-1 concentrations (consistent with the open water season minima in 2021 of 1.4 mg/L to 1.8 mg/L). Unlike previous years, concentrations in fall 2023 did not rapidly increase with the reduced flows from Sherlett Creek, rather remaining between 1.4 mg/L and 2.6 mg/L. Since residual mine waste removal ended in August 2021, iron concentrations have greatly reduced. The lack of increase in concentrations in fall 2023 may be attributed to the overall lesser amount of iron present in Camp Lake.

Total iron concentrations were above the CLWQPO (ambient SC-1 + 25%) during all sampling events and for all stations (including the Camp Lake discharge) in 2023. The concentrations in late August were approximately 3 to 5 times that of the CLWQPO, while the highest concentrations in spring and fall were approximately 11 to 16 and 2.5 to 6 times that of the CLWQPO, respectively. No concentrations were notably higher in any one station. All concentrations were above the MWQSOG Tier III guideline of 0.3 mg/L.

Total iron concentrations in the Camp Lake discharge were consistently within the range observed in Camp Lake (1.6 mg/L to 3.9 mg/L) and therefore were also above the CLWQPO and MWQSOG guidelines.

4.3.3 TOTAL METALS

4.3.3.1 Aluminum

Total aluminum concentrations in 2023 were the highest at the beginning of the open water season and gradually decreased/stabilized until the end of sampling in October. These observations contrast the patterns observed during the 2020, 2021 and 2022 open water seasons which followed a U-shaped pattern with the highest concentrations occurring at the beginning and end of the open water seasons, and the lowest concentrations occurring in mid-summer (Figure 20).

The highest concentrations at nearly all stations along Camp Lake occurred in spring, shortly following ice out. The highest spring concentrations along the main axis of the lake, in the South, Central, and North basins, ranged from 0.1 mg/L (SB-1) to 0.12 mg/L (CB-1) and were above the MWQSOG Tier III guideline (0.1 mg/L at pH ≥ 6.5), except for SB-1. The spring concentrations within the East basin stations (0.17 mg/L at EB-1 and EB-2) were also above the MWQSOG Tier III guideline, however concentrations were consistent with the main axis of the lake and were not notably higher than the other basins. The MWQSOG Tier III guideline for total aluminum is dependent on pH and is 0.1 mg/L for pH ≥ 6.5 and 0.005 mg/L for pH < 6.5. Concentrations in all four basins declined from late May until the end of October, dropping below the MWQSOG Tier III guideline and remaining below until the end of open water sampling. The lowest concentrations generally occurred around late August to early September. Aluminum concentrations in Camp Lake, including the discharge, closely tracked concentrations at SC-1 and were regularly lower at some stations.

Unlike previous years, concentrations in spring 2022 and 2023 appear to have been affected by higher concentrations measured over winter (as measured on March 18, 2022 and February 14, 2023). Total aluminum concentrations in winter 2021/2022 and 2022/2023 did not decline to the same extent as previous winters. The negligible flows at the end of 2022 persisting through winter (as evidenced by negligible outflow from the Camp Lake discharge weir) are the likely cause of higher concentrations observed in February 2023. Only a slight increase in concentrations from winter 2021/2022 to spring 2022 was observed and an even lesser increase was observed from winter 2022/2023 to spring 2023, reflecting the reduced impact from runoff. Aluminum concentrations in spring 2023 were lower than concentrations measured in spring 2020 – 2022 and consistent with spring 2019.

The 2023 fall concentrations at all stations remained below the MWQSOG Tier III guideline and did not increase with the reduction of flows through Sherlett Creek, which is contrasted to fall concentrations in 2017 – 2022.

Concentrations were below the CLWQPO (ambient SC-1 + 25%) at all main lake axis stations, as well as EB-1 and the Camp Lake discharge, by the end of May and remained below the CLWQPO until the end of open water sampling. At EB-2, concentrations were above the CLWQPO at four additional sampling events after May 30, 2023.

4.3.3.2 Cadmium

The highest total cadmium concentrations of 2023 occurred in all basins of Camp Lake early in the open water season, shortly after ice-out (Figure 21). Concentrations declined rapidly from spring through late July, and then declined more slowly or stabilized through September and October, similar to the pattern observed in 2022. The open water season minima were reached at most stations by late July, at which point concentrations ranged between 0.00032 mg/L (CB-1) and 0.00042 mg/L (EB-2). Total cadmium

concentrations remained stable through to the end of open water season except for EB-1 and EB-2 which gradually increased through to the end of the open water season.

The concentrations measured in August 2021 were the lowest open water season concentrations measured since Sherlett Creek flow was restored to the lake in 2018 (DJRC, 2022). The lowest concentrations in 2023 were slightly higher than these concentrations and more similar to concentrations measured in 2019 and 2022. The slightly higher concentrations are attributed only in part to the lower inflows into Camp Lake from Sherlett Creek. Higher concentrations in spring, compared to concentrations measured during spring 2021, appeared to be another factor in the higher concentrations. Similar to aluminum, concentrations in spring 2023 were similar to concentrations in spring 2022, but higher than concentrations measured in spring of 2021, at all stations on Camp Lake, despite residual sources of acid and metal generating material being removed by the end of 2021. The net result of the higher concentrations in spring, coupled with the lower inflows from the creek, was concentrations in late July that were slightly higher than the lowest concentrations measured in 2021.

The higher spring concentrations are the direct result of winter concentrations that did not decline to the same extent as previous years (due to negligible flows over winter); however, despite these higher concentrations and the lower inflows, concentrations at all main lake axis stations declined to below the CLWQPO (ambient SC-1 + 25%) by early August. Concentrations remained below the CLWQPO until the end of open water sampling except CB-1, NB-1, EB-1, and EB-2 which fluctuated between being above and below through September and October.

Concentrations at most Camp Lake stations remained stable or increased slightly from the summer minimums through to the end of open water season except EB-1 and EB-2 which gradually increased from the summer minimums through to the end of October. The extent of increases was similar to concentrations in 2022 at EB-1 and EB-2, however the main lake axis stations in 2023 remained below concentrations observed in 2022. The highest concentrations in fall 2023 along the main lake axis ranged between 0.00036 mg/L (SB-1 and CB-2) and 0.0004 mg/L (CLD) compared to the highest concentrations in fall 2022, which ranged from 0.00042 mg/L (SB-2) to 0.00057 mg/L (CB-1 and NB-2). Concentrations in the East basin measured similar between fall 2023 and fall 2022.

The increase in concentrations during fall 2022 and 2023 was attributed to negligible flows through Sherlett Creek and beaver activity at the Notched Cofferdam (2023 only). The increase in concentrations at the end of open water monitoring in 2021 was attributed to construction activities that were still ongoing in the fall of 2021 (DJRC, 2022).

It is notable that total cadmium concentrations measured in the inflowing Sherlett Creek were lower than concentrations measured in Camp Lake at the start of open water sampling, but, by July, concentrations were as high, or higher, than concentrations at many Camp Lake stations. This pattern is consistent with concentrations measured at SC-1 in 2022. Continued decline in concentrations in Camp Lake may have been stalled by these higher concentrations; however, with limited inflows in late summer and early fall, the effect of the higher concentrations was likely reduced. The increases observed at EB-1 and EB-2 in fall were likely more so related to a small degree of cadmium loading either from within the lake or the adjacent watershed.

Concentrations within the main lake axis stations and the Camp Lake discharge were consistently below the MWQSOG Tier II acute objective (0.00125 mg/L) but remained above the chronic objective (0.00018 mg/L) through the open water season. The East basin stations, excluding one occurrence for EB-1 and EB-2 on May

16, 2023, had concentrations below the acute objective throughout the open water season; however, concentrations remained above the chronic objective over the duration of open water sampling, similar to the rest of Camp Lake stations.

4.3.3.3 Copper

Total copper concentrations along Camp Lake followed an L-shaped seasonal pattern as also observed in 2022 (Figure 22). Concentrations were highest shortly after ice-out and declined rapidly through to mid July, and then continued to decline more slowly through early October when the open water season minima occurred in all lake basins. Similar to iron and aluminum, and to a lesser extent for cadmium, a distinct increase in concentrations through fall was not observed. This pattern was observed in 2022 for copper but not for the rest of the metals. Similar to 2022 (and contrast to 2021), concentrations in the East basin were not substantially higher than concentrations at the main lake axis stations except for the first monitoring event in spring. Total copper concentrations in all parts of Camp Lake were above the Tier II chronic (0.00598 mg/L) objective throughout the 2023 open water season. Most stations were also above the Tier II acute objective (0.00857 mg/L) throughout 2023, except for SB-1, SB-2, CB-2, NB-1, NB-2, and the Camp Lake discharge at various times between September 19, 2023 and October 17, 2023, where concentrations dropped below.

As also observed for aluminum and cadmium, spring concentrations were higher than concentrations measured in winter; however, the increases occurred to a lesser extent than in spring 2020 – 2022 at all stations and were comparable to 2019 concentrations. The lesser spring increase is attributed to continued reduction in runoff effects compared to previous years. Similar to the other key metals, the 2023 spring concentrations were affected by higher concentrations in winter as a direct result of negligible flows through the 2022/2023 winter season.

Concentrations in all basins including the Camp Lake discharge declined to below the CLWQPO (ambient SC-1 + 30%) by the beginning of July and remained below until the end of open water sampling. Similar to aluminum and cadmium, the total copper concentrations in late summer were generally lower than concentrations measured in any other year since the re-establishment of Sherlett Creek flow to Camp Lake.

Total copper concentrations at SC-1 increased to above concentrations at many stations on Camp Lake by early August; however, the concentrations in Camp Lake are unlikely to have been affected by these higher concentrations due to lower inflows from Sherlett Creek to Camp Lake in late summer through fall.

4.3.3.4 Zinc

Total zinc concentrations along Camp Lake followed an L-shaped seasonal pattern as similarly observed in 2022 (Figure 23). Concentrations were highest shortly after ice-out and declined rapidly through to late July, and then continued to decline more slowly through to late September when the open water season minima occurred in all lake basins. Similar to cadmium, only a slight increase in concentrations was observed in EB-1 and EB-2 in fall (up to 0.22 mg/L), with all other stations remaining stable. Concentrations in 2022 followed a similar pattern and did not increase to the extent observed in 2021. During fall 2021, concentrations in the East basin increased from 0.12 mg/L (open water minima) to 0.28 mg/L by the end of October. Similar to the other key metals, the spring concentrations at all lake basins were affected by higher concentrations in winter as a direct result of negligible flows through the 2022/2023 winter season.

Concentrations at all lake basins, including the Camp Lake discharge, declined to below the CLWQPO (ambient SC-1 + 25%) by the beginning of July. Concentrations at all lake basins including Camp Lake

discharge were consistently above the MWQSOG Tier II acute and chronic objectives (0.0771 mg/L) throughout the 2023 open water season.

Similar to cadmium and copper, total zinc concentrations at SC-1 increased to at or above concentrations at many stations on Camp Lake by early July. The higher concentrations are unlikely to have affected concentrations in Camp Lake due to the lower inflows from Sherlett Creek to Camp Lake in late summer through fall.

4.4 Cold Lake

In the absence of flow over the discharge weir, the Camp Lake water quality could not affect water quality in Cold Lake from late July to October 2023. Although this period of no discharge cannot be considered as representing background conditions, the monitoring results are nevertheless helpful to further understand water quality in Cold Lake in the absence of a discharge.

4.4.1 PH, ALKALINITY AND SULPHATE

The field pH and alkalinity within the Camp Lake discharge closely tracked that of the North basin of Camp Lake, and Camp Lake overall. The field pH of the discharge was above the CLWQPO and the MWQSOG Tier III guideline of pH = 6.5 (minimum) from the start of open water season monitoring on May 16, 2023 until July 25, 2023, when the discharge was ended over the weir.

Stations included in the Cold Lake mixing zone (CL-3, CL-7, and CL-8) all had field pH values within the Tier III guideline range, ranging from 6.52 to 7.85 (Figure 24). Field pH values in the Cold Lake stations located outside the mixing zone (CL-2, CL-4, CL-5, and CL-6) showed variability with some values trending below the MWQSOG Tier III guideline in February and May but afterwords all pH values increased and were above the Tier III guideline for the remainder of open water season (Figure 25).

Alkalinity within Cold Lake was maintained at a generally consistent level ranging from 14 mg $CaCO_3$/L to 35 mg $CaCO_3$/L (Figures 26 and 27), which is consistent with concentrations measured in 2021 and 2022. A single low value of 4.3 mg $CaCO_3$/L was recorded at CL-8 in February 2023; however, this value is considered anomalous and not representative of conditions within Cold Lake in 2023.

In accordance with the requirements specified in the AMP, sulphate was added as a key water quality parameter for analysis in 2023. Sulphate has not been analyzed in any other monitoring years except for 2021. Sulphate concentrations within Cold Lake mixing zone appeared to be influenced by concentrations measured at the discharge from ice out until the end of June, after which concentrations at all mixing zone stations remained consistently around 25 mg/L until the end of open water sampling (Figure 32). Spring 2021 sulphate concentrations measured at the mixing zone did not appear to be influenced to the extent observed in 2023.

Increased concentrations within the mixing zone did not affect concentrations at any Cold Lake station outside of the mixing zone throughout the 2023 open water season (Figure 33).

4.4.2 TSS, TURBIDITY AND IRON

4.4.2.1 TSS

TSS concentrations in the Camp Lake discharge followed a similar U-shaped pattern to that of the rest of Camp Lake and closely tracked concentrations within the North basin and Camp Lake overall. TSS at the Camp Lake discharge ranged from from <1 mg/L to 5.0 mg/L.

TSS concentrations in the Cold Lake mixing zone in 2019, 2020, and 2021 showed initial higher concentrations in spring, due to high flows from the discharge during spring runoff (Figure 28). This trend was not observed in 2022 or 2023, with all concentrations being equal to or below 3.3 mg/L throughout the duration of open water sampling. The consistently low concentrations in 2022 and 2023 are associated with the completion of construction activities by the end of 2021 and consistently low concentrations in the discharge (i.e., well below the MWQSOG Tier II chronic objective). No flow over the Camp Lake discharge weir was present by July 25, 2022, which contributed to the low concentrations in the mixing zone on and after this date.

TSS concentrations within the Cold Lake stations outside the mixing zone followed a similar trend to that of the mixing zone, with concentrations being generally below 3.8 mg/L throughout open water sampling (Figure 29). A concentration of 10 mg/L was measured at CL-6 btm on May 30, 2023, however ground disturbance is the likely cause of the elevated concentration as CL-6 sfc measured <1.0 mg/L on the same date. The Camp Lake discharge had no effect on TSS concentrations at any station in Cold Lake in 2023.

It is notable that seasonal patterns prior to 2019 are not known due to the 4 mg/L analytical detection limit previously employed. TSS concentrations in the mixing zone and wider Cold Lake stations have remained well below the MWQSOG Tier II chronic objective of 11.5 mg/L since 2017.

4.4.2.2 Turbidity

The Camp Lake discharge followed the same pattern for turbidity as TSS (“U-shape”), with higher values measured in late May and early June and also in late summer and into fall. Turbidity in the Camp Lake discharge ranged from lows of approximately 8.5 to 11 NTU in mid-summer to highs of 17 NTU in spring and 16 NTU in fall.

Turbidity in the mixing zone followed the same U-shaped pattern observed in the discharge and was generally below 8 NTU (Figure 30). The U-shaped pattern for turbidity has been a consistent observation since the re-establishment of the continuous discharge from Camp Lake, and therefore appears to indicate some influence of the turbidity in discharge flows on the mixing zone. The higher values in the Camp Lake discharge in late summer and fall could not affect the mixing zone as there were no flows over the Camp Lake discharge weir during this time.

Turbidity at the Cold Lake stations located outside the mixing zone did not appear to be affected by turbidity in the mixing zone (Figure 31). Turbidity levels at all stations showed a wider range but were generally between <1 NTU and 8.2 NTU. There were samples at CL-4 (surface and bottom) that recorded higher-than-normal values in late May to early July, ranging from 11 mg/L to 17 mg/L. Higher-than-normal values have also been measured at CL-4 in previous monitoring years including 2017, 2018, and 2022. The Camp Lake discharge had the highest turbidity levels in the winter, which was also observed in 2022. The higher turbidity levels in the discharge over winter may have influenced the higher levels observed at CL-4 in spring. Unlike 2022, there were no elevated turbidity levels observed after July 11, 2023.

4.4.2.3 Iron

Total iron concentrations in the Camp Lake discharge closely tracked concentrations in Camp Lake and were the highest in spring. Concentrations ranged between 1.6 mg/L and 3.9 mg/L and were above the MWQSOG Tier III guideline (0.3 mg/L) throughout the duration of open water sampling.

In 2023, the concentrations of total iron at the mixing zone stations were highest in spring (0.57 mg/L to 2.0 mg/L), when concentrations and flow from the discharge were the highest and declined to lower concentrations (0.16 mg/L to 0.32 mg/L) by July 25, 2023, after discharge over the Camp Lake discharge weir had ended (Figure 34). Higher concentrations were noted at CL-7 and CL-3 than at CL-8 initially in spring, but then declined to comparable concentrations by early July. The higher concentrations in the spring suggest that there was impact from the discharge on the mixing zone in spring.

Unlike in previous years, an increase in concentration within the mixing zone did not occur in the fall, which may be attributed to less iron loading and the overall improvement of water quality within Cold Lake. Increases in concentrations in fall in previous years may be due to autumnal mixing of the water column with increased water temperatures – enabling flow mixing to the bottom of the lake and resuspension of iron that is released from lake sediments under anoxic conditions (DJRC, 2022).

With the exception of three sampling events (July 25, August 9, and August 22, 2023), total iron concentrations within the mixing zone stations were higher than the MWQSOG Tier III guideline. Total iron concentrations within the Cold Lake stations located outside the mixing zone were slightly more variable and higher than that of the mixing zone, ranging between 0.21 mg/L and 1.1 mg/L (Figure 35). Concentrations measured in 2023 were the lowest measured since 2019 and showed less variability and lower concentrations than 2020 – 2022. Total iron concentrations in Cold Lake were generally higher than the MWQSOG Tier III guideline but dropped below at most stations between June 13, 2023 and August 22, 2023.

During the period of time that Sherlett Creek was diverted from Camp Lake and water treatment was being used to manage water quality in Camp Lake, concentrations of total iron in Cold Lake were measured as high as 2.29 mg/L on near-bottom samples (DJRC, 2022). In comparison, total iron concentrations in 2023 were below this background concentration throughout the open water season and only ever reached as high as 2 mg/L (May 30 at CL-7 btm).

4.4.3 TOTAL METALS

4.4.3.1 Aluminum

The Camp Lake discharge appeared to have little to no effect on total aluminum concentrations in the Cold Lake mixing zone throughout most of 2023. The concentrations of total aluminum within the mixing zone stations were highest shortly after ice out and decreased throughout the 2023 open water season, ranging from 0.038 mg/L to 0.088 mg/L (Figure 36). The concentrations of total aluminum within the discharge showed less variability in 2023 compared to 2022, correlating to less influence in the mixing zone (despite similar magnitude of discharge flow).

Total aluminum concentrations in Cold Lake stations located outside the mixing zone were generally consistent with the mixing zone (between 0.028 mg/L and 0.094 mg/L; Figure 37). Concentrations were below the MWQSOG Tier III guideline at all stations throughout the open water season, including the mixing zone, except for CL-4 sfc (0.19 mg/L on June 27, 2023) and CL-6 btm (0.18 mg/L on May 30, 2023). The highest concentration measured in Cold Lake in the absence of a discharge from Camp Lake (i.e., background

concentration for the project) was 0.15 mg/L at CL-6 in August 2018 (bottom sample; DRJC, 2022). In 2023, the only concentrations above this background concentration were measured at CL-4 and CL-6 on June 27, 2023 and May 30, 2023, respectively. It is unlikely that these samples were affected by the discharge as concentrations within the mixing zone were not influenced.

4.4.3.2 Cadmium, Copper, and Zinc

In 2023, the concentrations of total cadmium, total copper, and total zinc within all mixing zone stations (CL-3, CL-7, and CL-8) were generally higher in spring than in summer and fall and initially higher at CL-7 and CL-3 compared to CL-8, similar to total iron (Figures 38, 40, and 42). The concentrations of total cadmium and total zinc at all mixing zone stations decreased to below MWQSOG Tier II objectives by July 11, 2023. Concentrations of total copper at all mixing zone stations decreased to below MWQSOG Tier II acute objectives by July 25, 2023, and stations varied between above and below the chronic objective from July 25, 2023 until the end of open water sampling. Camp Lake discharge concentrations appear to have affected concentrations within the mixing zone in spring for total cadmium, total copper, and total zinc. With that said, background concentrations for total copper within Cold Lake have been identified above the Tier II chronic objective and occasionally above the Tier II acute objective (DJRC, 2022). Therefore, the identified copper concentrations may not indicate impacts from the Camp Lake discharge.

Total cadmium, copper, and zinc concentrations within the Cold Lake stations located outside the mixing zone were marginally higher in spring than in summer or fall with concentrations being generally comparable to or lower than that of the mixing zone (Figures 39, 41, and 43). Total cadmium concentrations in Cold Lake outside the mixing zone were below the Tier II chronic objective throughout the open water sampling. Total zinc concentrations outside the mixing zone were above the Tier II acute and chronic objective at only one station (CL-4) in May 2023. Conversely, total copper concentrations above the Tier II chronic and/or acute objectives were present at all Cold Lake stations throughout open water sampling.

In the absence of the Camp Lake discharge, total cadmium concentrations in Cold Lake have been measured as high as 0.00034 mg/L while total zinc concentrations have been measured as high as 0.098 mg/L (DJRC, 2022). The concentrations of total cadmium and total zinc at all Cold Lake stations outside the mixing zone in 2023 are well below these values and therefore no impacts from the discharge on total cadmium or total zinc were apparent in 2023. Total copper concentrations in Cold Lake have ranged as high as 0.011 mg/L (i.e., above the Tier II acute objective) outside of any discharge event (DJRC, 2022). Only one total copper concentration measured at CL-5 btm on May 30, 2023 (0.052 mg/L) was higher than this maximum background concentration, however this value is considered anomalous and most likely caused by bottom disturbance as it is approximately 7 times higher than the surface sample taken on the same day and approximately 6-85 times higher than any other CL-5 btm samples collected in 2023. Therefore, it appears that the discharge did not have an effect on total copper concentrations in Cold Lake.

4.5 Discharge Toxicity

Water samples were collected from the Camp Lake discharge weir for testing of acute toxicity (96-hour LC_{50}) to juvenile rainbow trout on three dates in 2023 (May 16, July 11, and September 6). This toxicity test is one of the standard toxicity tests specified in the Metal and Diamond Mining Effluent Regulations (MDMER), which is not applicable to the Sherridon project but is completed to demonstrate whether the discharge

water quality presents a toxicity risk to the aquatic environment. Rainbow trout are one of the standard test organisms because they are more sensitive to potentially toxic materials than many other fish species.

The LC_{50} is the effluent concentration that is lethal to 50% of the fish tested. An LC_{50} result of >100% indicates that the discharge is not acutely toxic to fish. All three tests in 2023 returned an LC_{50} > 100% result (Table 7), with 0% mortality and 0% atypical behavior noted over the 96-hour test. The Camp Lake discharge was therefore not acutely toxic to fish at any time over the six-month open water monitoring period.

4.6 Groundwater Monitoring and Sampling

The following sections discuss the field and laboratory results for the groundwater monitoring events completed on June 14 and October 3, 2023, with data comparisons to previous samplings events. Since the onsite groundwater monitoring wells were installed in January and February 2022, there has been a total of four sampling events.

The groundwater results are compared to the MWQSOG, which were the reference criteria utilized for comparison of the February 2022 data (Tetra Tech; April 27, 2022 Memo). The groundwater results are compared to the MWQSOG based on sample specific hardness values measured for each groundwater sample.

Groundwater samples were collected from all 12 groundwater wells during both sampling events. During each sampling event in June and October, a total of 13 samples, including one field duplicate sample, were submitted to BV Laboratory in Winnipeg, Manitoba for laboratory analyses of general water chemistry, total metals, and dissolved metals. For comparison purposes, the groundwater analytical results are described below in terms of overburden and bedrock monitoring wells.

The 2023 results for field chemistry are provided in Table 9, general water quality in Table 10, dissolved metals in Table 11, and total metals in Table 12. The groundwater CoAs are included in Appendix D.

4.6.1 ROUTINE AND FIELD PARAMETERS

Bedrock Groundwater

Field pH measured for the bedrock monitoring wells MW-01-BR, MW-02-BR, and MW-04-BR showed consistent above neutral pH levels between 7.38 and 8.69 (i.e., within the MWQSOG Tier III guideline range) during both the June and October sampling events. MW-05-BR and MW-08-BR both had pH levels below the minimum MWQSOG Tier III guideline in the spring (6.49 and 6.16, respectively), but in the fall, pH levels were within the Tier III guideline range at both wells (6.63 and 6.66, respectively). MW-06-BR and MW-07-BR had slightly acidic pH levels during both sampling events with levels measuring between 4.8 and 6.17 (all below the minimum MWQSOG Tier III guideline). Monitoring wells MW-06-BR, MW-07-BR, and MW-08-BR are located within the vicinity of the former shaft and glory hole sites associated with the historic East Mine Workings Area (Figure 2), which likely explains the slightly acidic conditions observed within these wells. Overall, field pH levels in all wells were consistent with February and September 2022 sampling events.

The remaining general chemistry parameters showed overall consistency within each groundwater well with some seasonal variation. Generally, concentrations measured in 2023 were elevated in fall compared to spring which is consistent with concentrations measured in 2022. Higher concentrations of conductivity, total alkalinity, chloride, and TDS were observed in the wells north of Sherlett Creek (MW-01-BR, MW-02-BR, and

MW-04-BR) in 2022 and 2023 sampling events. Notably in June and October 2023, MW-01-BR had elevated concentrations of total hardness, TDS, sulphate and total alkalinity compared to 2022 and when compared to other bedrock wells.

Overburden Groundwater

Field pH measurements for the groundwater samples collected from the overburden groundwater wells showed consistent near neutral levels ranging from 6.58 to 7.65. MW-09-OB had a field pH of 10.59 measured in June, however it may have been due to equipment malfunctions as the lab pH was measured at 6.62. All groundwater samples collected from the overburden wells had field pH values that were within the MWQSOG Tier III guideline (6.5-9.0) in June and October 2023. In October 2023, MW-09-OB and MW-10-OB had lab pH values below the Tier III guideline (6.29 and 6.19, respectively) which is consistent with the September 2022 lab pH values. Both wells are located within a wetland area downgradient of the former East Mine Workings Area (Figure 2) which likely explains the slightly acidic conditions observed within these wells.

Other general chemistry parameters including alkalinity, TDS, sulphate, and hardness were consistent between spring and fall 2023 and when compared to 2022 concentrations.

4.6.2 DISSOLVED METALS

The June and October 2023 results for dissolved metals in groundwater are included in Table 11.

Bedrock Groundwater

Dissolved metal concentrations in MW-01-BR, MW-02-BR, MW-04-BR, and MW-05-BR were consistently low and below the hardness dependent MWQSOG Tier II chronic and acute guidelines during both spring and fall 2023 sampling events. Notably, MW-01-BR had elevated concentrations of calcium, magnesium, and potassium compared to other bedrock wells in 2022 and 2023. The elevated concentrations of minerals combined with the elevated concentrations of total hardness suggests that the water in MW-01-BR is likely “hard water” (i.e., high mineral content). Overall, concentrations measured in 2023 at all four wells were consistent with concentrations observed in 2022.

MW-06-BR, MW-07-BR, and MW-08-BR all had higher concentrations of key dissolved metals parameters during the 2023 spring and fall sampling events. All three groundwater wells had concentrations above the Tier II acute and chronic guidelines for dissolved cadmium (0.0024 mg/L to 0.11 mg/L), dissolved copper (0.12 mg/L to 6.2 mg/L), and dissolved zinc (1.5 mg/L to 35 mg/L). Concentrations measured in 2023 were consistent with concentrations observed in 2022.

Overall, higher concentrations were typically observed in the fall compared to the spring in 2023. MW-06-BR and MW-07-BR had the poorest water quality and higher metal concentrations when compared to the other bedrock wells.

Overburden Groundwater

Dissolved metal concentrations in MW-03-OB and MW-04-OB were consistently low and below the hardness dependent Tier II chronic and acute guidelines during both spring and fall 2023 sampling events. Concentrations of key dissolved metal parameters measured in 2023 were consistent with concentrations observed in 2022, albeit slightly higher.

MW-09-OB, MW-10-OB, and MW-11-OB all had dissolved zinc concentrations above the MWQSOG Tier II acute and chronic objectives in spring and fall 2023. Concentrations ranged from 1.3 mg/L (MW-11-OB) to 31 mg/ (MW-09-OB) which is consistent with concentrations observed in 2022. MW-10-OB also had dissolved cadmium concentrations above the Tier II acute and chronic objectives in spring and fall 2023 (0.0031 mg/L and 0.0016 mg/L, respectively). These concentrations are consistent with concentrations measured in 2022 at MW-10-OB.

Overall, higher dissolved concentrations in 2023 were generally observed at MW-09-OB, MW-10-OB, and MW-11-OB which is consistent with 2022 results and is likely attributed to the wetland location of the groundwater wells. Unlike bedrock wells, concentrations were not necessarily higher in the fall compared to the spring.

4.6.3 TOTAL METALS

The June and October 2023 results for total metals in groundwater are included in Table 12.

Bedrock Groundwater

Total aluminum concentrations were above the MWQSOG Tier III guideline in all seven bedrock wells in 2023 and ranged from 0.0075 mg/L (MW-06-BR) to 5.8 mg/L (MW-07-BR). These concentrations are consistent with concentrations measured in 2022. Total iron concentrations were above the Tier III guideline in all bedrock wells except for MW-07-BR, which is also consistent with 2022 results and concentrations ranged from 0.46 mg/L (MW-02-BR) to 9.8 mg/L (MW-01-BR). MW-06-BR, MW-07-BR, and MW-08-BR all had concentrations above the hardness-dependent MWQSOG Tier II acute and chronic objectives for total cadmium and total zinc in 2023. Concentrations of total cadmium ranged from 0.0028 mg/L (MW-08-BR) to 0.13 mg/L (MW-06-BR) and total zinc concentrations ranged from 1.7 mg/L (MW-08-BR) to 33 mg/L (MW-06-BR). Total cadmium concentrations in 2022 were consistent with 2023 results, however total zinc concentrations in 2023 have increased when compared to 2022 concentrations which ranged from 0.023 mg/L (below Tier II objectives) to 27 mg/L. MW-05-BR, MW-06-BR, MW-07-BR, and MW-08-BR all had concentrations above the hardness-dependent MWQSOG Tier II acute and chronic objectives for total copper in 2023. Concentrations ranged from 0.013 mg/L (MW-05-BR) to 6.7 mg/L (MW-07-BR) and were consistent with concentrations measured in 2022. MW-01-BR had concentrations above MWQSOG Tier III guidelines for total selenium and total uranium which are consistent with 2022 results.

Overall, higher concentrations were typically observed in the fall compared to the spring in 2023. MW-06-BR and MW-07-BR had the poorest water quality and higher metal concentrations when compared to the other bedrock wells.

Overburden Groundwater

Total aluminum concentrations were above the MWQSOG Tier III guideline in all five overburden wells in 2023, except for MW-04-OB in October (0.0049 mg/L). Concentrations ranged from 0.58 mg/L (MW-11-OB) to 47 mg/L (MW-03-OB) which were consistent with concentrations measured in 2022. MW-03-OB had a measured total aluminum concentration of 100 mg/L in June 2023, however this may be anomalous. Future spring sampling events will be important to observe total aluminum concentrations at MW-03-OB. Total cadmium concentrations were above the MWQSOG Tier II chronic objectives at MW-03-OB (spring), MW-09-OB (spring), and MW-10-OB (spring [acute and chronic] and fall). Total cadmium concentrations at MW-10-

OB were above Tier II objectives in 2022, however concentrations at MW-03-OB and MW-09-OB were above chronic objectives for the first time in spring 2023.

MW-03-OB (spring and fall), MW-04-OB (spring), and MW-10-OB (spring) all had total copper concentrations above the Tier II chronic objective. MW-03-OB measured concentrations in spring and fall were above the Tier II acute and chronic objectives, which is consistent with concentrations measured in 2022. Total iron concentrations were above the MWQSOG Tier III guideline in all five overburden wells in 2023. Concentrations ranged from 0.56 mg/L (MW-04-OB) to 76 mg/L (MW-03-OB) which were consistent with concentrations measured in 2022. MW-03-OB had a measured total iron concentration of 170 mg/L in June 2023, however this may be anomalous. Future spring sampling events will be important to observe total iron concentrations at MW-03-OB. Total zinc concentrations were above the MWQSOG Tier II acute and chronic objective in all five overburden wells in 2023, except for MW-04-OB. Concentrations ranged from 1.4 mg/L (MW-11-OB) to 30 mg/L (MW-09-OB) which are consistent with concentrations observed in 2022, albeit slightly higher.

In June 2023, MW-03-OB also had concentrations of total chromium, total lead, total nickel, total selenium, and total sliver above the respective Tier II objectives and Tier III guidelines. These higher concentrations are mostly inconsistent with concentrations measured during other sampling events. Therefore, it will be important to analyze data collected during the June 2024 sampling event to observe any patterns.

Overall, higher total concentrations in 2023 were generally observed at MW-09-OB, MW-10-OB, and MW-11-OB which is consistent with 2022 results and is likely attributed to the wetland location of the groundwater wells. Similar to dissolved metal concentrations in overburden wells, higher concentrations of total metals were mostly observed in the spring compared to the fall.

The results of the June and October 2023 groundwater monitoring showed elevated metals concentrations in the majority of the monitoring wells; specifically, MW-06-BR, MW-07-BR, MW-08-BR, MW-09-OB, MW-10-OB, and MW-11-OB appear to have the higher concentrations and poorer water quality when compared to the other groundwater wells. In the bedrock wells, higher concentrations were generally measured in the fall compared to the spring, however this was not observed in the overburden wells. When the 2023 results were compared against the results of the 2022 groundwater monitoring events, higher concentrations of key metal and water quality parameters were generally observed in 2023. To understand the groundwater quality at the site, it will be important to complete groundwater sampling events in spring and fall to increase the available data set. As knowledge of the groundwater at the site becomes more comprehensive, further insight may be available to determine if groundwater could be the source of elevated metals concentrations observed in Sherlett Creek downstream of SC-4.

4.7 QA/QC

A total of two field duplicate samples were collected during each biweekly surface water sampling event, one from Camp Lake and one from Cold Lake, and one trip blank was also submitted for each trip, excluding the sampling events on February 14 and October 31, 2023. During the groundwater sampling events, one field duplicate sample was collected from MW-06-BR (June) and from MW-03-OB (October). A field blank and trip blank were also submitted for laboratory analysis.

QA/QC assessment includes calculation of relative percent difference (RPD) for original and duplicate sample results, calculated as:

$$RPD = \frac{(A - B) \times 100}{(A + B) / 2}$$

Where: A = concentration of constituent in the original sample

B = concentration of constituent in the duplicate sample

Relative Percent Difference (RPD) was calculated for each duplicate and results are shown in Tables 4 to 6 for surface water and Table 10 to 12 for groundwater. General accepted protocols allow for a 30% RPD for water sample results that are greater than five times the detection limit of the analysis. Overall, QA/QC results show a high consistency between original and duplicate samples collected in 2023 for both surface water and groundwater.

5.0 PROGRESS TOWARD PROTECTION OF KISSISSING LAKE

One of the primary objectives of the Sherridon Reclamation Project is to prevent further degradation of Kississing Lake water quality related to runoff and discharge of mining impacted water from the former Sherridon Mine Site (AMP, 2022). Water quality monitoring within Kississing Lake was completed in September 2008 as part of a baseline study completed prior to the start of construction activities for site reclamation (Tetra Tech WEI, 2016). The September 2008 water quality results enable comparison of the current monitoring data to this data set to evaluate the degree of improvement that has been achieved through site reclamation works. It is important to continue to evaluate water quality in order to assess ongoing progress towards improvement of water quality within Kississing Lake.

During the 2023 open water season, the mean concentrations of the key total metals and key dissolved metals in the Camp Lake discharge were 71% to 96% lower and 78% to 99% lower, respectively, than concentrations measured in September 2008 (Table 13). From 2008 to 2023, the mean discharge pH increased from 3.4 to 6.9 (Table 13). From the 2021 to 2023 open water seasons, the mean concentrations of total and dissolved aluminum, cadmium, copper, and zinc showed no distinct changes. Total iron and dissolved iron concentrations showed a 10% decrease and 12% decrease, respectively, from 2021 concentrations.

The percent reduction in the mean concentrations of aluminum, cadmium, copper, and zinc at Cold Lake stations CL-2, CL-3, CL-4, and CL-5 correlate with the percent reduction in the mean metal concentrations occurring in the Camp Lake discharge (Table 14 and Table 15). Station CL-6 indicated a smaller percent reduction relative to the other stations; however, CL-6 contained lower mean metal concentrations relative to the other stations in 2008 (due to being farther from the historical discharge), which explains the lower percent reduction. Due to the reduced metal concentrations in the Camp Lake discharge, the mean concentrations of total cadmium and total zinc across Cold Lake were below the MWQSOG Tier II chronic exposure objectives (0.00018 mg/L and 0.0771 mg/L, respectively) in 2023. The mean concentrations of total aluminum across the lake were below the MWQSOG Tier III guideline (0.1 mg/L) in 2023.

Reclamation of the Sherridon Mine Site has lowered the total and dissolved iron loading into Cold Lake via the Camp Lake discharge by 89% and 97%, respectively (Table 13). The reduced concentrations resulted in decreases in the mean total iron concentrations at CL-2, CL-3, CL-4, CL-5, and CL-6 up to 80% decrease) (Table 15). Similarly, the mean dissolved iron concentrations at CL-2, CL-3, CL4, and CL-6 decreased up to 91%, while only the mean dissolved iron concentrations at CL-5 (btm) increased by 37% (Table 14).

The disproportionate decreases (and increases) in the mean concentrations of total and dissolved iron indicate that there is another source of iron to Cold Lake other than the Camp Lake discharge. The 2021 Water Quality Summary Report by DJRC (2022) stated that the most probable source of the additional iron is iron release from the Cold Lake sediments. Due to several decades of uncontrolled release of mining-impacted water from the Sherridon Mine Site, sediments within Cold Lake contain a considerable fraction of iron, representing 25% to 28% of the total sediment mass at the time of the September 2008 Baseline Study. The release of iron from the Cold Lake sediments has been suggested to occur under oxygen-depleted conditions, such as those that develop on lake bottoms under winter ice cover and under thermally stratified conditions that remain in spring/summer (DJRC, 2022; Wetzel, 2001).

6.0 CONCLUSIONS

The 2023 monitoring year was the second year of water quality monitoring in the post-construction phase of the Sherridon Mine Reclamation Project. The 2023 monitoring year was also the second year that the water quality results for Camp Lake were compared to the Camp Lake Water Quality Performance Objectives (CLWQPO), which were developed within the Adaptive Management Plan (AMP) that governs the post-construction and post-closure periods of the reclamation project. The CLWQPO represents proposed targets that have been estimated to be achieved within three to four years of the completion of construction if the system is operated in accordance with design parameters.

For the fifth consecutive year, Sherlett Creek provided sufficient alkalinity to maintain a near-neutral pH within Camp Lake, without the need for batch lime treatment, despite 2023 being the lowest year of precipitation in the last 10 years and the third consecutive year of low flows within Sherlett Creek. Flows were further reduced in 2023 due to the Camp Lake water level being raised through the unauthorized installation of stop logs at the discharge weir. It is estimated that stop logs were in place at the start of the open water monitoring on May 16, 2023. Beaver activity was also present on Sherlett Creek at the Notched Cofferdam, which further restricted flows into Camp Lake.

6.1 Sherlett Creek

Sherlett Creek documents the background surface water quality before the creek inflows into Camp Lake. Sherlett Creek is essential to the water quality within Camp Lake for several reasons including the continual supply of alkalinity for neutralizing pH within Camp Lake.

Field pH was near neutral and ranged from 6.61 to 7.61 during the 2023 open water season. This is consistent with field pH levels measured since 2017. Similar to 2017 and 2022, pH levels in 2023 declined slightly when flows were reduced through the creek (late summer). All four years have been characterized by low precipitation. Despite this, all field pH values in 2023 were within the MWQSOG Tier III guideline range (6.5 to 9.0). Alkalinity concentrations followed an increasing trend throughout the 2023 open water season, consistent with previous years.

In 2023, TSS concentrations during low flow periods were comparable to concentrations measured during high flow periods, ranging from <1.0 mg/L to 3.3 mg/L. There has been no apparent relation between flow volume and TSS at SC-1 in any of the low flow years including 2023. All measured concentrations in 2023 were below the MWQSOG Tier II chronic objective of 11.5 mg/L. All turbidity results in 2023 were below 3.2 NTU and no seasonal increase during low flow was observed, unlike 2017 and 2021 in which results ranged from 4.9 NTU to 7.3 NTU. In accordance with the requirements specified in the AMP, sulphate was added as a key water quality parameter for analysis in 2023. Sulphate concentrations gradually increased throughout the open water season, starting at 1.5 mg/L and increasing to 11 mg/L by October which is consistent with concentrations measured in 2021.

Starting in 2021, the total concentrations of cadmium, copper, and zinc were compared to MWQSOG Tier II aquatic life criteria using an average hardness calculated for Sherlett Creek (using SC-1 hardness) instead of the average Cold Lake hardness (59.4 mg $CaCO_3$/L), which was used in previous years. The average SC-1

hardness in 2023 was calculated to be 33.7 mg $CaCO_3$/L, which is similar to the hardness calculated in 2022 (30.8 mg $CaCO_3$/L).

Over the past seven years of monitoring (2017-2023), total iron concentrations at SC-1 have typically been below 0.4 mg/L. In 2023, concentrations during low flow periods reached 0.52 mg/L, while concentrations outside of the low flow months of August to October were below the MWQSOG Tier III guideline of 0.30 mg/L, with the exception of the concentration measured on May 16, 2023 (0.32 mg/L). Total aluminum concentrations have generally ranged between 0.02 mg/L and 0.10 mg/L over the last seven years of monitoring. All concentrations in 2023, with the exception of July 11 (0.18 mg/L), were below the MWQSOG Tier III guideline (0.10 mg/L for pH ≥ 6.5 and 0.005 mg/L for pH < 6.5).

Outside of low flow conditions, total cadmium concentrations have generally ranged between 0.00010 mg/L and 0.00050 mg/L over the last seven years of monitoring. Higher concentrations (up to 0.00089 mg/L) were measured during the period of lower flows, which was consistent with concentrations observed during low flow periods in 2017 and 2022. Total cadmium concentrations in 2023 were generally above the MWQSOG Tier II chronic objective of 0.00012 mg/L and below the acute objective of 0.00071 mg/L, which is consistent with results since 2017. Higher concentrations of copper were observed during the low flow period as noted for the other metals. In 2023, concentrations ranged from 0.0055 mg/L to 0.010 mg/L outside of the period of lower flows and increased up to 0.036 mg/L in fall. The higher concentrations in fall were similar to concentrations reported in 2017 and 2022, whereas concentrations in 2021 appeared to be less affected by low flows. Total zinc concentrations in 2023 were generally above the MWQSOG Tier II chronic and acute objectives (0.0477 mg/L) throughout the open water season, which is consistent with previous years.

Overall, key parameter concentrations within SC-1 have shown minor variations since monitoring began in 2017. Surface runoff had less of an effect on the creek in 2023 due to extremely low precipitation and no major rainfall events recorded during sampling events.

Five additional surface water sampling locations (SC-2 to SC-6) were sampled upstream of SC-1 to gather further water quality information in the reach of Sherlett Creek between SC-1 and Sherlett Lake. In 2021, a detailed sampling event was conducted to investigate a potential sub-surface source of metal contamination that enters the creek downstream of SC-4. The source was identified as either an inflow of metal contaminated groundwater or direct contact of the creek with the mineralized zone of the Sherridon deposit, which passes directly beneath the creek in this location.

In 2023, total concentrations of cadmium, copper, and zinc at stations SC-3, SC-2, and SC-1 were higher than at stations SC-4, SC-5, and SC-6 on all open water sampling dates, which is consistent with the results from 2022; however, total metal concentrations at all stations were higher compared to 2022 concentrations, which indicates that the third consecutive year of lower flows in 2023 likely resulted in some increased influence on metals concentrations.

6.2 Camp Lake

An important factor to consider in understanding water quality in Camp Lake and its potential effect on water quality in Cold Lake is the magnitude of inflow from Sherlett Creek into the South basin of Camp Lake. During the 2023 open water sampling season, flows from Sherlett Creek into Camp Lake were negligible from late July to the end of open water monitoring, reflecting low seasonal precipitation and the presence of beaver activity restricting flows.

The results and conclusions are stated first for the winter sampling event completed on February 14, 2023, as concentrations in spring are dependent on concentrations in winter, and specifically, water quality in winter must be understood in order to assess the effectiveness of reclamation activities in reducing concentrations in spring.

In previous monitoring years, water sampling events completed under winter ice cover indicated that water quality substantially improved over winter compared to water quality measured in fall. Flows maintained under winter ice cover reduce metals, TSS, and turbidity, and improve pH, and therefore provide an indication of water quality that can be achieved in the absence of runoff related effects but in the presence of flows. The winter sampling event completed on February 14, 2023 was the second winter sampling event where water quality did not substantially improve under winter ice cover. Substantial reductions in metals, TSS, and turbidity that occurred over previous winters did not occur to the same extent over the 2022/2023 winter. Flows on Sherlett Creek had substantially reduced by late summer of 2022 and were negligible to zero over winter. In the absence of flows under ice cover, water quality over winter could not improve to the same extent as it did in previous monitoring years, where flow was maintained.

The result of the higher concentrations in winter were concentrations in spring that were similar to concentrations measured during previous springs for many of the key total metals, including aluminum, cadmium, copper, and zinc. This is despite reductions in remaining sources of acid and metal generating mine waste that were completed by the end of 2021.

A comparison of the metals concentrations between winter and spring provides an indication of the overall contribution of spring runoff to metals concentrations in Camp Lake. Concentrations of all key metals increased from winter to spring; however, the increases were generally less than that of previous years, indicating less metals loading to the lake from spring runoff in 2023. The improvements in water quality from winter to spring were most notable for total aluminum, iron, cadmium, and zinc where only a slight increase in concentrations was observed after spring runoff at some stations, while other stations showed no increase from runoff in spring. Aluminum, iron, cadmium, and zinc therefore appeared to be less affected by spring runoff than copper and substantially less affected than concentrations in spring 2022. Overall, the monitoring results indicate that spring runoff still contributes a small degree of metals loading to the lake, although this is reduced compared to prior years. The increases that still occur in spring are likely due to very small quantities of residual sources of mine waste that remain onsite (which are likely not practical to remove), loading from natural metal-bearing rock in vicinity of Camp Lake, and/or interactions between submerged tailings and the lake water.

Concentrations of metals, as well as TSS and turbidity, decreased from spring into mid-summer with flow from Sherlett Creek. The decreases occurred as long as Sherlett Creek flow was maintained to the lake, which occurred until approximately late July, after which inflows into Camp Lake became substantially reduced due to the addition of an estimated two stop logs which were added to the Camp Lake discharge weir sometime between the July 11 and July 25, 2023 monitoring events.

Unlike in 2021, the cause of the lower inflows into Camp Lake was both lower precipitation-based flows on Sherlett Creek, and water levels on Camp Lake which were artificially raised by the placement of stop logs at the start of the open water monitoring on May 16, 2023. A total of three stop logs are estimated to have been in place on this date based on available information. The lowest metals concentrations were generally measured on or shortly after inflows reduced. In previous low flow years, metals generally increased after

inflows were reduced to near-zero (fall); however, in 2023, despite the lower inflows in late summer and fall, the concentrations of all key total metals were some of the lowest measured concentrations since the re-establishment of Sherlett Creek flow to Camp Lake. This is attributed directly to the progress of the Sherridon Reclamation Project.

The following is a summary of the key parameters when compared against the CLWQPO for the 2023 open water season.

- ***Field pH:*** Levels at all stations were above the CLWQPO minimum during all sampling events with the exception of the last sampling event in October and the last two sampling events in October for the Camp Lake discharge.
- ***TSS:*** Concentrations at all stations remained well below the CLWQPO (11.5 mg/L) for the entirety of the open water season.
- ***Turbidity:*** All turbidity levels measured during the 2023 open water season were above the CLWQPO.
- ***Iron:*** Concentrations were above the CLWQPO during all sampling events and for all stations in 2023; however, overall, concentrations were reduced when compared to concentrations measured in 2022.
- ***Aluminum:*** Concentrations were below the CLWQPO (ambient SC-1 + 25%) at all lake stations, as well as EB-1 and the Camp Lake discharge, by the end of May and remained below the CLWQPO until the end of open water sampling. At EB-2, concentrations were above the CLWQPO at four additional sampling events after May 30, 2023.
- ***Cadmium:*** Concentrations at most lake stations, including the Camp Lake discharge, were above the CLWQPO in spring until early August, after which they dropped below the CLWQPO and remained below until the end of open water sampling. CB-1, NB-1, EB-1, and EB-2 periodically fluctuated between being above and below the CLWQPO through September and October.
- ***Copper:*** Concentrations at all lake stations, including the Camp Lake discharge, were above the CLWQPO in spring until early July, after which they dropped below the CLWQPO and remained below until the end of sampling.
- ***Zinc:*** Concentrations at all Camp Lake stations, including the Camp Lake discharge, were above the CLWQPO in spring until early July, after which they dropped below the CLWQPO and remained below until the end of sampling.

Overall, the 2023 monitoring year results indicate water quality in Camp Lake that is achieved after three consecutive years of low precipitation and flows, coupled with artificially high water levels. The residual effect of these conditions may cause an extension of the projected three to four year recovery period for water quality within Camp Lake. Despite this, many of the key metal concentrations measured in 2023 were the lowest measured since 2017. It is important to note that the reclamation Project was intended and designed to prevent further degradation of the environment related to historic mining operations. The Project was not intended or designed to return the site to pre-mining conditions (AMP, 2022).

6.3 Cold Lake

Due to the addition of stop logs at the Camp Lake discharge weir, discharge flow over the Camp Lake weir was ended by the time of the July 25, 2023 monitoring event. No discharge was present over the weir from at least this date until the end of open water sampling.

The following are conclusions for water quality monitoring within Cold Lake:

- The stations located within Cold Lake outside the mixing zone had some pH values below the MWQSOG Tier III guideline in February and May, while stations in the Cold Lake mixing zone all had field pH values within the Tier III guideline.
- Alkalinity in Cold Lake was maintained at a fairly constant level throughout the 2023 open water season.
- Sulphate concentrations in the mixing zone appeared to be influenced by discharge concentrations from ice out until June. Cold Lake stations outside the mixing zone were not affected by the discharge.
- TSS within Cold Lake both in and outside the mixing zone were consistently low (i.e., lower than in Camp Lake and well below the Tier II chronic objective).
- Turbidity within the mixing zone stations was generally below 8 NTU and appeared to be affected by the mixing zone in spring (due to higher concentrations present in the mixing zone in spring relative to mid-summer); however, turbidity outside the mixing zone did not appear to be affected by the discharge turbidity.
- Total aluminum concentrations in the Cold Lake mixing zone were generally consistent throughout the open water season and therefore did not appear to be affected by the discharge. Cold Lake stations outside the mixing zone had concentrations consistent with the mixing zone.
- Higher concentrations of total iron, total cadmium, total copper, and total zinc were measured in the Cold Lake mixing zone in spring versus summer/fall, with the highest concentrations measured at CL-7 and CL-3 versus CL-8; therefore, the discharge appears to have affected the mixing zone, but only in spring.
- For Cold Lake outside the mixing zone, total aluminum and total iron were periodically measured slightly above the highest measured background concentrations for Cold Lake for the project, in summer and fall; however, since the discharge had no apparent effect on the mixing zone outside of spring, the higher concentrations are likely not due to the discharge.
- Based on a comparison of background concentrations for Cold Lake for total cadmium and total zinc, there was no apparent effect from the discharge on concentrations of these metals in Cold Lake outside the mixing zone in 2023.
- The concentrations of total copper in spring at Cold Lake stations were not above background concentrations, unlike 2022. One concentration at CL-5 btm was measured above background, however it is considered anomalous as it is approximately 6-85 times higher than any other CL-5 btm sample collected in 2023.

6.4 Groundwater

The monitoring wells located in the wetland area and to the southeast, in the vicinity of the historic East Mine workings, showed water quality parameters potentially indicative of exposure to naturally mineralized zones or potential mine waste, with the remaining wells to the north of the creek and southwest along the bedrock ridge showing freshwater indicators. Elevated total and dissolved metal concentrations were observed within the vicinity of the wetland area, which is consistent with the results from February and September 2022. With that said, the majority of the groundwater wells had elevated concentrations of key metals such as aluminum and iron.

In the bedrock wells, higher concentrations were generally measured in the fall 2023 compared to the spring 2023, however this was not observed in the overburden wells. When the 2023 results were compared against the results of the 2022 groundwater monitoring events, higher concentrations of key metal and water quality parameters were generally observed in 2023.

To understand the groundwater quality at the site, it will be important to complete groundwater sampling events in spring and fall to increase the available data set. As knowledge of the groundwater at the site becomes more comprehensive, further insight may be available to determine if groundwater could be the source of elevated metals concentrations observed in Sherlett Creek downstream of SC-4.

7.0 RECOMMENDATIONS

The environmental monitoring program is recommended to continue into 2024 (i.e., the third year of post-construction monitoring). The environmental monitoring should follow the requirements listed in the AMP for water quality monitoring. Water levels on Camp Lake should continue to be captured during the 2024 open water monitoring season as per the requirements of the AMP. No reduction in the sampling frequency is proposed for the 2024 monitoring year.

8.0 REFERENCES

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TABLES

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
Camp Lake										
SB-1	14-Feb-23		14:15	0.6	6.67	42.9	82.9	10.91	146.3	**14.48**
	16-May-23		10:45	14.2	6.93	238.0	100	9.9	173.0	**7.43**
	30-May-23		9:50	18.4	7.09	92.2	81.2	7.61	117.3	**12.89**
	13-Jun-23		16:35	21.3	7.39	282.1	78.3	6.67	127.5	**6.26**
	27-Jun-23		9:40	20.0	7.26	281.3	96.8	8.42	176.7	**6.18**
	11-Jul-23	**SW-113**	9:30	17.5	6.67	278.5	63.7	6.05	62.9	**11.63**
	25-Jul-23		9:25	21.6	7.09	304.1	72.6	6.37	62.1	**10.70**
	9-Aug-23		9:50	18.5	6.96	346.5	81.6	7.34	63.0	**8.82**
	22-Aug-23		9:35	18.7	6.81	396.7	84.3	7.58	81.0	**11.10**
	6-Sep-23		9:20	16.6	6.72	430.8	80.5	7.58	88.7	**7.16**
	19-Sep-23		9:25	15.5	6.64	421.3	74.3	7.08	37.3	**16.40**
	4-Oct-23	**SW-131**	9:25	11.5	6.57	458.8	60.7	6.3	82.6	**12.76**
	17-Oct-23		10:10	8.2	6.55	463.5	79.7	8.93	78.1	**9.60**
	31-Oct-23		-	-	-	-	-	-	-	-
SB-2	14-Feb-23		14:25	0.3	7.27	93.2	86	11.34	133.7	**11.77**
	16-May-23	**SW-101**	10:40	13.4	6.87	231.5	102.8	10.44	173.1	**8.45**
	30-May-23		9:45	18.4	7.05	259.1	91.3	8.5	122.1	**12.77**
	13-Jun-23		16:30	21.0	7.42	283.4	75.5	6.53	125.1	**5.97**
	27-Jun-23		9:35	19.8	7.28	228.0	97.1	8.44	175.8	**5.52**
	11-Jul-23		9:25	17.5	6.88	272.8	65.4	6.25	59.5	**11.53**
	25-Jul-23		9:20	21.4	7.11	301.8	68.8	6.08	58.6	**10.47**
	9-Aug-23		9:45	18.3	6.87	349.4	78.2	7.13	57.4	**10.50**
	22-Aug-23		9:30	18.6	7.00	390.7	84.3	7.63	80.1	**10.82**
	6-Sep-23		9:15	16.4	6.87	421.0	74.4	7.04	87.7	**7.59**
	19-Sep-23		9:20	15.4	6.87	410.7	72.1	6.86	35.9	**18.36**
	4-Oct-23		9:20	11.5	6.81	454.6	75.1	7.74	80.2	**12.66**
	17-Oct-23		10:05	8.2	6.87	455.3	81.5	9.11	77.1	**11.20**
	31-Oct-23		-	-	-	-	-	-	-	-
CB-1	14-Feb-23		13:25	0.1	6.80	122.0	114.2	14.96	150.9	**16.49**
	16-May-23		10:50	14.1	6.86	277.8	95.3	9.45	154.6	**7.63**
	30-May-23	**SW-104**	9:55	18.3	7.11	288.1	82.5	7.75	119.9	**32.20**
	13-Jun-23		16:40	21.3	7.31	300.8	72.4	6.16	125.3	**6.14**
	27-Jun-23		9:45	20.4	7.27	287.0	91.4	7.87	176.4	**5.88**
	11-Jul-23		9:35	17.7	6.64	285.6	69.0	6.54	65.0	**8.68**
	25-Jul-23		9:30	21.2	7.08	222.8	68.4	6.06	65.5	**10.11**
	9-Aug-23		9:55	17.9	7.00	351.2	85.1	7.75	73.7	**9.18**
	22-Aug-23		9:40	19.4	6.86	310.3	86.8	7.73	82.0	**10.45**
	6-Sep-23		9:25	16.7	6.70	360.3	76.7	7.2	89.3	**6.93**
	19-Sep-23		9:30	15.6	6.65	422.1	71.1	6.75	37.9	**16.19**
	4-Oct-23		9:30	11.2	6.58	465.9	67.0	6.94	85.7	**10.95**
	17-Oct-23		10:15	8.2	**6.32**	464.1	84.0	9.39	78.8	**12.17**
	31-Oct-23		-	-	-	-	-	-	-	-
CB-2	14-Feb-23		14:00	0.4	7.13	141.0	73	10.06	126.0	**22.40**
	16-May-23		11:00	14.1	6.87	278.4	95.3	9.45	154.6	**10.20**
	30-May-23		10:00	18.4	7.08	185.0	83.6	7.76	121.0	**14.01**
	13-Jun-23		16:45	21.0	7.38	307.3	76.4	6.6	127.1	**6.65**
	27-Jun-23		9:50	20.1	7.28	290.6	94.1	7.94	171.9	**6.02**
	11-Jul-23		9:40	17.4	6.63	286.3	72.3	6.81	68.6	**12.01**
	25-Jul-23		9:35	21.2	7.13	223.4	63.3	5.61	65.4	**10.05**
	9-Aug-23	**SW-121**	10:00	17.7	6.96	353.1	88.7	8.1	71.8	**9.01**
	22-Aug-23		9:45	19.5	6.88	288.0	88.5	6.97	82.7	**10.84**
	6-Sep-23		9:30	16.7	6.82	433.2	77.5	7.27	89.6	**6.10**
	19-Sep-23	**SW-128**	9:35	15.5	6.65	422.9	72	6.83	38.8	**13.90**
	4-Oct-23		9:35	11.1	6.61	465.6	67.6	7.01	87.0	**10.74**
	17-Oct-23		10:20	8.5	6.51	465.9	81.1	9.02	79.7	**10.64**
	31-Oct-23		-	-	-	-	-	-	-	-

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
NB-1	14-Feb-23		12:50	0.1	6.91	25.2	43.4	6.05	163.7	**32.10**
	16-May-23		11:40	14.3	6.84	310.5	102.4	10.16	130.7	**11.03**
	30-May-23		11:05	19.2	7.12	307.4	92	8.45	124.9	**16.11**
	13-Jun-23		17:05	21.4	7.37	325.5	77.8	6.65	135.7	**6.67**
	27-Jun-23		10:10	20.4	7.30	337.9	102.4	8.73	178.8	**7.12**
	11-Jul-23		10:00	17.5	6.63	311.8	78.5	7.49	70.9	**7.03**
	25-Jul-23		9:55	20.8	7.13	324.1	64.6	5.77	69.1	**8.46**
	9-Aug-23		10:25	18.3	7.01	364.4	88.6	8.01	82.3	**8.02**
	22-Aug-23	**SW-124**	10:05	19.4	6.97	370.5	82.8	7.3	81.4	**7.73**
	6-Sep-23	**SW-125**	9:50	16.3	6.58	462.0	77	7.29	91.7	**7.28**
	19-Sep-23		9:55	15.3	6.65	450.3	76	7.21	40.7	**12.58**
	4-Oct-23		9:55	11.1	6.53	493.0	66	6.84	90.6	**9.06**
	17-Oct-23		10:45	8.3	**6.36**	488.8	88.9	9.98	83.3	**8.43**
	31-Oct-23		-	-	-	-	-	-	-	-
NB-2	14-Feb-23		13:00	0.5	7.32	149.0	55.1	9.00	120.8	**24.60**
	16-May-23		11:25	14.2	6.78	322.2	97.2	9.63	139.2	**10.87**
	30-May-23		11:00	19.9	7.04	167.5	86.4	7.83	122.3	**16.65**
	13-Jun-23		17:00	20.9	7.40	320.1	76.1	6.62	133.7	**6.50**
	27-Jun-23	**SW-112**	10:05	19.9	7.29	329.0	94.4	8.07	175.1	**6.75**
	11-Jul-23		9:55	17.6	6.80	307.3	70.6	7.33	69.1	**6.07**
	25-Jul-23		9:50	21.2	7.15	320.6	66.6	5.85	67.4	**8.78**
	9-Aug-23		10:20	18.0	7.09	365.3	87.1	7.9	111.5	**7.43**
	22-Aug-23		10:00	19.3	7.02	417.9	76.8	6.84	80.6	**7.75**
	6-Sep-23		9:45	16.1	7.04	454.4	77.8	7.37	91.7	**5.64**
	19-Sep-23		9:50	15.3	6.77	447.3	76.4	7.34	39.3	**11.33**
	4-Oct-23		9:50	10.9	6.64	490.7	65.1	6.83	92.3	**8.68**
	17-Oct-23		10:40	8.2	**6.48**	487.1	80.8	9.04	82.1	**7.92**
	31-Oct-23		-	-	-	-	-	-	-	-
EB-1	14-Feb-23	**SW-102**	13:35	0.2	6.58	40.8	139	17.86	158.2	**23.50**
	16-May-23		11:05	13.9	6.73	349.1	96.2	9.50	156.0	**14.85**
	30-May-23		10:05	18.8	7.08	328.5	92.2	8.5	122.2	**16.09**
	13-Jun-23	**SW-108**	16:50	20.3	7.37	345.3	73.7	6.40	134.7	**7.36**
	27-Jun-23		9:55	20.3	7.26	351.2	89.7	7.7	174.3	**6.47**
	11-Jul-23		9:45	17.6	6.70	334.6	70	7.72	69.5	**5.11**
	25-Jul-23		9:40	20.7	7.18	344.7	67.3	6	63.6	**7.40**
	9-Aug-23		10:05	16.3	7.03	378.4	87.8	8.2	85.6	**6.95**
	22-Aug-23		9:50	19.1	6.96	426.6	83.2	7.48	84.3	**7.68**
	6-Sep-23		9:35	15.9	6.88	463.2	78.6	7.46	91.6	**4.34**
	19-Sep-23		9:40	15.7	6.77	449.2	74.8	7.1	39.7	**8.71**
	4-Oct-23		9:40	10.3	6.64	492.9	71.5	7.56	91.0	**7.47**
	17-Oct-23		10:25	8.4	**6.47**	491.9	86.7	9.64	82.3	**6.92**
	31-Oct-23		-	-	-	-	-	-	-	-
EB-2	14-Feb-23		13:50	0.5	**6.49**	29.5	46.1	6.5	156.7	**23.10**
	16-May-23		11:15	14.9	6.68	353.6	97.5	9.51	146.1	**15.08**
	30-May-23		10:10	18.9	7.04	332.6	90.8	8.37	122.6	**15.93**
	13-Jun-23		16:55	21.1	7.31	339.1	77.6	6.66	135.2	**8.14**
	27-Jun-23		10:00	20.2	7.28	366.7	85.5	7.36	172.4	**6.41**
	11-Jul-23		9:50	17.4	6.96	339.9	77	7.29	69.7	**7.01**
	25-Jul-23	**SW-118**	9:45	21.1	7.19	349.5	59.3	5.26	64.8	**7.40**
	9-Aug-23		10:10	17.9	7.07	385.8	87.6	7.99	71.5	**7.05**
	22-Aug-23		9:55	19.1	7.00	433.0	80.1	7.18	85.1	**7.37**
	6-Sep-23		9:40	16.1	6.94	466.4	77.9	7.39	92.0	**4.35**
	19-Sep-23		9:45	15.6	6.83	450.2	72.5	6.9	40.5	**8.26**
	4-Oct-23		9:45	10.5	6.69	498.4	68.8	7.24	91.4	**7.37**
	17-Oct-23	**SW-138**	10:30	8.4	6.52	497.0	85.1	7.53	83.4	**6.91**
	31-Oct-23		-	-	-	-	-	-	-	-

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
Camp Lake Discharge	14-Feb-23		12:25	0.2	6.79	31.9	68.9	9.25	100.7	**27.80**
	16-May-23		11:45	14.8	6.89	318.3	92.4	9.04	133.2	**105.80**
	30-May-23	**SW-105**	11:15	18.0	7.00	190.9	97	9.1	125.0	**15.33**
	13-Jun-23		17:10	21.3	7.34	326.4	75.1	6.46	136.7	**6.72**
	27-Jun-23		10:15	20.4	7.22	340.3	90.5	7.92	178.3	**7.00**
	11-Jul-23		10:05	17.5	6.73	315.1	59.5	5.66	70.0	**6.50**
	25-Jul-23		10:00	20.3	7.11	324.7	58.5	5.27	69.7	**8.62**
	9-Aug-23		10:30	17.9	6.99	366.3	94.3	8.61	95.5	**7.66**
	22-Aug-23		10:10	19.3	6.98	418.4	86.7	7.68	83.2	**8.79**
	6-Sep-23		9:55	16.3	6.71	437.4	74.1	7.01	92.3	**11.41**
	19-Sep-23		10:00	15.3	6.66	454.7	69.8	6.68	41.1	**12.41**
	4-Oct-23	**SW-132**	10:00	11.2	**6.45**	498.0	62.3	6.45	92.9	**9.21**
	17-Oct-23		10:50	8.2	**6.39**	492.8	68.0	7.61	84.2	**8.87**
	31-Oct-23		-	-	-	-	-	-	-	-
Manitoba Water Quality Standards, Objectives, and Guidelines [1]										
Protection of Freshwater Aquatic Life										
Tier III Guideline					*6.5 - 9.0*					
Camp Lake Water Quality Performance Objectives [2]										
Sampling Event Dates	14-Feb-23				*6.5 - 9.0* [2a]					*3.0* [2b, 2c]
	16-May-23									*3.6* [2b, 2c]
	30-May-23									*2.9* [2b, 2c]
	13-Jun-23									*2.4* [2b, 2c]
	27-Jun-23									*2.6* [2b, 2c]
	11-Jul-23									*2.3* [2b, 2c]
	25-Jul-23									*5.1* [2b, 2c]
	9-Aug-23									*3.0* [2b, 2c]
	22-Aug-23									*2.7* [2b, 2c]
	6-Sep-23									*2.0* [2b, 2c]
	19-Sep-23									*2.4* [2b, 2c]
	4-Oct-23									*2.9* [2b, 2c]
	17-Oct-23									*0.8* [2b, 2c]
	31-Oct-23									-

Notes:

"-" = no value
EC = Electrical Conductivity
ORP = Oxygen Reduction Potential
DO = Dissolved Oxygen
NTU = Nephelometric Turbidity Units

1. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
2. Camp Lake Water Quality Performance Objectives (CLWQPO). Final Adaptive Management Plan - Sherridon Orphaned Mine Site Reclamation Project, August 16, 2022.
   a. The pH objective is the MWQSOG Tier III guideline. It has been determined to be reasonable based on pre-construction predictions and monitoring record.
   b. Turbidity objectives calculated as ambient SC-1 + 25%. Ambient SC-1 refers to the concentration measured at Sherlett Creek station SC-1 within the previous 7 days.
   c. The 25% allowance in the turbidity calculation is to account for sampling and analytical variation as per DJRC (2022).

- Values outside of MWQSOG range (pH).
BOLD - Values outside of CLWQPO range (pH) or above specified maximum value (turbidity).

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
Sherlett Creek										
SC-1	14-Feb-23		14:40	0.7	7.39	51.9	79.9	11.04	124.3	2.40
	16-May-23	**SW-102**	12:15	13.5	7.37	69.0	100.5	10.00	204.1	2.85
	30-May-23		12:00	18.2	7.07	71.4	113.7	10.62	118.3	2.35
	13-Jun-23		17:30	21.2	7.61	73.2	80.5	6.86	125.4	1.91
	27-Jun-23		11:45	20.9	7.51	76.7	93	7.77	160.0	2.09
	11-Jul-23		10:30	18.1	6.61	91.3	66.4	6.22	73.7	1.84
	25-Jul-23		10:15	20.9	6.98	83.5	68.4	6.01	72.4	4.10
	9-Aug-23		11:15	17.3	6.80	104.8	67.8	6.24	97.7	2.36
	22-Aug-23		10:35	18.9	6.89	144.8	73.8	6.59	65.9	2.13
	6-Sep-23		10:15	14.6	6.98	154.4	71	6.99	80.5	1.59
	19-Sep-23		10:15	15.4	7.00	154.4	68.9	6.57	21.6	1.95
	3-Oct-23		12:30	9.8	6.96	154.9	69.1	7.42	78.7	2.30
	17-Oct-23		11:45	8.4	7.03	173.5	77.7	8.68	77.4	0.62
	31-Oct-23		11:40	2.4	5.29	335.1	69.3	9.12	143.1	-
SC-2	13-Jun-23	**SW-109**	17:55	21.0	7.71	65.0	75	6.42	130.9	2.54
	3-Oct-23		12:10	9.5	6.87	154.7	57.6	6.27	80.4	2.22
SC-3	13-Jun-23		17:50	21.4	7.53	73.0	71.9	6.11	147.9	4.93
	3-Oct-23		12:00	10.0	6.95	176.2	57.5	6.18	82.9	2.24

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
SC-4	13-Jun-23		17:45	21.1	7.85	62.3	75.3	6.45	117.7	1.91
	3-Oct-23	**SW-134**	12:00	10.2	6.95	128.5	61.1	6.56	71.3	1.72
SC-5	13-Jun-23		18:10	21.3	7.86	62.5	89.4	7.47	121.3	2.39
	3-Oct-23		12:20	10.4	6.91	131.7	61.5	6.55	70.2	2.50
SC-6	13-Jun-23		18:15	20.5	7.93	61.7	98.8	8.38	118.6	1.40
	3-Oct-23		9:05	11.9	7.25	109.5	66	6.81	53.9	2.17
Manitoba Water Quality Standards, Objectives, and Guidelines [1]										
Protection of Freshwater Aquatic Life										
Tier III Guideline					*6.5 - 9.0*					

Notes:
"-" = no value
EC = Electrical Conductivity
ORP = Oxygen Reduction Potential
DO = Dissolved Oxygen
NTU = Nephelometric Turbidity Units

1. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.

- Values outside of MWQSOG range (pH).

Cold Lake										
CL-2 sfc	14-Feb-23		11:35	0.0	7.64	58.3	56.1	7.81	108.6	8.38
	16-May-23		9:15	11.4	7.07	108.1	116	12.2	222.6	2.11
	30-May-23		9:25	16.5	7.23	72.7	79.6	7.8	114.4	3.35
	13-Jun-23		16:05	20.5	7.88	111.4	73.7	6.39	100.2	1.59
	27-Jun-23		9:10	19.5	7.66	124.4	83.2	7.25	176.0	1.80
	11-Jul-23		9:00	17.0	7.05	115.9	59.1	5.71	49.8	2.28
	25-Jul-23	**SW-117**	9:05	20.8	7.53	116.4	64	5.72	49.6	0.94
	9-Aug-23		9:05	17.1	7.58	128.8	86.4	8.09	83.4	1.11
	22-Aug-23		8:50	19.3	7.51	169.2	7.51	6.72	59.2	1.31
	6-Sep-23		9:05	17.0	7.42	171.6	68.5	6.4	68.3	1.63
	19-Sep-23		8:50	16.2	7.53	164.1	69.3	6.47	9.6	1.99
	4-Oct-23	**SW-133**	9:10	13.6	7.46	172.0	60.5	5.97	49.4	2.10
	17-Oct-23		9:35	10.3	7.43	170.4	69.5	7.27	50.8	0.91
	31-Oct-23		-	-	-	-	-	-	-	-
CL-2 btm	14-Feb-23	**SW-101**	12:00	0.0	7.38	39.3	62.5	50.14	149.7	-
	16-May-23		9:20	5.9	6.83	159.3	105.8	12.76	232.9	5.95
	30-May-23		9:30	11.7	7.12	64.6	87.7	9.45	119.3	4.43
	13-Jun-23	**SW-107**	16:10	11.7	7.30	108.8	72.8	7.57	76.7	3.25
	27-Jun-23		9:15	15.5	7.30	110.1	77.3	7.23	186.6	3.37
	11-Jul-23		9:05	14.4	6.77	109.9	42.6	4.29	59.6	5.69
	25-Jul-23		9:10	15.7	7.07	117.1	45.2	4.45	61.7	4.19
	9-Aug-23		9:10	15.1	7.03	130.1	80.5	7.7	75.1	3.50
	22-Aug-23		8:55	18.4	7.28	172.2	74	6.75	63.3	2.38
	6-Sep-23		9:10	17.5	7.40	168.7	71.6	6.62	68.7	1.52
	19-Sep-23		8:55	16.2	7.52	164.3	71.6	6.71	10.3	1.61
	4-Oct-23		9:15	13.4	7.42	173.8	62.7	6.17	51.1	2.36
	17-Oct-23		9:35	10.4	7.40	170.7	70.7	7.53	52.4	0.76
	31-Oct-23		-	-	-	-	-	-	-	-
CL-3 sfc	14-Feb-23		10:10	0.6	6.66	56.2	70.2	9.77	120.4	2.42
	16-May-23		8:55	13.1	6.85	173.7	107.5	10.9	225.8	7.81
	30-May-23		9:05	16.1	7.19	68.5	75.1	7.38	114.0	3.86
	13-Jun-23	**SW-106**	15:45	21.2	7.41	289.3	73	6.24	107.1	2.32
	27-Jun-23		8:50	19.6	7.50	202.3	84	7.33	194.2	3.79
	11-Jul-23		8:40	17.2	7.11	118.2	61.6	5.91	47.0	2.05
	25-Jul-23		8:45	20.8	7.58	122.1	59.4	5.31	44.4	1.38
	9-Aug-23		8:45	17.3	7.55	126.7	75.2	6.95	62.3	0.90
	22-Aug-23		8:40	19.1	7.49	177.1	83.4	7.45	54.7	2.10
	6-Sep-23		8:45	17.5	7.53	172.7	76.9	7.1	67.7	0.85
	19-Sep-23		8:35	16.4	7.52	163.0	74.5	6.92	4.4	2.06
	4-Oct-23		8:50	13.4	7.44	173.9	60.8	6.01	45.9	2.20
	17-Oct-23		9:15	10.3	7.45	168.6	69.6	7.44	44.0	1.29
	31-Oct-23		-	-	-	-	-	-	-	-

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
CL-3 btm	14-Feb-23		10:20	0.6	6.94	96.2	120.2	16.59	105.7	3.02
	16-May-23		9:00	11.1	6.82	116.3	111	11.78	229.1	2.83
	30-May-23		9:10	15.9	7.10	173.1	85.3	8.37	118.1	6.65
	13-Jun-23		15:50	20.1	7.78	78.9	78.9	6.87	93.8	2.44
	27-Jun-23		8:55	19.4	7.53	175.7	96.1	8.33	191.0	2.98
	11-Jul-23		8:45	17.3	7.11	118.4	65.5	6.26	49.3	2.45
	25-Jul-23		8:50	20.8	7.53	121.5	63.4	5.59	47.4	1.70
	9-Aug-23	SW-120	8:50	17.9	7.56	124.2	76	7.08	60.2	0.94
	22-Aug-23		8:43	19.1	7.48	177.7	79	7.05	55.3	1.99
	6-Sep-23		8:50	17.3	7.53	172.8	85.2	7.79	68.5	1.23
	19-Sep-23		8:38	16.2	7.53	163.7	79.4	7.38	5.5	2.19
	4-Oct-23		8:55	13.3	7.46	174.1	59	5.88	46.2	2.15
	17-Oct-23		9:15	10.3	7.43	169.4	74.2	7.92	45.7	1.42
	31-Oct-23		-	-	-	-	-	-	-	-
CL-4 sfc	14-Feb-23		9:30	0.2	6.40	99.4	73.2	10.19	136.4	2.16
	16-May-23	SW-100	8:30	11.7	6.75	106.1	106.7	11.26	232.4	2.57
	30-May-23		8:40	15.8	7.13	80.7	82.6	8.19	119.5	5.22
	13-Jun-23		15:25	19.4	7.83	111.4	75.2	6.66	83.6	1.91
	27-Jun-23		8:30	19.1	7.61	111.7	82.7	7.3	193.2	3.00
	11-Jul-23		8:20	17.2	7.12	112.4	94.6	9.11	51.0	1.89
	25-Jul-23		8:25	20.2	7.60	109.8	63.4	5.72	40.6	1.30
	9-Aug-23		8:25	17.2	7.64	123.8	81.6	7.57	85.7	1.19
	22-Aug-23		8:25	18.7	7.50	167.6	81.1	7.33	53.2	1.51
	6-Sep-23		8:25	17.5	7.29	169.5	79.2	7.33	74.2	1.89
	19-Sep-23		8:20	16.4	7.46	160.8	71.1	6.6	-21.0	2.28
	4-Oct-23		8:30	13.3	7.41	170.4	55.7	5.55	41.8	2.25
	17-Oct-23		9:05	10.4	7.48	166.2	70.5	7.50	40.1	2.21
	31-Oct-23		-	-	-	-	-	-	-	-
CL-4 btm	14-Feb-23		9:35	0.2	6.35	134.4	50.3	7.01	122.3	2.0
	16-May-23		8:35	6.1	6.60	124.0	110.3	12.71	243.0	5.44
	30-May-23		8:45	10.7	7.15	57.1	85.6	9.45	122.3	13.71
	13-Jun-23		15:30	11.8	7.35	100.0	75.5	7.8	87.9	5.43
	27-Jun-23		8:35	12.6	7.20	105.0	66.6	6.64	204.7	11.90
	11-Jul-23		8:25	15.3	6.86	108.5	46.7	4.63	57.1	8.91
	25-Jul-23	SW-116	8:30	16.9	7.18	115.3	55	5.31	56.5	3.06
	9-Aug-23		8:30	16.3	7.13	127.3	71	6.7	78.3	5.67
	22-Aug-23		8:30	18.1	7.29	169.8	70.4	6.44	55.2	3.27
	6-Sep-23		8:30	17.8	7.49	170.7	81.2	7.46	68.9	2.08
	19-Sep-23		8:25	16.0	7.39	163.9	65.7	6.17	-2.3	3.37
	4-Oct-23		8:35	13.3	7.36	167.6	59.4	5.86	43.1	3.54
	17-Oct-23		9:05	10.3	7.45	166.2	78.3	8.02	42.1	2.64
	31-Oct-23		-	-	-	-	-	-	-	-
CL-5 sfc	14-Feb-23	SW-100	9:00	0.5	6.31	92.9	80.8	11.29	126.2	0.96
	16-May-23		8:20	12.5	6.39	96.7	111.3	11.58	260.3	2.66
	30-May-23		8:25	15.5	7.29	88.7	88	8.71	126.5	6.89
	13-Jun-23		15:15	19.5	7.74	119.2	79.8	7.23	87.0	2.71
	27-Jun-23	SW-110	8:20	18.6	7.62	110.6	86.8	7.70	197.4	2.42
	11-Jul-23		8:10	17.2	7.38	110.9	61.6	5.92	49.4	1.93
	25-Jul-23		8:15	20.2	7.75	107.5	64.2	5.79	38.9	1.47
	9-Aug-23		8:15	18.3	7.59	118.9	81.5	7.44	69.6	1.06
	22-Aug-23		8:15	18.8	7.58	167.0	80.9	7.3	51.7	1.86
	6-Sep-23		8:15	17.1	7.60	170.3	82.5	7.69	71.6	1.87
	19-Sep-23	SW-130	8:10	16.3	7.54	160.3	70.1	6.52	-8.5	8.93
	4-Oct-23		8:20	13.3	7.42	169.8	57.9	5.76	41.9	2.38
	17-Oct-23		9:00	10.2	7.50	158.1	71.9	7.55	36.8	2.53
	31-Oct-23		-	-	-	-	-	-	-	-
CL-5 btm	14-Feb-23		9:15	0.3	6.23	96.9	96.5	12.83	127.2	0.84
	16-May-23		8:25	6.1	6.28	135.6	108.7	12.97	252.5	10.07
	30-May-23		8:30	11.6	7.25	90.1	94.1	10.16	125.7	5.97
	13-Jun-23		15:20	12.3	7.17	97.0	71.4	7.33	95.6	6.24
	27-Jun-23		8:25	14.1	7.27	103.6	81.6	7.77	209.2	5.59
	11-Jul-23		8:15	17.5	7.93	109.3	63.7	6.07	49.7	2.02
	25-Jul-23		8:20	17.4	7.31	114.6	54.3	5.18	52.8	2.72
	9-Aug-23	SW-119	8:20	17.8	7.62	120.1	78	7.16	67.2	1.44
	22-Aug-23		8:20	18.3	7.39	170.6	79.4	7.21	54.4	2.54
	6-Sep-23		8:20	17.6	7.59	169.2	83.6	7.71	71.2	1.94
	19-Sep-23		8:15	16.0	7.37	162.9	63	5.9	-4.4	4.21
	4-Oct-23		8:25	13.3	7.42	168.7	63.4	6.29	41.8	3.24
	17-Oct-23		9:00	10.2	7.47	160.7	76.2	8.16	37.5	2.70
	31-Oct-23		-	-	-	-	-	-	-	-

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
CL-6 sfc	14-Feb-23		8:35	3.6	6.51	151.2	120.2	14.55	125.4	0.83
	16-May-23		8:05	13.0	4.12	246.4	148.3	15.13	333.0	2.96
	30-May-23		8:15	15.2	7.81	152.9	102.5	10.18	139.7	4.15
	13-Jun-23		15:05	20.7	7.79	54.6	72.7	6.35	82.0	3.4
	27-Jun-23		8:10	18.3	7.34	102.0	93.7	8.64	220.6	2.65
	11-Jul-23	**SW-115**	8:00	17.0	7.08	115.0	67.8	6.45	57.9	1.71
	25-Jul-23		8:05	20.7	8.11	115.7	80.6	7.09	51.1	1.83
	9-Aug-23		8:05	16.8	7.08	122.4	81.6	7.65	105.3	1.76
	22-Aug-23		8:05	18.5	7.50	168.0	81.8	7.42	56.2	1.87
	6-Sep-23		8:05	17.2	7.57	173.6	82.6	7.69	83.1	1.78
	19-Sep-23		8:00	16.2	7.34	161.3	75.1	7.1	-10.9	3.08
	4-Oct-23		8:10	13.3	7.39	171.0	63.6	6.32	55.6	1.61
	17-Oct-23	**SW-136**	8:50	10.4	7.65	161.1	82.5	8.78	31.6	1.06
	31-Oct-23		-	-	-	-	-	-	-	-
CL-6 btm	14-Feb-23		8:45	0.5	6.43	160.3	74.7	10.26	120.2	0.73
	16-May-23		8:10	12.2	5.54	94.7	139	14.39	321.7	3.29
	30-May-23		8:20	12.5	7.31	96.8	88.3	9.38	133.1	8.61
	13-Jun-23		15:10	13.1	7.23	91.8	89	8.89	94.1	4.02
	27-Jun-23		8:15	15.2	7.32	96.5	90.4	8.24	221.3	2.93
	11-Jul-23		8:05	17.0	7.38	105.9	67.3	6.49	53.4	2.40
	25-Jul-23		8:10	18.1	7.63	108.8	64.4	6.03	54.3	2.13
	9-Aug-23		8:10	17.8	7.62	120.1	78	7.16	67.2	1.44
	22-Aug-23	**SW-122**	8:10	18.4	7.54	165.0	79.4	7.22	53.0	1.99
	6-Sep-23	**SW-127**	8:10	17.6	7.62	168.0	84.8	7.83	76.0	2.58
	19-Sep-23		8:05	16.0	7.52	157.8	66.2	6.28	-9.8	1.91
	4-Oct-23		8:15	13.0	7.40	168.8	55.2	6.54	47.7	1.81
	17-Oct-23		8:50	9.7	7.56	155.1	87.0	9.33	33.3	1.94
	31-Oct-23		-	-	-	-	-	-	-	-
CL-7 sfc	14-Feb-23		10:40	0.8	6.94	96.2	73.2	10.24	101.9	6.41
	16-May-23		9:05	13.3	6.75	187.9	108.3	10.85	228.9	6.21
	30-May-23		9:15	16.2	7.19	69.5	91	8.9	115.9	3.2
	13-Jun-23		15:55	20.7	7.75	145.7	74.3	6.39	99.6	3.38
	27-Jun-23		9:00	19.7	7.52	222.5	99.6	8.59	188.9	3.65
	11-Jul-23		8:50	17.2	7.08	120.2	63.0	6.04	50.9	2.19
	25-Jul-23		8:55	21.1	7.57	111.4	64	5.68	46.2	1.37
	9-Aug-23		8:55	17.7	7.55	126.4	78.9	7.49	61.7	3.74
	22-Aug-23	**SW-123**	8:45	19.1	7.51	165.7	82.1	7.36	55.8	1.74
	6-Sep-23	**SW-126**	8:55	17.5	7.54	170.8	74.7	6.91	67.5	1.62
	19-Sep-23		8:40	16.3	7.53	164.4	68.1	6.38	6.0	2.05
	4-Oct-23		9:00	13.3	7.43	174.3	60.6	6.03	47.3	1.97
	17-Oct-23		9:20	10.2	7.44	170.0	70.0	7.48	47.0	0.68
	31-Oct-23		-	-	-	-	-	-	-	-
CL-7 btm	14-Feb-23		11:15	0.3	7.49	57.4	103.3	14.92	114.9	5.98
	16-May-23		9:10	12.7	6.90	179.0	112.8	11.46	227.6	4.50
	30-May-23		9:20	16.0	7.12	214.1	92.2	9.01	119.5	9.68
	13-Jun-23		16:00	18.3	7.77	111.2	7.67	6.89	92.7	2.41
	27-Jun-23	**SW-111**	9:05	19.8	7.49	217.5	95.5	8.21	189.0	3.87
	11-Jul-23		8:55	17.2	7.03	120.1	72.8	6.98	52.3	2.48
	25-Jul-23		9:00	21.0	7.57	110.9	64.2	5.58	47.5	1.39
	9-Aug-23		9:00	17.6	7.56	127.3	105.6	9.57	60.9	2.30
	22-Aug-23		8:47	19.1	7.51	168.9	80.1	7.17	56.6	1.50
	6-Sep-23		9:00	17.2	7.55	174.0	75.1	6.99	68.4	2.13
	19-Sep-23	**SW-129**	8:45	16.2	7.51	164.2	70.4	6.6	8.2	2.23
	4-Oct-23		9:05	13.2	7.44	174.2	59.8	5.95	48.2	1.83
	17-Oct-23	**SW-137**	9:20	10.3	7.45	170.0	77.8	8.28	48.6	1.15
	31-Oct-23		-	-	-	-	-	-	-	-
CL-8 sfc	14-Feb-23		9:50	0.1	6.52	101.1	125.7	17.25	118.6	2.25
	16-May-23		8:45	12.5	6.88	138.5	107.2	10.94	222.4	4.84
	30-May-23	**SW-103**	8:50	15.8	7.13	68.2	86.0	8.5	118.2	3.28
	13-Jun-23		15:35	19.4	7.69	166.5	81.1	7.08	91.9	2.75
	27-Jun-23		8:40	19.2	7.62	123.0	95.2	8.29	188.7	2.35
	11-Jul-23		8:30	17.0	7.09	119.4	60.4	5.68	46.0	3.2
	25-Jul-23		8:35	20.5	7.54	89.4	65.3	5.86	41.7	1.17
	9-Aug-23		8:35	17.8	7.39	125.4	78	7.21	61.9	1.20
	22-Aug-23		8:35	18.9	7.50	167.7	81.9	7.34	52.1	1.55
	6-Sep-23		8:35	17.5	7.51	167.4	78.2	7.24	68.5	2.03
	19-Sep-23		8:30	16.3	7.50	163.0	68.8	6.41	0.7	2.25
	4-Oct-23		8:40	13.4	7.42	174.1	58.1	5.78	44.1	2.23
	17-Oct-23		9:10	10.4	7.43	167.0	70.1	7.47	40.8	2.47
	31-Oct-23		-	-	-	-	-	-	-	-

TABLE 3
2023 SURFACE WATER FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
CL-8 btm	14-Feb-23		10:00	0.4	6.70	102.6	78.9	10.85	131.4	3.23
	16-May-23		8:50	12.5	6.88	114.3	112.6	11.86	223.4	3.13
	30-May-23		9:00	14.8	7.11	74.0	86.5	8.64	120.2	4.54
	13-Jun-23		15:40	19.7	7.85	112.6	77.6	6.83	86.4	2.19
	27-Jun-23		8:45	19.1	7.63	124.6	96.7	8.51	189.0	2.68
	11-Jul-23	**SW-114**	8:35	17.2	7.11	118.0	64.3	6.21	47.9	2.18
	25-Jul-23		8:40	20.4	7.44	62.3	66.2	5.94	49.1	1.85
	9-Aug-23		8:40	17.7	7.52	126.2	78.6	7.23	65.9	1.14
	22-Aug-23		8:37	19.0	7.51	167.6	82.1	7.36	53.4	1.62
	6-Sep-23		8:40	17.5	7.54	172.6	80.2	7.41	68.6	1.78
	19-Sep-23		8:33	16.3	7.52	163.7	72.5	6.73	3.2	2.10
	4-Oct-23		8:45	13.2	7.42	174.8	68	6.72	46.2	2.30
	17-Oct-23		9:10	10.3	7.39	168.8	82.4	8.95	42.7	1.47
	31-Oct-23		-	-	-	-	-	-	-	-
Manitoba Water Quality Standards, Objectives, and Guidelines [1]										
Protection of Freshwater Aquatic Life										
Tier III Guideline					*6.5 - 9.0*					

Notes:
"-" = no value
EC = Electrical Conductivity
ORP = Oxygen Reduction Potential
DO = Dissolved Oxygen
NTU = Nephelometric Turbidity Units

1. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.

- Values outside of MWQSOG range (pH).

Sample ID	Date	Field Duplicate Sample ID	Time	Temperature (°C)	pH	EC (µS/cm)	DO		ORP (mV)	Turbidity (NTU)
							% L	mg/L		
Additional Surface Water Sampling Locations										
Portage Lake	3-Oct-23		8:15	12.4	7.35	191.5	67.8	6.91	91.2	2.25
Sherlett Lake	3-Oct-23		8:45	12.7	7.37	128.6	79.8	8.18	59.5	1.71
WWTP Outflow	3-Oct-23		11:55	12.2	7.24	603.0	56.2	5.73	126.8	28.90
C Dock	3-Oct-23	**SW-135**	17:50	10.9	7.86	206.4	76.3	7.96	70.4	1.73
	31-Oct-23		14:00	1.0	7.04	216.4	77.7	10.57	74.5	-
Cofferdam	4-Oct-23		12:00	12.8	7.37	481.4	60.4	6.00	78.0	19.43
	17-Oct-23		12:10	8.7	6.99	167.5	79.5	8.83	82.0	0.74
	31-Oct-23		11:50	0.4	5.81	160.7	85.0	11.82	116.6	-
Diversion	17-Oct-23		12:30	8.8	6.91	174.7	71.5	7.82	85.1	1.08
	31-Oct-23		13:30	3.5	6.92	188.1	74.0	9.60	69.9	-
Manitoba Water Quality Standards, Objectives, and Guidelines [1]										
Protection of Freshwater Aquatic Life										
Tier III Guideline					*6.5 - 9.0*					

Notes:
"-" = no value
EC = Electrical Conductivity
ORP = Oxygen Reduction Potential
DO = Dissolved Oxygen
NTU = Nephelometric Turbidity Units

1. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.

- Values outside of MWQSOG range (pH).

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	pH (units)	Parameters [1] Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
Camp Lake															
SB-1	14-Feb-23		**6.40**	**25**	<1.0	8.1	9.9	<1.0	<1.0	**170**	180	153	8.7	9.4	1.3
	16-May-23		6.53	**10**	<1.0	15	18	<1.0	<1.0	**87**	110	98.6	7.9	8.3	2.1
	30-May-23		6.72	**13**	<1.0	17	21	<1.0	<1.0	**120**	120	118	8.9	9.3	2.9
	13-Jun-23		6.69	**9.0**	<1.0	13	16	<1.0	<1.0	**120**	130	121	8.5	7.6	1.2
	27-Jun-23		**6.35**	**7.0**	<1.0	13	16	<1.0	<1.0	**110**	130	125	8.7	7.4	2.8
	11-Jul-23		**6.07**	**15**	<1.0	9.6	12	<1.0	<1.0	**120**	120	130	9.2	7.7	1.9
		SW-113	**6.18**	**14**	<1.0	12	14	<1.0	<1.0	**110**	120	125	9.4	7.6	2.1
	RPD		*1.8%*	*6.9%*	*NC*	*22%*	*15%*	*NC*	*NC*	*8.7%*	*3.9%*	*NC*	*2.2%*	*1.3%*	*10%*
	25-Jul-23		**6.42**	**13**	<1.0	13	16	<1.0	<1.0	**130**	110	137	8.8	8.2	1.7
	9-Aug-23		**6.33**	**10**	<1.0	8.8	11	<1.0	<1.0	**130**	150	142	7.9	5.7	2.3
	22-Aug-23		**5.83**	**14**	<1.0	7.3	8.8	<1.0	<1.0	**140**	140	154	6.8	7.0	2.2
	6-Sep-23		**5.92**	**16**	<1.0	6.8	8.3	<1.0	<1.0	**160**	170	163	7.1	5.2	2.7
	19-Sep-23		**6.06**	**20**	<1.0	4.8	5.8	<1.0	<1.0	**190**	180	169	7.1	6.5	2.5
	4-Oct-23		**5.90**	**20**	<1.0	4.2	5.2	<1.0	<1.0	**180**	180	172	7.1	6.9	3.2
		SW-131	**5.90**	**21**	<1.0	4.6	5.6	<1.0	<1.0	**170**	180	170	6.9	7.7	3.9
	RPD		*0.0%*	*4.9%*	*NC*	*9.1%*	*7.4%*	*NC*	*NC*	*5.7%*	*0.0%*	*1.2%*	*2.9%*	*11%*	*20%*
	17-Oct-23		**6.11**	**23**	<1.0	1.8	2.2	<1.0	<1.0	**180**	190	188	6.4	6.3	4.1
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
SB-2	14-Feb-23		**6.45**	**27**	<1.0	7.4	9.0	<1.0	<1.0	**140**	170	156	6.9	8.5	1.0
	16-May-23		6.52	**9.7**	<1.0	16	19	<1.0	<1.0	**81**	110	104	10	9.1	1.0
		SW-101	6.56	**9.9**	<1.0	16	20	<1.0	<1.0	**79**	100	96.2	9.1	9.1	1.4
	RPD		*0.61%*	*2.0%*	*NC*	*0.0%*	*5.1%*	*NC*	*NC*	*2.5%*	*10%*	*7.8%*	*9.4%*	*0.0%*	*33%*
	30-May-23		**6.42**	**13**	<1.0	13	16	<1.0	<1.0	**110**	120	117	8.7	9.4	2.5
	13-Jun-23		6.69	**8.2**	<1.0	14	17	<1.0	<1.0	**110**	130	121	9.3	6.9	1.9
	27-Jun-23		**6.46**	**6.0**	<1.0	16	19	<1.0	<1.0	**82**	100	96.7	9.5	9.0	3.5
	11-Jul-23		**6.34**	**14**	<1.0	10	12	<1.0	<1.0	**110**	120	128	9.6	8.3	2.3
	25-Jul-23		**6.43**	**13**	<1.0	11	13	<1.0	<1.0	**130**	130	138	8.9	8.4	1.6
	9-Aug-23		**6.31**	**15**	<1.0	7.2	8.8	<1.0	<1.0	**130**	150	141	7.7	7.2	2.3
	22-Aug-23		**5.79**	**13**	<1.0	6.8	8.3	<1.0	<1.0	**150**	150	159	7.7	6.4	2.8
	6-Sep-23		**5.96**	**15**	<1.0	6.5	8.0	<1.0	<1.0	**150**	150	161	7.3	6.4	2.5
	19-Sep-23		**5.97**	**23**	<1.0	5.6	6.9	<1.0	<1.0	**170**	180	167	7.4	6.8	4.4
	4-Oct-23		**5.89**	**21**	<1.0	4.1	4.9	<1.0	<1.0	**180**	180	191	6.7	6.9	6.1
	17-Oct-23		**6.08**	**24**	<1.0	1.8	2.1	<1.0	<1.0	**180**	190	185	6.5	5.5	3.2
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CB-1	14-Feb-23		**6.48**	**21**	<1.0	7.1	8.7	<1.0	<1.0	**170**	200	185	9.4	8.8	<1.0
	16-May-23		**6.46**	**12**	<1.0	13	16	<1.0	<1.0	**120**	130	127	7.1	7.8	1.7
	30-May-23		6.62	**18**	<1.0	13	16	<1.0	<1.0	**120**	120	129	6.6	8.5	3.9
		SW-104	6.61	**25**	<1.0	14	17	<1.0	<1.0	**120**	120	128	9.2	7.6	5.0
	RPD		*0.15%*	*33%*	*NC*	*7.4%*	*6.1%*	*NC*	*NC*	*0.0%*	*0.0%*	*0.78%*	*33%*	*11%*	*25%*
	13-Jun-23		6.51	**7.6**	<1.0	13	16	<1.0	<1.0	**120**	140	133	9.2	7.1	1.8
	27-Jun-23		**6.37**	**6.1**	<1.0	13	16	<1.0	<1.0	**110**	130	121	8.4	8.2	2.5
	11-Jul-23		**6.23**	**10**	<1.0	12	15	<1.0	<1.0	**120**	130	128	9.4	6.7	1.2
	25-Jul-23		**6.41**	**13**	<1.0	10	12	<1.0	<1.0	**140**	130	143	8.7	8.3	2.0
	9-Aug-23		**6.23**	**10**	<1.0	11	14	<1.0	<1.0	**130**	160	140	7.6	7.7	1.9
	22-Aug-23		**5.81**	**12**	<1.0	8.0	9.7	<1.0	<1.0	**140**	160	162	7.6	7.5	2.7
	6-Sep-23		**5.94**	**14**	<1.0	6.3	7.7	<1.0	<1.0	**150**	150	165	5.9	4.9	2.9
	19-Sep-23		**6.02**	**18**	<1.0	4.5	5.5	<1.0	<1.0	**170**	180	171	6.6	6.6	2.7
	4-Oct-23		**5.91**	**19**	<1.0	3.9	4.7	<1.0	<1.0	**180**	180	190	6.4	7.1	3.9
	17-Oct-23		**6.08**	**21**	<1.0	1.5	1.9	<1.0	<1.0	**180**	200	188	5.2	6.5	3.5
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CB-2	14-Feb-23		**6.04**	**32**	<1.0	2.3	2.9	<1.0	<1.0	**190**	230	187	8.4	6.9	1.7
	16-May-23		**6.47**	**12**	<1.0	13	16	<1.0	<1.0	**110**	130	120	7.8	7.8	1.5
	30-May-23		6.70	**13**	<1.0	13	15	<1.0	<1.0	**120**	130	126	7.1	8.8	3.7
	13-Jun-23		6.67	**8.0**	<1.0	12	15	<1.0	<1.0	**120**	140	134	9.1	7.7	2.3
	27-Jun-23		**6.32**	**6.8**	<1.0	14	17	<1.0	<1.0	**120**	130	124	8.4	8.0	1.1
	11-Jul-23		**6.39**	**11**	<1.0	11	14	<1.0	<1.0	**120**	130	132	7.6	8.6	1.7
	25-Jul-23		**6.42**	**13**	<1.0	12	14	<1.0	<1.0	**120**	140	145	8.8	7.7	1.6
	9-Aug-23		**6.24**	**11**	<1.0	9.4	12	<1.0	<1.0	**130**	150	138	7.4	6.3	2.1
		SW-121	**6.24**	**11**	<1.0	9.2	11	<1.0	<1.0	**130**	150	140	6.8	7.6	1.2
	RPD		*0.0%*	*0.0%*	*NC*	*2.2%*	*8.7%*	*NC*	*NC*	*0.0%*	*0.0%*	*1.4%*	*8.5%*	*19%*	*55%*
	22-Aug-23		**5.76**	**12**	<1.0	7.2	8.8	<1.0	<1.0	**150**	140	159	7.9	7.4	2.1
	6-Sep-23		**5.98**	**11**	<1.0	7.2	8.8	<1.0	<1.0	**150**	160	163	6.7	6.1	2.6
	19-Sep-23		**6.04**	**17**	<1.0	4.5	5.5	<1.0	<1.0	**180**	180	176	7	6.3	4.3
		SW-128	**6.06**	**16**	<1.0	4.6	5.7	<1.0	<1.0	**170**	180	173	7.3	6.6	3.7
	RPD		*0.33%*	*6.1%*	*NC*	*2.2%*	*3.6%*	*NC*	*NC*	*5.7%*	*0.0%*	*1.7%*	*4.2%*	*4.7%*	*15%*
	4-Oct-23		**5.91**	**17**	<1.0	4.5	5.4	<1.0	<1.0	**180**	180	189	7.4	7.0	3.7
	17-Oct-23		**6.12**	**20**	<1.0	1.9	2.3	<1.0	<1.0	**190**	190	191	6.4	6.1	1.1
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameters [1]											
			pH (units)	Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
NB-1	14-Feb-23		**5.85**	**31**	<1.0	1.8	2.2	<1.0	<1.0	**200**	240	195	7.7	7.7	1.9
	16-May-23		**6.42**	**13**	<1.0	11	14	<1.0	<1.0	**130**	150	142	7.4	6.8	1.5
	30-May-23		6.58	**14**	<1.0	12	14	<1.0	<1.0	**140**	130	142	8.4	8.1	1.8
	13-Jun-23		6.53	**9.8**	<1.0	8.3	10	<1.0	<1.0	**150**	170	159	8.5	5.8	2.5
	27-Jun-23		**6.16**	**7.8**	<1.0	11	14	<1.0	<1.0	**130**	160	142	7.8	7.4	2.9
	11-Jul-23		**6.21**	**9.5**	<1.0	12	15	<1.0	<1.0	**130**	140	148	8.7	8.3	1.0
	25-Jul-23		**6.43**	**11**	<1.0	9.6	12	<1.0	<1.0	**130**	150	134	8.6	8.0	0.97
	9-Aug-23		**6.34**	**9.5**	<1.0	8.0	9.8	<1.0	<1.0	**140**	160	146	7.7	7.2	1.1
	22-Aug-23		**5.82**	**9.2**	<1.0	7.0	8.5	<1.0	<1.0	**160**	150	172	7.3	7.4	<1.0
		SW-124	**5.82**	**9.3**	<1.0	6.8	8.3	<1.0	<1.0	**150**	150	163	7.4	6.8	2.3
	RPD		*0.0%*	*1.1%*	*NC*	*2.9%*	*2.4%*	*NC*	*NC*	*6.5%*	*0.0%*	*5.4%*	*1.4%*	*8.5%*	*NC*
	6-Sep-23		**5.90**	**15**	<1.0	5.3	6.5	<1.0	<1.0	**160**	170	180	6.7	4.9	2.3
		SW-125	**5.89**	**14**	<1.0	5.5	6.7	<1.0	<1.0	**170**	160	177	6.7	6.0	2.3
	RPD		*0.17%*	*6.9%*	*NC*	*3.7%*	*3.0%*	*NC*	*NC*	*6.1%*	*6.1%*	*1.7%*	*0.0%*	*20%*	*0.0%*
	19-Sep-23		**5.97**	**15**	<1.0	3.9	4.7	<1.0	<1.0	**200**	200	189	6.4	6.4	2.6
	4-Oct-23		**5.79**	**16**	<1.0	3.2	3.9	<1.0	<1.0	**200**	200	199	6.8	7.1	4.3
	17-Oct-23		**5.67**	**16**	<1.0	2.3	2.8	<1.0	<1.0	**190**	200	198	6.2	6.4	3.2
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
NB-2	14-Feb-23		**6.17**	**28**	<1.0	4.2	5.1	<1.0	<1.0	**190**	210	187	10	8.2	1.1
	16-May-23		**6.20**	**14**	<1.0	13	16	<1.0	<1.0	**140**	140	137	6.3	8.1	1.9
	30-May-23		6.59	**18**	<1.0	11	13	<1.0	<1.0	**130**	140	139	7.8	8.1	5.1
	13-Jun-23		6.62	**11**	<1.0	11	14	<1.0	<1.0	**130**	150	135	9.7	6.6	1.1
	27-Jun-23		**6.28**	**7.4**	<1.0	11	14	<1.0	<1.0	**130**	150	145	7.9	7.4	2.6
		SW-112	**6.31**	**7.5**	<1.0	11	14	<1.0	<1.0	**130**	150	143	8.1	7.5	1.2
	RPD		*0.48%*	*1.3%*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*0.0%*	*0.0%*	*1.4%*	*2.5%*	*1.3%*	*73.7%*
	11-Jul-23		**6.24**	**8.0**	<1.0	14	18	<1.0	<1.0	**120**	130	146	8.1	6.9	1.3
	25-Jul-23		**6.42**	**11**	<1.0	11	14	<1.0	<1.0	**140**	130	137	8.7	8.2	1.5
	9-Aug-23		**6.28**	**9.2**	<1.0	9.4	11	<1.0	<1.0	**140**	160	148	6.4	7.6	1.5
	22-Aug-23		**5.83**	**8.8**	<1.0	7.1	8.6	<1.0	<1.0	**150**	150	166	7.3	7.3	1.3
	6-Sep-23		**5.93**	**9.8**	<1.0	7.1	8.6	<1.0	<1.0	**170**	170	180	6.4	6.2	1.9
	19-Sep-23		**6.02**	**15**	<1.0	4.1	5.0	<1.0	<1.0	**190**	200	187	6.1	6.3	2.8
	4-Oct-23		**5.85**	**14**	<1.0	3.8	4.6	<1.0	<1.0	**210**	210	200	6.9	7.4	2.9
	17-Oct-23		**5.92**	**16**	<1.0	1.3	1.5	<1.0	<1.0	**190**	210	171	6.6	6.4	1.7
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
EB-1	14-Feb-23		**6.13**	**31**	<1.0	3.3	4.0	<1.0	<1.0	**200**	240	198	9.3	8.2	1.7
		SW-102	**6.15**	**32**	<1.0	3.0	3.7	<1.0	<1.0	**200**	220	192	9.0	8.7	<1.0
	RPD		*0.33%*	*3.2%*	*NC*	*10%*	*7.8%*	*NC*	*NC*	*0.0%*	*8.7%*	*3.1%*	*3.3%*	*5.9%*	*NC*
	16-May-23		**6.31**	**18**	<1.0	7.0	8.6	<1.0	<1.0	**150**	160	152	6.4	6.6	1.6
	30-May-23		**6.34**	**16**	<1.0	9.3	11	<1.0	<1.0	**150**	140	156	8.1	6.4	2.7
	13-Jun-23		6.55	**8.7**	<1.0	8.6	11	<1.0	<1.0	**150**	160	147	8.5	6.5	1.8
		SW-108	**6.41**	**8.3**	<1.0	11	13	<1.0	<1.0	**150**	160	151	7.4	6.4	2.2
	RPD		*2.2%*	*4.7%*	*NC*	*24%*	*17%*	*NC*	*NC*	*0.0%*	*0.0%*	*2.7%*	*14%*	*1.6%*	*20%*
	27-Jun-23		**6.20**	**6.7**	<1.0	10	12	<1.0	<1.0	**140**	160	152	7.4	7.3	2.7
	11-Jul-23		**6.35**	**6.1**	<1.0	10	13	<1.0	<1.0	**140**	150	161	8.7	7.9	<1.0
	25-Jul-23		**6.40**	**9.0**	<1.0	11	13	<1.0	<1.0	**140**	140	149	8.2	8.0	<0.96
	9-Aug-23		**6.24**	**8.7**	<1.0	9.7	12	<1.0	<1.0	**150**	170	153	6.8	7.2	<1.0
	22-Aug-23		**5.82**	**8.5**	<1.0	6.9	8.4	<1.0	<1.0	**160**	160	171	6.9	6.6	1.4
	6-Sep-23		**5.90**	**8.0**	<1.0	6.4	7.8	<1.0	<1.0	**180**	180	183	6.8	6.5	<1.0
	19-Sep-23		**6.05**	**12**	<1.0	5.4	6.5	<1.0	<1.0	**190**	200	198	7.0	6.4	2.7
	4-Oct-23		**5.90**	**13**	<1.0	4.1	5.0	<1.0	<1.0	**190**	190	198	7.1	6.4	2.9
	17-Oct-23		**5.78**	**15**	<1.0	3.8	4.7	<1.0	<1.0	**200**	210	201	6.1	6.3	1.4
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
EB-2	14-Feb-23		**5.61**	**31**	<1.0	1.0	1.2	<1.0	<1.0	**220**	240	216	8.3	8.5	<1.0
	16-May-23		**6.07**	**18**	<1.0	7.5	9.1	<1.0	<1.0	**160**	160	154	6.4	7.5	3.0
	30-May-23		6.51	**16**	<1.0	9.1	11	<1.0	<1.0	**150**	140	157	5.7	6.8	3.3
	13-Jun-23		6.61	**12**	<1.0	11	13	<1.0	<1.0	**140**	160	141	9.4	7.1	1.5
	27-Jun-23		**6.31**	**6.7**	<1.0	9.3	11	<1.0	<1.0	**150**	170	168	7.4	6.8	2.1
	11-Jul-23		**6.16**	**7.8**	<1.0	12	15	<1.0	<1.0	**140**	150	169	8.3	6.0	1.4
	25-Jul-23		**6.38**	**8.4**	<1.0	10	13	<1.0	<1.0	**140**	150	150	8.2	7.5	2.3
		SW-118	**6.40**	**8.5**	<1.0	10	12	<1.0	<1.0	**150**	150	160	8.2	7.9	<0.95
	RPD		*0.31%*	*1.2%*	*NC*	*0.0%*	*8.0%*	*NC*	*NC*	*6.9%*	*0.0%*	*6.5%*	*0.0%*	*5.2%*	*NC*
	9-Aug-23		**6.29**	**8.5**	<1.0	8.0	9.8	<1.0	<1.0	**150**	180	159	7.3	7.3	1.9
	22-Aug-23		**5.80**	**8.1**	<1.0	6.8	8.3	<1.0	<1.0	**160**	160	179	7.2	7.3	<1.0
	6-Sep-23		**5.93**	**8.6**	<1.0	6.3	7.7	<1.0	<1.0	**170**	170	178	6.1	5.6	1.6
	19-Sep-23		**6.04**	**11**	<1.0	4.6	5.6	<1.0	<1.0	**190**	200	189	6.4	6.5	1.7
	4-Oct-23		**5.88**	**12**	<1.0	4.1	5.1	<1.0	<1.0	**200**	200	209	6.9	7.1	3.4
	17-Oct-23		**5.75**	**15**	<1.0	3.3	4.0	<1.0	<1.0	**190**	210	200	4.7	5.1	1.8
		SW-138	**5.79**	**14**	<1.0	3.4	4.2	<1.0	<1.0	**190**	210	203	6.0	6.0	2.4
	RPD		*0.69%*	*6.9%*	*NC*	*3.0%*	*4.9%*	*NC*	*NC*	*0.0%*	*0.0%*	*1.5%*	*24%*	*16%*	*29%*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	pH (units)	Parameters [1]											
				Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
Camp Lake Discharge	14-Feb-23		**5.60**	**31**	<1.0	1.2	1.5	<1.0	<1.0	**200**	230	199	8.1	9.1	<1.0
	16-May-23		**6.42**	**13**	<1.0	12	14	<1.0	<1.0	**140**	140	140	6.6	7.9	1.5
	30-May-23		6.57	**17**	<1.0	11	13	<1.0	<1.0	**130**	150	149	6.4	7.6	2.8
		SW-105	6.56	**19**	<1.0	11	13	<1.0	<1.0	**140**	140	149	7.0	7.2	3.3
	RPD		*0.15%*	*11%*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*7.4%*	*6.9%*	*0.0%*	*9.0%*	*5.4%*	*16%*
	13-Jun-23		6.60	**9.4**	<1.0	11	13	<1.0	<1.0	**140**	150	143	9.5	6.9	2.2
	27-Jun-23		**6.37**	**8.0**	<1.0	11	13	<1.0	<1.0	**130**	160	155	7.4	7.5	2.3
	11-Jul-23		**6.13**	**8.5**	<1.0	10	13	<1.0	<1.0	**130**	140	150	8.4	6.5	<1.0
	25-Jul-23		**6.42**	**11**	<1.0	11	14	<1.0	<1.0	**140**	110	147	8.7	8.0	2.6
	9-Aug-23		**6.30**	**8.8**	<1.0	11	13	<1.0	<1.0	**140**	160	146	7.6	7.3	1.5
	22-Aug-23		**5.83**	**9.6**	<1.0	7.6	9.3	<1.0	<1.0	**160**	160	170	7.4	5.1	2.3
	6-Sep-23		**5.92**	**14**	<1.0	7.0	8.5	<1.0	<1.0	**170**	180	186	7.5	6.5	5.0
	19-Sep-23		**6.00**	**15**	<1.0	4.1	5.1	<1.0	<1.0	**190**	200	201	6.9	6.4	2.9
	4-Oct-23		**5.84**	**16**	<1.0	3.7	4.5	<1.0	<1.0	**200**	200	194	6.7	7.2	4.1
		SW-132	**5.85**	**16**	<1.0	3.4	4.2	<1.0	<1.0	**190**	200	204	6.7	6.8	3.5
	RPD		*0.17%*	*0.0%*	*NC*	*8.5%*	*6.9%*	*NC*	*NC*	*5.1%*	*0.0%*	*5.0%*	*0.0%*	*5.7%*	*16%*
	17-Oct-23		**5.88**	**16**	<1.0	1.1	1.3	<1.0	<1.0	**190**	200	197	6.3	5.4	1.7
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
Laboratory Detection Limits			-	*0.10 - 0.20*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.50*	*0.50*	*0.50*	*0.50*	*0.96 - 1.1*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]															
Protection of Aquatic Life and Wildlife															
Tier II Objective - Chronic															*11.5 [2a]*
Tier II Objective - Acute															*31.5 [2a]*
Protection of Freshwater Aquatic Life															
Tier III Guideline			*6.5 - 9.0*							*500*					
Camp Lake Water Quality Performance Objectives [3]															
Sampling Event Dates	14-Feb-23		*6.5 - 9.0 [3a]*	*0.9 [3b]*						*12.8 [3c]*					*11.5 [3d]*
	16-May-23			*2.9 [3b]*						*10.6 [3c]*					
	30-May-23			*2.0 [3b]*						*12.4 [3c]*					
	13-Jun-23			*2.9 [3b]*						*12.6 [3c]*					
	27-Jun-23			*0.5 [3b]*						*12.4 [3c]*					
	11-Jul-23			*2.9 [3b]*						*18.3 [3c]*					
	25-Jul-23			*0.5 [3b]*						*14.9 [3c]*					
	9-Aug-23			*3.1 [3b]*						*18.0 [3c]*					
	22-Aug-23			*3.9 [3b]*						*16.4 [3c]*					
	6-Sep-23			*2.1 [3b]*						*18.5 [3c]*					
	19-Sep-23			*2.0 [3b]*						*17.5 [3c]*					
	4-Oct-23			*3.8 [3b]*						*22.5 [3c]*					
	17-Oct-23			*3.4 [3b]*						*22.5 [3c]*					
	31-Oct-23			*9.3 [3b]*						*22.5 [3c]*					

Notes:
"-" = No Data
NC = Not Calculated
NTU = Nephelometric Turbidity Units
RPD = Relative Percent Difference
TSS = Total Suspended Solids

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. The MWQSOG Tier II objectives for TSS state an allowable 5 mg/L increase over background for chronic exposures and 25 mg/L increase over background for acute exposures. In the case of Sherlett Creek, analysis of all available TSS data for 2017-2023 indicates the maximum observed concentration is 6.5 mg/L, for a Tier II chronic exposure objective of 11.5 mg/L and a Tier II acute exposure objective of 31.5 mg/L. This objective has also been applied to Camp Lake and Cold Lake.
3. Camp Lake Water Quality Performance Objectives (CLWQPO). Final Adaptive Management Plan - Sherridon Orphaned Mine Site Reclamation Project, August 16, 2022.
   a. The pH objective is the MWQSOG Tier III guideline. It has been determined to be reasonable based on pre-construction predictions and monitoring record.
   b. The turbidity objectives are calculated as ambient SC-1 + 25%. The 25% allowance in the turbidity calculation is to account for sampling and analytical variation as per DJRC, 2022.
   c. The sulphate objectives are calculated as ambient SC-1 + 7 + 25%. Calculation is based on pre-construction prediction (from SENES 2008) plus 25% allowance for sampling and analytical variation as per DJRC (2022).
   d. The TSS objective is the MWQSOG Tier II chronic objective. It has been determined to be reasonable based on monitoring record.
   e. Ambient SC-1 refers to the concentration measured at Sherlett Creek station SC-1 within the previous 7 days.

- Values outside of MWQSOG range (pH) or above specified maximum value (sulphate and TSS).
BOLD - Values outside of CLWQPO range (pH) or above specified maximum value (turbidity, sulphate, and TSS).

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	pH (units)	Parameters [1] Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
Sherlett Creek															
SC-1	14-Feb-23		7.08	0.70	<1.0	30	36	<1.0	<1.0	3.2	35	34.9	12	14 [7]	<1.0
	16-May-23		6.72	2.3	<1.0	25	31	<1.0	<1.0	1.5	30	27.1	12	11	2.7
		SW-102	6.76	2.1	<1.0	25	30	<1.0	<1.0	1.6	30	28.3	12	9.9	2.5
	RPD		*0.59%*	*9.1%*	*NC*	*0.0%*	*3.3%*	*NC*	*NC*	*6.5%*	*0.0%*	*4.3%*	*0.0%*	*11%*	*7.7%*
	30-May-23		6.50	1.6	<1.0	26	31	<1.0	<1.0	2.9	27	28.5	11	9.6	1.9
	13-Jun-23		7.02	2.3	<1.0	24	29	<1.0	<1.0	3.1	32	29.4	12	11	<1.0
	27-Jun-23		6.65	0.37	<1.0	26	31	<1.0	<1.0	2.9	31	30.7	12	11	3.3
	11-Jul-23		6.50	2.3	<1.0	36	44	<1.0	<1.0	7.6	36	38.1	12	11	1.5
	25-Jul-23		6.80	0.37	<1.0	32	40	<1.0	<1.0	4.9	32	33.6	13	12	<1.0
	9-Aug-23		6.64	2.5	<1.0	35	42	<1.0	<1.0	7.4	39	36.7	12	11	1.3
	22-Aug-23		6.20	3.1	<1.0	31	38	<1.0	<1.0	6.1	38	36.1	12	12	1.1
	6-Sep-23		6.32	1.7	<1.0	30	37	<1.0	<1.0	7.8	35	37.5	12	10	<1.0
	19-Sep-23		6.29	1.6	<1.0	30	36	<1.0	<1.0	7.0	35	34.5	12	12	1.1
	3-Oct-23		6.38	3.0	<1.0	34	42	<1.0	<1.0	11	39	42.1	12	12	<1.0
	17-Oct-23		7.07	2.7	<1.0	28	34	<1.0	<1.0	11	41	37.6	11	11	1.0
	31-Oct-23		6.69	7.4	<1.0	30	36	<1.0	<1.0	11	40	40.8	11	11	2.5
SC-2	13-Jun-23		6.98	2.7	<1.0	25	30	<1.0	<1.0	3.7	32	29.5	11	15	3.3
		SW-109	7.00	2.6	<1.0	26	31	<1.0	<1.0	3.2	31	29.5	13	12	1.2
	RPD		*0.29%*	*3.8%*	*NC*	*3.9%*	*3.3%*	*NC*	*NC*	*14%*	*3.2%*	*0.0%*	*17%*	*22%*	*93%*
SC-3	3-Oct-23		6.36	2.9	<1.0	32	39	<1.0	<1.0	12	45	38.7	12	12	2.8
	13-Jun-23		6.98	3.5	<1.0	23	28	<1.0	<1.0	5.3	32	29.5	14	11	7.0
	3-Oct-23		6.37	3.6	<1.0	32	39	<1.0	<1.0	10	35.7	38.0	11	12	2.8
SC-4	13-Jun-23		6.83	5.1	<1.0	28	34	<1.0	<1.0	1.6	30	28.4	15	11	11
	3-Oct-23		6.38	2.5	<1.0	30	36	<1.0	<1.0	3.1	33	34.0	12	13	3.9
		SW-134	6.37	3.6	<1.0	30	37	<1.0	<1.0	2.5	33	34.0	12	12	<1.0
	RPD		*0.16%*	*36%*	*NC*	*0.0%*	*2.7%*	*NC*	*NC*	*21%*	*0.0%*	*0.0%*	*0.0%*	*8.0%*	*NC*
SC-5	13-Jun-23		6.69	3.0	<1.0	26	32	<1.0	<1.0	1.3	30	28.9	14	9.4	2.6
	3-Oct-23		6.28	2.3	<1.0	29	35	<1.0	<1.0	1.0	32	34.3	9.7	12	2.1
SC-6	13-Jun-23		7.01	3.3	<1.0	26	32	<1.0	<1.0	<1.0	30	28.9	11	11	1.7
	3-Oct-23		6.40	2.0	<1.0	30	36	<1.0	<1.0	<1.0	37	33.1	12	12	<1.0
Laboratory Detection Limits			*-*	*0.10 - 0.20*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.50*	*0.50*	*0.50*	*0.50*	*0.96 - 1.1*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]															
Protection of Aquatic Life and Wildlife															
Tier II Objective - Chronic															*11.5 [2a]*
Tier II Objective - Acute															*31.5 [2a]*
Protection of Freshwater Aquatic Life															
Tier III Guideline			*6.5 - 9.0*							*500*					

Notes:

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NTU = Nephelometric Turbidity Units
RPD = Relative Percent Difference
TSS = Total Suspended Solids

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- Values outside of MWQSOG range (pH) or above specified maximum value (sulphate and TSS).

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	pH (units)	Parameters [1] Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
Cold Lake															
CL-2 sfc	14-Feb-23		7.07	2.9	<1.0	28	34	<1.0	<1.0	21	53	46.1	11	12	<1.0
	16-May-23		6.47	2.6	<1.0	25	31	<1.0	<1.0	25	44	44.5	10	9.7	1.1
	30-May-23		7.07	3.1	<1.0	26	32	<1.0	<1.0	32	55	52.8	11	10	<1.0
	13-Jun-23		6.85	3.4	<1.0	23	29	<1.0	<1.0	25	50	48.4	11	11	<1.0
	27-Jun-23		6.64	0.20	<1.0	26	32	<1.0	<1.0	26	52	48.9	10	11	<1.0
	11-Jul-23		6.41	2.8	<1.0	31	37	<1.0	<1.0	25	49	50.5	10	9.7	1.8
	25-Jul-23		6.78	0.16	<1.0	29	35	<1.0	<1.0	26	46	45.6	10	11	<0.97
		SW-117	6.76	0.32	<1.0	29	36	<1.0	<1.0	26	47	47.5	10	10	<0.96
	RPD		*0.30%*	*67%*	*NC*	*0.0%*	*2.8%*	*NC*	*NC*	*0.0%*	*2.2%*	*4.1%*	*0.0%*	*10%*	*NC*
	9-Aug-23		6.62	1.8	<1.0	29	35	<1.0	<1.0	22	49	46.5	8.8	9.8	<1.0
	22-Aug-23		6.20	1.1	<1.0	28	35	<1.0	<1.0	23	43	47.9	9.6	6.7	<1.0
	6-Sep-23		6.35	2.0	<1.0	26	32	<1.0	<1.0	20	44	47.0	9.3	7.6	1.0
	19-Sep-23		6.51	2.2	<1.0	27	33	<1.0	<1.0	22	49	48.7	9.8	9.3	<1.0
	4-Oct-23		6.39	3.0	<1.0	30	36	<1.0	<1.0	22	47	46.5	8.6	10	2.0
		SW-133	6.35	3.0	<1.0	29	35	<1.0	<1.0	23	50	46.4	8.5	10	<1.0
	RPD		*0.63%*	*0.0%*	*NC*	*3.4%*	*2.8%*	*NC*	*NC*	*4.4%*	*6.2%*	*0.22%*	*1.2%*	*0.0%*	*NC*
	17-Oct-23		6.30	2.8	<1.0	30	37	<1.0	<1.0	25	50	46.6	9.5	7.8	1.5
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-2 btm	14-Feb-23		7.09	2.6	<1.0	26	32	<1.0	<1.0	20	54	46.3	11	11	<1.0
		SW-101	7.06	3.0	<1.0	27	33	<1.0	<1.0	20	53	44.5	10	10	<1.0
	RPD		*0.42%*	*14%*	*NC*	*3.8%*	*3.1%*	*NC*	*NC*	*0.0%*	*1.9%*	*4.0%*	*9.5%*	*9.5%*	*NC*
	16-May-23		6.38	7.20	<1.0	23	28	<1.0	<1.0	46	66	62.6	10	12	<1.0
	30-May-23		6.99	4.80	<1.0	25	30	<1.0	<1.0	28	45	50.8	7.8	10	1.3
	13-Jun-23		6.89	6.10	<1.0	24	30	<1.0	<1.0	23	48	45.4	10	8.30	1.4
		SW-107	6.73	5.40	<1.0	29	35	<1.0	<1.0	24	50	46.7	10	9.10	<1.0
	RPD		*2.3%*	*12%*	*NC*	*19%*	*15%*	*NC*	*NC*	*4.3%*	*4.1%*	*2.8%*	*0.0%*	*9.2%*	*NC*
	27-Jun-23		6.53	2.6	<1.0	26	31	<1.0	<1.0	21	47	46.2	10	9.7	<0.97
	11-Jul-23		6.64	6.3	<1.0	27	33	<1.0	<1.0	21	46	50.0	11	9.7	1.1
	25-Jul-23		6.72	4.3	<1.0	30	36	<1.0	<1.0	26	45	45.5	10	9.1	1.3
	9-Aug-23		6.55	5.1	<1.0	30	37	<1.0	<1.0	22	51	48.8	9.9	9.2	<1.0
	22-Aug-23		6.20	3.2	<1.0	27	33	<1.0	<1.0	24	44	47.7	9.7	8.7	1.6
	6-Sep-23		6.34	2.3	<1.0	27	33	<1.0	<1.0	21	50	46.4	9.3	9.7	1.2
	19-Sep-23		6.53	2.1	<1.0	30	36	<1.0	<1.0	22	50	45.7	9.1	9.4	<1.0
	4-Oct-23		6.38	3.2	<1.0	29	36	<1.0	<1.0	23	49	46.4	10	10	2.3
	17-Oct-23		6.33	3.1	<1.0	29	36	<1.0	<1.0	24	49	48	9.4	9.6	<1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-3 sfc	14-Feb-23		6.93	2.5	<1.0	33	40	<1.0	<1.0	11	48	40.6	14	13	<1.0
	16-May-23		6.39	7.6	<1.0	20	24	<1.0	<1.0	56	73	70.0	9.6	9.6	1.0
	30-May-23		7.07	4.1	<1.0	26	31	<1.0	<1.0	37	51	57.2	8.7	9.9	<1.0
	13-Jun-23		6.70	8.2	<1.0	14	17	<1.0	<1.0	120	140	128	8.9	7.6	1.3
		SW-106	6.45	4.4	<1.0	15	19	<1.0	<1.0	100	120	103	8.4	7.8	2.3
	RPD		*3.8%*	*60%*	*NC*	*6.9%*	*11%*	*NC*	*NC*	*18%*	*15%*	*22%*	*5.8%*	*2.6%*	*56%*
	27-Jun-23		6.45	4.9	<1.0	16	19	<1.0	<1.0	88	110	107	8.8	8.3	2.1
	11-Jul-23		6.42	2.8	<1.0	28	35	<1.0	<1.0	25	50	52	10	9.9	<0.96
	25-Jul-23		6.77	0.21	<1.0	28	34	<1.0	<1.0	26	51	49.2	10	9.7	<0.96
	9-Aug-23		6.56	1.5	<1.0	27	33	<1.0	<1.0	23	48	44.7	9.6	9.1	<1.0
	22-Aug-23		6.18	2.4	<1.0	31	38	<1.0	<1.0	27	46	53.2	8.0	8.6	1.1
	6-Sep-23		6.34	2.2	<1.0	26	31	<1.0	<1.0	21	44	48	9.4	8.7	<1.0
	19-Sep-23		6.28	2.1	<1.0	29	35	<1.0	<1.0	23	48	48.8	9.7	9.9	<1.0
	4-Oct-23		6.40	2.5	<1.0	29	35	<1.0	<1.0	27	50	48.9	8.1	9.5	3.2
	17-Oct-23		6.34	2.9	<1.0	30	36	<1.0	<1.0	23	49	49.4	9.0	9.0	<1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-3 btm	14-Feb-23		7.02	2.8	<1.0	28	34	<1.0	<1.0	17	49	40.5	13	11	<1.0
	16-May-23		6.68	3.3	<1.0	23	28	<1.0	<1.0	29	50	52.1	11	8.6	<1.0
	30-May-23		6.91	6.8	<1.0	23	28	<1.0	<1.0	65	78	76.8	8.4	9.3	3.3
	13-Jun-23		6.96	5.3	<1.0	23	28	<1.0	<1.0	36	61	55.2	14	8	1.8
	27-Jun-23		6.51	2.9	<1.0	21	26	<1.0	<1.0	53	77	72.6	9.2	9.5	2.3
	11-Jul-23		6.49	2.7	<1.0	35	43	<1.0	<1.0	25	50	53.3	10	9.9	<1.0
	25-Jul-23		6.76	0.22	<1.0	30	36	<1.0	<1.0	29	48	48.2	10	9.7	<0.95
	9-Aug-23		6.57	1.7	<1.0	29	35	<1.0	<1.0	21	50	46.1	9.5	9.6	<1.0
		SW-120	6.57	2.3	<1.0	31	37	<1.0	<1.0	21	48	44.1	8.3	6.3	<1.0
	RPD		*0.0%*	*30%*	*NC*	*6.7%*	*5.6%*	*NC*	*NC*	*0.0%*	*4.1%*	*4.4%*	*13%*	*42%*	*NC*
	22-Aug-23		6.22	1.1	<1.0	28	34	<1.0	<1.0	27	46	50.5	9.8	8.5	<1.0
	6-Sep-23		6.30	2.1	<1.0	35	43	<1.0	<1.0	24	42	48.0	8.5	8.3	<1.0
	19-Sep-23		6.44	2.5	<1.0	29	36	<1.0	<1.0	22	49	47.9	9.1	9.2	1.4
	4-Oct-23		6.41	4.0	<1.0	29	35	<1.0	<1.0	22	48	49.6	10	9.1	2.3
	17-Oct-23		7.09	3.2	<1.0	27	33	<1.0	<1.0	25	49	50	9.2	8.7	<1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameters [1]												
			pH (units)	Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
CL-4 sfc	14-Feb-23		7.11	2.1	<1.0	32	40	<1.0	<1.0	7.9	47	39.9	13	16	<1.0
	16-May-23		6.49	3.3	<1.0	24	30	<1.0	<1.0	26	45	46.1	11	14	<1.0
		SW-100	6.68	2.8	<1.0	23	28	<1.0	<1.0	25	47	43.5	11	11	1.7
	RPD		*2.9%*	*16%*	*NC*	*4.3%*	*6.9%*	*NC*	*NC*	*3.9%*	*4.3%*	*5.8%*	*0.0%*	*24%*	*NC*
	30-May-23		6.96	17	<1.0	24	29	<1.0	<1.0	34	49	53.6	10	11	4.9
	13-Jun-23		7.00	5.2	<1.0	24	30	<1.0	<1.0	24	49	46.8	10	9.4	1.0
	27-Jun-23		6.66	0.38	<1.0	27	33	<1.0	<1.0	22	50	44.9	10	9.8	<0.99
	11-Jul-23		6.68	0.39	<1.0	25	31	<1.0	<1.0	23	47	48.3	10	10	1.1
	25-Jul-23		6.78	0.21	<1.0	32	40	<1.0	<1.0	20	43	44.3	10	9.9	<1.0
	9-Aug-23		6.64	1.2	<1.0	28	34	<1.0	<1.0	20	48	44.0	9.5	9.9	<0.99
	22-Aug-23		6.23	1.6	<1.0	29	35	<1.0	<1.0	21	41	47.2	9.3	8.5	1.6
	6-Sep-23		6.35	2.1	<1.0	29	36	<1.0	<1.0	20	43	44.6	9	8.6	1.3
	19-Sep-23		6.52	2.5	<1.0	28	35	<1.0	<1.0	20	49	46.1	9.2	9.4	<1.0
	4-Oct-23		6.39	3.3	<1.0	29	35	<1.0	<1.0	20	47	45.8	9.8	9.4	2.3
	17-Oct-23		6.35	3.2	<1.0	30	36	<1.0	<1.0	22	49	45.3	9.2	8.4	<1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-4 btm	14-Feb-23		6.89	2.0	<1.0	27	33	<1.0	<1.0	19	50	44.4	10	12	<0.99
	16-May-23		6.44	5.4	<1.0	28	34	<1.0	<1.0	31	52	52.4	10	12	<1.0
	30-May-23		7.10	14.0	<1.0	28	34	<1.0	<1.0	18	38	40.1	11	10	3.1
	13-Jun-23		6.93	6.9	<1.0	25	31	<1.0	<1.0	18	44	42.6	9.9	8.6	1.3
	27-Jun-23		6.52	11	<1.0	29	35	<1.0	<1.0	17	44	42.0	9.4	9.9	1.2
	11-Jul-23		6.63	11	<1.0	28	34	<1.0	<1.0	20	45	48.2	11	10	2.0
	25-Jul-23		6.66	3.8	<1.0	27	32	<1.0	<1.0	25	47	46.7	10	9.5	<1.0
		SW-116	6.76	3.7	<1.0	30	36	<1.0	<1.0	26	47	47.2	10	10	1.4
	RPD		*1.5%*	*2.7%*	*NC*	*11%*	*12%*	*NC*	*NC*	*3.9%*	*0.0%*	*1.1%*	*0.0%*	*5.1%*	*NC*
	9-Aug-23		6.67	6.0	<1.0	27	33	<1.0	<1.0	21	50	48.3	8.7	8.6	<1.0
	22-Aug-23		6.22	4.5	<1.0	30	36	<1.0	<1.0	21	43	47.2	9.1	8.8	2.0
	6-Sep-23		6.35	2.1	<1.0	29	35	<1.0	<1.0	21	44	46.6	9.4	8.6	2.4
	19-Sep-23		6.51	2.9	<1.0	27	33	<1.0	<1.0	22	49	46.1	9.3	9.4	1.4
	4-Oct-23		6.40	4.5	<1.0	29	35	<1.0	<1.0	19	45	47.4	10	9.9	1.1
	17-Oct-23		6.36	3.6	<1.0	30	37	<1.0	<1.0	23	49	48.3	9.4	8.6	<0.99
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-5 sfc	14-Feb-23		6.94	2.4	<1.0	35	42	<1.0	<1.0	5.1	43	36.5	15	15	<1.0
		SW-100	7.04	2.4	<1.0	31	38	<1.0	<1.0	5.4	41	36.6	14	15	<1.0
	RPD		*1.4%*	*0.0%*	*NC*	*12%*	*10%*	*NC*	*NC*	*5.7%*	*4.8%*	*0.3%*	*6.9%*	*0.0%*	*NC*
	16-May-23		6.51	2.9	<1.0	26	31	<1.0	<1.0	20	40	39.6	11	11	<1.0
	30-May-23		7.04	9.9	<1.0	27	33	<1.0	<1.0	27	44	48.7	9.2	12	<1.0
	13-Jun-23		7.01	7.4	<1.0	24	29	<1.0	<1.0	20	46	44.3	12	9.5	1.1
	27-Jun-23		6.56	0.20	<1.0	27	33	<1.0	<1.0	21	49	42.6	10	9.7	<0.94
		SW-110	6.56	0.36	<1.0	27	33	<1.0	<1.0	20	47	45.7	10	8.9	<1.0
	RPD		*0.0%*	*57%*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*4.9%*	*4.2%*	*7.0%*	*0.0%*	*8.6%*	*NC*
	11-Jul-23		6.45	0.43	<1.0	27	33	<1.0	<1.0	21	46	48.1	10	8.0	1.2
	24-Jul-23		6.81	0.17	<1.0	30	37	<1.0	<1.0	20	42	43.3	10	9.6	<0.96
	9-Aug-23		6.60	1.5	<1.0	26	32	<1.0	<1.0	18	45	42.4	9.5	8.3	<1.0
	22-Aug-23		6.24	1.5	<1.0	29	36	<1.0	<1.0	20	41	46.3	9.5	9.0	<1.0
	6-Sep-23		6.34	1.8	<1.0	28	34	<1.0	<1.0	18	46	43.8	8.1	8.9	1.9
	19-Sep-23		6.53	2.2	<1.0	29	35	<1.0	<1.0	20	47	45.1	9.3	9.8	1.3
		SW-130	6.28	2.2	<1.0	29	35	<1.0	<1.0	19	48	47.0	9.0	9.4	<1.0
	RPD		*3.9%*	*0.0%*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*5.1%*	*2.1%*	*4.1%*	*3.3%*	*4.2%*	*NC*
	4-Oct-23		6.40	3.2	<1.0	28	35	<1.0	<1.0	22	46	43.5	10	9.5	3.8
	17-Oct-23		6.36	3.4	<1.0	29	36	<1.0	<1.0	22	45	45	8.8	8.8	1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-5 btm	14-Feb-23		6.99	6.7	<1.0	24	29	<1.0	<1.0	27	58	51.2	9.6	9.7	2.7
	16-May-23		6.43	10	<1.0	24	30	<1.0	<1.0	36	57	57.9	10	14	<1.0
	30-May-23		6.47	3.8	<1.0	27	33	<1.0	<1.0	17	41	42.8	8.1	11	1.9
	13-Jun-23		6.75	7.2	<1.0	30	37	<1.0	<1.0	17	42	40.3	10	8.9	<1.0
	27-Jun-23		6.64	4.0	<1.0	27	32	<1.0	<1.0	17	46	44.5	10	9.6	1.6
	11-Jul-23		6.51	0.35	<1.0	31	38	<1.0	<1.0	21	46	46.5	9.9	8.3	<1.0
	25-Jul-23		6.75	2.8	<1.0	30	37	<1.0	<1.0	26	45	49.3	10	9.4	<0.99
	9-Aug-23		6.72	1.9	<1.0	31	38	<1.0	<1.0	18	46	42.5	8.7	8.0	<1.0
		SW-119	6.58	2.4	<1.0	29	36	<1.0	<1.0	19	45	42.6	9.1	6.7	1.3
	RPD		*2.1%*	*23%*	*NC*	*6.7%*	*5.4%*	*NC*	*NC*	*5.4%*	*2.2%*	*0.2%*	*4.5%*	*18%*	*NC*
	22-Aug-23		6.18	3.4	<1.0	29	35	<1.0	<1.0	20	43	48.7	9.4	9.0	<1.0
	6-Sep-23		6.33	2.2	<1.0	29	35	<1.0	<1.0	-	-	-	-	-	1.2
	19-Sep-23		6.50	3.7	<1.0	29	36	<1.0	<1.0	20	48	46.6	9.5	9.4	1.1
	4-Oct-23		6.39	2.6	<1.0	28	34	<1.0	<1.0	20	46	48.9	10	9.3	<1.0
	17-Oct-23		6.23	3.1	<1.0	29	35	<1.0	<1.0	23	46	45.3	9.2	9.0	1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameters [1]												
			pH (units)	Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
CL-6 sfc	14-Feb-23		6.94	2.3	<1.0	31	38	<1.0	<1.0	14	52	43.8	12	12	1.0
	16-May-23		6.52	2.5	<1.0	26	32	<1.0	<1.0	15	38	39.4	12	13	1.1
	30-May-23		7.02	3.3	<1.0	28	34	<1.0	<1.0	20	44	43.6	11	12	<1.0
	13-Jun-23		6.79	4.1	<1.0	27	33	<1.0	<1.0	18	45	42.9	9.8	9.5	<1.0
	27-Jun-23		6.54	0.37	<1.0	28	34	<1.0	<1.0	17	44	42.6	10	9.6	<0.95
	11-Jul-23		6.71	0.23	<1.0	28	34	<1.0	<1.0	18	43	42.1	7.9	9.7	1.4
		SW-115	6.51	2.2	<1.0	31	38	<1.0	<1.0	18	43	45.0	11	9.5	1.4
	RPD		*3.0%*	*162%*	*NC*	*10%*	*11%*	*NC*	*NC*	*0.0%*	*0.0%*	*6.7%*	*33%*	*2.1%*	*0.0%*
	25-Jul-23		6.77	0.17	<1.0	31	38	<1.0	<1.0	18	41	41.1	10	9.7	<0.97
	9-Aug-23		6.61	1.5	<1.0	29	35	<1.0	<1.0	15	48	40.0	9.5	9.0	<1.0
	22-Aug-23		6.20	2.8	<1.0	30	37	<1.0	<1.0	17	39	43.4	9.3	9.8	<1.0
	6-Sep-23		6.35	1.7	<1.0	29	35	<1.0	<1.0	16	39	42.1	8.9	8.7	<1.0
	19-Sep-23		6.52	2.3	<1.0	29	35	<1.0	<1.0	16	45	43.3	9.3	7.9	<0.99
	4-Oct-23		6.29	2.1	<1.0	29	36	<1.0	<1.0	17	43	41.2	9.8	9.9	<1.0
	17-Oct-23		6.36	1.4	<1.0	30	37	<1.0	<1.0	15	41	41.2	8.6	8.8	<1.0
		SW-136	6.35	2.5	<1.0	29	35	<1.0	<1.0	14	42	40.5	8.7	8.9	<1.0
	RPD		*0.16%*	*56%*	*NC*	*3.4%*	*5.6%*	*NC*	*NC*	*6.9%*	*2.4%*	*1.7%*	*1.2%*	*1.1%*	*NC*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-6 btm	14-Feb-23		7.08	2.3	<1.0	30	36	<1.0	<1.0	11	44	41.0	11	11	<1.0
	16-May-23		6.49	2.8	<1.0	26	32	<1.0	<1.0	15	38	40.4	11	15	1.1
	30-May-23		7.04	7.4	<1.0	28	34	<1.0	<1.0	16	40	39.6	9.6	12	10
	13-Jun-23		6.77	6.6	<1.0	30	36	<1.0	<1.0	14	40	38.7	9.5	8.1	2.5
	27-Jun-23		6.59	0.37	<1.0	30	37	<1.0	<1.0	14	42	39.0	9.5	9.2	1.4
	11-Jul-23		6.53	2.5	<1.0	31	37	<1.0	<1.0	18	43	44.2	10	8.6	1.1
	25-Jul-23		6.78	0.41	<1.0	31	38	<1.0	<1.0	18	44	43.0	10	9.9	<0.96
	9-Aug-23		6.63	1.7	<1.0	31	38	<1.0	<1.0	16	44	40.7	9.0	9.4	<1.0
	22-Aug-23		6.21	2.3	<1.0	29	36	<1.0	<1.0	16	40	43.5	9.8	9.9	1.8
		SW-122	6.22	2.4	<1.0	32	39	<1.0	<1.0	18	45	45.0	9.4	9.1	1.9
	RPD		*0.16%*	*4.3%*	*NC*	*10%*	*8.0%*	*NC*	*NC*	*12%*	*12%*	*3.4%*	*4.2%*	*8.4%*	*5.4%*
	6-Sep-23		6.30	2.2	<1.0	30	36	<1.0	<1.0	17	40	43.3	8.8	8.0	1.7
		SW-127	6.35	1.7	<1.0	28	34	<1.0	<1.0	16	36	42.5	8.1	8.4	1.5
	RPD		*0.79%*	*26%*	*NC*	*6.9%*	*5.7%*	*NC*	*NC*	*6.1%*	*11%*	*1.9%*	*8.3%*	*4.9%*	*13%*
	19-Sep-23		6.52	1.6	<1.0	28	34	<1.0	<1.0	17	45	41.1	9.0	9.5	1.5
	4-Oct-23		6.40	2.4	<1.0	30	36	<1.0	<1.0	18	42	44.9	9.6	9.7	1.7
	17-Oct-23		6.34	2.6	<1.0	30	37	<1.0	<1.0	17	44	41.7	8.9	8.7	<1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-7 sfc	14-Feb-23		7.05	2.5	<1.0	31	38	<1.0	<1.0	11	48	40.6	12	13	<1.0
	16-May-23		6.57	7.2	<1.0	15	19	<1.0	<1.0	66	85	78.7	9.0	8.9	1.0
	30-May-23		6.41	3.4	<1.0	26	31	<1.0	<1.0	34	51	54.5	10	11	<1.0
	13-Jun-23		6.94	4.6	<1.0	21	26	<1.0	<1.0	43	68	64.7	12	8.2	1.6
	27-Jun-23		6.47	4.6	<1.0	17	21	<1.0	<1.0	78	97	83.7	9.5	8.4	1.5
	11-Jul-23		6.67	3.5	<1.0	26	32	<1.0	<1.0	27	51	54.2	10	9.5	<0.95
	25-Jul-23		6.79	0.18	<1.0	31	38	<1.0	<1.0	23	37	44.3	10	10	<0.95
	9-Aug-23		6.58	1.6	<1.0	30	37	<1.0	<1.0	22	50	47.0	9.3	10	<1.0
	22-Aug-23		6.23	1.4	<1.0	29	35	<1.0	<1.0	21	42	46.6	9.7	9.2	<1.0
		SW-123	6.23	2.5	<1.0	28	34	<1.0	<1.0	22	42	47.0	9.0	9.5	1.4
	RPD		*0.0%*	*56%*	*NC*	*3.5%*	*2.9%*	*NC*	*NC*	*4.7%*	*0.0%*	*0.9%*	*7.5%*	*3.2%*	*NC*
	6-Sep-23		6.30	2.2	<1.0	29	35	<1.0	<1.0	20	44	44.6	9.4	9.5	2.0
		SW-126	6.36	2.7	<1.0	27	33	<1.0	<1.0	21	48	46.3	8.9	6.6	1.2
	RPD		*0.95%*	*20%*	*NC*	*7.1%*	*5.9%*	*NC*	*NC*	*4.9%*	*8.7%*	*3.7%*	*5.5%*	*36%*	*50%*
	19-Sep-23		6.27	2.4	<1.0	30	36	<1.0	<1.0	22	48	46.5	8.8	9.2	1.2
	4-Oct-23		6.38	2.5	<1.0	28	34	<1.0	<1.0	25	50	49.6	10	10	2.7
	17-Oct-23		6.31	3.0	<1.0	29	36	<1.0	<1.0	24	50	48.7	8.8	7.5	<0.99
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-7 btm	14-Feb-23		7.07	2.6	<1.0	30	37	<1.0	<1.0	11	47	39.6	13	13	<1.0
	16-May-23		6.59	6.3	<1.0	16	20	<1.0	<1.0	59	82	72.7	10	10	<1.0
	30-May-23		6.33	9.7	<1.0	20	24	<1.0	<1.0	84	97	101	9.2	10	2.6
	13-Jun-23		6.93	3.3	<1.0	23	28	<1.0	<1.0	39	62	54.3	10	9	1.6
	27-Jun-23		6.40	4.5	<1.0	16	20	<1.0	<1.0	75	97	92.0	9.2	9.1	2.5
		SW-111	6.55	4.7	<1.0	21	25	<1.0	<1.0	74	100	88.6	9.0	8.2	1.6
	RPD		*2.3%*	*4.3%*	*NC*	*27%*	*22%*	*NC*	*NC*	*1.3%*	*3.0%*	*3.8%*	*2.2%*	*10%*	*44%*
	11-Jul-23		6.50	2.7	<1.0	32	39	<1.0	<1.0	27	51	54.2	10	9.5	<0.97
	25-Jul-23		6.76	0.19	<1.0	28	34	<1.0	<1.0	20	46	49.2	11	9.8	<0.95
	9-Aug-23		6.63	1.1	<1.0	28	34	<1.0	<1.0	22	50	44.9	8.4	8.9	<1.0
	22-Aug-23		6.18	2.0	<1.0	30	37	<1.0	<1.0	22	44	48.8	10	11	1.3
	6-Sep-23		6.32	2.3	<1.0	30	36	<1.0	<1.0	23	47	47.6	8.6	8.6	1.9
	19-Sep-23		6.28	2.5	<1.0	31	37	<1.0	<1.0	23	49	47.4	9.9	9.3	1.5
		SW-129	6.29	2.4	<1.0	33	40	<1.0	<1.0	23	49	47.0	9.2	9.5	<1.0
	RPD		*0.16%*	*4.1%*	*NC*	*6.3%*	*7.8%*	*NC*	*NC*	*0.0%*	*0.0%*	*0.85%*	*7.3%*	*2.1%*	*NC*
	4-Oct-23		6.37	3.1	<1.0	29	36	<1.0	<1.0	22	49	47.6	11	9.8	1.5
	17-Oct-23		6.31	3.0	<1.0	30	37	<1.0	<1.0	24	50	48.7	8.8	9.2	<0.99
		SW-137	6.31	3.4	<1.0	31	38	<1.0	<1.0	24	49	48.4	8.9	9.1	<1.0
	RPD		*0.0%*	*13%*	*NC*	*3.3%*	*2.7%*	*NC*	*NC*	*0.0%*	*2.0%*	*0.62%*	*1.1%*	*1.1%*	*NC*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameters [1]												
			pH (units)	Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
CL-8 sfc	14-Feb-23		6.78	2.0	<1.0	4.3	5.2	<1.0	<1.0	11	45	40.9	12	13	<1.0
	16-May-23		6.42	5.2	<1.0	22	26	<1.0	<1.0	41	58	57.2	10	10	<1.0
	30-May-23		6.60	3.5	<1.0	24	29	<1.0	<1.0	34	50	53.7	8.3	11	<1.0
		SW-103	6.97	3.6	<1.0	26	31	<1.0	<1.0	35	50	54	10	9.6	1.0
	RPD		*5.5%*	*2.8%*	*NC*	*8.0%*	*6.7%*	*NC*	*NC*	*2.9%*	*0.0%*	*0.56%*	*19%*	*14%*	*NC*
	13-Jun-23		6.89	3.3	<1.0	21	26	<1.0	<1.0	52	74	67.8	9.2	8.5	1.2
	27-Jun-23		6.53	0.59	<1.0	26	32	<1.0	<1.0	27	52	49.7	9.0	9.7	2.2
	11-Jul-23		6.45	2.6	<1.0	30	36	<1.0	<1.0	26	50	52.5	11	10	<0.99
	25-Jul-23		6.77	0.27	<1.0	30	37	<1.0	<1.0	20	46	45.1	10	9.4	<1.0
	9-Aug-23		6.54	1.3	<1.0	31	38	<1.0	<1.0	21	50	45.2	9.2	9.9	<1.0
	22-Aug-23		6.19	1.3	<1.0	30	36	<1.0	<1.0	21	45	46.8	9.7	10	<1.0
	6-Sep-23		6.35	2.1	<1.0	31	37	<1.0	<1.0	23	45	43.8	8.5	7.6	1.5
	19-Sep-23		6.38	2.5	<1.0	28	34	<1.0	<1.0	21	49	46.0	9.2	9.3	<1.0
	4-Oct-23		6.40	2.9	<1.0	29	36	<1.0	<1.0	23	50	46.2	8.8	9.9	2.5
	17-Oct-23		6.31	3.0	<1.0	30	36	<1.0	<1.0	24	50	48.5	9.3	9.1	<1.0
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
CL-8 btm	14-Feb-23		7.06	2.5	<1.0	29	35	<1.0	<1.0	13	49	41.6	12	12.0	<1.0
	16-May-23		6.68	3.2	<1.0	22	27	<1.0	<1.0	29	50	45.9	9.9	9.0	1.1
	30-May-23		6.59	5.4	<1.0	22	27	<1.0	<1.0	43	56	58.8	11	9.7	<1.0
	13-Jun-23		6.97	4.4	<1.0	23	28	<1.0	<1.0	25	51	46.2	12	8.3	1.0
	27-Jun-23		6.67	2.4	<1.0	27	32	<1.0	<1.0	28	53	51.1	9.9	9.7	<1.0
	11-Jul-23		6.66	3.0	<1.0	25	30	<1.0	<1.0	26	51	51.7	11	10	1.2
		SW-114	6.49	2.5	<1.0	32	39	<1.0	<1.0	26	50	52.2	10	9.9	1.1
	RPD		*2.6%*	*18%*	*NC*	*25%*	*26%*	*NC*	*NC*	*0.0%*	*2.0%*	*1.0%*	*9.5%*	*1.0%*	*8.7%*
	25-Jul-23		6.76	0.21	<1.0	31	38	<1.0	<1.0	21	43	44.6	10	9.2	<0.95
	9-Aug-23		6.59	1.7	<1.0	33	40	<1.0	<1.0	21	47	43.6	9.6	9.3	<1.0
	22-Aug-23		6.22	1.2	<1.0	29	35	<1.0	<1.0	21	42	45.9	9.6	9.7	<1.0
	6-Sep-23		6.30	2.1	<1.0	26	32	<1.0	<1.0	21	53	46.9	8.5	7.3	1.4
	19-Sep-23		6.52	2.5	<1.0	28	34	<1.0	<1.0	22	49	46.8	8.9	9.5	1.0
	4-Oct-23		6.38	3.1	<1.0	28	34	<1.0	<1.0	23	50	50.1	9.9	9.9	1.4
	17-Oct-23		6.33	3.2	<1.0	30	37	<1.0	<1.0	26	48	50.4	9.1	7.6	3.1
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-
Laboratory Detection Limits			-	*0.10 - 0.20*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.50*	*0.50*	*0.50*	*0.50*	*0.96 - 1.1*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]															
Protection of Aquatic Life and Wildlife															
Tier II Objective - Chronic															*11.5 [2a]*
Tier II Objective - Acute															*31.5 [2a]*
Protection of Freshwater Aquatic Life															
Tier III Guideline			*6.5 - 9.0*							*500*					

Notes:
"-" = No Data
NC = Not Calculated
NTU = Nephelometric Turbidity Units
RPD = Relative Percent Difference
TSS = Total Suspended Solids

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. The MWQSOG Tier II objectives for TSS state an allowable 5 mg/L increase over background for chronic exposures and 25 mg/L increase over background for acute exposures. In the case of Sherlett Creek, analysis of all available TSS data for 2017-2023 indicates the maximum observed concentration is 6.5 mg/L, for a Tier II chronic exposure objective of 11.5 mg/L and a Tier II acute exposure objective of 31.5 mg/L. This objective has also been applied to Camp Lake and Cold Lake.

- Values outside of MWQSOG range (pH) or above specified maximum value (sulphate and TSS).

TABLE 4
GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	pH (units)	Parameters [1] Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
Additional Surface Water Sampling Locations															
Portage Lake	3-Oct-23		6.44	2.6	<1.0	36	44	<1.0	<1.0	6.2	42	41.3	13	13	2.8
Sherlett Lake	3-Oct-23		6.40	1.7	<1.0	29	35	<1.0	<1.0	1.7	32	32.1	13	11	2.3
WWTP Outflow	3-Oct-23		7.37	24	<1.0	150	180	<1.0	<1.0	80	95	98.1	15	21	52
C Dock	3-Oct-23		6.43	2.7	<1.0	37	45	<1.0	<1.0	6.7	42	39.6	13	13	3.3
		SW-135	6.43	2.5	<1.0	36	44	<1.0	<1.0	7.5	42	40.0	14	13	3.3
	RPD		*0.0%*	*7.7%*	*NC*	*2.7%*	*2.2%*	*NC*	*NC*	*11%*	*0.0%*	*1.0%*	*7.4%*	*0.0%*	*0.0%*
	31-Oct-23		6.76	11	<1.0	30	37	<1.0	<1.0	38	60	62.7	11	10	3.0
Cofferdam	4-Oct-23		5.95	21	<1.0	5.3	6.5	<1.0	<1.0	170	170	177	6.9	6.6	3.8
	17-Oct-23		7.08	4.9	<1.0	31	38	<1.0	<1.0	12	42	39.8	12	8.3	<1.0
	31-Oct-23		6.78	13	<1.0	33	40	<1.0	<1.0	12	46	46.4	12	12	28
Diversion	17-Oct-23		7.02	3.7	<1.0	29	36	<1.0	<1.0	12	42	42.7	11	11	<1.0
	31-Oct-23		6.74	11	<1.0	32	39	<1.0	<1.0	7.6	43	44.1	11	11	5.6
Laboratory Detection Limits			-	*0.10 - 0.20*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.50*	*0.50*	*0.50*	*0.50*	*0.96 - 1.1*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]															
Protection of Aquatic Life and Wildlife															
Tier II Objective - Chronic															*11.5 [2a]*
Tier II Objective - Acute															*31.5 [2a]*
Protection of Freshwater Aquatic Life															
Tier III Guideline			*6.5 - 9.0*							*500*					

Notes:
"-" = No Data
NC = Not Calculated
NTU = Nephelometric Turbidity Units
RPD = Relative Percent Difference
TSS = Total Suspended Solids

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. The MWQSOG Tier II objectives for TSS state an allowable 5 mg/L increase over background for chronic exposures and 25 mg/L increase over background for acute exposures. In the case of Sherlett Creek, analysis of all available TSS data for 2017-2023 indicates the maximum observed concentration is 6.5 mg/L, for a Tier II chronic exposure objective of 11.5 mg/L and a Tier II acute exposure objective of 31.5 mg/L. This objective has also been applied to Camp Lake and Cold Lake.

- Values outside of MWQSOG range (pH) or specified maximum value (sulphate and TSS).

Sample ID	Date	Field Duplicate Sample ID	pH (units)	Parameters [1] Turbidity (NTU)	Alkalinity PP as $CaCO_3$	Alkalinity Total as $CaCO_3$	Bicarbonate (HCO_3)	Carbonate (CO_3)	Hydroxide (OH)	Sulphate (SO_4)	Hardness as $CaCO_3$	Total Hardness as $CaCO_3$	Total Organic Carbon as C	Dissolved Organic Carbon as C	TSS
TRIP BLANK	16-May-23		4.82	0.10	<1.0	<1.0	<1.0	<1..0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	30-May-23		4.92	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	13-Jun-23		4.92	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	27-Jun-23		5.07	<0.10	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<0.50	<0.50	<0.50	<0.50	<0.96
	11-Jul-23		4.90	<0.10	<1.0	1.0	1.3	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	25-Jul-23		5.04	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.97
	9-Aug-23		4.89	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	22-Aug-23		4.64	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<0.50	<0.50	<0.50	<0.50	<1.0
	6-Sep-23		4.99	0.13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	19-Sep-23		4.96	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
	4-Oct-23		4.97	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<0.50	<0.50	<0.50	<0.50	<1.0
	17-Oct-23		4.85	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0
Laboratory Detection Limits			-	*0.10 - 0.20*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.50*	*0.50*	*0.50*	*0.50*	*0.96 - 1.1*

Notes:
"-" = No Data
NC = Not Calculated
NTU = Nephelometric Turbidity Units
RPD = Relative Percent Difference
TSS = Total Suspended Solids

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
Camp Lake																																	
SB-1	14-Feb-23		0.019	<0.00060	0.00026	0.015	<0.0010	<0.020	0.00059	55	<0.0010	0.00046	0.0093	0.29	<0.00020	<0.020	9.7	0.11	<0.00020	0.0012	<0.10	4.7	<0.00020	1.5	<0.00010	3.5	0.050	57	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.17
	16-May-23		0.023	<0.00060	0.00030	0.013	<0.0010	<0.020	0.00055	33	<0.0010	0.00073	0.017	0.35	<0.00020	0.020	6.0	0.12	<0.00020	0.0014	<0.10	2.7	<0.00020	1.6	<0.00010	2.4	0.035	31	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	30-May-23		0.019	<0.00060	0.00023	0.012	<0.0010	<0.020	0.00054	37	<0.0010	0.00038	0.018	1.1	<0.00020	<0.020	6.6	0.13	<0.00020	0.0015	<0.10	3.2	<0.00020	1.3	<0.00010	2.5	0.045	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	13-Jun-23		0.015	<0.00060	0.00035	0.013	<0.0010	<0.020	0.00032	42	<0.0010	<0.00030	0.012	0.46	<0.00020	<0.020	6.9	0.097	<0.00020	0.0014	<0.10	3.4	<0.00020	1.2	<0.00010	2.8	0.043	37	<0.00020	<0.0010	<0.0010	<0.00010	0.0012	0.12
	27-Jun-23		0.010	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.00026	41	<0.0010	<0.00030	0.0078	0.86	<0.00020	<0.020	7.1	0.051	<0.00020	0.00064	<0.10	3.5	<0.00020	1.0	<0.00010	2.9	0.042	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.083
	11-Jul-23		0.0090	<0.00060	0.00022	0.011	<0.0010	<0.020	0.00023	37	<0.0010	<0.00030	0.0075	2.7	<0.00020	<0.020	6.6	0.059	<0.00020	0.00096	<0.10	3.2	<0.00020	0.87	<0.00010	2.6	0.046	38	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.076
		SW-113	0.012	<0.00060	0.00024	0.015	<0.0010	0.024	0.00024	37	<0.0010	<0.00030	0.0082	2.8	<0.00020	<0.020	6.7	0.060	<0.00020	0.00094	<0.10	3.3	<0.00020	0.96	<0.00010	2.7	0.048	38	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.077
	RPD		*29%*	*NC*	*8.7%*	*31%*	*NC*	*NC*	*4.3%*	*0.0%*	*NC*	*NC*	*8.9%*	*3.6%*	*NC*	*NC*	*1.5%*	*1.7%*	*NC*	*2.1%*	*NC*	*3.1%*	*NC*	*10%*	*NC*	*3.8%*	*4.3%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*1.3%*
	25-Jul-23		0.0068	<0.00060	0.00023	0.010	<0.0010	<0.020	0.00022	35	<0.0010	<0.00030	0.0087	1.1	<0.00020	<0.020	5.9	0.037	<0.00020	0.00079	<0.10	3.3	<0.00020	0.68	<0.00010	2.6	0.039	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.069
	9-Aug-23		0.0075	<0.00060	0.00024	0.011	<0.0010	<0.020	0.00024	48	<0.0010	<0.00030	0.0067	0.54	<0.00020	<0.020	7.8	0.041	<0.00020	0.00085	<0.10	4.0	<0.00020	0.69	<0.00010	3.0	0.050	46	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.065
	22-Aug-23		0.0043	<0.00060	0.00020	0.012	<0.0010	<0.020	0.00024	46	<0.0010	<0.00030	0.0058	0.30	<0.00020	<0.020	7.2	0.044	<0.00020	0.00085	<0.10	3.9	<0.00020	0.65	<0.00010	2.9	0.046	48	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.064
	6-Sep-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00022	53	<0.0010	<0.00030	0.0066	0.13	<0.00020	<0.020	8.6	0.054	<0.00020	0.00065	<0.10	4.5	<0.00020	0.67	<0.00010	3.4	0.052	48	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.054
	19-Sep-23		<0.0030	<0.00060	0.00023	0.014	<0.0010	<0.020	0.00024	57	<0.0010	<0.00030	0.0046	0.087	<0.00020	<0.020	9.4	0.061	<0.00020	0.00095	<0.10	4.8	<0.00020	0.67	<0.00010	3.4	0.059	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.064
	4-Oct-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00028	56	<0.0010	<0.00030	0.0036	<0.060	<0.00020	<0.020	8.9	0.065	<0.00020	0.00082	<0.10	4.6	<0.00020	0.67	<0.00010	3.4	0.063	57	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.065
		SW-131	<0.0030	<0.00060	0.00025	0.014	<0.0010	<0.020	0.00029	57	<0.0010	<0.00030	0.0036	<0.060	<0.00020	<0.020	8.9	0.064	<0.00020	0.00079	<0.10	4.6	<0.00020	0.64	<0.00010	3.4	0.062	54	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.067
	RPD		*NC*	*NC*	*NC*	*7.4%*	*NC*	*NC*	*3.5%*	*1.8%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*0.0%*	*1.6%*	*NC*	*3.7%*	*NC*	*0.0%*	*NC*	*4.6%*	*NC*	*0.0%*	*1.6%*	*5.4%*	*NC*	*NC*	*NC*	*NC*	*NC*	*3.0%*
	17-Oct-23		0.0056	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00028	61	<0.0010	<0.00030	0.0038	<0.060	<0.00020	<0.020	9.4	0.072	<0.00020	0.00088	<0.10	5.1	<0.00020	0.66	<0.00010	3.6	0.054	58	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.069
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SB-2	14-Feb-23		0.017	<0.00060	0.00028	0.014	<0.0010	<0.020	0.00058	53	<0.0010	0.00041	0.0088	0.29	<0.00020	<0.020	9.1	0.096	<0.00020	0.0014	<0.10	4.4	<0.00020	1.4	<0.00010	3.3	0.048	54	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.17
	16-May-23		0.024	<0.00060	0.00030	0.011	<0.0010	<0.020	0.00059	33	<0.0010	0.00079	0.020	0.34	<0.00020	<0.020	5.9	0.12	<0.00020	0.0013	<0.10	2.7	<0.00020	1.5	<0.00010	2.4	0.034	31	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.19
		SW-101	0.024	<0.00060	0.00027	0.010	<0.0010	<0.020	0.00056	32	<0.0010	0.00074	0.018	0.30	<0.00020	0.055	5.8	0.12	<0.00020	0.0014	<0.10	2.6	<0.00020	1.5	<0.00010	2.3	0.034	31	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	RPD		*0.0%*	*NC*	*11%*	*10%*	*NC*	*NC*	*5.2%*	*3.1%*	*NC*	*6.5%*	*11%*	*13%*	*NC*	*NC*	*1.7%*	*0.0%*	*NC*	*7.4%*	*NC*	*3.8%*	*NC*	*0.0%*	*NC*	*4.3%*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*5.4%*
	30-May-23		0.021	<0.00060	0.00021	0.012	<0.0010	<0.020	0.00050	37	<0.0010	0.00037	0.016	1.1	<0.00020	<0.020	6.7	0.12	<0.00020	0.0012	<0.10	3.2	<0.00020	1.3	<0.00010	2.6	0.045	32	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.16
	13-Jun-23		0.011	<0.00060	0.00033	0.013	<0.0010	<0.020	0.00038	42	<0.0010	<0.00030	0.011	0.28	<0.00020	<0.020	6.9	0.071	<0.00020	0.0012	<0.10	3.4	0.00024	0.78	<0.00010	2.7	0.043	26	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
	27-Jun-23		0.011	<0.0006	0.00030	<0.010	<0.0010	<0.020	0.00021	32	<0.0010	<0.00030	0.0077	0.70	<0.00020	<0.020	5.9	0.020	<0.00020	0.00086	<0.10	2.8	<0.00020	1.1	<0.00010	2.5	0.036	26	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.071
	11-Jul-23		0.011	0.00063	0.00033	0.011	<0.0010	<0.020	0.00026	37	<0.0010	<0.00030	0.0079	2.7	<0.00020	<0.020	6.7	0.060	<0.00020	0.00094	<0.10	3.3	<0.00020	0.87	<0.00010	2.6	0.046	37	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.079
	25-Jul-23		0.0068	<0.00060	0.00027	0.011	<0.0010	<0.020	0.00021	40	<0.0010	<0.00030	0.0073	1.1	<0.00020	<0.020	6.9	0.037	<0.00020	0.00081	<0.10	3.7	<0.00020	0.69	<0.00010	2.9	0.042	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.067
	9-Aug-23		0.0073	<0.00060	0.00021	0.011	<0.0010	<0.020	0.00023	48	<0.0010	<0.00030	0.0065	0.67	<0.00020	<0.020	7.8	0.044	<0.00020	0.00063	<0.10	4.0	<0.00020	0.68	<0.00010	3.0	0.050	46	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.065
	22-Aug-23		0.0058	<0.00060	0.00026	0.012	<0.0010	<0.020	0.00026	47	<0.0010	<0.00030	0.0061	0.22	<0.00020	<0.020	7.6	0.046	<0.00020	0.00082	<0.10	4.1	<0.00020	0.69	<0.00010	2.9	0.047	50	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.073
	6-Sep-23		<0.0030	<0.00060	0.00023	0.012	<0.0010	<0.020	0.00025	47	<0.0010	<0.00030	0.0052	0.15	<0.00020	<0.020	7.6	0.052	<0.00020	0.00092	<0.10	4.1	<0.00020	0.63	<0.00010	3.0	0.048	52	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.068
	19-Sep-23		<0.0030	<0.00060	0.00021	0.021	<0.0010	<0.020	0.00025	56	<0.0010	<0.00030	0.0031	<0.060	0.00028	<0.020	9.3	0.071	<0.00020	0.00082	<0.10	4.8	<0.00020	0.67	<0.00010	3.4	0.059	54	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.06
	4-Oct-23		<0.0030	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00027	56	<0.0010	<0.00030	0.0035	0.092	<0.00020	<0.020	8.9	0.066	<0.00020	0.00088	<0.10	4.5	<0.00020	0.68	<0.00010	3.4	0.062	57	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.064
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00027	62	<0.0010	<0.00030	0.0039	0.11	<0.00020	<0.020	9.6	0.076	<0.00020	0.00089	<0.10	5.4	<0.00020	0.70	<0.00010	3.8	0.054	57	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.070
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CB-1	14-Feb-23		0.017	<0.00060	0.00023	0.017	<0.0010	<0.020	0.00060	63	<0.0010	0.00047	0.0093	0.32	<0.00020	<0.020	11	0.12	<0.00020	0.0015	<0.10	5.3	<0.00020	1.7	<0.00010	3.9	0.056	67	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	16-May-23		0.025	<0.00060	0.00025	0.013	<0.0010	<0.020	0.00065	39	<0.0010	0.0011	0.018	0.41	<0.00020	<0.020	6.7	0.16	<0.00020	0.0016	<0.10	3.0	<0.00020	1.5	<0.00010	2.6	0.038	39	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.21
	30-May-23		0.020	<0.00060	<0.00020	0.011	<0.0010	<0.020	0.00055	36	<0.0010	0.00038	0.016	0.85	<0.00020	<0.020	6.3	0.11	<0.00020	0.0016	<0.10	3.0	<0.00020	1.2	<0.00010	2.4	0.039	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.20
	13-Jun-23		0.014	<0.00060	0.00028	0.012	<0.0010	<0.020	0.00041	43	<0.0010	<0.00030	0.012	0.51	<0.00020	<0.020	7.4	0.11	<0.00020	0.0014	<0.10	3.7	<0.00020	1.2	<0.00010	3.0	0.050	37	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
	27-Jun-23		0.015	<0.00060	0.00024	0.014	<0.0010	0.025	0.00028	41	<0.0010	<0.00030	0.0090	0.70	<0.00020	<0.020	7.1	0.050	<0.00020	0.00064	<0.10	3.6	0.00020	1.1	<0.00010	2.8	0.042	37	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.080
	11-Jul-23		0.0094	<0.00060	0.00024	0.011	<0.0010	<0.020	0.00024	40	<0.0010	<0.00030	0.0073	2.1	<0.00020	<0.020	6.9	0.050	<0.00020	0.00095	<0.10	3.4	<0.00020	0.82	<0.00010	2.7	0.047	39	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.074
	25-Jul-23		0.0066	<0.00060	0.00024	0.011	<0.0010	<0.020	0.00021	39	<0.0010	<0.00030	0.0082	0.95	<0.00020	<0.020	6.9	0.035	<0.00020	0.00091	<0.10	3.6	<0.00020	0.66	<0.00010	2.8	0.042	36	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.068
	9-Aug-23		0.0084	<0.00060	0.00022	0.011	<0.0010	<0.020	0.00025	49	<0.0010	<0.00030	0.0070	0.49	<0.00020	<0.020	8.0	0.039	<0.00020	0.00063	<0.10	4.0	<0.00020	0.66	<0.00010	3.1	0.051	46	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.070
	22-Aug-23		0.0045	<0.00060	0.00021	0.013	<0.0010	<0.020	0.00022	51	<0.0010	<0.00030	0.0055	0.41	<0.00020	<0.020	8.1	0.044	<0.00020	0.00070	<0.10	4.4	<0.00020	0.66	<0.00010	3.3	0.049	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.063
	6-Sep-23		<0.0030	<0.00060	<0.00020	0.012	<0.0010	<0.020	0.00026	48	<0.0010	<0.00030	0.0051	0.11	<0.00020	<0.020	8.0	0.048	<0.00020	0.00094	<0.10	4.0	<0.00020	0.57	<0.00010	3.0	0.047	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.069
	19-Sep-23		<0.0030	<0.00060	0.00022	0.014	<0.0010	<0.020	0.00023	57	<0.0010	<0.00030	0.0047	<0.060	0.00052	<0.020	9.4	0.061	<0.00020	0.00091	<0.10	4.8	<0.00020	0.65	<0.00010	3.4	0.060	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.062
	4-Oct-23		<0.0030	0.00082	0.00022	0.013	<0.0010	<0.020	0.00030	57	<0.0010	<0.00030	0.0040	<0.060	<0.00020	<0.020	9.1	0.060	<0.00020	0.00090	<0.10	4.7	<0.00020	0.65	<0.00010	3.5	0.062	59	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.075
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00026	62	<0.0010	<0.00030	0.0041	<0.060	<0.00020	<0.020	9.7	0.074	<0.00020	0.00095	<0.10	5.3	<0.00020	0.68	<0.00010	3.8	0.054	59	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.074
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CB-2	14-Feb-23		0.015	<0.00060	0.00022	0.018	<0.0010	<0.020	0.00072	72	<0.0010	0.00054	0.011	0.38	<0.00020	<0.020	13	0.12	<0.00020	0.0023	<0.10	5.9	<0.00020	1.6	<0.00010	4.2	0.061	76	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.21
	16-May-23		0.023	<0.00060	0.00024	0.012	<0.0010	<0.020	0.00074	40	<0.0010	0.0012	0.021	0.36	<0.00020	<0.020	6.9	0.16	<0.00020	0.0017	<0.10	3.2	<0.00020	1.5	<0.00010	2.6	0.038	39	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.23
	30-May-23		0.021	<0.00060	<0.00020	0.012	<0.0010	<0.020	0.00058	39	<0.0010	0.00050	0.016	1.0	<0.00020	<0.020	6.8	0.13	<0.00020	0.0016	<0.10	3.4	<0.00020	1.2	<0.00010	2.6	0.047	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.20
		SW-104	0.018	<0.00060	<0.00020	0.011	<0.0010	<0.020	0.00011	38	<0.0010	0.00034	0.015	0.91	<0.00020	<0.020	6.4	0.11	<0.00020	0.0014	<0.10	3.1	<0.00020	1.2	<0.00010	2.5	0.040	34	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.19
	RPD		*15%*	*NC*	*NC*	*8.7%*	*NC*	*NC*	*136%*	*2.6%*	*NC*	*NC*	*6.5%*	*9.4%*	*NC*	*NC*	*6.1%*	*17%*	*NC*	*13%*	*NC*	*9.2%*	*NC*	*0.0%*	*NC*	*3.9%*	*16%*	*2.9%*	*NC*	*NC*	*NC*	*NC*	*NC*	*5.1%*
	13-Jun-23		0.021	<0.00060	0.00021	0.012	<0.0010	<0.020	0.00032	45	<0.0010	0.00031	0.011	0.48	<0.00020	<0.020	7.5	0.10	<0.00020	0.0013	<0.10	3.8	0.00022	1.1	<0.00010	3.0	0.051	38	<0.00020	<0.0010	<0.0010	<0.00010	0.0013	0.12
	27-Jun-23		0.013	<0.00060	0.00023	0.010	<0.0010	<0.020	0.00023	42	<0.0010	<0.00030	0.011	0.94	<0.00020	<0.020	7.3	0.056	<0.00020	<0.00050	<0.10	3.6	<0.00020	1.0	<0.00010	2.9	0.043	40	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.08
	11-Jul-23		0.011	<0.00060	0.00025	0.011	<0.0010	<0.020	0.00026	39	<0.0010	<0.00030	0.0091	2.2	<0.00020	<0.020	6.8	0.051	<0.00020	0.00093	<0.10	3.4	<0.00020	0.82	<0.00010	2.6	0.047	39	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.082
	25-Jul-23		0.0082	<0.00060	0.00023	0.011	<0.0010	<0.020	0.00024	43	<0.0010	<0.00030	0.0066	1.2	<0.00020	<0.020	7.0	0.036	<0.00020	0.00085	<0.10	3.7	<0.00020	0.68	<0.00010	2.8	0.051	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.074
	9-Aug-23		0.0086	<0.00060	0.00023	0.011	<0.0010	<0.020	0.00025	49	<0.0010	<0.00030	0.0071	0.51	<0.00020	<0.020	7.9	0.039	<0.00020	<0.00050	<0.10	4.0	<0.00020	0.67	<0.00010	3.0	0.051	46	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.067
		SW-121	0.0061	<0.00060	0.00027	0.011	<0.0010	<0.020	0.00025	48	<0.0010	<0.00030	0.0071	0.83	<0.00020	<0.020	8.2	0.042	<0.00020	0.00072	<0.10	4.0	<0.00020	0.73	<0.00010	3.2	0.053	51	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.069
	RPD		*34%*	*NC*	*16%*	*0.0%*	*NC*	*NC*	*0.0%*	*2.1%*	*NC*	*NC*	*0.0%*	*48%*	*NC*	*NC*	*3.7%*	*7.4%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*8.6%*	*NC*	*6.5%*	*3.8%*	*10%*	*NC*	*NC*	*NC*	*NC*	*NC*	*2.9%*
	22-Aug-23		0.0035	<0.00060	0.00029	0.015	<0.0010	0.025	0.00024	46	<0.0010	<0.00030	0.0058	0.21	<0.00020	<0.020	7.4	0.043	<0.00020	0.00087	<0.10	4.0	<0.00020	0.68	<0.00010	2.9	0.048	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.067
	6-Sep-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00021	50	<0.0010	<0.00030	0.0045	0.069	<0.00020	<0.020	8.1	0.049	<0.00020	0.00074	<0.10	4.3	<0.00020	0.62	<0.00010	3.1	0.049	54	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.062
	19-Sep-23		<0.0030	<0.00060	0.00020	0.014	<0.0010	<0.020	0.00023	57	<0.0010	<0.00030	0.0065	<0.060	<0.00020	<0.020	9.4	0.054	<0.00020	0.00096	<0.10	4.9	<0.00020	0.63	<0.00010	3.4	0.060	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.063
		SW-128	<0.0030	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00026	57	<0.0010	<0.00030	0.0037	<0.060	<0.00020	<0.020	9.4	0.057	<0.00020	0.00093	<0.10	4.9	<0.00020	0.62	<0.00010	3.4	0.060	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.063
	RPD		*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*12%*	*0.0%*	*NC*	*NC*	*55%*	*NC*	*NC*	*NC*	*0.0%*	*5.4%*	*NC*	*3.2%*	*NC*	*0.0%*	*NC*	*1.6%*	*NC*	*0.0%*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*
	4-Oct-23		<0.0030	<0.00060	0.00020	0.014	<0.0010	<0.020	0.00028	57	<0.0010	<0.00030	0.0041	<0.060	<0.00020	<0.020	9.0	0.060	<0.00020	0.00088	<0.10	4.7	<0.00020	0.64	<0.00010	3.4	0.062	58	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.074
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00029	62	<0.0010	<0.00030	0.0043	<0.060	<0.00020	0.022	9.6	0.072	<0.00020	0.00091	<0.10	5.3	<0.00020	0.66	<0.00010	3.7	0.054	60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.074
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
NB-1	14-Feb-23		0.031	<0.00060	0.00024	0.018	<0.0010	<0.020	0.00077	74	<0.0010	0.00051	0.011	0.38	<0.00020	<0.020	13	0.12	<0.00020	0.0016	<0.10	6.0	<0.00020	1.7	<0.00010	4.3	0.064	81	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
	16-May-23		0.028	<0.00060	0.00030	0.012	<0.0010	<0.020	0.00079	46	<0.0010	0.0013	0.022	0.44	<0.00020	0.060	7.6	0.18	<0.00020	0.0017	<0.10	3.4	<0.00020	1.5	<0.00010	2.7	0.041	45	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.26
	30-May-23		0.015	<0.00060	<0.00020	0.012	<0.0010	<0.020	0.00050	42	<0.0010	0.00064	0.014	1.2	<0.00020	<0.020	7.0	0.15	<0.00020	0.0011	<0.10	3.4	<0.00020	1.2	<0.00010	2.6	0.042	39	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.17
	13-Jun-23		0.0086	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00055	53	<0.0010	0.00072	0.011	0.19	<0.00020	<0.020	8.3	0.13	<0.00020	0.0017	<0.10	4.0	<0.00020	0.9	<0.00010	3.1	0.050	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.17
	27-Jun-23		0.012	0.00061	<0.00020	0.011	<0.0010	<0.020	0.00031	49	<0.0010	<0.00030	0.0086	0.89	<0.00020	<0.020	8.3	0.079	<0.00020	0.00085	<0.11	3.9	0.00021	0.97	<0.00010	3.0	0.047	46	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.093
	11-Jul-23		0.0080	<0.00060	0.00021	0.011	<0.0010	<0.020	0.00024	43	<0.0010	<0.00030	0.0071	1.3	<0.00020	<0.020	7.3	0.054	<0.00020	0.00089	<0.10	3.4	<0.00020	0.82	<0.00010	2.7	0.049	44	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.073
	25-Jul-23		0.010	<0.00060	0.00022	0.011	<0.0010	<0.020	0.00022	46	<0.0010	<0.00030	0.0067	1.2	<0.00020	<0.020	7.3	0.040	<0.00020	0.00066	<0.10	3.8	<0.00020	0.69	<0.00010	2.9	0.052	42	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.070
	9-Aug-23		0.0095	<0.00060	0.00025	0.011	<0.0010	<0.020	0.00025	51	<0.0010	<0.00030	0.0078	0.51	<0.00020	<0.020	8.2	0.048	<0.00020	<0.00050	<0.10	3.9	<0.00020	0.66	<0.00010	3.0	0.051	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.071
	22-Aug-23		0.0046	<0.00060	0.00024	0.012	<0.0010	<0.020	0.00023	49	<0.0010	<0.00030	0.0067	0.35	<0.00020	<0.020	7.7	0.044	<0.00020	0.00069	<0.10	3.9	<0.00020	0.66	<0.00010	2.9	0.047	52	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.068
		SW-124	0.0050	<0.00060	0.00024	0.012	<0.0010	<0.020	0.00024	49	<0.0010	<0.00030	0.0066	0.45	<0.00020	<0.020	7.7	0.044	<0.00020	0.00081	<0.10	3.9	<0.00020	0.66	<0.00010	2.8	0.047	53	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.067
	RPD		*8.3%*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*4.3%*	*0.0%*	*NC*	*NC*	*1.5%*	*25%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*16%*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*3.5%*	*0.0%*	*1.9%*	*NC*	*NC*	*NC*	*NC*	*NC*	*1.5%*
	6-Sep-23		0.0040	<0.00060	0.00043	0.012	<0.0010	<0.020	0.00027	50	<0.0010	<0.00030	0.0057	0.085	<0.00020	<0.020	7.7	0.061	<0.00020	0.0012	<0.10	4.0	<0.00020	0.65	<0.00010	2.9	0.048	60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.076
		SW-125	<0.0030	<0.00060	0.00022	0.012	<0.0010	<0.020	0.00028	51	<0.0010	<0.00030	0.0057	0.11	<0.00020	<0.020	8.1	0.059	<0.00020	0.00086	<0.10	4.1	<0.00020	0.61	<0.00010	3.0	0.047	57	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.077
	RPD		*NC*	*NC*	*65%*	*0.0%*	*NC*	*NC*	*3.6%*	*2.0%*	*NC*	*NC*	*0.0%*	*26%*	*NC*	*NC*	*5.1%*	*3.3%*	*NC*	*33%*	*NC*	*2.5%*	*NC*	*6.3%*	*NC*	*3.4%*	*2.1%*	*5.1%*	*NC*	*NC*	*NC*	*NC*	*NC*	*1.3%*
	19-Sep-23		<0.0030	<0.00060	0.00022	0.013	<0.0010	<0.020	0.00027	63	<0.0010	<0.00030	0.0052	<0.060	<0.00020	<0.020	10	0.066	<0.00020	0.00084	<0.10	4.8	<0.00020	0.63	<0.00010	3.4	0.062	60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.072
	4-Oct-23		0.033	<0.00060	0.00027	0.014	<0.0010	<0.020	0.00035	64	<0.0010	<0.00030	0.0082	2.1	<0.00020	<0.020	9.6	0.073	<0.00020	0.0010	<0.10	4.6	<0.00020	0.78	<0.00010	3.4	0.065	65	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00028	65	<0.0010	<0.00030	0.0046	0.066	<0.00020	<0.020	10	0.067	<0.00020	0.00087	<0.10	5.1	<0.00020	0.58	<0.00010	3.6	0.053	59	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.076
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NB-2	14-Feb-23		0.017	<0.00060	0.00027	0.018	<0.0010	<0.020	0.00074	67	<0.0010	0.00053	0.010	0.35	<0.00020	<0.020	11	0.12	<0.00020	0.0017	<0.10	5.6	<0.00020	1.7	<0.00010	4.0	0.059	73	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
	16-May-23		0.025	<0.00060	0.00028	0.012	<0.0010	<0.020	0.00074	43	<0.0010	0.0012	0.021	0.42	<0.00020	<0.020	7.2	0.18	0.00028	0.0011	<0.10	3.4	<0.00020	1.4	<0.00010	2.8	0.043	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.25
	30-May-23		0.016	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00050	45	<0.0010	0.00047	0.014	1.1	<0.00020	<0.020	7.8	0.16	<0.00020	0.0013	<0.10	3.7	<0.00020	1.3	<0.00010	2.7	0.050	41	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.16
	13-Jun-23		0.011	<0.00060	0.00023	0.012	<0.0010	<0.020	0.00040	47	<0.0010	<0.00030	0.013	0.43	<0.00020	<0.020	7.5	0.11	<0.00020	0.0013	<0.10	3.6	<0.00020	1.1	<0.00010	2.8	0.045	45	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.14
	27-Jun-23		0.011	<0.00060	0.00021	0.010	<0.0010	<0.020	0.00032	48	<0.0010	<0.00030	0.0071	0.80	<0.00020	<0.020	8.1	0.072	<0.00020	0.00090	<0.10	3.8	<0.00020	0.97	<0.00010	3.0	0.046	44	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.082
		SW-112	0.012	<0.00060	0.00030	<0.010	<0.0010	<0.020	0.00029	47	<0.0010	<0.00030	0.0080	0.76	<0.00020	<0.020	7.9	0.067	<0.00020	0.00071	<0.10	3.9	<0.00020	0.98	<0.00010	2.9	0.043	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.088
	RPD		*8.7%*	*NC*	*35%*	*NC*	*NC*	*NC*	*9.8%*	*2.1%*	*NC*	*NC*	*12%*	*5.1%*	*NC*	*NC*	*2.5%*	*7.2%*	*NC*	*24%*	*NC*	*2.6%*	*NC*	*1.0%*	*NC*	*3.4%*	*6.7%*	*2.3%*	*NC*	*NC*	*NC*	*NC*	*NC*	*7.1%*
	11-Jul-23		0.0099	<0.00060	<0.00020	0.010	<0.0010	<0.020	0.00025	42	<0.0010	<0.00030	0.0079	1.2	<0.00020	<0.020	7.1	0.043	<0.00020	0.00074	<0.10	3.3	<0.00020	0.82	<0.00010	2.6	0.048	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.072
	25-Jul-23		0.0082	<0.00060	0.00024	0.011	<0.0010	<0.020	0.00023	42	<0.0010	<0.00030	0.0070	0.96	<0.00020	<0.020	7.1	0.035	<0.00020	0.00077	<0.10	3.6	<0.00020	0.65	<0.00010	2.8	0.042	38	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.072
	9-Aug-23		0.0080	<0.00060	0.00022	0.011	<0.0010	<0.020	0.00025	51	<0.0010	<0.00030	0.0077	0.62	<0.00020	<0.020	8.2	0.039	<0.00020	0.00077	<0.10	4.0	<0.00020	0.65	<0.00010	3.0	0.051	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.071
	22-Aug-23		0.0044	<0.00060	0.00024	0.012	<0.0010	<0.020	0.00025	49	<0.0010	<0.00030	0.0068	0.40	0.00034	<0.020	7.7	0.044	<0.00020	0.00088	<0.10	3.9	<0.00020	0.66	<0.00010	2.9	0.047	52	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.069
	6-Sep-23		<0.0030	<0.00060	<0.00020	0.012	<0.0010	<0.020	0.00026	54	<0.0010	<0.00030	0.0077	0.18	<0.00020	<0.020	8.7	0.051	<0.00020	0.00072	<0.10	4.3	<0.00020	0.69	<0.00010	3.2	0.050	58	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.069
	19-Sep-23		<0.0030	<0.00060	0.00023	0.013	<0.0010	<0.020	0.00026	63	<0.0010	<0.00030	0.0055	<0.060	<0.00020	<0.020	10	0.059	<0.00020	0.00088	<0.10	4.8	<0.00020	0.62	<0.00010	3.4	0.062	60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.072
	4-Oct-23		<0.0030	<0.00060	0.00026	0.014	<0.0010	<0.020	0.00034	67	<0.0010	<0.00030	0.0048	<0.060	<0.00020	<0.020	10	0.064	<0.00020	0.00086	<0.10	4.9	<0.00020	0.60	<0.00010	3.6	0.070	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.082
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00030	66	<0.0010	<0.00030	0.0047	<0.060	<0.00020	<0.020	10	0.069	<0.00020	0.00087	<0.10	5.2	<0.00020	0.63	<0.00010	3.7	0.054	62	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.079
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB-1	14-Feb-23		0.016	<0.00060	0.00023	0.019	<0.0010	<0.020	0.00083	74	<0.0010	0.00060	0.011	0.42	<0.00020	<0.020	13	0.13	<0.00020	0.0019	<0.10	6.1	<0.00020	1.8	<0.00010	4.4	0.064	79	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.24
		SW-102	0.016	<0.00060	0.00026	0.018	<0.0010	<0.020	0.00081	69	<0.0010	0.00062	0.011	0.40	<0.00020	<0.020	12	0.13	<0.00020	0.0018	<0.10	5.7	<0.00020	1.7	<0.00010	4.1	0.061	76	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.23
	RPD		*0.0%*	*NC*	*12%*	*5.4%*	*NC*	*NC*	*2.4%*	*7.0%*	*NC*	*3.3%*	*0.0%*	*4.9%*	*NC*	*NC*	*8.0%*	*0.0%*	*NC*	*5.4%*	*NC*	*6.8%*	*NC*	*5.7%*	*NC*	*7.1%*	*4.8%*	*3.9%*	*NC*	*NC*	*NC*	*NC*	*NC*	*4.3%*
	16-May-23		0.024	<0.00060	0.00022	0.015	<0.0010	<0.020	0.00120	51	<0.0010	0.0028	0.023	0.41	<0.00020	0.023	8.3	0.32	<0.00020	0.0026	<0.10	3.6	<0.00020	1.5	<0.00010	3.0	0.045	53	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.36
	30-May-23		0.015	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00084	45	<0.0010	0.0016	0.014	0.49	<0.00020	<0.020	7.5	0.20	<0.00020	0.0021	<0.10	3.5	<0.00020	1.1	<0.00010	2.7	0.046	44	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.26
	13-Jun-23		0.018	<0.00060	<0.00020	0.018	<0.0010	0.027	0.00053	51	<0.0010	0.00067	0.013	0.25	<0.00020	<0.020	8.6	0.14	<0.00020	0.0015	<0.10	4.0	<0.00020	1.0	<0.00010	3.1	0.078	45	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.16
		SW-108	0.014	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00057	52	<0.0010	0.00064	0.013	0.31	<0.00020	<0.020	8.2	0.14	<0.00020	0.0021	<0.10	3.9	<0.00020	1.0	<0.00010	3.2	0.050	50	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	RPD		*25%*	*NC*	*NC*	*25%*	*NC*	*NC*	*7.3%*	*1.9%*	*NC*	*4.6%*	*0.0%*	*21%*	*NC*	*NC*	*4.8%*	*0.0%*	*NC*	*33%*	*NC*	*2.5%*	*NC*	*0.0%*	*NC*	*3.2%*	*44%*	*11%*	*NC*	*NC*	*NC*	*NC*	*NC*	*12%*
	27-Jun-23		0.013	0.0011	0.00020	0.012	<0.0010	<0.020	0.00041	51	<0.0010	<0.00030	0.0097	0.65	<0.00020	<0.020	8.3	0.077	<0.00020	0.0012	<0.10	4.1	<0.00020	0.80	<0.00010	3.2	0.049	48	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	11-Jul-23		0.0097	<0.00060	0.00021	0.013	<0.0010	<0.020	0.0003	48	<0.0010	<0.00030	0.0071	0.87	<0.00020	<0.020	8	0.035	<0.00020	0.00099	<0.10	3.9	<0.00020	0.71	<0.00010	2.9	0.054	47	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.081
	25-Jul-23		0.0094	<0.00060	0.00022	0.011	<0.0010	<0.020	0.00028	44	<0.0010	<0.00030	0.0068	0.45	<0.00020	<0.020	7.4	0.020	<0.00020	0.00083	<0.10	3.8	<0.00020	0.52	<0.00010	2.9	0.043	42	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.085
	9-Aug-23		0.011	<0.00060	0.00022	0.012	<0.0010	<0.020	0.00034	53	<0.0010	<0.00030	0.0077	0.53	<0.00020	<0.020	8.4	0.030	<0.00020	0.00079	<0.10	4.2	<0.00020	0.54	<0.00010	3.1	0.053	51	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.092
	22-Aug-23		0.012	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00039	50	<0.0010	<0.00030	0.0086	0.23	<0.00020	<0.020	7.8	0.034	<0.00020	0.0012	<0.10	4.0	<0.00020	0.54	<0.00010	3.0	0.049	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	6-Sep-23		0.0036	<0.00060	0.00023	0.014	<0.0010	<0.020	0.00042	57	<0.0010	<0.00030	0.0085	0.11	<0.00020	<0.020	9.2	0.038	<0.00020	0.0013	<0.10	4.5	<0.00020	<0.50	<0.00010	3.4	0.053	58	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
	19-Sep-23		<0.0030	<0.00060	0.00022	0.015	<0.0010	<0.020	0.00038	63	<0.0010	<0.00030	0.0065	0.075	<0.00020	<0.020	10	0.042	<0.00020	0.0013	<0.10	5.1	<0.00020	<0.50	<0.00010	3.6	0.064	59	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.12
	4-Oct-23		0.021	0.00061	0.00024	0.015	<0.0010	<0.020	0.00047	62	<0.0010	<0.00030	0.0060	<0.060	<0.00020	<0.020	9.5	0.050	0.00030	0.0012	<0.10	4.8	<0.00020	0.53	<0.00010	3.6	0.067	62	<0.00020	<0.0010	<0.0010	0.00019	0.0011	0.14
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00049	68	<0.0010	0.00040	0.0080	<0.060	<0.00020	<0.020	10	0.064	<0.00020	0.0014	<0.10	5.4	<0.00020	0.55	<0.00010	3.9	0.057	65	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.16
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB-2	14-Feb-23		0.022	<0.00060	0.00020	0.019	<0.0010	<0.020	0.00088	75	<0.0010	0.00066	0.013	0.50	<0.00020	<0.020	13	0.13	<0.00020	0.0021	<0.10	6.2	<0.00020	1.7	<0.00010	4.4	0.067	83	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.26
	16-May-23		0.027	<0.00060	0.00023	0.014	<0.0010	<0.020	0.0010	49	<0.0010	0.0026	0.019	0.54	<0.00020	<0.020	8.0	0.34	<0.00020	0.0024	<0.10	3.8	0.00025	1.3	<0.00010	3.1	0.048	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.33
	30-May-23		0.016	<0.00060	<0.00020	0.016	<0.0010	<0.020	0.00078	45	<0.0010	0.0015	0.014	0.59	<0.00020	<0.020	7.5	0.23	<0.00020	0.0020	<0.10	3.6	<0.00020	1.2	<0.00010	2.8	0.046	45	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.26
	13-Jun-23		0.014	<0.00060	0.00043	0.012	<0.0010	<0.020	0.00037	49	<0.0010	0.00037	0.013	0.48	<0.00020	<0.020	7.9	0.12	<0.00020	0.0013	<0.10	3.7	0.00041	1.2	<0.00010	2.9	0.047	47	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
	27-Jun-23		0.011	<0.00060	0.00032	0.012	<0.0010	<0.020	0.00042	55	<0.0010	<0.00030	0.0088	0.45	<0.00020	<0.020	9.0	0.082	<0.00020	0.0014	<0.10	4.3	<0.00020	0.80	<0.00010	3.3	0.051	51	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.14
	11-Jul-23		0.0086	<0.00060	0.00034	0.013	<0.0010	<0.020	0.00033	49	<0.0010	<0.00030	0.0076	0.54	<0.00020	<0.020	8.0	0.035	<0.00020	0.0011	<0.10	3.8	<0.00020	0.72	<0.00010	2.9	0.055	50	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.094
	25-Jul-23		0.0088	<0.00060	0.00025	0.012	<0.0010	<0.020	0.00031	49	<0.0010	<0.00030	0.0069	0.73	<0.00020	<0.020	7.6	0.023	<0.00020	0.0010	<0.10	4.0	<0.00020	0.59	<0.00010	3.0	0.055	48	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.092
		SW-118	0.0074	<0.00060	0.00026	0.012	<0.0010	<0.020	0.00030	47	<0.0010	<0.00030	0.0089	0.76	<0.00020	<0.020	7.8	0.025	<0.00020	0.00096	<0.10	4.0	<0.00020	0.68	<0.00010	3.0	0.045	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.087
	RPD		*17%*	*NC*	*3.9%*	*0.0%*	*NC*	*NC*	*3.3%*	*4.2%*	*NC*	*NC*	*25%*	*4.0%*	*NC*	*NC*	*2.6%*	*8.3%*	*NC*	*4.1%*	*NC*	*0.0%*	*NC*	*14%*	*NC*	*0.0%*	*20%*	*14%*	*NC*	*NC*	*NC*	*NC*	*NC*	*5.6%*
	9-Aug-23		0.013	<0.00060	0.00022	0.013	<0.0010	<0.020	0.00036	56	<0.0010	<0.00030	0.0072	0.31	<0.00020	<0.020	8.7	0.028	<0.00020	0.00084	<0.10	4.3	<0.00020	0.51	<0.00010	3.3	0.055	52	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.098
	22-Aug-23		0.0080	<0.00060	0.00025	0.014	<0.0010	<0.020	0.00042	52	<0.0010	<0.00030	0.0070	0.33	<0.00020	<0.020	8.0	0.033	<0.00020	0.0014	<0.10	4.2	<0.00020	0.53	<0.00010	3.1	0.050	55	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	6-Sep-23		0.0046	<0.00060	0.00023	0.014	<0.0010	<0.020	0.00042	55	<0.0010	<0.00030	0.0071	0.13	<0.00020	<0.020	8.7	0.043	<0.00020	0.0013	<0.10	4.4	<0.00020	0.51	<0.00010	3.3	0.051	62	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.12
	19-Sep-23		<0.0030	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00043	63	<0.0010	<0.00030	0.0055	<0.060	<0.00020	<0.020	10	0.044	<0.00020	0.0013	<0.10	5.0	<0.00020	<0.50	<0.00010	3.6	0.063	61	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.12
	4-Oct-23		<0.0030	<0.00060	0.00021	0.015	<0.0010	<0.020	0.00050	65	<0.0010	0.00030	0.0050	<0.060	<0.00020	<0.020	9.7	0.052	<0.00020	0.0011	<0.10	4.9	<0.00020	0.50	<0.00010	3.7	0.069	64	<0.00020	<0.0010	<0.0010	<0.00010	0.0010	0.14
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00050	68	<0.0010	0.00044	0.0069	<0.060	<0.00020	0.025	10	0.066	<0.00020	0.0013	<0.10	5.4	<0.00020	0.55	<0.00010	3.9	0.054	66	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.14
		SW-138	<0.0030	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00051	69	<0.0010	0.00046	0.0070	<0.060	<0.00020	<0.020	10	0.066	<0.00020	0.0013	<0.10	5.3	<0.00020	0.55	<0.00010	3.9	0.056	66	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.15
	RPD		*NC*	*NC*	*NC*	*6.9%*	*NC*	*NC*	*2.0%*	*1.5%*	*NC*	*NC*	*1.4%*	*NC*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*0.0%*	*NC*	*1.9%*	*NC*	*0.0%*	*NC*	*0.0%*	*3.6%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*6.9%*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																			
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
Camp Lake Discharge	14-Feb-23		0.019	<0.00060	0.00027	0.017	<0.0010	<0.020	0.00071	73	<0.0010	0.00053	0.011	0.39	<0.00020	<0.020	12	0.12	<0.00020	0.0016	<0.10	5.9	<0.00020	1.6	<0.00010	4.2	0.062	79	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
	16-May-23		0.025	<0.00060	0.00025	0.012	<0.0010	<0.020	0.00078	45	<0.0010	0.0012	0.021	0.36	<0.00020	<0.020	7.5	0.17	<0.00020	0.0016	<0.10	3.3	<0.00020	1.5	<0.00010	2.7	0.041	45	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.25
	30-May-23		0.019	<0.00060	<0.00020	0.014	<0.0010	<0.020	0.00064	47	<0.0010	0.00068	0.017	1.20	<0.00020	<0.020	8.1	0.18	<0.00020	0.0016	<0.10	3.8	<0.00020	1.3	<0.00010	2.9	0.053	42	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
		SW-105	0.019	<0.00060	<0.00020	0.012	<0.0010	<0.020	0.00066	43	<0.0010	0.00077	0.016	1.2	<0.00020	<0.020	7.7	0.16	<0.00020	0.0017	<0.10	3.5	<0.00020	1.2	<0.00010	2.6	0.042	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
	RPD		*0.0%*	*NC*	*NC*	*15%*	*NC*	*NC*	*3.1%*	*8.9%*	*NC*	*12%*	*6.1%*	*0.0%*	*NC*	*NC*	*5.1%*	*12%*	*NC*	*6.1%*	*NC*	*8.2%*	*NC*	*8.0%*	*NC*	*11%*	*23%*	*2.4%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*
	13-Jun-23		0.011	<0.00060	0.00021	0.012	<0.0010	<0.020	0.00040	49	<0.0010	0.00036	0.013	0.47	<0.00020	<0.020	7.8	0.11	<0.00020	0.0013	<0.10	3.8	<0.00020	1.2	<0.00010	2.9	0.046	47	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.15
	27-Jun-23		0.0078	<0.00060	<0.00020	0.010	<0.0010	0.021	0.00032	50	<0.0010	<0.00030	0.0078	0.74	<0.00020	<0.020	8.4	0.080	<0.00020	0.00076	<0.10	3.9	<0.00020	0.99	<0.00010	3.0	0.047	47	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.091
	11-Jul-23		0.0084	<0.00060	<0.00020	0.011	<0.0010	<0.020	0.00023	44	<0.0010	<0.00030	0.0080	1.2	<0.00020	<0.020	7.4	0.051	<0.00020	0.0012	<0.10	3.5	<0.00020	0.81	<0.00010	2.7	0.050	45	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.077
	25-Jul-23		0.0097	<0.00060	0.00025	0.011	<0.0010	<0.020	0.00022	35	<0.0010	<0.00030	0.0069	1.0	<0.00020	<0.020	5.6	0.032	<0.00020	0.00089	<0.10	3.0	<0.00020	0.62	<0.00010	2.3	0.037	39	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.068
	9-Aug-23		0.0086	<0.00060	0.00024	0.011	<0.0010	<0.020	0.00022	52	<0.0010	<0.00030	0.0072	0.55	<0.00020	<0.020	8.1	0.041	<0.00020	0.00072	<0.10	3.9	<0.00020	0.67	<0.00010	3.0	0.051	48	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.067
	22-Aug-23		0.0047	<0.00060	0.00021	0.012	<0.0010	0.021	0.00027	49	<0.0010	<0.00030	0.0073	0.33	<0.00020	<0.020	7.8	0.045	<0.00020	0.00096	<0.10	3.9	<0.00020	0.66	<0.00010	2.8	0.047	53	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.073
	6-Sep-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00028	58	<0.0010	<0.00030	0.0079	0.16	<0.00020	<0.020	8.9	0.051	<0.00020	0.00082	<0.10	4.4	<0.00020	0.58	<0.00010	3.2	0.052	49	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.071
	19-Sep-23		<0.0030	<0.00060	0.00023	0.016	<0.0010	<0.020	0.00026	64	<0.0010	<0.00030	0.0071	0.11	<0.00020	<0.020	10	0.064	<0.00020	0.00089	<0.10	4.8	<0.00020	0.69	<0.00010	3.4	0.063	60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.072
	4-Oct-23		<0.0030	<0.00060	0.00023	0.014	<0.0010	<0.020	0.00032	65	<0.0010	<0.00030	0.0043	<0.060	<0.00020	<0.020	9.7	0.067	<0.00020	0.00084	<0.10	4.7	<0.00020	0.64	<0.00010	3.5	0.068	62	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.079
		SW-132	<0.0030	<0.00060	0.00026	0.014	<0.0010	<0.020	0.00032	65	<0.0010	<0.00030	0.0041	<0.060	<0.00020	<0.020	9.7	0.069	<0.00020	0.00093	<0.10	4.7	<0.00020	0.63	<0.00010	3.5	0.067	61	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.079
	RPD		*NC*	*NC*	*12%*	*0.0%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*4.8%*	*NC*	*NC*	*NC*	*0.0%*	*2.9%*	*NC*	*10%*	*NC*	*0.0%*	*NC*	*1.6%*	*NC*	*0.0%*	*1.5%*	*1.6%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*
	17-Oct-23		<0.0030	<0.00060	<0.00020	0.013	<0.0010	<0.020	0.00031	66	<0.0010	<0.00030	0.0047	<0.060	<0.00020	0.022	10	0.074	<0.00020	0.00090	<0.10	5.0	<0.00020	0.65	<0.00010	3.6	0.053	65	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.081
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																						
Protection of Aquatic Life and Wildlife																																						
Tier II Objective - Chronic			-	-	*0.150*	-	-	-	*0.00017 [2a]*	-	*0.048 [2a]*	-	*0.00574 [2a]*	-	*0.00142 [2a]*	-	-	-	-	*0.0335 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.076 [2a]*
Tier II Objective - Acute			-	-	*0.340*	-	-	-	*0.00121 [2a]*	-	*0.372 [2a]*	-	*0.00823 [2a]*	-	*0.0365 [2a]*	-	-	-	-	*0.301 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0754 [2a]*

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 59.4 mg/L as $CaCO_3$ as measured in Cold Lake on May 11, 2016.

- Values above MWQSOG value.

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
Sherlett Creek																																	
SC-1	14-Feb-23		0.015	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.000089	9.3	<0.0010	<0.00030	0.0037	<0.060	<0.00020	<0.020	3.0	0.010	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.1	<0.00010	2.1	0.027	1.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.034
	16-May-23		0.028	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.00011	7.9	<0.0010	<0.00030	0.0056	0.14	<0.00020	<0.020	2.4	<0.0040	<0.00020	<0.00050	<0.10	1.3	<0.00020	1.5	<0.00010	1.5	<0.020	1.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.039
		SW-102	0.022	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.00011	7.8	<0.0010	<0.00030	0.0070	0.14	<0.00020	<0.020	2.4	0.0041	<0.00020	0.00053	<0.10	1.3	<0.00020	1.5	<0.00010	1.5	<0.020	1.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.038
	RPD		*24%*	*NC*	*12%*	*NC*	*NC*	*NC*	*0.0%*	*1.3%*	*NC*	*NC*	*22%*	*0.0%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*2.6%*
	30-May-23		0.020	<0.00060	0.00029	<0.010	<0.0010	<0.020	0.00018	7.1	<0.0010	<0.00030	0.0093	0.12	<0.00020	<0.020	2.2	0.0066	<0.00020	<0.00050	<0.10	1.2	<0.00020	1.2	<0.00010	1.4	<0.020	1.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.059
	13-Jun-23		0.024	<0.00060	0.00039	<0.010	<0.0010	0.024	0.00018	8.5	<0.0010	<0.00030	0.0079	0.12	<0.00020	<0.020	2.5	0.0086	<0.00020	0.00055	<0.10	1.5	<0.00020	1.3	<0.00010	1.8	0.021	1.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.060
	27-Jun-23		0.020	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.000085	8.1	<0.0010	<0.00030	0.0038	0.095	<0.00020	<0.020	2.7	0.0040	<0.00020	<0.00050	<0.10	1.3	<0.00020	1.2	<0.00010	1.7	<0.020	1.4	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.029
	11-Jul-23		0.020	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.00047	9.4	<0.0010	<0.00030	0.016	0.18	<0.00020	<0.020	3.0	0.023	<0.00020	0.00066	<0.10	1.2	<0.00020	1.2	<0.00010	2.1	0.024	2.9	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.20
	25-Jul-23		0.023	<0.00060	0.00052	<0.010	<0.0010	<0.020	0.00018	8.4	<0.0010	<0.00030	0.0078	0.19	<0.00020	<0.020	2.7	0.0047	<0.00020	0.00050	<0.10	1.3	<0.00020	0.95	<0.00010	2.0	0.022	1.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	9-Aug-23		0.016	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.00049	10	<0.0010	<0.00030	0.021	0.22	<0.00020	<0.020	3.1	0.024	<0.00020	0.00062	<0.10	1.4	<0.00020	1.1	<0.00010	2.0	0.024	3.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.23
	22-Aug-23		0.023	0.00069	0.00053	<0.010	<0.0010	<0.020	0.00038	10	<0.0010	<0.00030	0.015	0.19	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	1.2	<0.00010	1.9	0.023	2.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	6-Sep-23		0.024	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.00045	9.2	<0.0010	<0.00030	0.021	0.21	<0.00020	<0.020	2.9	0.0097	<0.00020	0.00066	<0.10	1.4	<0.00020	1.2	<0.00010	1.9	0.023	3.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.25
	19-Sep-23		0.017	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.00029	9.7	<0.0010	<0.00030	0.013	0.14	<0.00020	<0.020	2.7	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	1.4	<0.00010	2.0	0.021	2.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.15
	3-Oct-23		0.034	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.00045	10	<0.0010	<0.00030	0.012	0.24	0.00028	<0.020	3.1	0.060	<0.00020	0.00051	<0.10	1.6	<0.00020	1.4	<0.00010	2.5	0.027	3.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.21
	17-Oct-23		0.019	<0.00060	0.00031	<0.010	<0.0010	<0.020	0.00042	11	<0.0010	<0.00030	0.010	0.16	<0.00020	<0.020	3.3	0.064	<0.00020	0.0010	<0.10	1.7	<0.00020	1.2	<0.00010	3.7	0.024	3.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
	31-Oct-23		0.014	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.00029	11	<0.0010	<0.00030	0.0056	0.16	<0.00020	<0.020	3.1	0.063	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.2	<0.00010	5.3	0.028	3.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
SC-2	13-Jun-23		0.025	<0.00060	0.00036	0.012	<0.0010	<0.020	0.00028	8.3	<0.0010	<0.00030	0.010	0.14	<0.00020	<0.020	2.8	0.011	<0.00020	<0.00050	<0.10	1.5	<0.00020	1.3	<0.00010	1.6	0.024	1.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.086
		SW-109	0.026	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.00028	8.1	<0.0010	<0.00030	0.011	0.12	<0.00020	<0.020	2.7	0.0088	<0.00020	<0.00050	<0.10	1.3	<0.00020	1.3	<0.00010	1.5	0.021	1.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.088
	RPD		*3.9%*	*NC*	*5.4%*	*NC*	*NC*	*NC*	*0.0%*	*2.4%*	*NC*	*NC*	*9.5%*	*15%*	*NC*	*NC*	*3.6%*	*22%*	*NC*	*NC*	*NC*	*14%*	*NC*	*0.0%*	*NC*	*6.5%*	*13%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*2.3%*
	3-Oct-23		0.027	<0.00060	0.00047	<0.050	<0.0010	<0.10	0.00051	13	<0.0010	<0.00030	0.016	<0.30	<0.00020	<0.10	3.3	<0.020	<0.00020	0.00064	<0.50	1.9	<0.00020	<2.5	<0.00010	<2.5	<0.10	3.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.28
SC-3	13-Jun-23		0.034	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.00077	8.30	<0.0010	<0.00030	0.023	0.13	<0.00020	<0.020	2.7	0.013	<0.00020	0.00086	<0.10	1.5	<0.00020	1.3	<0.00010	1.5	0.021	2.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.22
	3-Oct-23		0.028	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.00042	10	<0.0010	<0.00030	0.011	0.18	<0.00020	<0.020	3.1	0.023	<0.00020	0.00051	<0.10	1.7	<0.00020	1.5	<0.00010	2.4	0.025	3.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.21
SC-4	13-Jun-23		0.015	<0.00060	0.00034	<0.010	<0.0010	<0.020	<0.000020	7.8	<0.0010	<0.00030	0.0012	0.091	<0.00020	<0.020	2.6	<0.0040	<0.00020	<0.00050	<0.10	1.3	<0.00020	1.2	<0.00010	1.5	0.020	1.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	3-Oct-23		0.0088	<0.00060	0.00046	<0.010	<0.0010	<0.020	<0.000020	8.6	<0.0010	<0.00030	0.0018	0.13	<0.00020	<0.020	2.7	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	1.3	<0.00010	1.8	0.023	1.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
		SW-134	0.011	<0.00060	0.00039	<0.050	<0.0010	<0.10	<0.000020	9.0	<0.0010	<0.00030	0.0016	<0.30	<0.00020	<0.10	2.6	<0.020	<0.00020	<0.00050	<0.50	2.3	<0.00020	<2.5	<0.00010	<2.5	<0.10	1.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	RPD		*22%*	*NC*	*16%*	*NC*	*NC*	*NC*	*NC*	*4.5%*	*NC*	*NC*	*12%*	*NC*	*NC*	*NC*	*3.8%*	*NC*	*NC*	*NC*	*NC*	*42%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*NC*
SC-5	13-Jun-23		0.019	<0.00060	0.00048	<0.010	<0.0010	<0.020	<0.000020	7.8	<0.0010	<0.00030	0.0013	0.11	0.00021	<0.020	2.6	<0.0040	<0.00020	<0.00050	<0.10	1.3	<0.00020	1.2	<0.00010	1.5	<0.020	1.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	3-Oct-23		0.0092	<0.00060	0.00034	<0.050	<0.0010	<0.10	<0.000020	8.5	<0.0010	<0.00030	0.0013	<0.30	<0.00020	<0.10	2.5	<0.020	<0.00020	<0.00050	<0.50	2.0	<0.00020	<2.5	<0.00010	<2.5	<0.10	1.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
SC-6	13-Jun-23		0.015	<0.00060	0.00036	<0.010	<0.0010	<0.020	<0.000020	7.8	<0.0010	<0.00030	0.0011	0.088	<0.00020	<0.020	2.6	<0.0040	<0.00020	<0.00050	<0.10	1.3	<0.00020	1.2	<0.00010	1.5	0.020	1.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	3-Oct-23		0.0073	<0.00060	0.00048	<0.010	<0.0010	<0.020	<0.000020	9.4	<0.0010	<0.00030	0.0014	0.062	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.4	<0.00020	1.2	<0.00010	2.4	0.021	1.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																	
Protection of Aquatic Life and Wildlife																																	
Tier II Objective - Chronic			-	-	*0.150*	-	-	-	*0.00012 [2a]*	-	*0.0304 [2a]*	-	*0.00354 [2a]*	-	*0.00076 [2a]*	-	-	-	-	*0.0207 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0470 [2a]*
Tier II Objective - Acute			-	-	*0.340*	-	-	-	*0.00070 [2a]*	-	*0.234 [2a]*	-	*0.00482 [2a]*	-	*0.0194 [2a]*	-	-	-	-	*0.187 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0466 [2a]*

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 33.7 mg/L as $CaCO_3$ as measured at station SC-1 in 2023.

- Values above MWQSOG value.

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
Cold Lake																																	
CL-2 sfc	14-Feb-23		0.014	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000036	14	<0.0010	<0.00030	0.0059	0.14	<0.00020	<0.020	4.0	<0.0040	<0.00020	<0.00050	<0.10	1.9	<0.00020	0.97	<0.00010	2.5	0.029	7.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.017
	16-May-23		0.030	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.00011	12	<0.0010	<0.00030	0.0075	0.15	<0.00020	<0.020	3.1	0.012	<0.00020	<0.00050	<0.10	1.6	<0.00020	1.0	<0.00010	2.0	0.024	7.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.046
	30-May-23		0.019	<0.00060	0.00029	<0.010	<0.0010	<0.020	0.000098	16	<0.0010	<0.00030	0.0082	0.24	<0.00020	<0.020	3.9	0.0054	<0.00020	0.00063	<0.10	1.8	<0.00020	1.0	<0.00010	2.1	0.029	8.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.039
	13-Jun-23		0.016	<0.00060	0.00032	<0.010	<0.0010	<0.020	0.000033	14	<0.0010	<0.00030	0.0089	0.092	<0.00020	<0.020	3.5	<0.0040	<0.00020	0.00051	<0.10	1.7	<0.00020	0.78	<0.00010	2.1	0.027	7.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.025
	27-Jun-23		0.013	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000040	14	<0.0010	<0.00030	0.0050	0.077	<0.00020	0.022	3.8	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.78	<0.00010	2.2	0.026	8.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	11-Jul-23		0.012	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.000040	14	<0.0010	<0.00030	0.0044	0.14	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.76	<0.00010	2.0	0.029	8.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.015
	25-Jul-23		0.0099	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000035	13	<0.0010	<0.00030	0.0049	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	0.00054	<0.10	1.7	<0.00020	0.61	<0.00010	2.1	0.027	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
		SW-117	0.0083	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000029	13	<0.0010	<0.00030	0.0066	0.065	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.74	<0.00010	2.1	0.026	8.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.012
	RPD		*18%*	*NC*	*11%*	*NC*	*NC*	*NC*	*19%*	*0.0%*	*NC*	*NC*	*30%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*19%*	*NC*	*0.0%*	*3.8%*	*31%*	*NC*	*NC*	*NC*	*NC*	*NC*	*8.0%*
	9-Aug-23		0.011	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.000021	14	<0.0010	<0.00030	0.0045	0.069	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.68	<0.00010	2.1	0.027	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0070
	22-Aug-23		0.015	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000021	12	<0.0010	<0.00030	0.0047	0.077	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.71	<0.00010	1.9	0.026	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0067
	6-Sep-23		0.0090	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0041	0.096	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.71	<0.00010	2.0	0.026	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0064
	19-Sep-23		0.0091	<0.00060	0.00032	0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0034	0.11	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.81	<0.00010	2.2	0.029	6.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0055
	4-Oct-23	**SW-133**	0.012	0.001	0.00046	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0041	0.12	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.79	<0.00010	2.2	0.030	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0041
	RPD		*27%*	*NC*	*36%*	*NC*	*NC*	*NC*	*NC*	*7.4%*	*NC*	*NC*	*19%*	*NC*	*NC*	*NC*	*5.6%*	*NC*	*NC*	*NC*	*NC*	*6.1%*	*NC*	*2.5%*	*NC*	*0.0%*	*3.4%*	*1.5%*	*NC*	*NC*	*NC*	*NC*	*NC*	*29%*
	17-Oct-23		0.012	<0.00060	0.00032	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0041	0.20	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.82	<0.00010	2.4	0.027	7.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0046
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-2 btm	14-Feb-23		0.013	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000041	15	<0.0010	<0.00030	0.0057	0.16	<0.00020	<0.020	4.1	<0.0040	<0.00020	<0.00050	<0.10	1.9	<0.00020	1.0	<0.00010	2.4	0.028	7.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
		SW-101	0.026	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000038	15	<0.0010	<0.00030	0.0061	0.17	<0.00020	<0.020	4.1	<0.0040	<0.00020	<0.00050	<0.10	1.9	<0.00020	1.1	<0.00010	2.4	0.027	8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.015
	RPD		*67%*	*NC*	*14%*	*NC*	*NC*	*NC*	*7.6%*	*0.0%*	*NC*	*NC*	*6.8%*	*6.1%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*10%*	*NC*	*0.0%*	*3.6%*	*5.1%*	*NC*	*NC*	*NC*	*NC*	*NC*	*18%*
	16-May-23		0.021	<0.00060	0.00031	0.011	<0.0010	<0.020	0.00011	19	<0.0010	<0.00030	0.0066	0.47	<0.00020	<0.0020	4.3	0.066	<0.00020	<0.00050	<0.10	2.1	<0.00020	1.3	<0.00010	2.4	0.031	15.00	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.048
	30-May-23		0.021	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000096	13	<0.0010	<0.00030	0.0089	0.19	<0.00020	<0.020	3.1	0.0044	<0.00020	0.00057	<0.10	1.5	<0.00020	0.96	<0.00010	1.8	0.025	7.50	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.042
	13-Jun-23		0.018	<0.00060	0.00047	0.010	<0.0010	<0.020	0.000043	14	<0.0010	<0.00030	0.0089	0.16	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.0	<0.00010	2.1	0.027	7.60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.033
		SW-107	0.018	<0.00060	0.00033	0.011	<0.0010	<0.020	0.000054	14	<0.0010	<0.00030	0.0073	0.16	<0.00020	<0.020	3.7	<0.0040	<0.00020	0.00057	<0.10	1.8	<0.00020	1.0	<0.00010	2.1	0.028	7.30	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.031
	RPD		*0.0%*	*NC*	*35%*	*10%*	*NC*	*NC*	*23%*	*0.0%*	*NC*	*NC*	*20%*	*0.0%*	*NC*	*NC*	*8.5%*	*NC*	*NC*	*NC*	*NC*	*5.7%*	*NC*	*0.0%*	*NC*	*0.0%*	*3.6%*	*4.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*6.3%*
	27-Jun-23		0.014	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.000040	13	<0.0010	<0.00030	0.0046	0.14	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.96	<0.00010	2.1	0.025	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.019
	11-Jul-23		0.019	<0.00060	0.00023	<0.010	<0.0010	<0.020	0.000062	13	<0.0010	<0.00030	0.0054	0.34	<0.00020	<0.020	3.4	0.020	<0.00020	0.00051	<0.10	1.5	<0.00020	0.99	<0.00010	2.0	0.028	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.023
	25-Jul-23		0.014	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000060	13	<0.0010	<0.00030	0.0054	0.19	<0.00020	<0.020	3.3	0.0046	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.0	<0.00010	2.0	0.025	8.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.024
	9-Aug-23		0.015	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000071	15	<0.0010	<0.00030	0.0052	0.20	<0.00020	<0.020	3.6	0.020	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.0	<0.00010	2.2	0.028	7.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.021
	22-Aug-23		0.013	<0.00060	0.00040	0.011	<0.0010	0.021	0.000027	12	<0.0010	<0.00030	0.0047	0.093	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.77	<0.00010	1.9	0.026	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0076
	6-Sep-23		0.011	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.000022	14	<0.0010	<0.00030	0.0054	0.10	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.74	<0.00010	2.1	0.028	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0075
	19-Sep-23		0.0075	<0.00060	0.00037	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0038	0.087	0.00039	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.77	<0.00010	2.2	0.029	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0048
	4-Oct-23		0.011	<0.00060	0.00036	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0042	0.14	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.79	<0.00010	2.3	0.028	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0043
	17-Oct-23		0.0097	<0.00060	0.00036	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0043	0.23	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.87	<0.00010	2.3	0.026	7.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0055
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-3 sfc	14-Feb-23		0.016	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.000080	13	<0.0010	<0.00030	0.0061	0.14	<0.00020	<0.020	4.0	0.015	<0.00020	<0.00050	<0.10	1.9	<0.00020	1.1	<0.00010	2.5	0.027	4.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.045
	16-May-23		0.026	<0.00060	0.00027	<0.010	<0.0010	<0.020	0.00027	22	<0.0010	<0.00030	0.013	0.22	<0.00020	<0.020	4.4	0.056	0.00025	<0.00050	<0.10	2.0	0.00024	1.1	<0.00010	2.2	0.029	18	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	30-May-23		0.021	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.00013	15	<0.0010	<0.00030	0.0092	0.22	<0.00020	<0.020	3.4	0.0065	<0.00020	0.00080	<0.10	1.7	<0.00020	0.92	<0.00010	1.8	0.026	9.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.053
	13-Jun-23		0.020	<0.00060	0.00027	0.012	<0.0010	<0.020	0.00033	43	<0.0010	<0.00030	0.010	0.44	<0.00020	<0.020	7.2	0.074	<0.00020	0.0010	<0.10	3.5	<0.00020	1.1	<0.00010	2.8	0.044	38	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
		SW-106	0.012	<0.00060	0.00026	0.011	<0.0010	<0.020	0.00030	39	<0.0010	<0.00030	0.0097	0.36	<0.00020	<0.020	6.6	0.054	<0.00020	0.0010	<0.10	3.1	<0.00020	1.1	<0.00010	2.6	0.040	35	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.099
	RPD		*50%*	*NC*	*3.8%*	*8.7%*	*NC*	*NC*	*9.5%*	*9.8%*	*NC*	*NC*	*3.0%*	*20%*	*NC*	*NC*	*8.7%*	*31%*	*NC*	*0.0%*	*NC*	*12%*	*NC*	*0.0%*	*NC*	*7.4%*	*9.5%*	*8.2%*	*NC*	*NC*	*NC*	*NC*	*NC*	*1.0%*
	27-Jun-23		0.010	<0.00060	0.00029	<0.010	<0.0010	<0.020	0.00015	34	<0.0010	<0.00030	0.0061	0.45	<0.00020	<0.020	6.3	0.024	<0.00020	<0.00050	<0.10	3.0	<0.00020	0.87	<0.00010	2.6	0.038	29	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.052
	11-Jul-23		0.013	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000051	14	<0.0010	<0.00030	0.0049	0.14	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.74	<0.00010	2.0	0.029	8.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	25-Jul-23		0.018	<0.00060	0.00040	0.010	<0.0010	<0.020	0.000033	15	<0.0010	<0.00030	0.0043	0.097	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.66	<0.00010	2.2	0.031	8.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
	9-Aug-23		0.0095	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0044	<0.060	0.00028	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.70	<0.00010	2.2	0.028	7.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0058
	22-Aug-23		0.012	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.000022	13	<0.0010	<0.00030	0.0047	<0.060	0.00038	<0.020	3.3	<0.0040	<0.00020	0.00054	<0.10	1.7	<0.00020	0.6	<0.00010	2.0	0.026	7.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0061
	6-Sep-23		0.010	<0.00060	0.00039	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0045	0.43	<0.00020	<0.020	3.2	<0.0040	<0.00020	0.0006	<0.10	1.6	<0.00020	0.69	<0.00010	2.1	0.026	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0066
	19-Sep-23		0.0083	<0.00060	0.00036	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0034	0.085	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.74	<0.00010	2.1	0.029	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0063
	4-Oct-23		0.010	0.00066	0.00044	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0063	0.097	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.75	<0.00010	2.3	0.028	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0044
	17-Oct-23		0.0096	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0040	0.14	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.9	<0.00020	0.76	<0.00010	2.3	0.026	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0056
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-3 btm	14-Feb-23		0.011	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000060	13	<0.0010	<0.00030	0.0055	0.12	<0.00020	<0.020	3.9	0.0054	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.96	<0.00010	2.4	0.027	5.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.029
	16-May-23		0.031	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.00013	14	<0.0010	<0.00030	0.0079	0.20	<0.00020	<0.020	3.5	0.017	<0.00020	0.00054	<0.10	1.6	<0.00020	1.2	<0.00010	2.0	0.024	8.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.049
	30-May-23		0.021	<0.00060	0.00032	0.011	<0.0010	<0.020	0.00025	23	<0.0010	<0.00030	0.012	0.54	<0.00020	<0.020	4.9	0.041	<0.00020	0.00085	<0.10	2.3	<0.00020	1.1	<0.00010	2.2	0.035	18	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	13-Jun-23		0.020	<0.00060	0.00029	0.010	<0.0010	<0.020	0.000071	18	<0.0010	<0.00030	0.0069	0.14	<0.00020	<0.020	3.9	<0.0040	<0.00020	0.00069	<0.10	1.8	0.00058	0.87	<0.00010	2.2	0.030	11	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.036
	27-Jun-23		0.012	<0.00060	0.00028	<0.010	<0.0010	<0.020	0.000075	23	<0.0010	<0.00030	0.0056	0.24	<0.00020	<0.020	4.9	<0.0040	<0.00020	<0.00050	<0.10	2.3	<0.00020	0.82	<0.00010	2.4	0.032	17	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.028
	11-Jul-23		0.012	<0.00060	0.00027	<0.010	<0.0010	<0.020	0.000046	14	<0.0010	<0.00030	0.0049	0.13	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.74	<0.00010	2.0	0.029	8.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	25-Jul-23		0.009	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.000031	13	<0.0010	<0.00030	0.0063	0.099	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.56	<0.00010	2.1	0.027	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	9-Aug-23		0.010	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000025	14	<0.0010	<0.00030	0.0049	<0.060	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.68	<0.00010	2.3	0.030	7.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0069
		SW-120	0.010	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0046	<0.060	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.76	<0.00010	2.2	0.029	8.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0073
	RPD		*0.0%*	*NC*	*11%*	*NC*	*NC*	*NC*	*NC*	*7.4%*	*NC*	*NC*	*6.3%*	*NC*	*NC*	*NC*	*2.7%*	*NC*	*NC*	*NC*	*NC*	*6.1%*	*NC*	*11%*	*NC*	*4.4%*	*3.4%*	*6.3%*	*NC*	*NC*	*NC*	*NC*	*NC*	*5.6%*
	22-Aug-23		0.012	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000024	13	<0.0010	<0.00030	0.0046	0.070	0.00031	<0.020	3.2	<0.0040	<0.00020	0.00051	<0.10	1.6	<0.00020	0.66	<0.00010	2.0	0.026	8.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0082
	6-Sep-23		0.010	<0.00060	0.00039	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0045	0.069	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.66	<0.00010	2.0	0.026	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0077
	19-Sep-23		0.0090	<0.00060	0.00037	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0047	0.089	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.75	<0.00010	2.2	0.029	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0050
	4-Oct-23		0.012	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0042	0.24	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.80	<0.00010	2.2	0.030	6.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0053
	17-Oct-23		0.010	<0.00060	0.00043	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0042	0.16	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.76	<0.00010	2.3	0.027	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0058
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
CL-4 sfc	14-Feb-23		0.020	<0.00060	0.00052	<0.010	<0.0010	<0.020	0.00011	12	<0.0010	<0.00030	0.0058	0.19	<0.00020	<0.020	4.0	0.025	<0.00020	<0.00050	<0.10	1.9	<0.00020	1.3	<0.00010	2.4	0.026	3.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.051
	16-May-23		0.028	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.00010	13	<0.0010	<0.00030	0.0088	0.14	<0.00020	<0.020	3.2	0.012	<0.00020	<0.00050	<0.10	1.6	<0.00020	1.0	<0.00010	2.0	0.024	7.7	<0.00020	<0.0010	<0.0010	<0.0010	<0.0010	0.049
		SW-100	0.030	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.00012	13	<0.0010	<0.00030	0.0083	0.16	<0.00020	<0.020	3.4	0.013	0.00040	0.00062	<0.10	1.6	<0.00020	1.1	<0.00010	1.9	0.023	8.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.046
	RPD		*6.9%*	*NC*	*8.5%*	*NC*	*NC*	*NC*	*18%*	*0.0%*	*NC*	*NC*	*5.8%*	*13%*	*NC*	*NC*	*6.1%*	*8.0%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*10%*	*NC*	*5.1%*	*4.3%*	*5.1%*	*NC*	*NC*	*NC*	*NC*	*NC*	*6.3%*
	30-May-23		0.019	<0.00060	0.00030	<0.010	<0.0010	<0.020	0.000097	14	<0.0010	<0.00030	0.0076	0.19	<0.00020	<0.020	3.4	<0.0040	<0.00020	0.00069	<0.10	1.7	<0.00020	0.91	<0.00010	1.9	0.026	8.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.048
	13-Jun-23		0.016	<0.00060	0.00030	<0.010	<0.0010	<0.020	0.000044	14	<0.0010	<0.00030	0.0085	0.087	<0.00020	<0.020	3.5	<0.0040	<0.00020	0.00051	<0.10	1.6	<0.00020	0.83	<0.00010	2.1	0.027	7.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.026
	27-Jun-23		0.012	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.000031	14	<0.0010	<0.00030	0.0042	0.069	<0.00020	<0.020	3.7	<0.0041	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.73	<0.00010	2.2	0.027	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.014
	11-Jul-23		0.012	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.000036	13	<0.0010	<0.00030	0.0042	0.10	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.70	<0.00010	2.0	0.029	7.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.014
	25-Jul-23		0.0097	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000021	12	<0.0010	<0.00030	0.0063	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.52	<0.00010	2.1	0.026	5.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0089
	9-Aug-23		0.0096	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0040	<0.060	<0.00020	<0.020	3.5	<0.0040	<0.00020	0.00083	<0.10	1.6	<0.00020	0.61	<0.00010	2.1	0.028	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0055
	22-Aug-23		0.013	<0.00060	0.00039	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0039	<0.060	<0.00020	<0.020	3.0	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.66	<0.00010	1.9	0.026	6.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0039
	6-Sep-23		0.0097	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0048	0.068	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.67	<0.00010	2.0	0.026	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0064
	19-Sep-23		0.0086	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0035	0.070	<0.00020	<0.020	3.7	<0.0040	<0.00020	0.00057	<0.10	1.7	<0.00020	0.71	<0.00010	2.2	0.029	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0053
	4-Oct-23		0.013	<0.00060	0.00043	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0038	0.067	0.00021	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.70	<0.00010	2.2	0.031	5.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0039
	17-Oct-23		0.011	<0.00060	0.00036	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0041	0.17	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.78	<0.00010	2.3	0.026	6.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0069
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-4 btm	14-Feb-23		0.01	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000047	14	<0.0010	<0.00030	0.0054	0.13	<0.00020	<0.020	3.8	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.95	<0.00010	2.3	0.027	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	16-May-23		0.024	<0.00060	0.00024	<0.010	<0.0010	<0.020	0.000090	15	<0.0010	<0.00030	0.0079	0.30	<0.00020	<0.020	3.6	0.027	<0.00020	<0.00050	<0.10	1.8	<0.00020	1.2	<0.00010	2.2	0.028	9.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.044
	30-May-23		0.017	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000043	11	<0.0010	<0.00030	0.0060	0.26	<0.00020	<0.020	2.9	0.016	<0.00020	0.00050	<0.10	1.4	<0.00020	0.80	<0.00010	1.8	0.024	5.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.019
	13-Jun-23		0.013	<0.00060	0.00032	0.010	<0.0010	<0.020	0.000023	12	<0.0010	<0.00030	0.0061	0.14	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.91	<0.00010	2.0	0.026	5.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.021
	27-Jun-23		0.024	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000051	12	<0.0010	<0.00030	0.0045	0.39	<0.00020	<0.020	3.4	0.021	0.00021	<0.0005	<0.10	1.7	0.00021	1.0	<0.00010	2.1	0.025	5.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.016
	11-Jul-23		0.018	<0.00060	0.00032	<0.010	<0.0010	<0.020	0.000052	12	<0.0010	<0.00030	0.0047	0.43	<0.00020	<0.020	3.3	0.037	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.96	<0.00010	2.0	0.028	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	25-Jul-23		0.011	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000035	13	<0.0010	<0.00030	0.0071	0.13	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.71	<0.00010	2.1	0.027	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.016
		SW-116	0.011	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000033	13	<0.0010	<0.00030	0.0073	0.14	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.90	<0.00010	2.1	0.026	8.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.017
	RPD		*0.0%*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*5.9%*	*0.0%*	*NC*	*NC*	*2.8%*	*7.4%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*5.7%*	*NC*	*24%*	*NC*	*0.0%*	*3.8%*	*30%*	*NC*	*NC*	*NC*	*NC*	*NC*	*6.1%*
	9-Aug-23		0.014	<0.00060	0.00039	0.010	<0.0010	<0.020	0.000039	14	<0.0010	<0.00030	0.0049	0.20	<0.00020	<0.020	3.6	0.0085	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.94	<0.00010	2.2	0.028	7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.012
	22-Aug-23		0.012	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0050	0.10	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.77	<0.00010	1.9	0.026	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0059
	6-Sep-23		0.0078	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0037	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.66	<0.00010	2.1	0.026	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0063
	19-Sep-23		0.010	<0.00060	0.00039	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0048	0.12	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.79	<0.00010	2.2	0.029	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0050
	4-Oct-23		0.011	<0.00060	0.00051	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0037	0.069	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.71	<0.00010	2.2	0.030	5.9	<0.00020	<0.0010	<0.0010	<0.00010	0.0011	0.0046
	17-Oct-23		0.0092	<0.00060	0.00031	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0036	0.14	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.75	<0.00010	2.3	0.027	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0044
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-5 sfc	14-Feb-23		0.015	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000074	11	<0.0010	<0.00030	0.0043	0.16	<0.00020	<0.020	3.6	0.016	<0.00020	0.00057	<0.10	1.8	<0.00020	1.3	<0.00010	2.5	0.025	2.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.040
		SW-100	0.014	<0.00060	0.00052	<0.010	<0.0010	<0.020	0.000078	11	<0.0010	<0.00030	0.0044	0.16	<0.00020	<0.020	3.4	0.016	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.3	<0.00010	2.4	0.024	2.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.039
	RPD		*6.9%*	*NC*	*3.9%*	*NC*	*NC*	*NC*	*5.3%*	*0.0%*	*NC*	*NC*	*2.3%*	*0.0%*	*NC*	*NC*	*5.7%*	*0.0%*	*NC*	*NC*	*NC*	*5.7%*	*NC*	*0.0%*	*NC*	*4.1%*	*4.1%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*2.5%*
	16-May-23		0.030	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000092	11	<0.0010	<0.00030	0.0083	0.15	<0.00020	<0.020	3.0	0.0082	<0.00020	<0.00050	<0.10	1.5	0.00023	1.0	<0.00010	2.0	0.023	5.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.044
	30-May-23		0.019	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.000087	13	<0.0010	<0.00030	0.0072	0.17	<0.00020	<0.020	3.2	<0.0040	<0.00020	0.00052	<0.10	1.7	<0.00020	0.92	<0.00010	1.9	0.024	7.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.042
	13-Jun-23		0.017	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000033	13	<0.0010	<0.00030	0.0062	0.072	<0.00020	<0.020	3.3	<0.0040	<0.00020	0.00059	<0.10	1.6	<0.00020	0.66	<0.00010	2.0	0.026	5.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.026
	27-Jun-23		0.013	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.000026	13	<0.0010	<0.00030	0.0042	0.061	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.71	<0.00010	2.2	0.027	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
		SW-110	0.013	<0.00060	0.00055	<0.010	<0.0010	<0.020	0.000027	13	<0.0010	<0.00030	0.0038	0.066	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.67	<0.00010	2.1	0.027	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	RPD		*0.0%*	*NC*	*47%*	*NC*	*NC*	*NC*	*3.8%*	*0.0%*	*NC*	*NC*	*10%*	*7.9%*	*NC*	*NC*	*5.6%*	*NC*	*NC*	*NC*	*NC*	*5.7%*	*NC*	*6%*	*NC*	*4.7%*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*17%*
	11-Jul-23		0.012	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.000026	13	<0.0010	<0.00030	0.0042	0.082	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.67	<0.00010	2.0	0.028	6.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
	25-Jul-23		0.0098	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0060	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.50	<0.00010	2.1	0.026	4.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0086
	9-Aug-23		0.0085	<0.00060	0.00034	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0038	<0.060	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.63	<0.00010	2.1	0.028	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0047
	22-Aug-23		0.012	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0041	<0.060	<0.00020	<0.020	3.0	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.61	<0.00010	1.9	0.025	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0040
	6-Sep-23		0.0099	<0.00060	0.00046	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0048	<0.060	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.62	<0.00010	2.1	0.027	5.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0055
	19-Sep-23		0.0088	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0056	0.068	<0.00020	<0.020	3.6	<0.0040	<0.00020	0.0011	<0.10	1.7	<0.00020	0.68	<0.00010	2.2	0.029	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0043
		SW-130	0.0080	<0.00060	0.00035	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0035	<0.060	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.68	<0.00010	2.2	0.029	5.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0049
	RPD		*9.5%*	*NC*	*25%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*46%*	*NC*	*NC*	*NC*	*2.7%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*1.7%*	*NC*	*NC*	*NC*	*NC*	*NC*	*13%*
	4-Oct-23		0.011	<0.00060	0.00047	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0038	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.69	<0.00010	2.2	0.030	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0043
	17-Oct-23		0.0091	<0.00060	0.00033	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0037	0.10	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.70	<0.00010	2.3	0.026	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0044
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-5 btm	14-Feb-23		0.022	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000071	16	<0.0010	<0.00030	0.0056	0.43	<0.00020	<0.020	4.1	0.048	<0.00020	<0.00050	<0.10	1.9	<0.00020	1.4	<0.00010	2.3	0.028	10	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.023
	16-May-23		0.022	<0.00060	0.00028	0.010	<0.0010	<0.020	0.00011	16	<0.0010	<0.00030	0.0089	0.39	<0.00020	<0.020	3.9	0.046	<0.00020	<0.00050	<0.10	1.9	0.00038	1.3	<0.00010	2.3	0.029	11	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.043
	30-May-23		0.012	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.000036	11	<0.0010	<0.00030	0.0056	0.12	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.70	<0.00010	2.0	0.026	4.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	13-Jun-23		0.013	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000026	12	<0.0010	<0.00030	0.0053	0.11	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.84	<0.00010	2.0	0.026	5.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.019
	27-Jun-23		0.013	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.000027	13	<0.0010	<0.00030	0.0040	0.12	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.86	<0.00010	2.2	0.027	5.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.015
	11-Jul-23		0.011	<0.00060	0.00024	<0.010	<0.0010	<0.020	0.000025	13	<0.0010	<0.00030	0.0039	0.092	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.72	<0.00010	2.0	0.029	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.012
	25-Jul-23		0.010	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.000030	13	<0.0010	<0.00030	0.0070	0.090	0.00038	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.79	<0.00010	2.0	0.025	7.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.015
	9-Aug-23		0.012	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000020	13	<0.0010	<0.00030	0.0039	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.58	<0.00010	2.1	0.027	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0048
		SW-119	0.0099	<0.00060	0.00038	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0045	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.66	<0.00010	2.1	0.028	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0066
	RPD		*19%*	*NC*	*5.1%*	*NC*	*NC*	*NC*	*NC*	*8.0%*	*NC*	*NC*	*14%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*13%*	*NC*	*0.0%*	*3.6%*	*12%*	*NC*	*NC*	*NC*	*NC*	*NC*	*32%*
	22-Aug-23		0.013	<0.00060	0.00039	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0048	0.080	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.72	<0.00010	1.9	0.026	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0062
	6-Sep-23		0.0090	<0.00060	0.00037	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0044	<0.060	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.61	<0.00010	2.3	0.027	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0059
	19-Sep-23		0.011	<0.00060	0.00047	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0047	0.12	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.78	<0.00010	2.2	0.029	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0052
	4-Oct-23		0.011	<0.00060	0.00047	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0040	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.71	<0.00010	2.2	0.030	5.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0043
	17-Oct-23		0.011	<0.00060	0.00034	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0038	0.12	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.73	<0.00010	2.3	0.026	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0045
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
CL-6 sfc	14-Feb-23		0.0098	<0.00060	0.00055	<0.010	<0.0010	<0.020	0.000055	14	<0.0010	<0.00030	0.0051	0.071	<0.00020	<0.020	4.2	<0.0040	<0.00020	<0.00050	<0.10	2	<0.00020	0.87	<0.00010	2.7	0.030	5.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.024
	16-May-23		0.026	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000048	10	<0.0010	<0.00030	0.0060	0.12	<0.00020	<0.020	2.9	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.89	<0.00010	2.0	0.024	4.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.028
	30-May-23		0.020	0.00080	0.00033	<0.010	<0.0010	<0.020	0.000060	12	<0.0010	<0.00030	0.0074	0.12	<0.00020	<0.020	3.4	<0.0040	<0.00020	0.00068	<0.10	1.7	<0.00020	0.80	<0.00010	2.0	0.028	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.027
	13-Jun-23		0.014	<0.00060	0.00043	0.011	<0.0010	<0.020	0.000035	13	<0.0010	<0.00030	0.0045	<0.060	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.73	<0.00010	2.1	0.027	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	27-Jun-23		0.011	<0.00060	0.00034	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0034	<0.060	<0.00020	0.026	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.63	<0.00010	2.1	0.025	5.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	11-Jul-23		0.011	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000027	12	<0.0010	<0.00030	0.0040	0.062	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.62	<0.00010	2.0	0.028	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
		SW-115	0.011	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000031	12	<0.0010	<0.00030	0.0037	<0.060	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.63	<0.00010	2.0	0.028	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0097
	RPD		*0.0%*	*NC*	*24%*	*NC*	*NC*	*NC*	*14%*	*0.0%*	*NC*	*NC*	*7.8%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*1.6%*	*NC*	*0.0%*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*13%*
	25-Jul-23		0.0088	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0058	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	<0.50	<0.00010	2.1	0.026	4.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0075
	9-Aug-23		0.0087	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0034	<0.060	<0.00020	<0.020	3.9	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.54	<0.00010	2.4	0.029	5.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	22-Aug-23		0.010	<0.00060	0.00051	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0038	<0.060	<0.00020	<0.020	2.9	<0.0040	<0.00020	0.00079	<0.10	1.5	<0.00020	0.56	<0.00010	1.9	0.025	5.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	6-Sep-23		0.0086	<0.00060	0.00049	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0036	<0.060	<0.00020	<0.020	3.0	<0.0040	<0.00020	<0.00050	<0.10	1.4	<0.00020	0.52	<0.00010	2.0	0.025	5.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0050
	19-Sep-23		0.012	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0040	<0.060	<0.00020	<0.020	3.5	<0.0040	<0.00020	0.00053	<0.10	1.6	<0.00020	0.60	<0.00010	2.1	0.028	5.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0051
	4-Oct-23		0.015	0.00083	0.00050	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0037	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.59	<0.00010	2.2	0.029	5.0	<0.00020	0.0024	0.0013	<0.00010	<0.0010	0.0050
	17-Oct-23		0.0067	<0.00060	0.00047	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0030	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	<0.50	<0.00010	2.2	0.025	4.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0056
		SW-136	0.0053	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0027	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	<0.50	<0.00010	2.3	0.026	4.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0039
	RPD		*23%*	*NC*	*6.6%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*11%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*4.4%*	*3.9%*	*2.3%*	*NC*	*NC*	*NC*	*NC*	*NC*	*36%*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-6 btm	14-Feb-23		0.012	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000027	12	<0.0010	<0.00030	0.0034	0.094	<0.00020	<0.020	3.6	0.015	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.72	<0.00010	2.3	0.027	4.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0094
	16-May-23		0.029	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.000040	10	<0.0010	<0.00030	0.0061	0.12	<0.00020	<0.020	3.0	<0.0040	<0.00020	<0.00050	<0.10	1.5	0.00024	0.90	<0.00010	2.0	0.024	4.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.029
	30-May-23		0.011	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.000033	11	<0.0010	<0.00030	0.0056	0.064	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.92	<0.00010	1.9	0.027	6.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.016
	13-Jun-23		0.0083	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0050	<0.060	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.63	<0.00010	2.0	0.026	4.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.015
	27-Jun-23		0.012	0.0014	0.00062	<0.010	<0.0010	<0.020	0.000032	11	<0.0010	<0.00030	0.0032	<0.060	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.75	<0.00010	2.1	0.027	4.6	<0.0002	<0.0010	<0.0010	<0.00010	<0.0010	0.012
	11-Jul-23		0.010	<0.00060	0.00030	<0.010	<0.0010	<0.020	0.000021	12	<0.0010	<0.00030	0.0037	<0.060	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.65	<0.00010	2.0	0.028	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0096
	25-Jul-23		0.012	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000022	12	<0.0010	<0.00030	0.0039	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.66	<0.00010	2.0	0.029	6.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	9-Aug-23		0.0094	<0.00060	0.00037	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0039	<0.060	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.57	<0.00010	2.2	0.028	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0047
	22-Aug-23		0.013	0.0010	0.00054	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0038	<0.060	<0.00020	<0.020	3.0	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.59	<0.00010	2.0	0.026	5.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0033
		SW-122	0.0096	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0036	<0.060	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.58	<0.00010	2.1	0.026	5.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	RPD		*30%*	*NC*	*30%*	*NC*	*NC*	*NC*	*NC*	*8.7%*	*NC*	*NC*	*5.4%*	*NC*	*NC*	*NC*	*18%*	*NC*	*NC*	*NC*	*NC*	*13%*	*NC*	*2%*	*NC*	*4.9%*	*0.0%*	*1.9%*	*NC*	*NC*	*NC*	*NC*	*NC*	*NC*
	6-Sep-23		0.0079	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0032	<0.060	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.51	<0.00010	2.1	0.026	5.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0050
		SW-127	0.0083	<0.00060	0.00046	<0.010	<0.0010	<0.020	<0.000020	9.8	<0.0010	<0.00030	0.0034	<0.060	<0.00020	<0.020	2.7	<0.0040	<0.00020	<0.00050	<0.10	1.3	<0.00020	0.51	<0.00010	1.8	0.024	5.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0054
	RPD		*4.9%*	*NC*	*4.4%*	*NC*	*NC*	*NC*	*NC*	*12%*	*NC*	*NC*	*6.1%*	*NC*	*NC*	*NC*	*14%*	*NC*	*NC*	*NC*	*NC*	*14%*	*NC*	*0.0%*	*NC*	*15%*	*8.0%*	*2.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*7.7%*
	19-Sep-23		0.0074	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0030	<0.060	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.58	<0.00010	2.2	0.029	5.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0040
	4-Oct-23		0.010	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0033	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.4	<0.00020	0.59	<0.00010	2.1	0.029	5.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0040
	17-Oct-23		0.0098	<0.00060	0.00037	0.011	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0034	0.077	<0.00020	0.021	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.67	<0.00010	2.3	0.026	4.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0062
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-7 sfc	14-Feb-23		0.014	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.00010	13	<0.0010	<0.00030	0.0059	0.14	<0.00020	<0.020	3.9	0.015	<0.00020	<0.00050	<0.10	1.9	<0.00020	1.1	<0.00010	2.4	0.027	4.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.046
	16-May-23		0.029	<0.00060	0.00030	0.011	<0.0010	<0.020	0.00034	26	<0.0010	0.00038	0.014	0.25	<0.00020	<0.020	5.0	0.068	<0.00020	0.0010	<0.10	2.2	<0.00020	1.3	<0.00010	2.3	0.030	22	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.12
	30-May-23		0.022	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.00011	15	<0.0010	<0.00030	0.0076	0.21	<0.00020	<0.020	3.5	0.0040	<0.00020	0.00059	<0.10	1.8	<0.00020	0.93	<0.00010	2.0	0.027	8.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.047
	13-Jun-23		0.012	<0.00060	0.00031	0.011	<0.0010	<0.020	0.000066	20	<0.0010	<0.00030	0.0060	0.17	<0.00020	<0.020	4.3	0.0043	<0.00020	0.00060	<0.10	2.1	<0.00020	0.91	<0.00010	2.4	0.031	13	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.035
	27-Jun-23		0.010	<0.00060	<0.00020	<0.010	<0.0010	<0.020	0.00013	30	<0.0010	<0.00030	0.0057	0.35	<0.00020	<0.020	5.6	0.014	<0.00020	<0.00050	<0.10	2.6	<0.00020	0.81	<0.0001	2.5	0.036	24	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.041
	11-Jul-23		0.012	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.000051	14	<0.0010	<0.00030	0.0047	0.15	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.74	<0.00010	2.0	0.029	9.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.017
	25-Jul-23		0.0093	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000023	10	<0.0010	<0.00030	0.0062	<0.060	<0.00020	<0.020	2.7	<0.0040	<0.00020	<0.00050	<0.10	1.4	<0.00020	0.54	<0.00010	1.8	0.024	5.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0097
	9-Aug-23		0.010	<0.00060	0.00039	<0.010	<0.0010	<0.020	0.000027	14	<0.0010	<0.00030	0.0046	0.061	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.71	<0.00010	2.2	0.029	8.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0065
	22-Aug-23		0.013	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000026	12	<0.0010	<0.00030	0.0048	<0.060	<0.00020	<0.020	3.0	<0.0040	<0.00020	0.00073	<0.10	1.6	<0.00020	0.65	<0.00010	1.9	0.025	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0059
		SW-123	0.014	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0043	<0.060	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.65	<0.00010	2.0	0.026	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0050
	RPD		*7.4%*	*NC*	*4.8%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*11%*	*NC*	*NC*	*NC*	*3.3%*	*NC*	*NC*	*NC*	*NC*	*6.5%*	*NC*	*0.0%*	*NC*	*5.1%*	*3.9%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*17%*
	6-Sep-23		0.0098	<0.00060	0.00038	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0054	0.078	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.60	<0.00010	1.9	0.026	5.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0063
		SW-126	0.010	<0.00060	0.00037	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0046	0.10	<0.00020	<0.020	3.4	<0.0040	<0.00020	0.00056	<0.10	1.6	<0.00020	0.71	<0.00010	2.1	0.028	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0068
	RPD		*2.0%*	*NC*	*2.7%*	*NC*	*NC*	*NC*	*NC*	*7.4%*	*NC*	*NC*	*16%*	*25%*	*NC*	*NC*	*9.2%*	*NC*	*NC*	*NC*	*NC*	*6.5%*	*NC*	*17%*	*NC*	*10%*	*7.4%*	*9.8%*	*NC*	*NC*	*NC*	*NC*	*NC*	*7.6%*
	19-Sep-23		0.0085	<0.00060	0.00038	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0031	0.078	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.73	<0.00010	2.2	0.029	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0047
	4-Oct-23		0.012	<0.00060	0.00048	0.011	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0042	0.095	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.76	<0.00010	2.3	0.033	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0045
	17-Oct-23		0.0096	<0.00060	0.00031	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0038	0.16	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.9	<0.00020	0.75	<0.00010	2.3	0.027	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0053
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-7 btm	14-Feb-23		0.020	<0.00060	0.00056	<0.010	<0.0010	<0.020	0.00011	12	<0.0010	<0.00030	0.0073	0.13	0.00028	<0.020	3.8	0.013	<0.00020	0.00069	<0.10	1.9	<0.00020	1.1	<0.00010	2.5	0.026	4.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.049
	16-May-23		0.029	<0.00060	0.00034	0.010	<0.0010	<0.020	0.00036	25	<0.0010	0.00038	0.014	0.25	<0.00020	0.059	4.9	0.063	<0.00020	0.00097	<0.10	2.2	<0.00020	1.3	<0.00010	2.2	0.030	21	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.12
	30-May-23		0.020	<0.00060	0.00026	0.013	<0.0010	<0.020	0.00034	29	<0.0010	<0.00030	0.011	0.77	<0.00020	<0.020	5.8	0.078	<0.00020	0.0010	<0.10	2.7	<0.00020	1.2	<0.00010	2.4	0.040	23	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.12
	13-Jun-23		0.014	<0.00060	0.00031	0.010	<0.0010	<0.020	0.000057	18	<0.0010	<0.00030	0.0084	0.12	<0.00020	<0.020	4.0	<0.0040	<0.00020	0.00051	<0.10	1.9	<0.00020	0.88	<0.00010	2.1	0.029	12	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.033
	27-Jun-23		0.0094	<0.00060	0.00022	<0.010	<0.0010	<0.020	0.00012	29	<0.0010	<0.00030	0.0057	0.34	<0.00021	0.021	5.8	0.0096	<0.00020	<0.00050	<0.10	2.8	0.00023	0.87	<0.00010	2.5	0.034	24	<0.00021	<0.0010	<0.0010	<0.00010	<0.0010	0.042
		SW-111	0.010	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.00012	30	<0.0010	<0.00030	0.0062	0.35	<0.00020	<0.020	5.8	0.011	<0.00020	<0.00050	<0.10	2.8	<0.00020	0.85	<0.00010	2.6	0.036	24	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.045
	RPD		*6.2%*	*NC*	*60%*	*NC*	*NC*	*NC*	*0.0%*	*3.4%*	*NC*	*NC*	*8.4%*	*2.9%*	*NC*	*NC*	*0.0%*	*14%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*2.3%*	*NC*	*3.9%*	*5.7%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*6.9%*
	11-Jul-23		0.013	<0.00060	0.00028	0.012	<0.0010	<0.020	0.000046	14	<0.0010	<0.00030	0.0050	0.15	<0.00020	<0.020	3.7	<0.0040	<0.00020	0.00053	<0.10	1.7	<0.00020	0.81	<0.00010	2.1	0.030	9.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.019
	25-Jul-23		0.015	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000025	13	<0.0010	<0.00030	0.0042	<0.060	<0.00020	<0.020	3.3	<0.0040	<0.00020	0.00058	<0.10	1.8	<0.00020	0.61	<0.00010	2.1	0.029	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	9-Aug-23		0.011	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000028	14	<0.0010	<0.00030	0.0044	0.073	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.66	<0.00010	2.1	0.028	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0072
	22-Aug-23		0.011	<0.00060	0.00033	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0040	0.077	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.65	<0.00010	2.0	0.026	6.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0069
	6-Sep-23		0.0090	<0.00060	0.00031	0.011	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0058	0.13	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.81	<0.00010	2.2	0.028	7.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0048
	19-Sep-23		0.0092	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0034	0.084	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.73	<0.00010	2.2	0.029	6.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0053
		SW-129	0.0079	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0041	0.090	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.73	<0.00010	2.2	0.029	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0051
	RPD		*15%*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*7.4%*	*NC*	*NC*	*19%*	*6.9%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*1.5%*	*NC*	*NC*	*NC*	*NC*	*NC*	*3.8%*
	4-Oct-23		0.011	0.00067	0.00045	0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0041	0.079	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.77	<0.00010	2.6	0.029	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0050
	17-Oct-23		0.011	<0.00060	0.00033	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0043	0.14	<0.00020	<0.020	3.7	<0.0040	<0.00020	0.00056	<0.10	1.9	<0.00020	0.74	<0.00010	2.3	0.027	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0055
		SW-137	0.0094	<0.00060	0.00031	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0035	0.15	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.76	<0.00010	2.3	0.026	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0045
	RPD		*16%*	*NC*	*6.3%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*21%*	*6

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
CL-8 sfc	14-Feb-23		0.014	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.00011	12	<0.0010	<0.00030	0.0063	0.13	<0.00020	<0.020	3.7	0.014	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.99	<0.00010	2.3	0.026	4.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.040
	16-May-23		0.026	<0.00060	0.00029	<0.010	<0.0010	<0.020	0.00017	17	<0.0010	<0.00030	0.010	0.17	<0.00020	<0.020	3.7	0.031	<0.00020	<0.00050	<0.10	1.8	<0.00020	1.1	<0.00010	2.1	0.027	13	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.070
	30-May-23		0.016	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.00011	14	<0.0010	<0.00030	0.0079	0.25	<0.00020	<0.020	3.4	0.0057	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.94	<0.00010	1.9	0.026	9.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.039
		SW-103	0.021	<0.00060	0.00034	0.012	<0.0010	<0.020	0.00011	14	<0.0010	<0.00030	0.0078	0.25	<0.00020	<0.020	3.4	0.0045	<0.00020	0.00060	<0.10	1.8	<0.00020	0.94	<0.00010	1.9	0.026	9.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.050
	RPD		*27%*	*NC*	*3.0%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*1.3%*	*0.0%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*5.7%*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*1.1%*	*NC*	*NC*	*NC*	*NC*	*NC*	*24.7%*
	13-Jun-23		0.014	<0.00060	0.00028	0.011	<0.0010	<0.020	0.00010	22	<0.0010	<0.00030	0.0092	0.16	<0.00020	<0.020	4.4	0.0061	<0.00020	0.00058	<0.10	2.2	<0.00020	0.92	<0.00010	2.2	0.032	16	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.044
	27-Jun-23		0.012	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.000038	15	<0.0010	<0.00030	0.0045	0.091	<0.00020	0.022	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.77	<0.00010	2.1	0.026	8.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	11-Jul-23		0.013	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000042	14	<0.0010	<0.00030	0.0049	0.15	<0.00020	<0.020	3.5	<0.0040	<0.00020	0.00054	<0.10	1.6	<0.00020	0.74	<0.00010	2.0	0.029	8.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
	25-Jul-23		0.014	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.000026	13	<0.0010	<0.00030	0.0042	0.064	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.61	<0.00010	2.1	0.029	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.010
	9-Aug-23		0.0097	<0.00060	0.00038	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0045	<0.060	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.69	<0.00010	2.2	0.029	7.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0061
	22-Aug-23		0.011	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0038	0.070	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.65	<0.00010	2.0	0.027	5.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0063
	6-Sep-23		0.011	<0.00060	0.00035	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0046	0.076	<0.00020	<0.020	3.3	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.68	<0.00010	2.1	0.027	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0070
	19-Sep-23		0.0091	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0048	0.094	<0.00020	<0.020	3.8	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.74	<0.00010	2.2	0.029	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0047
	4-Oct-23		0.014	<0.00060	0.00040	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0042	0.090	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.75	<0.00010	2.3	0.028	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0048
	17-Oct-23		0.0095	<0.00060	0.00034	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0040	0.15	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.9	<0.00020	0.75	<0.00010	2.3	0.028	7.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0047
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-8 btm	14-Feb-23		0.013	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000056	13	<0.0010	<0.00030	0.0057	0.10	<0.00020	<0.020	3.9	0.0055	<0.00020	<0.00050	<0.10	1.9	<0.00020	0.88	<0.00010	2.4	0.026	5.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.030
	16-May-23		0.032	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.00013	14	<0.0010	<0.00030	0.010	0.17	<0.00020	<0.020	3.5	0.018	<0.00020	0.00070	<0.10	1.6	<0.00020	1.2	<0.00010	2.0	0.024	9.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.051
	30-May-23		0.021	<0.00060	0.00032	<0.010	<0.0010	<0.020	0.00016	16	<0.0010	<0.00030	0.010	0.34	<0.00020	<0.020	3.8	0.012	<0.00020	0.00067	<0.10	1.8	<0.00020	0.97	<0.00010	1.9	0.030	11	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.061
	13-Jun-23		0.015	<0.00060	0.00033	0.010	<0.0010	<0.020	0.000053	15	<0.0010	<0.00030	0.0082	0.091	<0.00020	<0.020	3.5	<0.0040	<0.00020	0.00064	<0.10	1.7	<0.00020	0.85	<0.00010	2.0	0.029	8.0	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.026
	27-Jun-23		0.012	<0.00060	0.00037	<0.010	<0.0010	<0.020	0.000042	15	<0.0010	<0.00030	0.0048	0.089	<0.00020	<0.020	3.8	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.75	<0.00010	2.1	0.026	8.6	<0.0002	<0.0010	<0.0010	<0.00010	<0.0010	0.019
	11-Jul-23		0.013	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000053	14	<0.0010	<0.00030	0.0050	0.15	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.75	<0.00010	2.0	0.030	8.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.018
		SW-114	0.012	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.000043	14	<0.0010	<0.00030	0.0045	0.13	<0.00020	<0.020	3.6	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.74	<0.00010	2.0	0.029	8.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.017
	RPD		*8.0%*	*NC*	*26%*	*NC*	*NC*	*NC*	*21%*	*0.0%*	*NC*	*NC*	*11%*	*14%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*6.1%*	*NC*	*1.3%*	*NC*	*0.0%*	*3.4%*	*2.4%*	*NC*	*NC*	*NC*	*NC*	*NC*	*5.7%*
	25-Jul-23		0.016	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000026	12	<0.0010	<0.00030	0.0042	<0.060	<0.00020	<0.020	3.2	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.60	<0.00010	2.0	0.025	6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	9-Aug-23		0.010	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000023	13	<0.0010	<0.00030	0.0048	<0.060	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.70	<0.00010	2.1	0.028	7.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0068
	22-Aug-23		0.010	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0045	<0.060	<0.00020	<0.020	3.1	<0.0040	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.67	<0.00010	1.9	0.026	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0059
	6-Sep-23		0.012	<0.00060	0.00045	0.013	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0047	0.086	<0.00020	<0.020	4.1	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.67	<0.00010	2.4	0.029	6.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0088
	19-Sep-23		0.0098	<0.00060	0.00034	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0035	0.085	0.00025	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.73	<0.00010	2.2	0.029	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0053
	4-Oct-23		0.011	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	14	<0.0010	<0.00030	0.0066	0.091	<0.00020	<0.020	3.7	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.75	<0.00010	2.3	0.029	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0044
	17-Oct-23		0.0091	<0.00060	0.00036	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0040	0.17	<0.00020	<0.020	3.4	<0.0040	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.78	<0.00010	2.2	0.026	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0051
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																			
Protection of Aquatic Life and Wildlife																																			
Tier II Objective - Chronic			-	-	*0.150*	-	-	-	*0.00017 [2a]*	-	*0.048 [2a]*	-	*0.00574 [2a]*	-	*0.00142 [2a]*	-	-	-	-	*0.0335 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.076 [2a]*
Tier II Objective - Acute			-	-	*0.340*	-	-	-	*0.00121 [2a]*	-	*0.372 [2a]*	-	*0.00823 [2a]*	-	*0.0365 [2a]*	-	-	-	-	*0.301 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0754 [2a]*

Notes: NC = Not Calculated RPD = Relative Percent Difference

"-" = No Data

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 59.4 mg/L as $CaCO_3$ as measured in Cold Lake on May 11, 2016.

- Values above MWQSOG value.

TABLE 5
DISSOLVED METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																		
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
Additional Surface Water Sampling Locations																																					
Portage Lake	3-Oct-23		0.013	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000037	11	<0.0010	<0.00030	0.0048	0.20	<0.00020	<0.020	3.6	<0.0040	<0.00020	0.00076	<0.10	1.4	<0.00020	<0.50	<0.00010	2.4	0.027	2.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.034
Sherlett Lake	3-Oct-23		0.0067	<0.00060	0.00042	<0.010	<0.0010	<0.020	<0.000020	8.5	<0.0010	<0.00030	0.0011	<0.060	<0.00020	<0.020	2.7	<0.0040	<0.00020	0.00060	<0.10	1.5	<0.00020	1.2	<0.00010	1.8	0.021	1.1	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
WWTP Outflow	3-Oct-23		0.31	<0.00060	0.00045	<0.010	<0.0010	0.12	0.000025	26	<0.0010	<0.00030	0.0049	0.21	<0.00020	<0.020	7.3	0.0091	0.00022	0.0015	0.13	12	<0.00020	2.2	<0.00010	30	0.057	25	<0.00020	<0.0010	<0.0010	0.00018	<0.0010	0.042
C Dock	3-Oct-23		0.015	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.000042	11	<0.0010	<0.00030	0.0046	0.22	<0.00020	<0.020	3.6	0.0059	<0.00020	0.00058	<0.10	1.4	<0.00020	<0.50	<0.00010	2.4	0.027	2.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.031
		SW-135	0.014	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000032	11	<0.0010	<0.00030	0.0046	0.22	<0.00020	<0.020	3.6	0.0040	<0.00020	0.00054	<0.10	1.4	<0.00020	<0.50	<0.00010	2.4	0.027	2.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.031
	RPD		*6.9%*	*NC*	*21%*	*NC*	*NC*	*NC*	*27%*	*0.0%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*0.0%*	*38%*	*NC*	*7.1%*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*0.0%*	*0.0%*	*4.4%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*
	31-Oct-23		0.012	<0.00060	0.00038	0.011	<0.0010	<0.020	0.000050	17	<0.0010	<0.00030	0.0046	0.15	<0.00020	<0.020	4.1	0.017	<0.00020	<0.00050	<0.10	2.2	<0.00020	0.55	<0.00010	3.1	0.037	10	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.047
Cofferdam	4-Oct-23		<0.0030	<0.00060	0.00026	0.017	<0.0010	0.020	0.00030	55	<0.0010	<0.00030	0.0041	<0.060	<0.00020	<0.020	9.1	0.073	<0.00020	0.0010	<0.10	4.7	<0.00020	0.73	<0.00010	3.5	0.051	53	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.083
	17-Oct-23		0.016	<0.00060	0.00031	<0.010	<0.0010	<0.020	0.00025	11	<0.0010	<0.00030	0.0072	0.18	<0.00020	<0.020	3.4	0.044	<0.00020	0.00052	<0.10	1.8	<0.00020	1.2	<0.00010	4.7	0.025	3.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
	31-Oct-23		0.019	<0.00060	0.0004	<0.010	<0.0010	<0.020	0.00031	12	<0.0010	<0.00030	0.0078	0.18	<0.00020	<0.020	3.6	0.053	<0.00020	0.00057	<0.10	2.0	<0.00020	1.3	<0.00010	6.7	0.031	3.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.15
Diversion	17-Oct-23		0.016	<0.00060	0.00027	<0.010	<0.0010	<0.020	0.00022	11	<0.0010	<0.00030	0.0074	0.18	<0.00020	<0.020	3.4	0.043	<0.00020	0.00055	<0.10	1.9	<0.00020	1.2	<0.00010	4.7	0.025	3.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.13
	31-Oct-23		0.019	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.00032	12	<0.0010	<0.00030	0.0079	0.20	<0.00020	<0.020	3.4	0.043	<0.00020	0.00056	<0.10	2.0	<0.00020	1.2	<0.00010	6.0	0.029	3.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.17
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																					
Protection of Aquatic Life and Wildlife																																					
Tier II Objective - Chronic			-	-	*0.150*	-	-	-	*0.00017 [2a]*	-	*0.048 [2a]*	-	*0.00574 [2a]*	-	*0.00142 [2a]*	-	-	-	-	*0.0335 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0760 [2a]*
Tier II Objective - Acute			-	-	*0.340*	-	-	-	*0.00121 [2a]*	-	*0.372 [2a]*	-	*0.00823 [2a]*	-	*0.0365 [2a]*	-	-	-	-	*0.301 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0754 [2a]*

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 59.4 mg/L as $CaCO_3$ as measured in Cold Lake on May 11, 2016.

- Values above MWQSOG value.

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																		
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
TRIP BLANK	16-May-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	30-May-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	13-Jun-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	0.24	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	27-Jun-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	0.00021	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	11-Jul-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	25-Jul-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	9-Aug-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	22-Aug-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	6-Sep-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	19-Sep-23		<0.0030	0.00068	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	0.00030	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	4-Oct-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	17-Oct-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
Camp Lake																																	
SB-1	14-Feb-23		**0.15**	<0.00060	0.00034	0.018	<0.0010	<0.020	**0.00063**	48	0.0056	0.00056	**0.013**	**2.3**	0.00032	<0.020	8.3	0.10	<0.00020	0.0016	<0.10	4.1	<0.00020	1.7	<0.00010	3.3	0.056	49	<0.00020	<0.0010	0.0069	<0.00010	<0.0010	**0.19**
	16-May-23		0.10	<0.00060	0.00027	0.011	<0.0010	<0.020	**0.00073**	31	<0.0010	0.0010	**0.026**	**1.4**	<0.00020	<0.020	5.2	0.12	<0.00020	0.0014	<0.10	2.6	<0.00020	1.6	<0.00010	2.2	0.038	28	<0.00020	<0.0010	0.0035	<0.00010	<0.0010	**0.23**
	30-May-23		**0.094**	<0.00060	0.00030	0.012	<0.0010	<0.020	**0.00057**	37	<0.0010	0.00085	**0.020**	**2.7**	<0.00020	<0.020	6.4	0.16	<0.00020	0.0014	<0.10	3.1	<0.00020	1.6	<0.00010	2.5	0.039	31	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	**0.16**
	13-Jun-23		0.059	<0.00060	0.00025	0.011	<0.0010	<0.020	**0.00053**	38	<0.0010	0.00044	**0.018**	**1.5**	<0.00020	<0.020	6.5	0.10	<0.00020	0.0014	<0.10	3.1	<0.00020	1.3	<0.00010	2.5	0.043	35	<0.00020	<0.0010	0.0016	<0.00010	<0.0014	**0.16**
	27-Jun-23		0.056	<0.00060	0.00029	0.010	<0.0010	<0.020	**0.00041**	39	<0.0010	0.00035	**0.013**	**2.0**	<0.00020	<0.020	6.8	0.082	<0.00020	0.0011	<0.10	3.4	<0.00020	1.3	<0.00010	2.7	0.040	37	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	**0.12**
	11-Jul-23		0.055	<0.00060	0.00037	0.012	<0.0010	<0.020	0.00033	40	<0.0010	<0.00030	0.012	**4.2**	<0.00020	<0.020	7.4	0.062	<0.00020	0.0013	<0.10	3.6	<0.00020	0.98	<0.00010	2.7	0.048	38	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
		SW-113	0.047	<0.00060	0.00036	0.010	<0.0010	<0.020	0.00033	38	<0.0010	<0.00030	0.011	**4.1**	<0.00020	<0.020	7.1	0.059	<0.00020	0.0012	<0.10	3.2	<0.00020	1.1	<0.00010	2.5	0.044	36	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.10
	RPD		*16%*	*NC*	*2.7%*	*18%*	*NC*	*NC*	*0.0%*	*5.1%*	*NC*	*NC*	*8.7%*	*2.4%*	*NC*	*NC*	*4.1%*	*5.0%*	*NC*	*8.0%*	*NC*	*12%*	*NC*	*12%*	*NC*	*7.7%*	*8.7%*	*5.4%*	*NC*	*NC*	*NC*	*NC*	*NC*	*10%*
	25-Jul-23		0.042	<0.00060	0.00024	0.012	<0.0010	0.021	**0.00033**	42	<0.0010	<0.00030	0.010	**3.4**	<0.00020	<0.020	7.9	0.050	<0.00020	0.00099	<0.10	3.8	<0.00020	0.94	<0.00010	3.0	0.041	40	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.094
	9-Aug-23		0.049	<0.00060	0.00029	0.012	<0.0010	0.027	0.00035	44	<0.0010	<0.00030	0.013	**3.0**	<0.00020	<0.020	7.5	0.052	<0.00020	0.00099	<0.10	3.8	<0.00020	1.0	<0.00010	2.8	0.049	50	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.10
	22-Aug-23		0.032	<0.00060	0.00025	0.013	<0.0010	<0.020	0.00029	49	<0.0010	<0.00030	0.0093	**2.6**	<0.00020	<0.020	8.0	0.052	<0.00020	0.00066	<0.10	4.1	<0.00020	0.85	<0.00010	3.1	0.048	49	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.089
	6-Sep-23		0.050	<0.00060	0.00036	0.013	<0.0010	<0.020	0.00044	52	<0.0010	0.00033	0.012	**2.4**	0.00026	<0.020	8.4	0.060	<0.00020	0.0015	<0.10	4.5	<0.00020	0.74	<0.00010	3.2	0.056	52	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.13
	19-Sep-23		0.029	<0.00060	0.00025	0.013	<0.0010	<0.020	0.00030	53	<0.0010	<0.00030	0.0075	**2.6**	<0.00020	<0.020	8.8	0.063	<0.00020	0.0010	<0.10	4.5	<0.00020	0.71	<0.00010	3.3	0.057	54	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.082
	4-Oct-23		0.050	<0.00060	0.00034	0.014	<0.0010	<0.020	0.00040	54	<0.0010	<0.00030	0.0087	**2.3**	<0.00020	<0.020	8.8	0.069	<0.00020	0.0015	<0.10	4.5	<0.00020	0.83	<0.00010	3.3	0.063	59	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.14
		SW-131	0.049	<0.00060	0.00033	0.014	<0.0010	<0.020	0.00042	54	<0.0010	0.00034	0.012	**2.3**	<0.00020	<0.020	8.8	0.068	<0.00020	0.0021	<0.10	4.5	<0.00020	0.80	<0.00010	3.3	0.061	58	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.12
	RPD		*2.0%*	*NC*	*3.0%*	*0.0%*	*NC*	*NC*	*4.9%*	*0.0%*	*NC*	*NC*	*32%*	*0.0%*	*NC*	*NC*	*0.0%*	*1.5%*	*NC*	*33%*	*NC*	*0.0%*	*NC*	*3.7%*	*NC*	*0.0%*	*3.2%*	*1.7%*	*NC*	*NC*	*28.6%*	*NC*	*NC*	*15%*
	17-Oct-23		**0.059**	<0.00060	0.00028	0.015	<0.0010	<0.020	0.00036	60	<0.0010	0.00032	0.0086	**2.4**	<0.00020	<0.020	9.1	0.074	<0.00020	0.0015	<0.10	4.9	<0.00020	0.88	<0.00010	3.5	0.063	59	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.11
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SB-2	14-Feb-23		**0.17**	<0.00060	0.00028	0.018	<0.0010	<0.020	**0.00065**	49	<0.0010	0.00057	**0.013**	**2.6**	<0.00020	<0.020	8.3	0.098	<0.00020	0.0016	<0.10	4.1	<0.00020	1.7	<0.00010	3.2	0.057	51	<0.00020	<0.0010	0.0081	<0.00010	<0.0010	**0.20**
	16-May-23		0.11	<0.00060	0.00029	0.011	<0.0010	<0.020	**0.00067**	32	<0.0010	0.0011	**0.027**	**1.3**	<0.00020	<0.020	5.6	0.13	<0.00020	0.0021	<0.10	2.7	<0.00020	1.5	<0.00010	2.3	0.038	27	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	**0.21**
		SW-101	0.099	<0.00060	0.00039	0.011	<0.0010	<0.020	**0.00069**	30	<0.0010	0.0010	**0.026**	**1.3**	<0.00020	<0.020	5.1	0.13	<0.00020	0.0016	<0.10	2.5	<0.00020	1.6	<0.00010	2.3	0.037	28	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	**0.23**
	RPD		*11%*	*NC*	*29%*	*0.0%*	*NC*	*NC*	*2.9%*	*6.5%*	*NC*	*NC*	*3.8%*	*0.0%*	*NC*	*NC*	*9.3%*	*0.0%*	*NC*	*27%*	*NC*	*7.7%*	*NC*	*6.5%*	*NC*	*0.0%*	*2.7%*	*3.6%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*9.1%*
	30-May-23		**0.073**	<0.00060	0.00027	0.012	<0.0010	<0.020	**0.00063**	36	<0.0010	0.00081	**0.023**	**2.7**	<0.00020	<0.020	6.6	0.15	<0.00020	0.0016	<0.10	2.9	<0.00020	1.5	<0.00010	2.3	0.039	33	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	**0.19**
	13-Jun-23		0.056	<0.00060	0.00021	0.011	<0.0010	<0.020	**0.00053**	38	<0.0010	0.00043	**0.017**	**1.5**	<0.00020	<0.020	6.6	0.10	<0.00020	0.0014	<0.10	3.2	<0.00020	1.3	<0.00010	2.5	0.043	35	<0.00020	<0.0010	0.0015	<0.00010	<0.0014	**0.16**
	27-Jun-23		0.059	<0.00060	0.00029	<0.010	<0.0010	<0.020	0.00032	30	<0.0010	<0.00030	**0.011**	**1.4**	<0.00020	<0.020	5.5	0.062	<0.00020	0.0011	<0.10	2.8	<0.00020	1.3	<0.00010	2.3	0.034	26	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	**0.098**
	11-Jul-23		0.062	<0.00060	0.00036	0.011	<0.0010	<0.020	0.00035	40	<0.0010	<0.00030	0.015	**4.5**	<0.00020	<0.020	6.8	0.067	<0.00020	0.0012	<0.10	3.5	<0.00020	1.1	<0.00010	2.9	0.047	37	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.11
	25-Jul-23		0.047	<0.00060	0.00034	0.012	<0.0010	0.022	**0.00035**	42	<0.0010	<0.00030	0.011	**3.4**	<0.00020	<0.020	7.9	0.051	<0.00020	0.0010	<0.10	3.8	<0.00020	0.93	<0.00010	3.0	0.041	40	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.11
	9-Aug-23		0.050	<0.00060	0.00033	0.012	<0.0010	<0.020	0.00033	44	<0.0010	<0.00030	0.012	**3.6**	<0.00020	<0.020	7.5	0.054	<0.00020	0.0010	<0.10	3.8	<0.00020	0.92	<0.00010	2.8	0.049	49	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.10
	22-Aug-23		0.031	<0.00060	0.00023	0.013	<0.0010	<0.020	0.00031	50	<0.0010	<0.00030	0.010	**2.7**	<0.00020	<0.020	8.4	0.053	<0.00020	0.00074	<0.10	4.3	<0.00020	0.87	<0.00010	3.2	0.049	50	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.090
	6-Sep-23		0.061	<0.00060	0.00040	0.012	<0.0010	<0.020	0.00050	51	<0.0010	0.00035	0.014	**2.3**	<0.00020	<0.020	8.2	0.061	<0.00020	0.0016	<0.10	4.5	<0.00020	0.76	<0.00010	3.1	0.056	52	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.14
	19-Sep-23		0.042	<0.00060	0.00023	0.013	<0.0010	<0.020	0.00037	52	<0.0010	<0.00030	0.0084	**2.6**	0.00065	<0.020	8.9	0.062	<0.00020	0.0013	<0.10	4.5	<0.00020	0.81	<0.00010	3.2	0.057	53	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.10
	4-Oct-23		0.033	<0.00060	0.00022	0.015	<0.0010	<0.020	0.00033	60	<0.0010	<0.00030	0.0094	**2.6**	<0.00020	<0.020	9.8	0.075	<0.00020	0.0019	<0.10	5.0	<0.00020	0.79	<0.00010	3.7	0.056	61	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.098
	17-Oct-23		0.048	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00038	59	<0.0010	0.00034	0.0075	**2.3**	<0.00020	<0.020	9.1	0.079	<0.00020	0.0012	<0.10	4.9	<0.00020	0.91	<0.00010	3.5	0.062	60	<0.00020	<0.0010	0.002	<0.00010	<0.0010	0.11
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CB-1	14-Feb-23		**0.086**	<0.00060	0.00038	0.020	<0.0010	<0.020	**0.00072**	58	<0.0010	0.00060	**0.013**	**2.2**	<0.00020	<0.020	9.8	0.12	<0.00020	0.0016	<0.10	5.1	<0.00020	1.8	<0.00010	3.9	0.067	61	<0.00020	<0.0010	0.0034	<0.00010	<0.0010	**0.22**
	16-May-23		**0.12**	<0.00060	0.00029	0.012	<0.0010	<0.020	**0.00080**	40	<0.0010	0.0015	**0.031**	**1.8**	<0.00020	<0.020	6.6	0.18	<0.00020	0.0017	<0.10	3.2	<0.00020	1.9	<0.00010	2.5	0.043	40	0.00025	<0.0010	0.0013	<0.00010	<0.0010	**0.25**
	30-May-23		**0.086**	0.00093	0.00027	0.012	<0.0010	<0.020	**0.00065**	40	<0.0010	0.00091	**0.021**	**2.9**	<0.00020	<0.020	6.9	0.17	<0.00020	0.0014	<0.10	3.4	<0.00020	1.5	<0.00010	2.7	0.041	34	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	**0.17**
		SW-104	**0.073**	<0.00060	0.00027	0.012	<0.0010	<0.020	0.00070	40	<0.0010	0.0010	**0.024**	**2.9**	<0.00020	<0.020	7.2	0.16	0.00043	0.0015	<0.10	3.3	<0.00020	1.6	<0.00010	2.5	0.040	37	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	**0.21**
	RPD		*16%*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*7.4%*	*0.0%*	*NC*	*9.4%*	*13%*	*0.0%*	*NC*	*NC*	*4.3%*	*6.1%*	*NC*	*6.9%*	*NC*	*3.0%*	*NC*	*6.5%*	*NC*	*7.7%*	*2.5%*	*8.5%*	*NC*	*NC*	*20.7%*	*NC*	*NC*	*21%*
	13-Jun-23		0.061	<0.00060	0.00027	0.011	<0.0010	<0.020	**0.00057**	42	<0.0010	0.00054	**0.019**	**1.7**	<0.00020	<0.020	7.0	0.11	<0.00020	0.0015	<0.10	3.4	<0.00020	1.3	<0.00010	2.6	0.047	39	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	**0.18**
	27-Jun-23		**0.20**	<0.0006	0.00030	0.011	<0.0010	0.053	**0.00039**	38	<0.0010	0.00032	**0.013**	**1.7**	<0.00020	<0.020	6.5	0.075	<0.00020	0.0011	<0.10	3.2	<0.00020	1.2	<0.00010	2.6	0.047	35	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	**0.12**
	11-Jul-23		0.046	<0.00060	0.00034	0.011	<0.0010	<0.020	0.00034	40	<0.0010	<0.00030	0.012	**3.3**	<0.00020	<0.020	6.7	0.053	<0.00020	0.0011	<0.10	3.4	<0.00020	0.94	<0.00010	2.8	0.046	37	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.10
	25-Jul-23		0.044	<0.00060	0.00028	0.012	<0.0010	0.032	0.00032	44	<0.0010	<0.00030	0.011	**3.4**	<0.00020	<0.020	8.1	0.050	<0.00020	0.00099	<0.10	3.9	<0.00020	0.96	<0.00010	3.0	0.043	42	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.10
	9-Aug-23		0.050	<0.00060	0.00031	0.011	<0.0010	<0.020	**0.00035**	44	<0.0010	<0.00030	0.012	**2.8**	<0.00020	<0.020	7.4	0.047	<0.00020	0.0011	<0.10	3.8	<0.00020	0.92	<0.00010	2.7	0.048	53	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.10
	22-Aug-23		0.038	<0.00060	0.00025	0.013	<0.0010	<0.020	**0.00039**	51	<0.0010	<0.00030	0.012	**2.6**	<0.00020	<0.020	8.4	0.051	<0.00020	0.00089	<0.10	4.3	<0.00020	0.85	<0.00010	3.3	0.050	51	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.11
	6-Sep-23		0.042	<0.00060	0.00036	0.013	<0.0010	<0.020	**0.00045**	52	<0.0010	<0.00030	0.013	**2.4**	<0.00020	<0.020	8.5	0.061	<0.00020	0.0015	<0.10	4.6	<0.00020	0.71	<0.00010	3.2	0.058	53	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.13
	19-Sep-23		0.043	<0.00060	0.00029	0.013	<0.0010	<0.020	**0.00035**	54	<0.0010	<0.00030	0.014	**2.4**	<0.00020	<0.020	8.6	0.061	<0.00020	0.0026	<0.10	4.5	<0.00020	0.80	<0.00010	3.3	0.057	55	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.10
	4-Oct-23		0.042	<0.00060	0.00031	0.015	<0.0010	<0.020	**0.00041**	60	<0.0010	0.00030	0.0088	**2.3**	0.00023	<0.020	9.8	0.069	<0.00020	0.0021	<0.10	4.9	<0.00020	0.76	<0.00010	3.7	0.057	60	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.12
	17-Oct-23		0.042	<0.00060	0.00024	0.014	<0.0010	<0.020	0.00036	60	<0.0010	0.00031	0.0086	**2.1**	<0.00020	<0.020	9.1	0.076	<0.00020	0.0012	<0.10	5.0	<0.00020	0.87	<0.00010	3.5	0.062	61	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.10
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CB-2	14-Feb-23		**0.066**	<0.00060	0.00036	0.019	<0.0010	<0.020	**0.00070**	59	<0.0010	0.00056	**0.014**	**3.4**	<0.00020	<0.020	9.8	0.11	<0.00020	0.0014	<0.10	4.7	<0.00020	1.6	<0.00010	3.6	0.068	64	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	**0.20**
	16-May-23		0.11	<0.00060	0.00032	0.012	<0.0010	<0.020	**0.00082**	38	<0.0010	0.0014	**0.031**	**1.6**	<0.00020	<0.020	6.2	0.16	<0.00020	0.0018	<0.10	3.0	<0.00020	1.5	<0.00010	2.4	0.043	36	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	**0.28**
	30-May-23		**0.073**	<0.00060	0.00023	0.012	<0.0010	<0.020	**0.00068**	39	<0.0010	0.00093	**0.024**	**2.7**	<0.00020	<0.020	6.9	0.15	<0.00020	0.0014	<0.10	3.1	<0.00020	1.4	<0.00010	2.4	0.041	36	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	**0.21**
	13-Jun-23		0.065	<0.00060	0.00032	0.012	<0.0010	<0.020	**0.00058**	42	<0.0010	0.00051	**0.018**	**1.7**	<0.00020	<0.020	7.0	0.11	0.00073	0.0017	<0.10	3.4	<0.00020	1.2	<0.00010	2.6	0.048	40	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	**0.17**
	27-Jun-23		0.094	0.00061	0.00030	0.010	<0.0010	0.028	**0.00040**	39	<0.0010	0.00035	**0.013**	**1.8**	<0.00020	<0.020	6.6	0.077	<0.00020	0.0011	<0.10	3.3	<0.00020	1.2	<0.00010	2.7	0.042	36	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	**0.12**
	11-Jul-23		0.058	<0.00060	0.00031	0.011	<0.0010	<0.020	0.00032	41	<0.0010	<0.00030	0.012	**3.6**	<0.00020	<0.020	7.0	0.058	<0.00020	0.0013	<0.10	3.5	<0.00020	0.96	<0.00010	2.8	0.047	38	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.10
	25-Jul-23		0.052	<0.00060	0.00037	0.013	<0.0010	0.024	**0.00038**	45	<0.0010	<0.00030	0.012	**3.4**	<0.00020	<0.020	8.2	0.046	<0.00020	0.0011	<0.10	3.9	<0.00020	0.88	<0.00010	3.1	0.044	42	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.12
	9-Aug-23		0.046	<0.00060	0.00026	0.011	<0.0010	<0.020	0.00034	43	<0.0010	<0.00030	0.012	**2.8**	<0.00020	<0.020	7.3	0.046	<0.00020	0.00096	<0.10	3.6	<0.00020	0.84	<0.00010	2.8	0.048	48	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.099
		SW-121	0.048	<0.00060	0.00030	0.012	<0.0010	0.022	0.00033	44	<0.0010	<0.00030	0.012	**2.9**	<0.00020	<0.020	7.4	0.047	<0.00020	0.0010	<0.10	3.8	0.00023	0.94	<0.00010	2.8	0.048	49	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.10
	RPD		*4.3%*	*NC*	*14%*	*8.7%*	*NC*	*NC*	*3.0%*	*2.3%*	*NC*	*NC*	*0.0%*	*3.5%*	*NC*	*NC*	*1.4%*	*2.2%*	*NC*	*4.1%*	*NC*	*5.4%*	*NC*	*11%*	*NC*	*0.0%*	*0.0%*	*2.1%*	*NC*	*NC*	*9.5%*	*NC*	*NC*	*1.0%*
	22-Aug-23		0.039	<0.00060	0.00032	0.013	<0.0010	<0.020	0.00037	50	<0.0010	<0.00030	0.012	**2.6**	<0.00020	<0.020	8.3	0.050	<0.00020	0.00082	<0.10	4.2	<0.00020	0.84	<0.00010	3.2	0.050	51	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.11
	6-Sep-23		0.039	<0.00060	0.00024	0.012	<0.0010	<0.020	0.00033	52	<0.0010	<0.00030	0.0088	**2.0**	<0.00020	<0.020	8.3	0.057	<0.00020	0.0010	<0.10	4.6	<0.00020	0.74	<0.00010	3.1	0.056	53	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.091
	19-Sep-23		0.051	<0.00060	0.00024	0.014	<0.0010	<0.020	0.00031	56	<0.0010	<0.00030	0.0074	**2.3**	0.00047	<0.020	8.8	0.062	<0.00020	0.0013	<0.10	4.6	<0.00020	0.84	<0.00010	3.4	0.059	57	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.087
		SW-128	0.046	<0.00060	0.00023	0.013	<0.0010	<0.020	0.00036	55	<0.0010	<0.00030	0.014	**2.2**	0.00024	<0.020	8.8	0.056	<0.00020	0.0024	<0.10	4.5	<0.00020	0.75	<0.00010	3.4	0.051	54	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.099
	RPD		*10%*	*NC*	*4.3%*	*7.4%*	*NC*	*NC*	*15%*	*1.8%*	*NC*	*NC*	*62%*	*4.4%*	*NC*	*NC*	*0.0%*	*10%*	*NC*	*59%*	*NC*	*2.2%*	*NC*	*11%*	*NC*	*0.0%*	*15%*	*5.4%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*13%*
	4-Oct-23		0.045	<0.00060	0.00030	0.015	<0.0010	<0.020	0.00034	60	<0.0010	<0.00030	0.0074	**2.0**	<0.00020	<0.020	9.3	0.068	<0.00020	0.0012	<0.10	4.9	<0.00020	0.83	<0.00010	3.6	0.065	59	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.096
	17-Oct-23		0.048	<0.00060	<0.00020	0.015	<0.0010	<0.020	0.00038	61	<0.0010	0.00033	0.0085	**2.0**	<0.00020	<0.020	9.3	0.074	<0.00020	0.0014	<0.10	5.0	<0.00020	0.86	<0.00010	3.5	0.063	61	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.11
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																															
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
NB-1	14-Feb-23		**0.078**	<0.00060	0.00036	0.020	<0.0010	<0.020	**0.00077**	61	<0.0010	0.00052	**0.015**	**3.2**	0.00028	<0.020	10	0.11	<0.00020	0.0017	<0.10	5.0	<0.00020	1.7	<0.00010	3.8	0.070	67	<0.00020	<0.0010	0.0030	<0.00010	<0.0010	**0.22**
	16-May-23		**0.12**	<0.00060	0.00030	0.012	<0.0010	<0.020	**0.00093**	45	<0.0010	0.0015	**0.035**	**2.0**	<0.00020	<0.020	7.2	0.19	<0.00020	0.0018	<0.10	3.4	<0.00020	1.6	<0.00010	2.6	0.048	44	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	**0.30**
	30-May-23		**0.086**	0.00062	0.00028	0.013	<0.0010	<0.020	**0.00070**	44	<0.0010	0.0010	**0.023**	**3.2**	<0.00020	<0.020	7.5	0.19	<0.00020	0.0015	<0.10	3.5	<0.00020	1.5	<0.00010	2.7	0.044	38	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	**0.20**
	13-Jun-23		**0.087**	0.00098	<0.00020	0.014	<0.0010	<0.020	**0.00085**	50	<0.0010	0.0010	**0.024**	**1.7**	<0.00020	<0.020	8.2	0.15	<0.00020	0.0021	<0.10	3.9	<0.00020	1.2	<0.00010	3.0	0.054	49	<0.00020	<0.0010	0.0019	<0.00010	<0.0014	**0.23**
	27-Jun-23		0.053	<0.00060	0.00026	0.011	<0.0010	<0.020	**0.00044**	45	<0.0010	0.00035	**0.014**	**2.1**	<0.00020	<0.020	7.3	0.09	<0.00020	0.0011	<0.10	3.5	<0.00020	1.1	<0.00010	2.7	0.050	42	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	**0.12**
	11-Jul-23		0.045	<0.00060	0.00031	0.011	<0.0010	<0.020	0.00035	46	<0.0010	<0.00030	0.012	**2.4**	<0.00020	<0.020	8.0	0.057	<0.00020	0.0012	<0.10	3.5	<0.00020	1.0	<0.00010	2.7	0.049	43	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.11
	25-Jul-23		0.040	<0.00060	0.00032	0.011	<0.0010	<0.020	**0.00033**	42	<0.0010	<0.00030	0.011	**2.9**	<0.00020	<0.020	6.9	0.041	<0.00020	0.0011	<0.10	3.4	<0.00020	0.86	<0.00010	2.8	0.040	42	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.097
	9-Aug-23		0.047	<0.00060	0.00034	0.012	<0.0010	0.023	0.00035	46	<0.0010	<0.00030	0.014	**2.6**	<0.00020	<0.020	7.7	0.055	<0.00020	0.00099	<0.10	3.7	<0.00020	0.92	<0.00010	2.8	0.051	52	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	22-Aug-23		0.047	<0.00060	0.00034	0.012	<0.0010	<0.020	0.00045	55	<0.0010	<0.00030	0.017	**2.0**	<0.00020	<0.020	8.6	0.054	<0.00020	0.0011	<0.10	4.3	0.00020	0.79	<0.00010	3.2	0.057	52	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.13
		SW-124	0.033	<0.00060	0.00031	0.012	<0.0010	<0.020	0.00035	52	<0.0010	<0.00030	0.012	**2.1**	<0.00020	<0.020	8.3	0.051	<0.00020	0.00075	<0.10	4.1	<0.00020	0.80	<0.00010	3.1	0.047	52	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	RPD		*35%*	*NC*	*9.2%*	*0.0%*	*NC*	*NC*	*25%*	*5.6%*	*NC*	*NC*	*34%*	*4.9%*	*NC*	*NC*	*3.6%*	*5.7%*	*NC*	*38%*	*NC*	*4.8%*	*NC*	*1.3%*	*NC*	*3.2%*	*19%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*26%*
	6-Sep-23		0.035	<0.00060	0.00034	0.013	<0.0010	<0.020	0.00040	58	<0.0010	<0.00030	0.012	**2.5**	<0.00020	<0.020	9.2	0.066	<0.00020	0.0014	<0.10	4.7	<0.00020	0.71	<0.00010	3.2	0.060	56	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
		SW-125	0.026	<0.00060	0.00021	0.012	<0.0010	<0.020	0.00032	56	<0.0010	<0.00030	0.0097	**2.4**	<0.00020	<0.020	8.9	0.067	<0.00020	0.0011	<0.10	4.6	<0.00020	0.69	<0.00010	3.1	0.059	56	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.095
	RPD		*30%*	*NC*	*47%*	*8.0%*	*NC*	*NC*	*22%*	*3.5%*	*NC*	*NC*	*21%*	*4.1%*	*NC*	*NC*	*3.3%*	*1.5%*	*NC*	*24%*	*NC*	*2.2%*	*NC*	*2.9%*	*NC*	*3.2%*	*1.7%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*15%*
	19-Sep-23		0.034	<0.00060	0.00025	0.013	<0.0010	0.022	**0.00035**	60	<0.0010	<0.00030	0.0086	**2.2**	<0.00020	<0.020	9.5	0.064	<0.00020	0.0010	<0.10	4.4	<0.00020	0.75	<0.00010	3.4	0.053	62	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	4-Oct-23		0.033	<0.00060	0.00027	0.014	<0.0010	<0.020	**0.00035**	64	<0.0010	<0.00030	0.0082	**2.1**	<0.00020	<0.020	9.6	0.073	<0.00020	0.0010	<0.10	4.6	<0.00020	0.78	<0.00010	3.4	0.065	65	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	17-Oct-23		0.033	<0.00060	<0.00020	0.015	<0.0010	0.033	0.00039	64	<0.0010	0.00031	0.0079	**1.8**	0.0011	<0.020	9.4	0.082	<0.00020	0.0011	<0.10	4.8	<0.00020	0.90	<0.00010	3.4	0.064	64	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NB-2	14-Feb-23		**0.091**	<0.00060	0.00030	0.020	<0.0010	<0.020	**0.00076**	59	<0.0010	0.00058	**0.014**	**2.7**	<0.00020	<0.020	9.8	0.11	<0.00020	0.0015	<0.10	4.9	<0.00020	1.7	<0.00010	3.7	0.068	63	<0.00020	<0.0010	0.0034	<0.00010	<0.0010	**0.23**
	16-May-23		0.11	<0.00060	<0.00020	0.012	<0.0010	<0.020	**0.00086**	43	<0.0010	0.0014	**0.034**	**2.0**	<0.00020	<0.020	6.9	0.19	<0.00020	0.0018	<0.10	3.3	0.00021	1.6	<0.00010	2.5	0.046	43	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	**0.29**
	30-May-23		**0.079**	<0.00060	<0.00020	0.012	<0.0010	0.020	**0.00063**	43	<0.0010	0.00092	**0.023**	**3.4**	<0.00020	<0.020	7.6	0.19	0.00026	0.0014	<0.10	3.4	<0.00020	1.7	<0.00010	2.6	0.042	44	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	**0.19**
	13-Jun-23		0.056	<0.00060	<0.00020	0.011	<0.0010	<0.020	**0.00060**	43	<0.0010	0.00048	**0.019**	**1.7**	<0.00020	<0.020	7.1	0.11	<0.00020	0.0014	<0.10	3.4	<0.00020	1.2	<0.00010	2.6	0.046	41	<0.00020	<0.0010	0.0018	<0.00010	<0.0014	**0.17**
	27-Jun-23		0.053	<0.00060	0.00025	0.011	<0.0010	<0.020	**0.00043**	46	<0.0010	0.00034	**0.014**	**2.0**	<0.00020	<0.020	7.6	0.089	<0.00020	0.0013	<0.10	3.5	<0.00020	1.2	<0.00010	2.8	0.044	45	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	**0.13**
		SW-112	0.070	<0.00060	0.00026	0.010	<0.0010	0.021	**0.00042**	45	<0.0010	0.00034	**0.015**	**2.0**	<0.00020	<0.020	7.6	0.087	<0.00020	0.0018	<0.10	3.5	<0.00020	1.2	<0.00010	2.8	0.044	44	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	**0.13**
	RPD		*28%*	*NC*	*3.9%*	*10%*	*NC*	*NC*	*2.4%*	*2.2%*	*NC*	*0.0%*	*6.9%*	*0.0%*	*NC*	*NC*	*0.0%*	*2.3%*	*NC*	*32%*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*2.2%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*0.0%*
	11-Jul-23		0.053	<0.00060	0.00034	0.010	<0.0010	<0.020	0.00036	45	<0.0010	<0.00030	0.014	**2.1**	<0.00020	<0.020	8.0	0.050	<0.00020	0.0015	<0.10	3.5	<0.00020	1.0	<0.00010	2.7	0.049	42	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.11
	25-Jul-23		0.048	<0.00060	0.00039	0.011	<0.0010	<0.020	**0.00033**	43	<0.0010	<0.00030	0.011	**3.0**	<0.00020	<0.020	7.2	0.040	<0.00020	0.0011	<0.10	3.5	<0.00020	0.84	<0.00010	2.9	0.040	42	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.10
	9-Aug-23		0.048	<0.00060	0.0003	0.011	<0.0010	0.022	0.00037	47	<0.0010	<0.00030	0.015	**2.5**	<0.00020	<0.020	7.7	0.046	<0.00020	0.00097	<0.10	3.8	<0.00020	0.89	<0.00010	2.8	0.050	51	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	22-Aug-23		0.039	<0.00060	0.00031	0.012	<0.0010	<0.020	**0.00035**	53	<0.0010	<0.00030	0.013	**2.0**	0.00025	<0.020	8.4	0.052	<0.00020	0.0010	<0.10	4.1	<0.00020	0.78	<0.00010	3.1	0.055	51	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.10
	6-Sep-23		0.046	<0.00060	0.00036	0.012	<0.0010	<0.020	0.00046	57	<0.0010	<0.00030	0.014	**1.8**	<0.00020	<0.020	9.1	0.057	<0.00020	0.0014	<0.10	4.6	<0.00020	0.72	<0.00010	3.2	0.060	57	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.13
	19-Sep-23		0.034	0.0012	0.00028	0.013	<0.0010	<0.020	0.00033	59	<0.0010	<0.00030	0.0087	**2.0**	<0.00020	<0.020	9.4	0.058	<0.00020	0.0012	<0.10	4.4	<0.00020	0.69	<0.00010	3.4	0.052	60	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.091
	4-Oct-23		0.033	<0.00060	0.00032	0.015	<0.0010	0.021	0.00042	64	<0.0010	<0.00030	0.0089	**1.9**	0.00036	<0.020	10	0.067	<0.00020	0.0011	<0.10	4.8	<0.00020	0.73	<0.00010	3.5	0.056	63	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.11
	17-Oct-23		0.033	<0.00060	0.00025	0.012	<0.0010	<0.020	0.00039	55	<0.0010	0.00031	0.0084	**1.6**	<0.00020	<0.020	8.2	0.073	<0.00020	0.0016	<0.10	4.1	<0.00020	0.79	<0.00010	2.9	0.055	64	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.11
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB-1	14-Feb-23		**0.068**	<0.00060	0.00039	0.020	<0.0010	<0.020	**0.00081**	62	<0.0010	0.00058	**0.015**	**3.2**	0.00024	<0.020	11	0.12	<0.00020	0.0016	<0.10	5.1	<0.00020	1.7	<0.00010	3.9	0.072	67	<0.00020	<0.0010	0.0032	<0.00010	<0.0010	**0.22**
		SW-102	**0.072**	<0.00060	0.00040	0.020	<0.0010	<0.020	**0.00082**	60	<0.0010	0.00057	**0.015**	**3.1**	0.00021	<0.020	10	0.12	<0.00020	0.0017	<0.10	4.9	<0.00020	1.7	<0.00010	3.8	0.070	65	<0.00020	<0.0010	0.0026	<0.00010	<0.0010	**0.22**
	RPD		*5.7%*	*NC*	*2.5%*	*0.0%*	*NC*	*NC*	*1.2%*	*3.3%*	*NC*	*1.7%*	*0.0%*	*3.2%*	*NC*	*NC*	*9.5%*	*0.0%*	*NC*	*6.1%*	*NC*	*4.0%*	*NC*	*0.0%*	*NC*	*2.6%*	*2.8%*	*3.0%*	*NC*	*NC*	*20.7%*	*NC*	*NC*	*0.0%*
	16-May-23		**0.17**	<0.00060	0.00027	0.013	<0.0010	<0.020	**0.0013**	48	<0.0010	0.0029	**0.044**	**2.6**	<0.00020	<0.020	7.6	0.31	<0.00020	0.0027	<0.10	3.5	0.00021	1.6	<0.00010	2.8	0.051	51	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	**0.40**
	30-May-23		**0.10**	<0.00060	0.00028	0.014	<0.0010	<0.020	**0.0010**	49	<0.0010	0.0017	**0.029**	**3.1**	<0.00020	<0.020	8.5	0.25	<0.00020	0.0025	<0.10	3.7	<0.00020	1.6	<0.00010	2.8	0.048	50	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	**0.30**
	13-Jun-23		0.073	<0.00060	0.00027	0.012	<0.0010	<0.020	**0.00072**	46	<0.0010	0.00071	**0.023**	**1.6**	<0.00020	<0.020	7.7	0.13	<0.00020	0.0019	<0.10	3.6	<0.00020	1.1	<0.00010	2.8	0.050	45	<0.00020	<0.0010	0.0015	<0.00010	<0.0014	**0.21**
		SW-108	0.071	<0.00060	<0.00020	0.013	<0.0010	<0.020	**0.00072**	48	<0.0010	0.00083	**0.024**	**1.7**	<0.00020	<0.020	7.9	0.14	<0.00020	0.0019	<0.10	3.8	<0.00020	1.1	<0.00010	2.9	0.051	47	<0.00020	<0.0010	0.0015	<0.00010	<0.0014	**0.22**
	RPD		*2.8%*	*NC*	*NC*	*8.0%*	*NC*	*NC*	*0.0%*	*4.3%*	*NC*	*15.6%*	*4.3%*	*6.1%*	*NC*	*NC*	*2.6%*	*7.4%*	*NC*	*0.0%*	*NC*	*5.4%*	*NC*	*0.0%*	*NC*	*3.5%*	*2.0%*	*4.3%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*4.7%*
	27-Jun-23		0.078	<0.00060	0.00032	0.013	<0.0010	<0.020	**0.00053**	48	<0.0010	0.00042	**0.016**	**1.8**	<0.00020	<0.020	7.8	0.089	<0.00020	0.0015	<0.10	3.7	<0.00020	1.0	<0.00010	2.9	0.053	47	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	**0.13**
	11-Jul-23		0.065	<0.00060	0.00032	0.013	<0.0010	<0.020	0.00043	51	<0.0010	<0.00030	0.012	**1.5**	<0.00020	<0.020	8.0	0.041	<0.00020	0.0015	<0.10	3.9	<0.00020	0.87	<0.00010	3.2	0.054	47	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	0.13
	25-Jul-23		0.065	<0.00060	0.00035	0.012	<0.0010	<0.020	**0.00041**	47	<0.0010	<0.00030	0.012	**2.2**	<0.00020	<0.020	8.0	0.028	<0.00020	0.0011	<0.10	4.0	<0.00020	0.79	<0.00010	3.0	0.043	48	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.12
	9-Aug-23		0.077	<0.00060	0.00032	0.013	<0.0010	<0.020	0.00053	48	<0.0010	<0.00030	0.016	**2.2**	<0.00020	<0.020	8.0	0.037	<0.00020	0.0017	<0.10	4.0	<0.00020	0.75	<0.00010	2.9	0.052	54	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.15
	22-Aug-23		0.066	<0.00060	0.00029	0.014	<0.0010	<0.020	0.00057	54	<0.0010	0.00032	0.017	**1.8**	<0.00020	<0.020	8.7	0.038	<0.00020	0.0021	<0.10	4.4	<0.00020	0.70	<0.00010	3.3	0.050	55	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.16
	6-Sep-23		0.045	<0.00060	0.00024	0.014	<0.0010	<0.020	0.00047	58	<0.0010	<0.00030	0.012	**1.3**	<0.00020	<0.020	9.2	0.046	<0.00020	0.0012	<0.10	4.9	<0.00020	0.55	<0.00010	3.4	0.064	58	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.14
	19-Sep-23		0.052	<0.00060	0.00026	0.015	<0.0010	0.021	**0.00049**	63	<0.0010	<0.00030	0.0097	**1.5**	<0.00020	<0.020	10	0.045	<0.00020	0.0013	<0.10	4.7	<0.00020	0.64	<0.00010	3.7	0.057	62	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.14
	4-Oct-23		0.060	<0.00060	0.00025	0.015	<0.0010	<0.020	0.00051	63	<0.0010	0.00032	0.010	**1.6**	<0.00020	<0.020	9.6	0.055	<0.00020	0.0015	<0.10	4.9	<0.00020	0.67	<0.00010	3.7	0.066	64	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.15
	17-Oct-23		**0.074**	<0.00060	<0.00020	0.015	<0.0010	0.027	**0.00066**	65	<0.0010	0.00051	0.013	**1.5**	<0.00020	<0.020	9.5	0.067	<0.00020	0.0014	<0.10	5.0	<0.00020	0.80	<0.00010	3.6	0.064	65	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	0.19
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EB-2	14-Feb-23		**0.072**	<0.00060	0.00034	0.022	<0.0010	0.021	**0.00087**	68	<0.0010	0.00064	**0.015**	**3.4**	<0.00020	<0.020	11	0.13	<0.00020	0.0017	<0.10	5.4	<0.00020	1.9	<0.00010	4.2	0.078	75	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	**0.23**
	16-May-23		**0.17**	<0.00060	0.00025	0.014	<0.0010	0.020	**0.0013**	49	<0.0010	0.0031	**0.039**	**2.7**	<0.00020	<0.020	7.6	0.34	<0.00020	0.003	<0.10	3.5	0.00020	1.6	<0.00010	2.8	0.052	50	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	**0.40**
	30-May-23		**0.12**	<0.00060	0.00026	0.015	<0.0010	0.021	**0.00096**	49	<0.0010	0.0018	**0.026**	**2.9**	<0.00020	<0.020	8.2	0.26	<0.00020	0.0022	<0.10	3.8	<0.00020	1.5	<0.00010	3.0	0.049	44	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	**0.25**
	13-Jun-23		0.056	<0.00060	0.00031	0.011	<0.0010	<0.020	**0.00063**	44	<0.0010	0.00054	**0.019**	**1.8**	<0.00020	<0.020	7.4	0.12	<0.00020	0.0015	<0.10	3.4	0.00020	1.3	<0.00010	2.6	0.049	43	0.00052	<0.0010	0.0016	<0.00010	<0.0010	**0.18**
	27-Jun-23		0.071	<0.00060	0.00026	0.013	<0.0010	<0.020	**0.00058**	53	<0.0010	0.00049	**0.016**	**1.6**	<0.00020	<0.020	8.6	0.093	<0.00020	0.0015	<0.10	4.1	<0.00020	1.0	<0.00010	3.2	0.049	53	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	**0.16**
	11-Jul-23		0.15	<0.00060	0.00027	0.014	<0.0010	<0.020	0.00046	53	<0.0010	<0.00030	0.013	**1.4**	<0.00020	<0.020	9.0	0.040	<0.00020	0.0019	<0.10	3.9	<0.00020	1.2	<0.00010	3.1	0.056	49	<0.00020	<0.0010	0.0071	<0.00010	<0.0010	0.13
	25-Jul-23		**0.077**	<0.00060	0.00038	0.014	<0.0010	0.023	**0.00042**	47	<0.0010	<0.00030	0.012	**2.2**	<0.00020	<0.020	7.7	0.031	0.00034	0.0012	<0.10	3.9	0.00020	0.85	<0.00010	3.0	0.054	48	<0.00020	0.0011	0.0022	<0.00010	<0.0010	0.11
		SW-118	0.065	<0.00060	0.00027	0.013	<0.0010	0.024	**0.00042**	50	<0.0010	<0.00030	0.011	**2.0**	<0.00020	<0.020	8.7	0.030	<0.00020	0.0010	<0.10	4.1	<0.00020	0.81	<0.00010	3.2	0.047	47	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.12
	RPD		*17%*	*NC*	*34%*	*7.4%*	*NC*	*NC*	*0.0%*	*6.2%*	*NC*	*NC*	*8.7%*	*9.5%*	*NC*	*NC*	*12%*	*3.3%*	*NC*	*18%*	*NC*	*5.0%*	*NC*	*4.8%*	*NC*	*6.5%*	*14%*	*2.1%*	*NC*	*NC*	*4.4%*	*NC*	*NC*	*8.7%*
	9-Aug-23		**0.085**	<0.00060	0.00028	0.013	<0.0010	<0.020	0.00048	50	<0.0010	<0.00030	0.012	**2.0**	<0.00020	<0.020	8.1	0.034	<0.00020	0.0013	<0.10	4.1	<0.00020	0.77	<0.00010	3.0	0.053	55	<0.00020	<0.0010	0.002	<0.00010	<0.0010	0.14
	22-Aug-23		0.066	0.00064	0.00023	0.015	<0.0010	<0.020	0.00047	57	<0.0010	<0.00030	0.011	**1.7**	<0.00020	<0.020	9.1	0.039	<0.00020	0.0011	<0.10	4.6	<0.00020	0.72	<0.00010	3.4	0.052	57	<0.00020	<0.0010	0.0029	<0.00010	<0.0010	0.13
	6-Sep-23		0.058	<0.00060	0.0003	0.014	<0.0010	<0.020	0.00059	57	<0.0010	0.00034	0.012	**1.4**	<0.00020	<0.020	8.9	0.047	<0.00020	0.0017	<0.10	4.7	<0.00020	0.57	<0.00010	3.3	0.060	57	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.16
	19-Sep-23		**0.069**	<0.00060	0.00034	0.015	<0.0010	<0.020	**0.00066**	60	<0.0010	0.00038	0.013	**1.4**	0.00030	<0.020	9.6	0.048	<0.00020	0.0018	<0.10	4.8	<0.00020	0.65	<0.00010	3.4	0.063	60	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.20
	4-Oct-23		0.065	<0.00060	0.00031	0.016	<0.0010	<0.020	**0.00072**	67	<0.0010	0.00042	0.012	**1.6**	<0.00020	<0.020	10	0.057	<0.00020	0.0020	<0.10	5.2	<0.00020	0.60	<0.00010	3.8	0.058	66	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.21
	17-Oct-23		**0.087**	<0.00060	<0.00020	0.015	<0.0010	<0.020	**0.00074**	65	<0.0010	0.00060	0.014	**1.4**	<0.00020	<0.020	9.3	0.065	<0.00020	0.0019	<0.10	4.9	<0.00020	0.73	<0.00010	3.6	0.066	64	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.22
		SW-138	**0.079**	<0.00060	0.00021	0.018	<0.0010	0.021	**0.00068**	66	<0.0010	0.00053	0.012	**1.4**	<0.00020	<0.020	9.6	0.066	<0.00020	0.0018	<0.10	5.0	<0.00020	0.77	<0.00010	3.6	0.069	66	<0.00020	<0.0010	0.0026	<0.00010	<0.0010	0.20
	RPD		*10%*	*NC*	*NC*	*18%*	*NC*	*NC*	*8.5%*	*1.5%*	*NC*	*12%*	*15%*	*0.0%*	*NC*	*NC*	*3.2%*	*1.5%*	*NC*	*5.4%*	*NC*	*2.0%*	*NC*	*5.3%*	*NC*	*0.0%*	*4.4%*	*3.1%*	*NC*	*NC*	*8.0%*	*NC*	*NC*	*10%*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
Camp Lake Discharge	14-Feb-23		**0.081**	<0.00060	0.00032	0.019	<0.0010	<0.020	**0.00089**	63	<0.0010	0.00064	**0.017**	**3.2**	<0.00020	<0.020	10	0.11	<0.00020	0.0017	<0.10	5.1	<0.00020	1.6	<0.00010	3.8	0.070	68	<0.00020	<0.0010	0.0032	<0.00010	<0.0010	**0.26**
	16-May-23		**0.12**	<0.00060	0.00021	0.012	<0.0010	<0.020	**0.00089**	44	<0.0010	0.0014	**0.036**	**1.8**	<0.00020	<0.020	6.9	0.17	<0.00020	0.0018	<0.10	3.3	<0.00020	1.7	<0.00010	2.6	0.047	45	<0.00020	<0.0010	0.0026	<0.00010	<0.0010	**0.31**
	30-May-23		**0.089**	<0.00060	0.00033	0.013	<0.0010	<0.020	**0.00082**	46	<0.0010	0.0012	**0.028**	**3.9**	<0.00020	<0.020	8.2	0.20	<0.00020	0.0017	<0.10	3.5	<0.00020	1.6	<0.00010	2.6	0.046	47	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	**0.24**
		SW-105	**0.086**	<0.00060	0.0003	0.013	<0.0010	<0.020	**0.00080**	46	<0.0010	0.0011	**0.028**	**3.6**	<0.00020	<0.020	8.2	0.19	<0.00020	0.0016	<0.10	3.5	<0.00020	1.5	<0.00010	2.6	0.046	44	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	**0.24**
	RPD		*3%*	*NC*	*9.5%*	*0%*	*NC*	*NC*	*2.5%*	*0.0%*	*NC*	*NC*	*0.0%*	*8.0%*	*NC*	*NC*	*0.0%*	*5.1%*	*NC*	*6.1%*	*NC*	*0%*	*NC*	*6%*	*NC*	*0.0%*	*0.0%*	*6.6%*	*NC*	*NC*	*22.2%*	*NC*	*NC*	*0%*
	13-Jun-23		0.050	<0.00060	0.00022	0.011	<0.0010	<0.020	**0.00058**	45	<0.0010	0.00050	**0.022**	**1.8**	<0.00020	<0.020	7.5	0.11	0.00086	0.0016	<0.10	3.6	<0.00020	1.2	<0.00010	2.7	0.048	43	<0.00020	<0.0010	<0.0010	<0.00010	<0.0014	**0.17**
	27-Jun-23		0.052	<0.00060	0.00026	0.011	<0.0010	<0.020	**0.00044**	49	<0.0010	0.00036	**0.015**	**2.0**	<0.00020	<0.020	8.2	0.091	<0.00020	0.0014	<0.10	3.7	<0.00020	1.2	<0.00010	2.9	0.046	48	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	**0.13**
	11-Jul-23		0.039	<0.00060	0.00028	0.010	<0.0010	<0.020	0.00034	47	<0.0010	<0.00030	0.013	**2.2**	<0.00020	<0.020	8.1	0.055	<0.00020	0.0014	<0.10	3.5	<0.00020	0.98	<0.00010	2.7	0.049	44	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.11
	25-Jul-23		0.059	<0.00060	0.00029	0.012	<0.0010	<0.020	**0.00033**	46	<0.0010	<0.00030	0.011	**3.2**	<0.00020	<0.020	7.8	0.043	<0.00020	0.00096	<0.10	3.7	<0.00020	0.83	<0.00010	3.0	0.042	44	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	0.10
	9-Aug-23		0.048	<0.00060	0.00026	0.011	<0.0010	<0.020	0.00034	46	<0.0010	<0.00030	0.013	**2.3**	<0.00020	<0.020	7.5	0.047	0.00021	0.00099	<0.10	3.6	<0.00020	0.86	<0.00010	2.7	0.048	50	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.098
	22-Aug-23		0.044	<0.00060	0.00031	0.012	<0.0010	<0.020	0.00037	54	<0.0010	<0.00030	0.013	**2.0**	<0.00020	<0.020	8.4	0.055	<0.00020	0.0012	<0.10	4.1	<0.00020	0.80	<0.00010	3.1	0.056	52	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.11
	6-Sep-23		0.055	<0.00060	0.00035	0.013	<0.0010	<0.020	0.00046	60	<0.0010	<0.00030	0.015	**2.6**	<0.00020	<0.020	9.1	0.064	<0.00020	0.0013	<0.10	4.6	<0.00020	0.73	<0.00010	3.2	0.060	58	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.14
	19-Sep-23		0.038	<0.00060	0.00030	0.015	<0.0010	0.023	0.00032	64	<0.0010	<0.00030	0.0097	**2.3**	<0.00020	<0.020	10	0.073	<0.00020	0.0013	<0.10	4.8	<0.00020	0.81	<0.00010	3.6	0.064	65	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.094
	4-Oct-23		0.045	<0.00060	0.00039	0.013	<0.0010	<0.020	0.00048	62	0.0031	0.00034	0.010	**2.2**	<0.00020	<0.020	9.6	0.072	<0.00020	0.0013	<0.10	4.6	<0.00020	0.77	<0.00010	3.3	0.065	66	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.14
		SW-132	0.036	<0.00060	0.00029	0.014	<0.0010	<0.020	0.00036	66	<0.0010	<0.00030	0.0083	**2.2**	<0.00020	<0.020	9.8	0.073	<0.00020	0.0010	<0.10	4.8	<0.00020	0.79	<0.00010	3.5	0.066	65	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.10
	RPD		*22%*	*NC*	*29%*	*7.4%*	*NC*	*NC*	*29%*	*6.3%*	*NC*	*NC*	*19%*	*0.0%*	*NC*	*NC*	*2.1%*	*1.4%*	*NC*	*26%*	*NC*	*4.3%*	*NC*	*2.6%*	*NC*	*5.9%*	*1.5%*	*1.5%*	*NC*	*NC*	*17.1%*	*NC*	*NC*	*33%*
	17-Oct-23		0.036	<0.00060	0.00022	0.014	<0.0010	0.021	0.00040	63	0.0019	0.00030	0.0082	**1.6**	<0.00020	<0.020	9.4	0.077	<0.00020	0.0016	<0.10	4.7	<0.00020	0.83	<0.00010	3.3	0.063	63	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.12
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																	
Protection of Aquatic Life and Wildlife																																	
Tier II Objective - Chronic			-	-	-	-	-	-	*0.00018 [2a]*	-	*0.056*	-	*0.00598 [2a]*	-	*0.00164 [2a]*	-	-	-	-	*0.0336 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0771 [2a]*
Tier II Objective - Acute			-	-	-	-	-	-	*0.00125 [2a]*	-	*1.176*	-	*0.00857 [2a]*	-	*0.0421 [2a]*	-	-	-	-	*0.302 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0771 [2a]*
Tier III Guideline			*0.1 (pH ≥ 6.5) 0.005 (pH <6.5)*	-	-	-	-	-	-	-	-	-	-	*0.3*	-	-	-	-	*0.073*	-	-	-	*0.001*	-	*0.0001*	-	-	-	*0.0008*	-	-	*0.015*	-	-
Camp Lake Water Quality Performance Objectives [3]																																	
Sampling Event Dates	14-Feb-23		*0.038 [3a]*	-	-	-	-	-	*0.00012 [3a]*	-	-	-	*0.0056 [3b]*	*0.23 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.046 [3a]*
	16-May-23		*0.113 [3a]*	-	-	-	-	-	*0.00019 [3a]*	-	-	-	*0.0087 [3b]*	*0.40 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.061 [3a]*
	30-May-23		*0.070 [3a]*	-	-	-	-	-	*0.00024 [3a]*	-	-	-	*0.0096 [3b]*	*0.25 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.070 [3a]*
	13-Jun-23		*0.084 [3a]*	-	-	-	-	-	*0.00026 [3a]*	-	-	-	*0.0129 [3b]*	*0.28 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.086 [3a]*
	27-Jun-23		*0.098 [3a]*	-	-	-	-	-	*0.00015 [3a]*	-	-	-	*0.0072 [3b]*	*0.31 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.044 [3a]*
	11-Jul-23		*0.225 [3a]*	-	-	-	-	-	*0.00078 [3a]*	-	-	-	*0.0260 [3b]*	*0.43 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.288 [3a]*
	25-Jul-23		*0.071 [3a]*	-	-	-	-	-	*0.00031 [3a]*	-	-	-	*0.0122 [3b]*	*0.46 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.138 [3a]*
	9-Aug-23		*0.078 [3a]*	-	-	-	-	-	*0.00090 [3a]*	-	-	-	*0.0351 [3b]*	*0.65 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.363 [3a]*
	22-Aug-23		*0.066 [3a]*	-	-	-	-	-	*0.00061 [3a]*	-	-	-	*0.0234 [3b]*	*0.50 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.250 [3a]*
	6-Sep-23		*0.098 [3a]*	-	-	-	-	-	*0.00111 [3a]*	-	-	-	*0.0468 [3b]*	*0.55 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.475 [3a]*
	19-Sep-23		*0.055 [3a]*	-	-	-	-	-	*0.00051 [3a]*	-	-	-	*0.0208 [3b]*	*0.41 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.225 [3a]*
	4-Oct-23		*0.090 [3a]*	-	-	-	-	-	*0.00064 [3a]*	-	-	-	*0.0221 [3b]*	*0.64 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.300 [3a]*
	17-Oct-23		*0.056 [3a]*	-	-	-	-	-	*0.00063 [3a]*	-	-	-	*0.0221 [3b]*	*0.30 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.275 [3a]*
	31-Oct-23		*0.060 [3a]*	-	-	-	-	-	*0.00038 [3a]*	-	-	-	*0.0105 [3b]*	*0.34 [3a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.163 [3a]*

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 59.4 mg/L as $CaCO_3$ as measured in Cold Lake on May 11, 2016.
3. Camp Lake Water Quality Performance Objectives (CLWQPO). Final Adaptive Management Plan - Sherridon Orphaned Mine Site Reclamation Project, August 16, 2022.
   a. Aluminum, cadmium, iron, and zinc objectives calculated as ambient SC-1 + 25%. The 25% allowance is to account for sampling and analytical variation as per DJRC (2022).
   b. Copper objectives calculated as ambient SC-1 + 30%. Based on pre-construction prediction that total Cu will be 5 to 10% higher than in Sherlett Creek (from SENES 2008) plus 25% allowance for sampling and analytical variation as per DJRC (2022).
   c. Ambient SC-1 refers to the concentration measured at Sherlett Creek station SC-1 within the previous 7 days.

- Values above MWQSOG value.
BOLD - Values above CLWQPO value.

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																															
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
Sherlett Creek																																		
SC-1	14-Feb-23		0.030	<0.00060	0.00069	<0.010	<0.0010	<0.020	0.000095	9.2	<0.0010	<0.00030	0.0043	0.18	<0.00020	<0.020	2.9	0.017	<0.00020	<0.00050	<0.10	1.4	<0.00020	1.3	<0.00010	1.9	0.024	1.5	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.037
	16-May-23		0.090	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.00015	7.3	<0.0010	<0.00030	0.0067	0.32	<0.00020	<0.020	2.2	0.023	<0.00020	0.00058	<0.10	1.1	<0.00020	1.7	<0.00010	1.3	<0.020	1.4	<0.00020	<0.0010	0.0034	<0.00010	<0.0010	0.049
		SW-102	0.086	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.00015	7.6	<0.0010	<0.00030	0.0066	0.32	<0.00020	<0.020	2.3	0.023	<0.00020	0.00056	<0.10	1.2	<0.00020	1.6	<0.00010	1.4	<0.020	1.3	<0.00020	<0.0010	0.0030	<0.00010	<0.0010	0.049
	RPD		*4.5%*	*NC*	*15%*	*NC*	*NC*	*NC*	*0.0%*	*4.0%*	*NC*	*NC*	*1.5%*	*0.0%*	*NC*	*NC*	*4.4%*	*0.0%*	*NC*	*3.5%*	*NC*	*8.7%*	*NC*	*6.1%*	*NC*	*7.4%*	*NC*	*7.4%*	*NC*	*NC*	*12.5%*	*NC*	*NC*	*0.0%*
	30-May-23		0.056	0.0011	0.00036	<0.010	<0.0010	<0.020	0.00019	7.5	<0.0010	<0.00030	0.0074	0.20	<0.00020	<0.020	2.4	0.016	<0.00020	<0.00050	<0.10	1.1	<0.00020	1.5	<0.00010	1.4	<0.020	1.3	<0.00020	<0.0010	0.0028	<0.00010	<0.0010	0.056
	13-Jun-23		0.067	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.00021	7.7	<0.0010	<0.00030	0.010	0.22	<0.00020	<0.020	2.5	0.020	<0.00020	0.00066	<0.10	1.2	<0.00020	1.4	<0.00010	1.7	<0.020	1.6	<0.00020	<0.0010	0.0029	<0.00010	<0.0014	0.069
	27-Jun-23		0.078	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.00012	8.0	<0.0010	<0.0003	0.0055	0.25	<0.00020	<0.020	2.6	0.023	<0.00020	0.00053	<0.10	1.3	<0.00020	1.4	<0.00010	1.6	0.021	1.4	<0.00020	<0.0010	0.0028	<0.00010	<0.0010	0.035
	11-Jul-23		0.18	<0.00060	0.00046	<0.010	<0.0010	0.037	0.00062	10	<0.0010	<0.00030	0.020	0.34	<0.00020	<0.020	3.0	0.050	<0.00020	0.0013	<0.10	1.3	<0.00020	1.4	<0.00010	2.3	0.030	2.8	<0.00020	<0.0010	0.0031	<0.00010	<0.0010	0.23
	25-Jul-23		0.057	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.00025	8.9	<0.0010	<0.00030	0.0094	0.37	<0.00020	<0.020	2.8	0.044	0.00034	0.00053	<0.10	1.3	<0.00020	1.1	<0.00010	2.0	0.021	1.9	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.11
	9-Aug-23		0.062	<0.00060	0.00056	<0.010	<0.0010	<0.020	0.00072	9.7	<0.0010	<0.00030	0.027	0.52	<0.00020	<0.020	3.0	0.080	0.00077	0.00068	<0.10	1.5	<0.00020	1.4	<0.00010	1.9	0.024	3.3	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.29
	22-Aug-23		0.053	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.00049	9.6	<0.0010	<0.00030	0.018	0.40	<0.00020	<0.020	2.9	0.062	<0.00020	0.00061	<0.10	1.3	<0.00020	1.4	<0.00010	1.9	0.024	2.3	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.20
	6-Sep-23		0.078	<0.00060	0.00068	<0.010	<0.0010	<0.020	0.00089	9.9	<0.0010	0.00032	0.036	0.44	<0.00020	<0.020	3.1	0.062	<0.00020	0.0011	<0.10	1.6	<0.00020	1.4	<0.00010	2.0	0.025	3.1	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.38
	19-Sep-23		0.044	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.00041	9.1	<0.0010	<0.00030	0.016	0.33	<0.00020	<0.020	2.8	0.049	<0.00020	0.00081	<0.10	1.4	<0.00020	1.4	<0.00010	2.0	0.022	2.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.18
	3-Oct-23		0.072	0.00091	0.00044	<0.010	<0.0010	<0.020	0.00051	11	<0.0010	<0.00030	0.017	0.51	<0.00020	<0.020	3.5	0.088	<0.00020	0.0010	<0.10	1.9	<0.00020	1.7	<0.00010	2.7	0.026	3.9	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.24
	17-Oct-23		0.045	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.00050	10	<0.0010	<0.00030	0.017	0.24	<0.00020	<0.020	3.0	0.071	<0.00020	0.00059	<0.10	1.5	<0.00020	1.4	<0.00010	3.3	0.024	3.7	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.22
	31-Oct-23		0.048	<0.00060	0.00042	0.010	<0.0010	0.032	0.00030	11	<0.0010	<0.00030	0.0081	0.27	<0.00020	<0.020	3.3	0.079	<0.00020	0.00059	<0.10	1.7	<0.00020	1.4	<0.00010	5.3	0.028	3.1	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.13
SC-2	13-Jun-23		0.075	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.00033	7.7	<0.0010	<0.00030	0.013	0.23	<0.00020	<0.020	2.5	0.021	<0.00020	0.00050	<0.10	1.3	<0.00020	1.4	<0.00010	1.5	0.020	1.6	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.10
		SW-109	0.070	<0.00060	0.00054	<0.010	<0.0010	<0.020	0.00035	7.7	<0.0010	<0.00030	0.014	0.23	<0.00020	<0.020	2.5	0.021	<0.00020	0.00076	<0.10	1.2	<0.00020	1.4	<0.00010	1.5	0.020	1.6	0.00053	<0.0010	0.0023	<0.00010	<0.0010	0.099
	RPD		*6.9%*	*NC*	*25%*	*NC*	*NC*	*NC*	*5.9%*	*0.0%*	*NC*	*NC*	*7.4%*	*0.0%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*41%*	*NC*	*8.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*0.0%*	*NC*	*NC*	*8.3%*	*NC*	*NC*	*1.0%*
	3-Oct-23		0.086	<0.00060	0.00063	<0.010	<0.0010	<0.020	0.00079	10	<0.0010	0.00038	0.025	0.46	<0.00020	<0.020	3.2	0.081	<0.00020	0.0012	<0.10	1.6	<0.00020	1.8	<0.00010	2.2	0.027	3.8	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.36
SC-3	13-Jun-23		0.15	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.0011	7.8	<0.0010	0.00041	0.042	0.39	0.00031	<0.020	2.5	0.036	<0.00020	0.00083	<0.10	1.2	<0.00020	1.6	<0.00010	1.5	<0.020	2.0	<0.00020	<0.0010	0.0063	0.00012	<0.0010	0.24
	3-Oct-23		0.10	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.00062	9.4	<0.0010	<0.00030	0.018	0.41	<0.00020	<0.020	3.0	0.063	<0.00020	0.00092	<0.10	1.6	<0.00020	1.7	<0.00010	2.2	0.025	3.3	<0.00020	<0.0010	0.0030	<0.00010	<0.0010	0.26
SC-4	13-Jun-23		0.170	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.000040	7.4	<0.0010	<0.00030	0.0027	0.40	0.00021	<0.020	2.4	0.032	<0.00020	0.00076	<0.10	1.3	<0.00020	1.6	<0.00010	1.4	<0.020	1.1	<0.00020	<0.0010	0.0094	<0.00010	0.0011	0.0061
	3-Oct-23		0.045	<0.00060	0.00053	<0.010	<0.0010	<0.020	<0.000020	8.7	<0.0010	<0.00030	0.0020	0.37	<0.00020	<0.020	3.0	0.030	<0.00020	0.00061	<0.10	1.6	<0.00020	1.6	<0.00010	1.9	0.022	1.3	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.0035
		SW-134	0.059	<0.00060	0.00057	<0.010	<0.0010	<0.020	<0.000020	8.3	<0.0010	<0.00030	0.0022	0.37	<0.00020	<0.020	2.7	0.030	<0.00020	0.00060	<0.10	1.4	<0.00020	1.6	<0.00010	1.7	0.023	1.3	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.0044
	RPD		*27%*	*NC*	*7.3%*	*NC*	*NC*	*NC*	*NC*	*4.7%*	*NC*	*NC*	*9.5%*	*0.0%*	*NC*	*NC*	*11%*	*0.0%*	*NC*	*1.7%*	*NC*	*13%*	*NC*	*0.0%*	*NC*	*11%*	*4.4%*	*0.0%*	*NC*	*NC*	*44.4%*	*NC*	*NC*	*23%*
SC-5	13-Jun-23		0.077	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.000041	7.5	<0.0010	<0.00030	0.0019	0.26	<0.00020	<0.020	2.5	0.014	<0.00020	0.00069	<0.10	1.2	<0.00020	1.4	<0.00010	1.5	<0.020	1.1	<0.00020	<0.0010	0.0032	<0.00010	<0.0010	0.0048
	3-Oct-23		0.040	<0.00060	0.00045	<0.010	<0.0010	<0.020	<0.000020	8.9	<0.0010	<0.00030	0.0020	0.31	<0.00020	<0.020	3.0	0.025	<0.00020	0.00056	<0.10	1.7	<0.00020	1.5	<0.00010	1.9	0.022	1.2	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.0034
SC-6	13-Jun-23		0.069	<0.00060	0.00053	<0.010	<0.0010	<0.020	0.000044	7.6	<0.0010	<0.00030	0.0079	0.18	<0.00020	<0.020	2.4	0.0073	<0.00020	0.00071	<0.10	1.2	<0.00020	1.4	<0.00010	1.4	<0.020	1.1	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	0.0066
	3-Oct-23		0.051	<0.00060	0.00041	<0.010	<0.0010	<0.020	<0.000020	8.6	<0.0010	<0.00030	0.0020	0.26	<0.00020	<0.020	2.8	0.026	<0.00020	0.00061	<0.10	1.6	<0.00020	1.5	<0.00010	1.8	0.021	1.1	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.0041
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.000200*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10-0.50*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																		
Protection of Aquatic Life and Wildlife																																		
Tier II Objective - Chronic			-	-	-	-	-	-	*0.00012* [2a]	-	*0.0354* [2a]	-	*0.00368* [2a]	-	*0.00080* [2a]	-	-	-	-	*0.0207* [2a]	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0477* [2a]
Tier II Objective - Acute			-	-	-	-	-	-	*0.00071* [2a]	-	*0.740* [2a]	-	*0.00502* [2a]	-	*0.0204* [2a]	-	-	-	-	*0.187* [2a]	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0477* [2a]
Tier III Guideline			*0.1 (pH ≥ 6.5)* *0.005 (pH <6.5)*	-	-	-	-	-	-	-	-	-	-	*0.3*	-	-	-	-	*0.073*	-	-	-	*0.001*	-	*0.0001*	-	-	-	*0.0008*	-	-	*0.015*	-	-

Notes:
"-" = No Data EQL = Estimated Quantitation Limit = Lowest level of the parameter that can be quantified with confidence NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 33.7 mg/L as $CaCO_3$ as measured at station SC-1 in 2023.

- Values above MWQSOG value.

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
Cold Lake																																			
CL-2 sfc	14-Feb-23		0.032	<0.00060	0.00052	0.010	<0.0010	<0.020	0.000040	13	<0.0010	<0.00030	0.0056	0.22	<0.00020	<0.020	3.5	<0.0040	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.97	<0.00010	2.2	0.031	6.6	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
	16-May-23		0.076	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.00013	13	<0.0010	<0.00030	0.0098	0.34	<0.00020	<0.020	3.0	0.022	<0.00020	0.00062	<0.10	1.5	<0.00020	1.1	<0.00010	1.8	0.024	7.3	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.057
	30-May-23		0.059	<0.00060	0.00037	0.010	<0.0010	<0.020	0.00013	15	<0.0010	<0.00030	0.0073	0.44	<0.00020	<0.020	3.7	0.026	<0.00020	0.00057	<0.10	1.7	<0.00020	1.2	<0.00010	2.0	0.027	8.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.037
	13-Jun-23		0.046	0.00063	0.00046	0.010	<0.0010	<0.020	0.000090	14	<0.0010	<0.00030	0.0073	0.27	<0.00020	<0.020	3.5	0.010	<0.00020	0.00061	<0.10	1.7	<0.00020	0.96	<0.00010	2.0	0.028	7.9	<0.00020	<0.0010	0.0018	<0.00010	<0.0014	0.034
	27-Jun-23		0.053	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000069	14	<0.0010	<0.0003	0.0063	0.24	<0.00020	<0.020	3.5	0.0094	<0.00020	0.00055	<0.10	1.6	<0.00020	0.97	<0.00010	2.0	0.027	8.2	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.028
	11-Jul-23		0.061	<0.00060	0.00054	0.010	<0.0010	<0.020	0.000080	14	<0.0010	<0.00030	0.0070	0.33	0.00038	<0.020	3.8	0.016	<0.00020	0.00071	<0.10	1.7	<0.00020	0.83	<0.00010	2.1	0.029	7.8	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.028
	25-Jul-23		0.040	<0.00060	0.00043	0.010	<0.0010	<0.020	0.000054	13	<0.0010	<0.00030	0.0052	0.25	<0.00020	<0.020	3.3	0.0077	<0.00020	0.00060	<0.10	1.5	<0.00020	0.83	<0.00010	2.0	0.028	7.4	<0.00020	0.0011	0.0013	<0.00010	<0.0010	0.015
		SW-117	0.040	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000047	13	<0.0010	<0.00030	0.0053	0.22	<0.00020	<0.020	3.4	0.0069	<0.00020	0.00062	<0.10	1.6	<0.00020	0.89	<0.00010	2.1	0.029	7.7	<0.00020	0.0012	<0.0010	<0.00010	<0.0010	0.015
	RPD		*0.0%*	*NC*	*0.0%*	*NC*	*NC*	*NC*	*14%*	*0.0%*	*NC*	*NC*	*1.9%*	*13%*	*NC*	*NC*	*3.0%*	*11.0%*	*NC*	*3.3%*	*NC*	*6.5%*	*NC*	*7.0%*	*NC*	*4.9%*	*3.5%*	*4.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*
	9-Aug-23		0.041	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.000036	13	<0.0010	<0.00030	0.0051	0.21	<0.00020	<0.020	3.5	0.0089	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.88	<0.00010	2.0	0.028	7.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
	22-Aug-23		0.033	<0.00060	0.00040	0.010	<0.0010	<0.020	0.000026	13	<0.0010	<0.00030	0.0044	0.3	<0.00020	<0.020	3.5	0.014	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.91	<0.00010	2.2	0.028	7.1	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.011
	6-Sep-23		0.050	<0.00060	0.00038	0.010	<0.0010	<0.020	0.000039	13	<0.0010	<0.00030	0.0055	0.37	<0.00020	<0.020	3.5	0.026	<0.00020	0.00073	<0.10	1.7	<0.00020	0.92	<0.00010	2.1	0.030	6.7	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.012
	19-Sep-23		0.043	<0.00060	0.00048	0.011	<0.0010	<0.020	0.000035	14	<0.0010	<0.00030	0.0053	0.38	<0.00020	<0.020	3.6	0.029	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.96	<0.00010	2.3	0.029	6.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	4-Oct-23		0.047	<0.00060	0.00058	0.012	<0.0010	<0.020	0.000035	13	<0.0010	<0.00030	0.0068	0.46	<0.00020	<0.020	3.5	0.030	<0.00020	0.00096	<0.10	1.6	<0.00020	0.99	<0.00010	2.1	0.031	7.0	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.011
		SW-133	0.047	<0.00060	0.00056	<0.010	<0.0010	<0.020	0.000030	13	<0.0010	<0.00030	0.0090	0.45	<0.00020	<0.020	3.5	0.029	<0.00020	0.0016	<0.10	1.6	<0.00020	0.95	<0.00010	2.1	0.030	6.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.011
	RPD		*0.0%*	*NC*	*3.5%*	*NC*	*NC*	*NC*	*15%*	*0.0%*	*NC*	*NC*	*28%*	*2.2%*	*NC*	*NC*	*0.0%*	*3.4%*	*NC*	*50%*	*NC*	*0.0%*	*NC*	*4.1%*	*NC*	*0.0%*	*3.3%*	*2.9%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0.0%*
	17-Oct-23		0.04	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000028	13	<0.0010	<0.00030	0.0051	0.40	<0.00020	<0.020	3.3	0.020	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.95	<0.00010	2.1	0.028	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.010
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-2 btm	14-Feb-23		0.042	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000044	13	<0.0010	<0.00030	0.0063	0.30	<0.00020	<0.020	3.5	0.0043	<0.00020	<0.00050	<0.10	1.6	<0.00020	1.0	<0.00010	2.2	0.030	6.8	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.020
		SW-101	0.037	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.000055	12	<0.0010	<0.00030	0.0057	0.28	<0.00020	<0.020	3.4	0.0042	<0.00020	0.00054	<0.10	1.5	<0.00020	1.0	<0.00010	2.1	0.029	6.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.017
	RPD		*13%*	*NC*	*25%*	*NC*	*NC*	*NC*	*22%*	*8.0%*	*NC*	*NC*	*10%*	*6.9%*	*NC*	*NC*	*2.9%*	*2.4%*	*NC*	*NC*	*NC*	*6.5%*	*NC*	*0.0%*	*NC*	*4.7%*	*3.4%*	*4.5%*	*NC*	*NC*	*NC*	*NC*	*NC*	*16%*
	16-May-23		0.048	<0.00060	0.00033	0.011	<0.0010	<0.020	0.00014	19	<0.0010	<0.00030	0.0075	0.94	<0.00020	<0.020	3.9	0.085	<0.00020	0.00056	<0.10	1.9	<0.00020	1.3	<0.00010	2.0	0.031	14	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.056
	30-May-23		0.065	0.00062	0.00043	0.010	<0.0010	<0.020	0.00013	14	<0.0010	<0.00030	0.0079	0.59	<0.00020	<0.020	3.7	0.033	<0.00020	<0.00050	<0.10	1.7	<0.00020	1.4	<0.00010	2.0	0.026	8.5	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.046
	13-Jun-23		0.040	<0.00060	0.00027	<0.010	<0.0010	<0.020	0.00010	13	<0.0010	<0.00030	0.0075	0.47	<0.00020	<0.020	3.4	0.019	<0.00020	0.00078	<0.10	1.6	<0.00020	1.0	<0.00010	1.9	0.026	6.9	<0.00020	<0.0010	<0.0010	<0.00010	<0.0014	0.035
		SW-107	0.046	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.00010	13	<0.0010	<0.00030	0.0070	0.49	<0.00020	<0.020	3.4	0.019	<0.00020	0.00064	<0.10	1.6	<0.00020	1.1	<0.00010	2.0	0.028	7.1	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.039
	RPD		*14%*	*NC*	*34%*	*NC*	*NC*	*NC*	*2.1%*	*0.0%*	*NC*	*NC*	*6.9%*	*4.2%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*20%*	*NC*	*0.0%*	*NC*	*10%*	*NC*	*5.1%*	*7.4%*	*2.9%*	*NC*	*NC*	*NC*	*NC*	*NC*	*11%*
	27-Jun-23		0.062	<0.0006	0.00044	<0.010	<0.0010	<0.020	0.000072	13	<0.0010	<0.0003	0.0061	0.41	<0.00020	<0.020	3.4	0.017	<0.00020	0.00061	<0.10	1.7	<0.00020	1.1	<0.00010	2.1	0.026	6.7	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.030
	11-Jul-23		0.071	<0.00060	0.00054	0.011	<0.0010	<0.020	0.000099	14	<0.0010	<0.00030	0.0074	0.82	<0.00020	<0.020	3.6	0.052	0.00027	0.00069	<0.10	1.7	<0.00020	1.2	<0.00010	2.2	0.030	7.1	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.033
	25-Jul-23		0.053	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.00011	13	<0.0010	<0.00030	0.0067	0.56	<0.00020	<0.020	3.3	0.045	<0.00020	0.00064	<0.10	1.6	<0.00020	1.1	<0.00010	2.0	0.025	7.0	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.031
	9-Aug-23		0.050	<0.00060	0.00042	0.011	<0.0010	<0.020	0.000091	14	<0.0010	<0.00030	0.0067	0.66	<0.00020	<0.020	3.6	0.058	<0.00020	0.00055	<0.10	1.6	<0.00020	1.2	<0.00010	2.1	0.028	8.2	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.030
	22-Aug-23		0.044	<0.00060	0.00041	0.010	<0.0010	<0.020	0.000038	13	<0.0010	<0.00030	0.0060	0.36	<0.00020	<0.020	3.5	0.025	<0.00020	0.0016	<0.10	1.6	<0.00020	0.97	<0.00010	2.1	0.027	7.1	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.013
	6-Sep-23		0.068	<0.00060	0.00072	<0.010	<0.0010	<0.020	0.000055	13	<0.0010	<0.00030	0.0088	0.37	<0.00020	<0.020	3.4	0.026	<0.00020	0.00096	<0.10	1.7	<0.00020	0.86	<0.00010	2.1	0.029	6.7	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	0.022
	19-Sep-23		0.045	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.000045	13	<0.0010	<0.00030	0.0074	0.38	0.00037	<0.020	3.3	0.029	<0.00020	0.00091	<0.10	1.6	<0.00020	0.93	<0.00010	2.2	0.026	6.7	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	4-Oct-23		0.061	<0.00060	0.00059	<0.010	<0.0010	<0.020	0.000032	13	<0.0010	<0.00030	0.0067	0.48	<0.00020	<0.020	3.5	0.026	<0.00020	0.00057	<0.10	1.6	<0.00020	1.0	<0.00010	2.1	0.030	7.0	<0.00020	<0.0010	0.0035	<0.00010	<0.0010	0.012
	17-Oct-23		0.045	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000029	14	<0.0010	<0.00030	0.0060	0.43	<0.00020	<0.020	3.4	0.021	<0.00020	0.00070	<0.10	1.6	<0.00020	1.0	<0.00010	2.1	0.029	7.1	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.011
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-3 sfc	14-Feb-23		0.034	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.00011	11	<0.0010	<0.00030	0.0065	0.24	<0.00020	<0.020	3.3	0.018	<0.00020	0.00069	<0.10	1.6	<0.00020	1.0	<0.00010	2.2	0.028	3.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.049
	16-May-23		0.089	<0.00060	0.00036	<0.010	<0.0010	<0.020	0.00037	21	<0.0010	0.00053	0.017	0.82	<0.00020	<0.020	4.1	0.067	<0.00020	0.0012	<0.10	2.0	<0.00020	1.4	<0.00010	2.0	0.031	17	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.13
	30-May-23		0.074	<0.00060	0.00035	0.010	<0.0010	<0.020	0.00015	17	<0.0010	<0.00030	0.0082	0.61	<0.00020	<0.020	3.9	0.034	<0.00020	0.00075	<0.10	1.8	<0.00020	1.2	<0.00010	2.1	0.028	9.8	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.047
	13-Jun-23		0.045	<0.00060	0.00031	0.011	<0.0010	<0.020	0.00045	40	<0.0010	0.00031	0.015	1.3	<0.00020	<0.020	6.9	0.081	<0.00020	0.0011	<0.10	3.2	<0.00020	1.2	<0.00010	2.6	0.046	38	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.14
		SW-106	0.047	<0.00060	0.00029	<0.010	<0.0010	<0.020	0.00036	32	<0.0010	0.00031	0.013	1.0	<0.00020	<0.020	5.6	0.065	<0.00020	0.0011	<0.10	2.6	<0.00020	1.0	<0.00010	2.2	0.040	30	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.11
	RPD		*4.3%*	*NC*	*6.7%*	*NC*	*NC*	*NC*	*22%*	*22%*	*NC*	*NC*	*14%*	*26%*	*NC*	*NC*	*21%*	*22%*	*NC*	*0.0%*	*NC*	*21%*	*NC*	*18%*	*NC*	*17%*	*14%*	*24%*	*NC*	*NC*	*NC*	*NC*	*NC*	*24%*
	27-Jun-23		0.070	0.00094	0.00029	0.010	<0.0010	0.021	0.00027	33	<0.0010	<0.0003	0.010	1.2	<0.00020	<0.020	6.0	0.053	<0.00020	0.0010	<0.10	2.9	<0.00020	1.1	<0.00010	2.5	0.038	30	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.085
	11-Jul-23		0.052	<0.00060	0.00051	0.010	<0.0010	<0.020	0.000066	15	<0.0010	<0.00030	0.0061	0.34	<0.00020	<0.020	3.6	0.015	<0.00020	0.00080	<0.10	1.7	<0.00020	0.88	<0.00010	2.2	0.029	8.3	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.025
	25-Jul-23		0.050	<0.00060	0.00049	0.010	<0.0010	<0.020	0.000058	14	<0.0010	<0.00030	0.0054	0.32	<0.00020	<0.020	3.5	0.010	<0.00020	0.0011	<0.10	1.6	<0.00020	0.90	<0.00010	2.1	0.030	8.6	<0.00020	0.0011	0.0016	<0.00010	<0.0010	0.016
	9-Aug-23		0.043	<0.00060	0.00040	0.011	<0.0010	0.027	0.000041	12	<0.0010	<0.00030	0.0051	0.24	<0.00020	<0.020	3.3	0.012	<0.00020	0.00068	<0.10	1.6	<0.00020	0.98	<0.00010	1.9	0.027	7.5	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.013
	22-Aug-23		0.043	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000044	15	<0.0010	<0.00030	0.0051	0.28	<0.00020	<0.020	3.7	0.017	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.83	<0.00010	2.3	0.031	7.9	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.015
	6-Sep-23		0.066	<0.00060	0.00066	<0.010	<0.0010	<0.020	0.000051	13	<0.0010	<0.00030	0.0081	0.37	<0.00020	<0.020	3.5	0.020	<0.00020	0.00073	<0.10	1.7	<0.00020	0.82	<0.00010	2.1	0.030	7.0	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.017
	19-Sep-23		0.058	<0.00060	0.00050	0.011	<0.0010	<0.020	0.000033	13	<0.0010	<0.00030	0.0060	0.37	0.00022	<0.020	3.7	0.023	<0.00020	0.00068	<0.10	1.7	<0.00020	0.95	<0.00010	2.2	0.030	6.8	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.020
	4-Oct-23		0.049	<0.00060	0.00050	0.010	<0.0010	<0.020	0.000031	14	<0.0010	<0.00030	0.0059	0.44	<0.00020	<0.020	3.6	0.018	<0.00020	0.00054	<0.10	1.7	<0.00020	0.87	<0.00010	2.3	0.029	7.0	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.011
	17-Oct-23		0.049	0.0012	0.00047	<0.010	<0.0010	<0.020	0.000033	14	<0.0010	<0.00030	0.0059	0.40	<0.00020	<0.020	3.5	0.017	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.94	<0.00010	2.2	0.03	7.3	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.011
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-3 btm	14-Feb-23		0.033	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000069	11	<0.0010	<0.00030	0.0060	0.20	<0.00020	<0.020	3.2	0.0096	<0.00020	<0.00050	<0.10	1.4	<0.00020	0.90	<0.00010	2.1	0.028	4.8	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.029
	16-May-23		0.082	<0.00060	0.00033	<0.010	<0.0010	<0.020	0.00017	15	<0.0010	<0.00030	0.013	0.54	<0.00020	<0.020	3.6	0.036	<0.00020	0.00056	<0.10	1.7	<0.00020	1.5	<0.00020	2.0	0.027	9.9	<0.00020	<0.0010	0.0026	<0.00010	<0.0010	0.071
	30-May-23		0.075	<0.00060	0.00033	0.011	<0.0010	<0.020	0.00028	23	<0.0010	0.00032	0.012	1.3	<0.00020	<0.020	4.6	0.071	<0.00020	0.0010	<0.10	2.1	<0.00020	1.3	<0.00010	2.2	0.031	17	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.081
	13-Jun-23		0.051	<0.00060	0.00035	<0.010	<0.0010	<0.020	0.00015	16	<0.0010	<0.00030	0.0078	0.39	<0.00020	<0.020	3.7	0.018	<0.00020	0.00089	<0.10	1.7	<0.00020	0.92	<0.00010	2.0	0.029	11	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.046
	27-Jun-23		0.080	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.000069	12	<0.0010	<0.00030	0.0060	1.1	<0.00020	<0.020	3.2	0.058	<0.00020	0.00054	<0.10	2.1	<0.00020	1.3	<0.00010	2.0	0.025	5.5	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.026
	11-Jul-23		0.088	<0.00060	0.00057	0.011	<0.0010	<0.020	0.000089	14	<0.0010	<0.00030	0.0070	1.1	0.00041	<0.020	3.4	0.064	<0.00020	0.00091	<0.10	1.7	<0.00020	1.2	<0.00010	2.2	0.029	6.7	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.031
	25-Jul-23		0.053	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.000055	14	<0.0010	<0.00030	0.0054	0.29	<0.00020	<0.020	3.4	0.0097	<0.00020	0.00056	<0.10	1.6	<0.00020	0.85	<0.00010	2.1	0.029	8.4	<0.00020	0.0012	0.0019	<0.00010	<0.0010	0.016
	9-Aug-23		0.044	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000037	13	<0.0010	<0.00030	0.0053	0.23	<0.00020	<0.020	3.4	0.0093	<0.00020	0.00059	<0.10	1.6	<0.00020	0.86	<0.00010	2.0	0.028	7.5	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.013
		SW-120	0.049	<0.00060	0.00052	<0.010	<0.0010	<0.020	0.000035	12	<0.0010	<0.00030	0.0049	0.23	<0.00020	<0.020	3.3	0.0095	0.0022	0.00099	<0.10	1.6	<0.00020	0.83	<0.00010	2.0	0.028	7.3	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.013
	RPD		*11%*	*NC*	*10%*	*NC*	*NC*	*NC*	*5.6%*	*8.0%*	*NC*	*NC*	*7.8%*	*0.0%*	*NC*	*NC*	*3.0%*	*2.1%*	*NC*	*51%*	*NC*	*0.0%*	*NC*	*3.6%*	*NC*	*0.0%*	*0.0%*	*2.7%*	*NC*	*NC*	*8.0%*	*NC*	*NC*	*0.0%*
	22-Aug-23		0.054	<0.00060	0.00056	0.010	<0.0010	<0.020	0.000052	14	<0.0010	<0.00030	0.0065	0.31	<0.00020	<0.020	3.6	0.017	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.85	<0.00010	2.1	0.028	8.1	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.018
	6-Sep-23		0.058	<0.00060	0.00051	0.010	<0.0010	<0.020	0.000036	13	<0.0010	<0.00030	0.0057	0.39	<0.00020	<0.020	3.5	0.021	<0.00020	0.00053	<0.10	1.7	<0.00020	0.88	<0.00010	2.1	0.030	7.0	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.014
	19-Sep-23		0.054	<0.00060	0.00048	0.010	<0.0010	<0.020	0.000041	13	<0.0010	<0.00030	0.0061	0.37	<0.00020	<0.020	3.6	0.023	<0.00020	0.00051	<0.10	1.6	<0.00020	1.0	<0.00010	2.2	0.030	6.6	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.013
	4-Oct-23		0.050	<0.00060	0.00053	<0.010	<0.0010	<0.020	0.000038	14	<0.0010	<0.00030	0.0058	0.43	<0.00020	<0.020	3.6	0.019	<0.00020	0.00062	<0.10	1.7	<0.00020	0.92	<0.00010	2.2	0.030	6.9	<0.00020	0.0011	0.0013	<0.00010	<0.0010	0.011
	17-Oct-23		0.046	<0.00060	0.00048	0.010	<0.0010	<0.020	0.000030	14	0.0014	<0.00030	0.0044	0.38	<0.00020	<0.020	3.6	0.017	<0.00020	0.0019	<0.10	1.7	<0.00020	0.97	<0.00010	2.2	0.031	7.3	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.012
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
CL-4 sfc	14-Feb-23		0.033	<0.00060	0.00050	0.010	<0.0010	<0.020	0.00011	11	<0.0010	<0.00030	0.0062	0.29	<0.00020	<0.020	3.3	0.027	<0.00020	<0.00050	<0.10	1.6	<0.00020	1.2	<0.00010	2.1	0.028	2.8	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.057
	16-May-23		0.074	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.00015	13	<0.0010	<0.00030	0.0098	0.38	<0.00020	<0.020	3.2	0.027	<0.00020	0.00068	<0.10	1.5	<0.00020	1.2	<0.00010	1.8	0.025	7.5	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.061
		SW-100	0.073	<0.00060	0.00034	<0.010	<0.0010	<0.020	0.00015	12	<0.0010	<0.00030	0.0098	0.37	<0.00020	<0.020	3.0	0.026	<0.00020	0.00079	<0.10	1.5	<0.00020	1.1	<0.00010	1.8	0.025	7.3	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.061
	RPD		*1.4%*	*NC*	*11%*	*NC*	*NC*	*NC*	*0.0%*	*8.0%*	*NC*	*NC*	*0.0%*	*2.7%*	*NC*	*NC*	*6.5%*	*3.8%*	*NC*	*15%*	*NC*	*0.0%*	*NC*	*8.7%*	*NC*	*0.0%*	*0.0%*	*2.7%*	*NC*	*NC*	*24.0%*	*NC*	*NC*	*0.0%*
	30-May-23		0.053	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.00016	15	<0.0010	<0.00030	0.0087	0.53	<0.00020	<0.020	3.8	0.028	<0.00020	0.00057	<0.10	1.7	<0.00020	1.3	<0.00010	1.9	0.026	10	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.056
	13-Jun-23		0.050	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000099	13	<0.0010	<0.00030	0.0067	0.25	<0.00020	<0.020	3.4	0.0099	<0.00020	0.00066	<0.10	1.6	<0.00020	0.94	<0.00010	1.9	0.027	7.5	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.035
	27-Jun-23		0.19	<0.00060	0.00042	<0.010	<0.0010	0.041	0.000054	13	<0.0010	<0.00030	0.0057	0.20	<0.00020	<0.020	3.3	0.0089	<0.00020	0.00060	<0.10	1.6	<0.00020	0.92	<0.00010	2.0	0.032	6.6	<0.00020	<0.0010	0.0032	<0.00010	<0.0010	0.026
	11-Jul-23		0.061	<0.00060	0.00039	0.010	<0.0010	<0.020	0.000070	14	<0.0010	<0.00030	0.0057	0.30	0.00022	<0.020	3.4	0.016	<0.00020	0.0010	<0.10	1.6	<0.00020	0.84	<0.00010	2.1	0.028	7.1	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.021
	25-Jul-23		0.052	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000041	12	<0.0010	<0.00030	0.0049	0.17	<0.00020	<0.020	3.3	0.0072	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.82	<0.00010	2.1	0.028	6.6	<0.00020	0.0011	0.0016	<0.00010	<0.0010	0.012
	9-Aug-23		0.044	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.000033	12	<0.0010	<0.00030	0.0045	0.18	<0.00020	<0.020	3.4	0.0087	0.00071	0.00055	<0.10	1.6	<0.00020	0.85	<0.00010	1.9	0.027	6.9	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.011
	22-Aug-23		0.045	<0.00060	0.00046	0.011	<0.0010	<0.020	0.000024	13	<0.0010	<0.00030	0.0049	0.21	<0.00020	<0.020	3.5	0.014	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.87	<0.00010	2.2	0.028	6.6	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.012
	6-Sep-23		0.052	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000039	12	<0.0010	<0.00030	0.0055	0.32	<0.00020	<0.020	3.3	0.022	<0.00020	0.00063	<0.10	1.7	<0.00020	0.79	<0.00010	2.0	0.029	6.3	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	19-Sep-23		0.052	0.00060	0.00045	0.010	<0.0010	<0.020	0.000036	13	<0.0010	<0.00030	0.0058	0.33	<0.00020	<0.020	3.5	0.020	<0.00020	0.00077	<0.10	1.6	<0.00020	0.89	<0.00010	2.1	0.029	6.2	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.010
	4-Oct-23		0.052	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000022	13	<0.0010	<0.00030	0.0053	0.40	<0.00020	<0.020	3.4	0.018	<0.00020	0.00053	<0.10	1.6	<0.00020	0.91	<0.00010	2.2	0.029	6.1	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0099
	17-Oct-23		0.043	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.000021	13	<0.0010	<0.00030	0.0056	0.33	<0.00020	<0.020	3.2	0.016	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.89	<0.00010	2.1	0.028	6.6	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0095
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-4 btm	14-Feb-23		0.040	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000055	12	<0.0010	<0.00030	0.0062	0.29	<0.00020	<0.020	3.4	0.0080	<0.00020	0.00051	<0.10	1.5	<0.00020	0.95	<0.00010	2.1	0.028	6.3	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.022
	16-May-23		0.083	<0.00060	0.00060	0.010	<0.0010	<0.020	0.00012	15	<0.0010	<0.00030	0.0086	0.71	<0.00020	<0.020	3.6	0.049	<0.00020	0.00056	<0.10	1.7	<0.00020	1.4	<0.00010	2.0	0.029	9.1	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.096
	30-May-23		0.084	<0.00060	0.00042	0.011	<0.0010	<0.020	0.000055	11	<0.0010	<0.00030	0.0046	1.0	<0.00020	<0.020	3.0	0.055	<0.00020	0.00053	<0.10	1.5	<0.00020	1.1	<0.00010	1.9	0.025	4.7	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	0.017
	13-Jun-23		0.047	<0.00060	0.00037	0.010	<0.0010	<0.020	0.000081	12	<0.0010	<0.00030	0.0058	0.63	<0.00020	<0.020	3.2	0.026	<0.00020	0.00059	<0.10	1.6	<0.00020	0.96	<0.00010	2.0	0.026	5.7	<0.00020	<0.0010	<0.0010	<0.00010	<0.0014	0.029
	27-Jun-23		0.080	<0.00060	0.00046	<0.01	<0.0010	<0.020	0.000069	12	<0.0010	<0.0003	0.006	1.1	<0.00020	<0.020	3.2	0.058	<0.00020	0.00054	<0.10	1.5	<0.00020	1.3	<0.00010	2.0	0.025	5.5	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.026
	11-Jul-23		0.088	<0.00060	0.00057	0.011	<0.0010	<0.020	0.000089	14	<0.0010	<0.00030	0.007	1.1	0.00041	<0.020	3.4	0.064	<0.00020	0.00091	<0.10	1.7	<0.00020	1.2	<0.00010	2.2	0.029	6.7	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.031
	25-Jul-23		0.052	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000067	13	<0.0010	<0.00030	0.0064	0.47	<0.00020	<0.020	3.5	0.024	<0.00020	0.00056	<0.10	1.7	<0.00020	0.99	<0.00010	2.0	0.025	7.4	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.024
		SW-116	0.050	<0.00060	0.00055	<0.010	<0.0010	<0.020	0.000088	13	<0.0010	<0.00030	0.0065	0.46	<0.00020	<0.020	3.4	0.022	<0.00020	0.00061	<0.10	1.6	<0.00020	0.91	<0.00010	2.1	0.026	7.2	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.024
	RPD		*3.9%*	*NC*	*9.5%*	*NC*	*NC*	*NC*	*27%*	*0.0%*	*NC*	*NC*	*1.6%*	*2.2%*	*NC*	*NC*	*2.9%*	*8.7%*	*NC*	*8.5%*	*NC*	*6.1%*	*NC*	*8.4%*	*NC*	*4.9%*	*3.9%*	*2.7%*	*NC*	*NC*	*6.9%*	*NC*	*NC*	*0.0%*
	9-Aug-23		0.064	<0.00060	0.00051	0.011	<0.0010	<0.020	0.000065	13	<0.0010	<0.00030	0.0067	0.81	<0.00020	<0.020	3.6	0.066	0.00046	0.00067	<0.10	1.6	<0.00020	1.2	<0.00010	2.1	0.030	7.6	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.021
	22-Aug-23		0.059	<0.00060	0.00048	0.010	<0.0010	<0.020	0.000045	13	<0.0010	<0.00030	0.0057	0.42	<0.00020	<0.020	3.4	0.043	<0.00020	0.00052	<0.10	1.6	<0.00020	0.94	<0.00010	2.1	0.029	6.4	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.016
	6-Sep-23		0.073	<0.00060	0.00077	<0.010	<0.0010	<0.020	0.000053	13	<0.0010	<0.00030	0.0083	0.32	<0.00020	<0.020	3.5	0.021	<0.00020	0.00095	<0.10	1.7	<0.00020	0.82	<0.00010	2.1	0.029	6.3	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.018
	19-Sep-23		0.060	<0.00060	0.00049	0.010	<0.0010	<0.020	0.000042	13	0.0012	<0.00030	0.0056	0.52	0.012	<0.020	3.4	0.036	<0.00020	0.00086	<0.10	1.6	<0.00020	0.99	<0.00010	2.2	0.028	6.7	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.012
	4-Oct-23		0.066	<0.00060	0.00056	0.012	<0.0010	<0.020	0.000034	13	<0.0010	<0.00030	0.0056	0.57	<0.00020	<0.020	3.7	0.027	<0.00020	0.00061	<0.10	1.8	<0.00020	0.96	<0.00010	2.3	0.028	6.3	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.011
	17-Oct-23		0.054	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000025	14	<0.0010	<0.00030	0.0068	0.39	<0.00020	<0.020	3.5	0.017	<0.00020	0.00065	<0.10	1.7	<0.00020	1.1	<0.00010	2.2	0.030	6.9	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.012
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-5 sfc	14-Feb-23		0.035	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.000095	9.7	<0.0010	<0.00030	0.0051	0.26	<0.00020	<0.020	3.0	0.019	<0.00020	<0.00050	<0.10	1.4	<0.00020	1.2	<0.00010	2.2	0.025	2.2	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.041
		SW-100	0.080	<0.00060	0.00057	0.010	<0.0010	<0.020	0.00015	9.7	0.0012	<0.00030	0.033	0.25	0.00073	<0.020	3.0	0.019	0.00074	0.036	<0.10	1.7	0.00028	1.3	<0.00010	2.4	0.026	2.2	<0.00020	0.0019	0.0015	<0.00010	<0.0010	0.24
	RPD		*78%*	*NC*	*21%*	*NC*	*NC*	*NC*	*45%*	*0.0%*	*NC*	*NC*	*146%*	*3.9%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*19%*	*NC*	*8.0%*	*NC*	*8.7%*	*3.9%*	*0.0%*	*NC*	*NC*	*14.3%*	*NC*	*NC*	*142%*
	16-May-23		0.082	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.00013	11	<0.0010	<0.00030	0.0091	0.35	<0.00020	<0.020	3.1	0.024	<0.00020	0.00056	<0.10	1.4	<0.00020	1.2	<0.00010	1.7	0.024	5.9	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	0.054
	30-May-23		0.055	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.00012	14	<0.0010	<0.00030	0.0078	0.41	<0.00020	<0.020	3.6	0.022	<0.00020	0.00065	<0.10	1.6	<0.00020	1.3	<0.00010	1.9	0.025	8.0	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.046
	13-Jun-23		0.063	<0.00060	0.00053	<0.010	<0.0010	<0.020	0.00010	12	<0.0010	<0.00030	0.0065	0.25	<0.00020	<0.020	3.3	0.012	<0.00020	0.00052	<0.10	1.5	<0.00020	0.87	<0.00010	1.9	0.027	6.3	<0.00020	<0.0010	0.0036	<0.00010	<0.0010	0.033
	27-Jun-23		0.059	<0.00060	0.00048	<0.010	<0.0010	<0.020	0.000053	12	<0.0010	<0.00030	0.0054	0.21	<0.00020	<0.020	3.3	0.0086	<0.00020	0.00065	<0.10	1.5	<0.00020	0.87	<0.00010	1.9	0.025	6.5	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.023
		SW-110	0.079	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.000050	13	<0.0010	<0.00030	0.0063	0.21	<0.00020	<0.020	3.4	0.0097	<0.00020	0.00093	<0.10	1.6	<0.00020	0.97	<0.00010	2.1	0.027	6.5	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.024
	RPD		*29%*	*NC*	*4.3%*	*NC*	*NC*	*NC*	*5.8%*	*8.0%*	*NC*	*NC*	*15%*	*0.0%*	*NC*	*NC*	*3.0%*	*12%*	*NC*	*35%*	*NC*	*6.5%*	*NC*	*11%*	*NC*	*10%*	*7.7%*	*0.0%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*4.3%*
	11-Jul-23		0.064	<0.00060	0.00051	0.01	<0.0010	<0.020	0.000063	14	<0.0010	<0.00030	0.0053	0.26	<0.00020	<0.020	3.5	0.016	<0.00020	0.00066	<0.10	1.6	<0.00020	0.84	<0.00010	2.2	0.029	6.9	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.021
	25-Jul-23		0.051	<0.00060	0.00060	<0.010	<0.0010	<0.020	0.000065	12	<0.0010	<0.00030	0.0045	0.13	<0.00020	<0.020	3.3	0.0082	<0.00020	0.00064	<0.10	1.6	<0.00020	0.72	<0.00010	2.1	0.025	5.9	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	9-Aug-23		0.045	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000028	12	<0.0010	<0.00030	0.0042	0.16	<0.00020	<0.020	3.2	0.010	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.86	<0.00010	1.9	0.026	6.5	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.012
	22-Aug-23		0.046	<0.00060	0.00048	0.010	<0.0010	<0.020	0.000024	13	<0.0010	<0.00030	0.0042	0.22	<0.00020	<0.020	3.5	0.015	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.86	<0.00010	2.2	0.028	6.4	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.0092
	6-Sep-23		0.055	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000031	12	<0.0010	<0.00030	0.0050	0.25	<0.00020	<0.020	3.3	0.021	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.76	<0.00010	2.1	0.030	5.9	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.0095
	19-Sep-23		0.055	<0.00060	0.00044	0.010	<0.0010	<0.020	0.000031	12	<0.0010	<0.00030	0.0053	0.30	0.0043	<0.020	3.5	0.017	0.00027	0.00071	<0.10	1.6	<0.00020	0.86	<0.00010	2.1	0.029	5.9	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0097
		SW-130	0.054	<0.00060	0.0005	0.011	<0.0010	<0.020	0.000033	13	<0.0010	<0.00030	0.0047	0.31	<0.00020	<0.020	3.6	0.019	<0.00020	0.00057	<0.10	1.6	<0.00020	0.90	<0.00010	2.2	0.030	6.1	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.0099
	RPD		*1.8%*	*NC*	*13%*	*10%*	*NC*	*NC*	*6.3%*	*8.0%*	*NC*	*NC*	*12%*	*3.3%*	*NC*	*NC*	*2.8%*	*11%*	*NC*	*22%*	*NC*	*0.0%*	*NC*	*4.5%*	*NC*	*4.7%*	*3.4%*	*3.3%*	*NC*	*NC*	*6.1%*	*NC*	*NC*	*2.0%*
	4-Oct-23		0.065	<0.00060	0.00046	<0.010	<0.0010	<0.020	<0.000020	12	<0.0010	<0.00030	0.0049	0.31	<0.00020	<0.020	3.2	0.015	<0.00020	0.00051	<0.10	1.5	<0.00020	0.87	<0.00010	2.1	0.028	5.7	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.0099
	17-Oct-23		0.044	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000025	13	<0.0010	<0.00030	0.0052	0.26	<0.00020	<0.020	3.3	0.014	<0.00020	0.00063	<0.10	1.6	<0.00020	0.88	<0.00010	2.1	0.029	5.9	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0086
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-5 btm	14-Feb-23		0.049	<0.00060	0.00048	0.011	<0.0010	<0.020	0.00011	15	<0.0010	<0.00030	0.0081	0.80	<0.00020	<0.020	3.6	0.054	<0.00020	0.00054	<0.10	1.7	<0.00020	1.6	<0.00010	2.1	0.030	9.3	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.033
	16-May-23		0.058	<0.00060	0.00042	0.011	<0.0010	<0.020	0.00011	17	<0.0010	<0.00030	0.008	1.1	<0.00020	<0.020	3.8	0.078	<0.00020	<0.00050	<0.10	1.8	<0.00020	1.4	<0.00010	2.1	0.031	11	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.050
	30-May-23		0.058	<0.00060	0.00057	<0.010	<0.0010	<0.020	0.000061	11	<0.0010	<0.00030	0.052	0.42	<0.00020	<0.020	3.4	0.026	<0.00020	<0.00050	<0.10	1.5	<0.00020	1.1	<0.00010	1.9	0.025	5.6	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	0.025
	13-Jun-23		0.055	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.00010	11	<0.0010	<0.00030	0.00061	0.59	<0.00020	<0.020	3.1	0.027	<0.00020	0.00058	<0.10	1.5	<0.00020	0.89	<0.00010	1.9	0.026	5.1	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.029
	27-Jun-23		0.068	<0.00060	0.00050	<0.010	<0.0010	<0.020	0.000066	12	<0.0010	<0.00030	0.0059	0.41	<0.00020	<0.020	3.4	0.021	0.00045	0.00058	<0.10	1.7	<0.00020	1.2	<0.00010	2.2	0.027	5.7	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.026
	11-Jul-23		0.055	<0.00060	0.00053	<0.010	<0.0010	<0.020	0.000063	13	<0.0010	<0.00030	0.0057	0.25	<0.00020	<0.020	3.3	0.015	<0.00020	0.00066	<0.10	1.6	<0.00020	0.82	<0.00010	2.1	0.028	6.6	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.021
	25-Jul-23		0.062	<0.00060	0.00063	0.010	<0.0010	<0.020	0.000066	13	<0.0010	<0.00030	0.0077	0.33	<0.00020	<0.020	3.8	0.017	<0.00020	0.00083	<0.10	1.8	<0.00020	0.96	<0.00010	2.2	0.027	6.9	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.027
	9-Aug-23		0.054	<0.00060	0.00047	<0.010	<0.0010	0.023	0.000037	12	<0.0010	<0.00030	0.0049	0.20	<0.00020	<0.020	3.2	0.012	<0.00020	0.0011	<0.10	1.5	<0.00020	0.91	<0.00010	1.9	0.026	6.5	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.015
		SW-119	0.050	<0.00060	0.00054	<0.010	<0.0010	<0.020	0.000038	12	<0.0010	<0.00030	0.0048	0.15	<0.00020	<0.020	3.2	0.010	<0.00020	0.00056	<0.10	1.5	<0.00020	0.84	<0.00010	2.0	0.027	6.4	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.016
	RPD		*7.7%*	*NC*	*14%*	*NC*	*NC*	*NC*	*2.7%*	*0.0%*	*NC*	*NC*	*2.1%*	*29%*	*NC*	*NC*	*0.0%*	*18%*	*NC*	*65%*	*NC*	*0.0%*	*NC*	*8.0%*	*NC*	*5.1%*	*3.8%*	*1.6%*	*NC*	*NC*	*6.1%*	*NC*	*NC*	*6.5%*
	22-Aug-23		0.094	<0.00060	0.00062	0.011	<0.0010	<0.020	0.000048	14	<0.0010	<0.00030	0.0066	0.35	<0.00020	<0.020	3.6	0.024	<0.00020	0.0010	<0.10	1.7	<0.00020	0.99	<0.00010	2.2	0.029	7.1	<0.00020	<0.0010	0.0020	<0.00010	<0.0010	0.018
	6-Sep-23		0.084	<0.00060	0.00085	<0.010	<0.0010	<0.020	0.000050	12	<0.0010	<0.00030	0.0088	0.27	<0.00020	<0.020	3.3	0.024	<0.00020	0.0011	<0.10	1.7	<0.00020	0.80	<0.00010	2.1	0.029	6.1	<0.00020	<0.0010	0.0034	<0.00010	<0.0010	0.018
	19-Sep-23		0.076	<0.00060	0.00056	0.011	<0.0010	<0.020	0.000045	13	<0.0010	<0.00030	0.0062	0.54	0.00025	<0.020	3.6	0.035	<0.00020	0.00083	<0.10	1.6	<0.00020	1.1	<0.00010	2.1	0.030	6.3	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.015
	4-Oct-23		0.061	<0.00060	0.00053	0.011	<0.0010	<0.020	0.000052	13	<0.0010	<0.00030	0.0060	0.35	<0.00020	<0.020	3.8	0.016	<0.00020	0.00067	<0.10	1.8	<0.00020	0.86	<0.00010	2.4	0.029	6.3	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.014
	17-Oct-23		0.042	<0.00060	0.00049	<0.010	<0.0010	<0.020	<0.000020	13	<0.0010	<0.00030	0.0045	0.27	<0.00020	<0.020	3.3	0.014	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.93	<0.00010	2.1	0.029	6.1	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	0.0092
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
CL-6 sfc	14-Feb-23		0.033	<0.00060	0.00060	0.011	<0.0010	<0.020	0.000073	12	<0.0010	<0.00030	0.0069	0.14	<0.00020	<0.020	3.5	0.0080	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.83	<0.00010	2.4	0.031	4.7	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.030
	16-May-23		0.084	<0.00060	0.00055	<0.010	<0.0010	<0.020	0.000079	11	<0.0010	<0.00030	0.0063	0.33	<0.00020	<0.020	3.0	0.022	<0.00020	<0.00050	<0.10	1.5	<0.00020	1.4	<0.00010	1.8	0.025	5.2	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.034
	30-May-23		0.053	<0.00060	0.00048	<0.010	<0.0010	<0.020	0.000069	12	<0.0010	<0.00030	0.0058	0.28	<0.00020	<0.020	3.4	0.016	<0.00020	<0.00050	<0.10	1.5	<0.00020	1.0	<0.00010	1.9	0.025	6.0	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.029
	13-Jun-23		0.054	<0.00060	0.00034	0.010	<0.0010	<0.020	0.000058	12	<0.0010	<0.00030	0.0054	0.20	<0.00020	<0.020	3.3	0.0096	0.00079	0.00053	<0.10	1.6	<0.00020	0.79	<0.00010	2.0	0.027	5.8	<0.00020	<0.0010	0.0018	<0.00010	<0.0014	0.024
	27-Jun-23		0.065	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000041	12	<0.0010	<0.00030	0.0047	0.16	<0.00020	<0.020	3.3	0.0088	<0.00020	0.00061	<0.10	1.5	<0.00020	0.85	<0.00010	2.0	0.026	5.4	<0.00020	<0.0010	0.0028	<0.00010	<0.0010	0.018
	11-Jul-23		0.078	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000047	12	<0.0010	<0.00030	0.0051	0.21	<0.00020	<0.020	3.1	0.018	<0.00020	0.0011	<0.10	1.5	<0.00020	0.84	<0.00010	2.0	0.027	5.8	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.016
		SW-115	0.072	<0.00060	0.00049	0.010	<0.0010	<0.020	0.000050	13	<0.0010	<0.00030	0.0047	0.21	<0.00020	<0.020	3.3	0.018	<0.00020	0.00059	<0.10	1.6	<0.00020	0.82	<0.00010	2.1	0.029	5.9	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.017
	RPD		*8.0%*	*NC*	*4.2%*	*NC*	*NC*	*NC*	*6.2%*	*8.0%*	*NC*	*NC*	*8.2%*	*0.0%*	*NC*	*NC*	*6.2%*	*0.0%*	*NC*	*60.4%*	*NC*	*6.5%*	*NC*	*2.4%*	*NC*	*4.9%*	*7.1%*	*1.7%*	*NC*	*NC*	*11.8%*	*NC*	*NC*	*6.1%*
	25-Jul-23		0.052	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000035	11	<0.0010	<0.00030	0.0041	0.10	<0.00020	<0.020	3.3	0.0085	<0.00020	0.00052	<0.10	1.6	<0.00020	0.69	<0.00010	2.0	0.025	5.1	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.013
	9-Aug-23		0.051	<0.00060	0.00051	<0.010	<0.0010	<0.020	0.000035	11	<0.0010	<0.00030	0.0037	0.13	<0.00020	<0.020	3.1	0.014	<0.00020	0.00082	<0.10	1.4	<0.00020	0.76	<0.00010	1.9	0.026	5.5	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.013
	22-Aug-23		0.057	<0.00060	0.00049	0.011	<0.0010	<0.020	0.000022	12	<0.0010	<0.00030	0.0041	0.17	<0.00020	<0.020	3.3	0.015	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.84	<0.00010	2.1	0.028	5.5	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	0.0081
	6-Sep-23		0.057	<0.00060	0.00061	0.010	<0.0010	<0.020	0.000026	12	<0.0010	<0.00030	0.0048	0.20	<0.00020	<0.020	3.2	0.023	<0.00020	0.00087	<0.10	1.6	<0.00020	0.64	<0.00010	2.0	0.028	5.3	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.011
	19-Sep-23		0.058	<0.00060	0.00053	<0.010	<0.0010	<0.020	0.000025	12	<0.0010	<0.00030	0.0042	0.19	0.00051	<0.020	3.4	0.014	<0.00020	0.00052	<0.10	1.6	<0.00020	0.76	<0.00010	2.2	0.026	5.2	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.0087
	4-Oct-23		0.063	<0.00060	0.0005	<0.010	<0.0010	<0.020	0.000021	11	<0.0010	<0.00030	0.0044	0.20	<0.00020	<0.020	3.1	0.014	<0.00020	0.00055	<0.10	1.4	<0.00020	0.79	<0.00010	2.1	0.028	4.9	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0088
	17-Oct-23		0.028	<0.00060	0.00044	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0032	<0.060	<0.00020	<0.020	3.2	0.012	<0.00020	0.00052	<0.10	1.5	<0.00020	0.63	<0.00010	2.1	0.028	4.4	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0076
		SW-136	0.031	<0.00060	0.00063	<0.010	<0.0010	<0.020	<0.000020	11	<0.0010	<0.00030	0.0041	<0.060	<0.00020	<0.020	3.1	0.012	<0.00020	0.0007	<0.10	1.5	<0.00020	0.63	<0.00010	2.1	0.028	4.4	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.0080
	RPD		*10%*	*NC*	*36%*	*NC*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*25%*	*NC*	*NC*	*NC*	*3.2%*	*0.0%*	*NC*	*30%*	*NC*	*0.0%*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*NC*	*NC*	*5.1%*
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-6 btm	14-Feb-23		0.032	<0.00060	0.00056	0.011	<0.0010	<0.020	0.000032	11	<0.0010	<0.00030	0.0040	0.20	<0.00020	<0.020	3.4	0.023	<0.00020	<0.00050	<0.10	1.5	<0.00020	0.79	<0.00010	2.2	0.030	3.9	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.012
	16-May-23		0.085	<0.00060	0.00057	<0.010	<0.0010	<0.020	0.000074	11	<0.0010	<0.00030	0.0068	0.34	<0.00020	<0.020	3.1	0.023	<0.00020	0.00079	<0.10	1.6	<0.00020	1.3	<0.00010	1.9	0.025	5.1	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.029
	30-May-23		0.18	<0.00060	0.00047	0.011	<0.0010	<0.020	0.000089	11	<0.0010	<0.00030	0.0069	0.59	<0.00020	<0.020	3.2	0.029	<0.00020	0.00056	<0.10	1.4	<0.00020	1.2	<0.00010	1.8	0.025	4.9	<0.00020	<0.0010	0.0076	<0.00010	<0.0010	0.034
	13-Jun-23		0.068	<0.00060	0.00049	0.010	<0.0010	<0.020	0.000039	10	<0.0010	<0.00030	0.0043	0.26	<0.00020	<0.020	3.1	0.016	<0.00020	0.00056	<0.10	1.5	<0.00020	0.77	<0.00010	2.0	0.026	4.4	<0.00020	<0.0010	0.0019	<0.00010	<0.0014	0.021
	27-Jun-23		0.072	<0.00060	0.00049	<0.010	<0.0010	0.021	0.000047	11	<0.0010	<0.00030	0.0047	0.17	<0.00020	<0.020	3.1	0.015	<0.00020	0.00078	<0.10	1.5	<0.00020	1.7	<0.00010	2.0	0.025	4.3	<0.00020	<0.0010	0.003	<0.00010	<0.0010	0.022
	11-Jul-23		0.074	<0.00060	0.00052	0.011	<0.0010	<0.020	0.000044	12	<0.0010	<0.00030	0.0051	0.19	0.00024	<0.020	3.5	0.017	<0.00020	0.00058	<0.10	1.6	<0.00020	0.86	<0.00010	2.0	0.028	5.7	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.017
	25-Jul-23		0.052	<0.00060	0.00054	<0.010	<0.0010	<0.020	0.000063	12	<0.0010	<0.00030	0.0050	0.19	<0.00020	<0.020	3.2	0.013	<0.00020	0.00076	<0.10	1.6	<0.00020	0.82	<0.00010	2.1	0.025	5.8	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.018
	9-Aug-23		0.055	<0.00060	0.00055	<0.010	<0.0010	<0.020	0.000026	11	<0.0010	<0.00030	0.0045	0.14	<0.00020	<0.020	3.2	0.014	<0.00020	0.00053	<0.10	1.5	<0.00020	0.80	<0.00010	2.0	0.027	5.7	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.0098
	22-Aug-23		0.055	<0.00060	0.00050	0.010	<0.0010	<0.020	0.000022	12	<0.0010	<0.00030	0.0046	0.20	<0.00020	<0.020	3.3	0.019	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.82	<0.00010	2.1	0.027	5.4	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.010
		SW-122	0.059	<0.00060	0.00059	0.011	<0.0010	<0.020	0.000026	12	<0.0010	<0.00030	0.0045	0.21	<0.00020	<0.020	3.5	0.019	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.88	<0.00010	2.2	0.028	5.6	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.0098
	RPD		*7.0%*	*NC*	*17%*	*10%*	*NC*	*NC*	*17%*	*0.0%*	*NC*	*NC*	*2.2%*	*4.9%*	*NC*	*NC*	*5.9%*	*0.0%*	*NC*	*NC*	*NC*	*6.1%*	*NC*	*7.1%*	*NC*	*4.7%*	*3.6%*	*3.6%*	*NC*	*NC*	*8.3%*	*NC*	*NC*	*2.0%*
	6-Sep-23		0.063	<0.00060	0.00072	0.010	<0.0010	<0.020	0.000033	12	<0.0010	<0.00030	0.0054	0.19	<0.00020	<0.020	3.3	0.021	<0.00020	0.0010	<0.10	1.7	<0.00020	0.68	<0.00010	2.1	0.029	5.4	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.014
		SW-127	0.062	0.00079	0.00055	0.010	<0.0010	<0.020	0.000029	12	<0.0010	<0.00030	0.0048	0.18	<0.00020	<0.020	3.3	0.019	0.00021	0.00099	<0.10	1.6	<0.00020	0.73	<0.00010	2.1	0.029	5.2	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.010
	RPD		*1.6%*	*NC*	*27%*	*0.0%*	*NC*	*NC*	*13%*	*0.0%*	*NC*	*NC*	*12%*	*5.4%*	*NC*	*NC*	*0.0%*	*10%*	*NC*	*1.0%*	*NC*	*6.1%*	*NC*	*7.1%*	*NC*	*0.0%*	*0.0%*	*3.8%*	*NC*	*NC*	*16.0%*	*NC*	*NC*	*33%*
	19-Sep-23		0.078	<0.00060	0.00054	<0.010	<0.0010	<0.020	0.000032	11	<0.0010	<0.00030	0.0057	0.22	<0.00020	<0.020	3.2	0.015	<0.00020	0.00082	<0.10	1.4	<0.00020	0.77	<0.00010	2.1	0.027	5.2	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.012
	4-Oct-23		0.059	0.00070	0.00052	0.011	<0.0010	<0.020	0.000032	12	<0.0010	<0.00030	0.0051	0.22	<0.00020	<0.020	3.5	0.015	<0.00020	0.00062	<0.10	1.7	<0.00020	0.77	<0.00010	2.3	0.028	5.3	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.011
	17-Oct-23		0.050	<0.00060	0.00052	<0.010	<0.0010	<0.020	0.000024	11	0.0028	<0.00030	0.0047	0.16	<0.00020	<0.020	3.2	0.015	<0.00020	0.0021	<0.10	1.5	<0.00020	0.82	<0.00010	2.1	0.028	5.0	<0.00020	<0.0010	0.0025	<0.00010	<0.0010	0.010
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-7 sfc	14-Feb-23		0.039	<0.00060	0.00061	0.010	<0.0010	<0.020	0.00012	11	<0.0010	<0.00030	0.0077	0.21	<0.00020	<0.020	3.3	0.018	<0.00020	<0.00050	<0.10	1.4	<0.00020	1.0	<0.00010	2.1	0.028	3.8	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.056
	16-May-23		0.089	<0.00060	0.00028	<0.010	<0.0010	<0.020	0.00042	24	<0.0010	0.00060	0.019	0.87	<0.00020	<0.020	4.5	0.074	<0.00020	0.0010	<0.10	2.1	<0.00020	1.3	<0.00010	2.0	0.032	20	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.15
	30-May-23		0.070	0.0017	0.00035	0.010	<0.0010	<0.020	0.00015	16	<0.0010	<0.00030	0.0079	0.5	<0.00020	<0.020	3.7	0.029	<0.00020	0.00070	<0.10	1.8	<0.00020	1.2	<0.00010	2.1	0.028	9.1	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.045
	13-Jun-23		0.052	<0.00060	0.00036	0.010	<0.0010	<0.020	0.00017	19	<0.0010	<0.00030	0.0085	0.49	<0.00020	<0.020	4.2	0.024	<0.00020	0.00072	<0.10	2.0	<0.00020	1.0	<0.00010	2.1	0.032	14	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.054
	27-Jun-23		0.048	0.0012	0.00040	<0.010	<0.0010	<0.020	0.00022	25	<0.0010	<0.00030	0.0092	0.85	<0.00020	<0.020	5.1	0.038	<0.00020	0.00089	<0.10	2.3	<0.00020	0.95	<0.00010	2.1	0.032	24	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.071
	11-Jul-23		0.051	<0.00060	0.00045	0.010	<0.0010	<0.020	0.000079	15	<0.0010	<0.00030	0.0077	0.39	0.00052	<0.020	3.6	0.017	<0.00020	0.0016	<0.10	1.7	<0.00020	0.88	<0.00010	2.2	0.029	8.7	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.026
	25-Jul-23		0.047	<0.00060	0.00057	<0.010	<0.0010	<0.020	0.000065	12	<0.0010	<0.00030	0.0052	0.16	<0.00020	<0.020	3.3	0.0073	<0.00020	0.00077	<0.10	1.6	<0.00020	0.75	<0.00010	2.1	0.025	6.6	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.015
	9-Aug-23		0.044	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.000039	13	<0.0010	<0.00030	0.0052	0.29	<0.00020	<0.020	3.5	0.0099	<0.00020	0.00055	<0.10	1.6	<0.00020	0.89	<0.00010	2.0	0.028	8.1	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.013
	22-Aug-23		0.038	<0.00060	0.00046	0.010	<0.0010	<0.020	0.000028	13	<0.0010	<0.00030	0.0052	0.25	0.0014	<0.020	3.5	0.015	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.85	<0.00010	2.1	0.028	6.8	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.012
		SW-123	0.040	<0.00060	0.00047	0.010	<0.0010	<0.020	0.000031	13	<0.0010	<0.00030	0.0056	0.25	<0.00020	<0.020	3.5	0.014	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.81	<0.00010	2.2	0.028	6.6	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	RPD		*5.1%*	*NC*	*2.2%*	*0.0%*	*NC*	*NC*	*10%*	*0.0%*	*NC*	*NC*	*7.4%*	*0.0%*	*NC*	*NC*	*0.0%*	*6.9%*	*NC*	*NC*	*NC*	*6.1%*	*NC*	*4.8%*	*NC*	*4.7%*	*0.0%*	*3.0%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*8.0%*
	6-Sep-23		0.074	<0.00060	0.00066	<0.010	<0.0010	<0.020	0.000050	13	<0.0010	<0.00030	0.0074	0.39	<0.00020	<0.020	3.2	0.019	<0.00020	0.00071	<0.10	1.6	<0.00020	0.81	<0.00010	2.0	0.028	6.7	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.016
		SW-126	0.044	0.0013	0.00034	0.011	<0.0010	<0.020	0.000042	13	<0.0010	<0.00030	0.0072	0.36	<0.00020	<0.020	3.4	0.020	<0.00020	0.0011	<0.10	1.7	<0.00020	0.87	<0.00010	2.1	0.03	6.9	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.012
	RPD		*51%*	*NC*	*64%*	*NC*	*NC*	*NC*	*17%*	*0.0%*	*NC*	*NC*	*2.7%*	*8.0%*	*NC*	*NC*	*6.1%*	*5.1%*	*NC*	*43%*	*NC*	*6.1%*	*NC*	*7.1%*	*NC*	*4.9%*	*6.9%*	*2.9%*	*NC*	*NC*	*71%*	*NC*	*NC*	*29%*
	19-Sep-23		0.055	<0.00060	0.00053	0.010	<0.0010	<0.020	0.000041	13	<0.0010	<0.00030	0.0064	0.38	<0.00020	<0.020	3.5	0.023	<0.00020	0.00087	<0.10	1.6	<0.00020	0.88	<0.00010	2.1	0.029	6.6	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.014
	4-Oct-23		0.045	<0.00060	0.00051	0.010	<0.0010	<0.020	0.000026	14	<0.0010	<0.00030	0.0057	0.45	<0.00020	<0.020	3.6	0.019	<0.00020	0.00053	<0.10	1.7	<0.00020	0.95	<0.00010	2.3	0.031	7.1	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0099
	17-Oct-23		0.039	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000026	14	<0.0010	<0.00030	0.0059	0.32	<0.00020	<0.020	3.5	0.014	<0.00020	0.0015	<0.10	1.7	<0.00020	0.92	<0.00010	2.2	0.029	7.2	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.0094
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-7 btm	14-Feb-23		0.043	<0.00060	0.00065	0.011	<0.0010	<0.020	0.00013	11	0.0018	<0.00030	0.0098	0.24	0.00062	<0.020	3.2	0.017	<0.00020	0.0012	<0.10	1.5	<0.00020	1.0	<0.00010	2.2	0.028	3.8	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.051
	16-May-23		0.091	<0.00060	0.00021	<0.010	<0.0010	<0.020	0.00038	22	<0.0010	0.00058	0.018	0.79	<0.00020	<0.020	4.2	0.066	<0.00020	0.0010	<0.10	2.0	<0.00020	1.2	<0.00010	1.9	0.031	19	<0.00020	<0.0010	0.0022	<0.00010	<0.0010	0.13
	30-May-23		0.074	<0.00060	0.00040	0.011	<0.0010	<0.020	0.00043	30	<0.0010	0.00049	0.018	2.0	<0.00020	<0.020	6.1	0.11	<0.00020	0.0011	<0.10	2.7	<0.00020	1.5	<0.00010	2.4	0.035	27	<0.00020	<0.0010	0.0021	<0.00010	<0.0010	0.14
	13-Jun-23		0.049	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.00016	16	<0.0010	<0.00030	0.0083	0.39	<0.00020	<0.020	3.5	0.019	<0.00020	0.00074	<0.10	1.7	<0.00020	0.82	<0.00010	1.9	0.029	11	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.048
	27-Jun-23		0.051	<0.00060	0.00032	<0.010	<0.0010	0.024	0.00022	28	<0.0010	<0.00030	0.0092	0.96	<0.00020	<0.020	5.3	0.043	<0.00020	0.00087	<0.10	2.6	<0.00020	1.1	<0.00010	2.4	0.035	25	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.072
		SW-111	0.052	<0.00060	0.00039	0.010	<0.0010	<0.020	0.00023	27	<0.0010	<0.00030	0.010	0.93	<0.00020	<0.020	5.4	0.041	<0.00020	0.00083	<0.10	2.4	<0.00020	1.0	<0.00010	2.2	0.034	25	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.075
	RPD		*1.9%*	*NC*	*20%*	*NC*	*NC*	*NC*	*4.4%*	*3.6%*	*NC*	*NC*	*8.3%*	*3.2%*	*NC*	*NC*	*1.9%*	*4.8%*	*NC*	*4.7%*	*NC*	*8.0%*	*NC*	*10%*	*NC*	*8.7%*	*2.9%*	*0.0%*	*NC*	*NC*	*24%*	*NC*	*NC*	*4.1%*
	11-Jul-23		0.059	<0.00060	0.00057	0.010	<0.0010	<0.020	0.000085	16	<0.0010	<0.00030	0.0066	0.41	0.00080	<0.020	3.7	0.017	<0.00020	0.00073	<0.10	1.7	<0.00020	0.92	<0.00010	2.2	0.030	8.9	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.027
	25-Jul-23		0.045	<0.00060	0.00043	0.010	<0.0010	<0.020	0.000040	13	<0.0010	<0.00030	0.0050	0.18	<0.00020	<0.020	3.8	0.0088	<0.00020	<0.00050	<0.10	1.8	<0.00020	0.85	<0.00010	2.3	0.027	6.7	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	9-Aug-23		0.047	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000037	12	<0.0010	<0.00030	0.0056	0.27	<0.00020	<0.020	3.3	0.0097	0.00022	<0.00050	<0.10	1.6	<0.00020	0.85	<0.00010	1.9	0.027	7.8	<0.00020	<0.0010	0.0010	<0.00010	<0.0010	0.014
	22-Aug-23		0.043	0.00087	0.00047	0.011	<0.0010	<0.020	0.000028	14	<0.0010	<0.00030	0.0058	0.28	<0.00020	<0.020	3.7	0.015	<0.00020	0.00072	<0.10	1.7	<0.00020	0.89	<0.00010	2.2	0.029	7.2	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	6-Sep-23		0.050	<0.00060	0.00052	0.010	<0.0010	<0.020	0.000041	13	<0.0010	<0.00030	0.0057	0.40	<0.00020	<0.020	3.5	0.019	<0.00020	0.00056	<0.10	1.7	<0.00020	0.83	<0.00010	2.1	0.030	7.0	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.013
	19-Sep-23		0.055	0.0012	0.00052	0.010	<0.0010	<0.020	0.000049	13	<0.0010	<0.00030	0.0057	0.40	<0.00020	<0.020	3.6	0.024	<0.00020	0.00054	<0.10	1.6	<0.00020	0.96	<0.00010	2.1	0.029	6.7	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.016
		SW-129	0.059	<0.00060	0.00059	0.010	<0.0010	<0.020	0.000040	13	<0.0010	<0.00030	0.0065	0.38	<0.00020	<0.020	3.6	0.022	<0.00020	0.00079	<0.10	1.6	<0.00020	0.94	<0.00010	2.1	0.029	6.7	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.014
	RPD		*7.0%*	*NC*	*13%*	*0.0%*	*NC*	*NC*	*20%*	*0.0%*	*NC*	*NC*	*13%*	*5.1%*	*NC*	*NC*	*0.0%*	*8.7%*	*NC*	*38%*	*NC*	*NC*	*NC*	*2.1%*	*NC*	*0.0%*	*0.0%*	*0.0%*	*NC*	*NC*	*40%*	*NC*	*NC*	*13%*
	4-Oct-23		0.056	<0.00060	0.00048	<0.010	<0.0010	<0.020	0.000026	13	<0.0010	<0.00030	0.0057	0.44	<0.00020	<0.020	3.4	0.018	<0.00020	0.00056	<0.10	1.6	<0.00020	0.93	<0.00010	2.2	0.03	6.8	<0.00020	<0.0010	0.0013	<0.00010	<0.0010	0.0096
	17-Oct-23		0.043	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000029	14	<0.0010	<0.00030	0.0052	0.35	<0.00020	<0.020	3.5	0.016	<0.00020	<0.00050	<0.10	1.7	<0.00020	0.94	<0.00010	2.2	0.029	7.3	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.011
		SW-137	0.041	<0.00060	0.00044	<0.010	<0.0010	<0.020	0.000028	14	<0.0010	<0.00030	0.0047	0.35	<0.00020	<0.020	3.5	0.016	<0.00020	<0.00050	<0.10	1.6	<0.00020	1.0	<0.00010	2.2	0.029	7.1	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.0099
	RPD		*4.8%*	*NC*	*7.1%*	*NC*	*NC*	*NC*	*3.5%*	*0.0%*	*NC*	*NC*	*10%*	*0.0%*	*NC*	*NC*	*0.0%*	*0.0%*	*NC*	*NC*	*NC*	*6.1%*	*NC*	*6.2%*	*NC*	*0.0%*	*0.0%*	*2.8%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*11%*

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
CL-8 sfc	14-Feb-23		0.035	<0.00060	0.00052	<0.010	<0.0010	<0.020	0.00011	11	<0.0010	<0.00030	0.0068	0.24	<0.00020	<0.020	3.3	0.018	<0.00020	0.00058	<0.10	1.6	<0.00020	1.0	<0.00010	2.2	0.028	3.8	<0.00020	<0.0010	0.0019	<0.00010	<0.0010	0.050
	16-May-23		0.081	<0.00060	0.00038	<0.010	<0.0010	<0.020	0.00027	17	<0.0010	0.00037	0.014	0.57	<0.00020	<0.020	3.5	0.045	<0.00020	0.00082	<0.10	1.7	<0.00020	1.2	<0.00010	1.9	0.028	13	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.096
	30-May-23		0.078	<0.00060	0.00043	0.010	<0.0010	<0.020	0.00013	16	<0.0010	<0.00030	0.0080	0.53	<0.00020	<0.020	3.6	0.030	<0.00020	0.00072	<0.10	1.8	<0.00020	1.2	<0.00010	2.0	0.027	9.1	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.043
		SW-103	0.064	<0.00060	0.00031	0.010	<0.0010	<0.020	0.00014	16	<0.0010	<0.00030	0.0078	0.51	<0.00020	<0.020	3.7	0.029	<0.00020	0.00068	<0.10	1.7	<0.00020	1.2	<0.00010	2.0	0.027	8.8	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.043
	RPD		*20%*	*NC*	*32%*	*NC*	*NC*	*NC*	*7.4%*	*0.0%*	*NC*	*NC*	*2.5%*	*3.8%*	*NC*	*NC*	*2.7%*	*3.4%*	*NC*	*5.7%*	*NC*	*NC*	*NC*	*0.0%*	*NC*	*0.0%*	*0.0%*	*3.4%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*0.0%*
	13-Jun-23		0.050	<0.00060	0.00028	0.010	<0.0010	<0.020	0.00017	20	<0.0010	<0.00030	0.0092	0.54	<0.00020	<0.020	4.3	0.030	<0.00020	0.00065	<0.10	2.0	<0.00020	1.0	<0.00010	2.1	0.032	16	<0.00020	<0.0010	0.0012	<0.00010	<0.0014	0.057
	27-Jun-23		0.066	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000066	14	<0.0010	<0.00030	0.0055	0.34	<0.00020	<0.020	3.5	0.013	<0.00020	0.00063	<0.10	1.6	<0.00020	0.93	<0.00010	2.0	0.029	8.4	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.024
	11-Jul-23		0.045	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000074	15	<0.0010	<0.00030	0.0060	0.35	0.00057	<0.020	3.6	0.016	<0.00020	0.00062	<0.10	1.7	<0.00020	0.83	<0.00010	2.2	0.030	8.4	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.027
	25-Jul-23		0.046	<0.00060	0.00051	0.011	<0.0010	<0.020	0.000046	13	<0.0010	<0.00030	0.005	0.17	<0.00020	<0.020	3.3	0.0065	<0.00020	0.00051	<0.10	1.7	<0.00020	0.80	<0.00010	2.8	0.029	6.7	<0.00020	0.0012	0.0015	<0.00010	<0.0010	0.012
	9-Aug-23		0.047	<0.00060	0.00054	<0.010	<0.0010	<0.020	0.000044	13	<0.0010	<0.00030	0.0057	0.24	<0.00020	<0.020	3.3	0.0094	<0.00020	0.00058	<0.10	1.6	<0.00020	0.84	<0.00010	2.0	0.027	7.5	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.014
	22-Aug-23		0.049	<0.00060	0.00057	<0.010	<0.0010	<0.020	0.000042	13	<0.0010	<0.00030	0.0065	0.22	<0.00020	<0.020	3.4	0.015	<0.00020	0.00057	<0.10	1.6	<0.00020	0.81	<0.00010	2.1	0.029	6.4	<0.00020	<0.0010	0.0018	<0.00010	<0.0010	0.016
	6-Sep-23		0.055	<0.00060	0.00059	<0.010	<0.0010	0.031	0.000045	12	<0.0010	<0.00030	0.0066	0.32	<0.00020	<0.020	3.2	0.020	<0.00020	0.00071	<0.10	1.6	<0.00020	0.76	<0.00010	2.1	0.032	6.4	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.014
	19-Sep-23		0.056	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000034	13	<0.0010	<0.00030	0.0049	0.34	<0.00020	<0.020	3.4	0.025	<0.00020	0.00055	<0.10	1.6	<0.00020	0.87	<0.00010	2.2	0.027	6.5	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.0097
	4-Oct-23		0.053	<0.00060	0.00047	<0.010	<0.0010	<0.020	0.000026	13	<0.0010	<0.00030	0.0055	0.42	0.00024	<0.020	3.3	0.018	<0.00020	0.00058	<0.10	1.5	<0.00020	0.90	<0.00010	2.1	0.029	6.7	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	0.0097
	17-Oct-23		0.048	<0.00060	0.0004	<0.010	<0.0010	<0.020	0.000028	14	<0.0010	<0.00030	0.0051	0.35	<0.00020	<0.020	3.5	0.016	<0.00020	<0.00050	<0.10	1.6	<0.00020	0.95	<0.00010	2.1	0.029	7.2	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.010
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CL-8 btm	14-Feb-23		0.040	<0.00060	0.00058	0.010	<0.0010	<0.020	0.000099	11	<0.0010	<0.00030	0.0085	0.23	<0.00020	<0.020	3.3	0.011	<0.00020	0.00056	<0.10	1.6	<0.00020	0.96	<0.00010	2.2	0.028	4.7	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.042
	16-May-23		0.081	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.00017	13	<0.0010	<0.00030	0.010	0.41	<0.00020	<0.020	3.1	0.029	<0.00020	0.00065	<0.10	1.6	<0.00020	1.2	<0.00010	1.8	0.025	8.5	<0.00020	<0.0010	0.0023	<0.00010	<0.0010	0.067
	30-May-23		0.058	<0.00060	0.00036	0.010	<0.0010	<0.020	0.00022	17	<0.0010	<0.00030	0.0098	0.77	<0.00020	<0.020	4.0	0.041	<0.00020	0.00064	<0.10	1.8	<0.00020	1.3	<0.00010	1.9	0.028	12	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.065
	13-Jun-23		0.056	<0.00060	0.00046	<0.010	<0.0010	<0.020	0.00016	13	<0.0010	<0.00030	0.0070	0.28	0.00027	<0.020	3.3	0.011	<0.00020	0.00085	<0.10	1.6	<0.00020	0.92	<0.00010	1.9	0.027	7.6	0.00042	<0.0010	0.0022	<0.00010	<0.0010	0.033
	27-Jun-23		0.060	<0.00060	0.00040	<0.010	<0.0010	<0.020	0.000076	14	<0.0010	<0.00030	0.0060	0.32	<0.00020	<0.020	3.6	0.013	<0.00020	0.00066	<0.10	1.7	<0.00020	1.0	<0.00010	2.1	0.027	9.0	<0.00020	<0.0010	0.0027	<0.00010	<0.0010	0.029
	11-Jul-23		0.053	<0.00060	0.00050	0.010	<0.0010	<0.020	0.000069	15	<0.0010	<0.00030	0.0061	0.37	0.00023	<0.020	3.6	0.017	<0.00020	0.00066	<0.10	1.7	<0.00020	0.9	<0.00010	2.1	0.029	8.4	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.026
		SW-114	0.046	<0.00060	0.00051	0.010	<0.0010	<0.020	0.000078	15	<0.0010	<0.00030	0.0062	0.35	0.00023	<0.020	3.6	0.016	<0.00020	0.00051	<0.10	1.7	<0.00020	0.88	<0.00010	2.3	0.030	8.5	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.026
	RPD		*14%*	*NC*	*2.0%*	*NC*	*NC*	*NC*	*12%*	*0.0%*	*NC*	*NC*	*1.6%*	*5.6%*	*0.0%*	*NC*	*0.0%*	*6.1%*	*NC*	*26%*	*NC*	*NC*	*NC*	*2.2%*	*NC*	*9.1%*	*3.4%*	*1.2%*	*NC*	*NC*	*0.0%*	*NC*	*NC*	*0.0%*
	25-Jul-23		0.065	<0.00060	0.00049	<0.010	<0.0010	<0.020	0.000047	12	<0.0010	<0.00030	0.0055	0.20	0.00022	<0.020	3.4	0.0083	<0.00020	0.00065	<0.10	1.7	<0.00020	0.84	<0.00010	2.0	0.024	6.8	<0.00020	<0.0010	0.0028	<0.00010	<0.0010	0.016
	9-Aug-23		0.047	<0.00060	0.00043	<0.010	<0.0010	<0.020	0.000040	12	<0.0010	<0.00030	0.0049	0.23	<0.00020	<0.020	3.3	0.0087	<0.00020	0.00060	<0.10	1.5	<0.00020	0.83	<0.00010	1.9	0.026	7.4	<0.00020	<0.0010	0.0026	<0.00010	<0.0010	0.014
	22-Aug-23		0.039	<0.00060	0.00045	<0.010	<0.0010	<0.020	0.000032	13	<0.0010	<0.00030	0.0049	0.22	<0.00020	<0.020	3.4	0.015	<0.00020	0.00060	<0.10	1.6	<0.00020	0.80	<0.00010	2.1	0.028	6.3	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.012
	6-Sep-23		0.045	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.000037	13	<0.0010	<0.00030	0.0054	0.35	<0.00020	<0.020	3.4	0.020	<0.00020	0.00051	<0.10	1.7	<0.00020	0.83	<0.00010	2.1	0.030	6.8	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.012
	19-Sep-23		0.048	<0.00060	0.00057	0.010	<0.0010	<0.020	0.000041	13	<0.0010	<0.00030	0.0073	0.38	<0.00020	<0.020	3.5	0.022	<0.00020	0.00079	<0.10	1.7	<0.00020	0.93	<0.00010	2.2	0.027	6.4	<0.00020	<0.0010	0.0015	<0.00010	<0.0010	0.013
	4-Oct-23		0.042	<0.00060	0.00045	0.011	<0.0010	<0.020	0.000032	14	<0.0010	<0.00030	0.0056	0.47	<0.00020	<0.020	3.6	0.019	<0.00020	0.00058	<0.10	1.8	<0.00020	0.86	<0.00010	2.4	0.030	7.1	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.010
	17-Oct-23		0.041	0.0011	0.00038	<0.010	<0.0010	<0.020	0.000031	14	<0.0010	<0.00030	0.0058	0.38	<0.00020	<0.020	3.6	0.017	<0.00020	0.00089	<0.10	1.7	<0.00020	1.0	<0.00010	2.2	0.030	7.6	<0.00020	<0.0010	0.0016	<0.00010	<0.0010	0.010
	31-Oct-23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10-0.50*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																			
Protection of Aquatic Life and Wildlife																																			
Tier II Objective - Chronic			-	-	-	-	-	-	*0.00018 [2a]*	-	*0.056*	-	*0.00598 [2a]*	-	*0.00164 [2a]*	-	-	-	-	*0.0336 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0771 [2a]*
Tier II Objective - Acute			-	-	-	-	-	-	*0.00125 [2a]*	-	*1.176*	-	*0.00857 [2a]*	-	*0.0421 [2a]*	-	-	-	-	*0.302 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0771 [2a]*
Tier III Guideline			*0.1 (pH ≥ 6.5)* *0.005 (pH <6.5)*	-	-	-	-	-	-	-	-	-	-	*0.3*	-	-	-	-	*0.073*	-	-	-	*0.001*	-	*0.0001*	-	-	-	*0.0008*	-	-	*0.015*	-	-

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 59.4 mg/L as $CaCO_3$ as measured in Cold Lake on May 11, 2016.

- Values above MWQSOG value.

TABLE 6
TOTAL METALS IN WATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
Additional Surface Water Sampling Locations																																	
Portage Lake	3-Oct-23		0.054	<0.00060	0.00051	0.010	<0.0010	<0.020	0.000071	11	<0.0010	<0.00030	0.0069	0.47	<0.00020	<0.020	3.6	0.027	<0.00020	0.00091	<0.10	1.2	<0.00020	0.57	<0.00010	2.2	0.030	2.5	<0.00020	<0.0010	0.0017	<0.00010	<0.0010	0.050
Sherlett Lake	3-Oct-23		0.029	0.00076	0.00052	<0.010	<0.0010	<0.020	<0.000020	8.3	<0.0010	<0.00030	0.0013	0.16	<0.00020	<0.020	2.8	0.020	<0.00020	0.00076	<0.10	1.5	<0.00020	1.4	<0.00010	1.7	0.021	1.2	<0.00020	<0.0010	0.0011	<0.00010	<0.0010	<0.0030
WWTP Outflow	3-Oct-23		4.7	0.0018	0.00090	0.020	<0.0010	0.13	0.00085	27	<0.0010	0.00059	0.056	2.3	0.00088	<0.020	7.7	0.21	0.00038	0.0025	1.4	12	0.00035	3.4	<0.00010	31	0.057	27	<0.00020	0.0012	0.011	0.00063	0.0012	0.26
C Dock	3-Oct-23		0.046	<0.00060	0.00041	<0.010	<0.0010	<0.020	0.000062	10	<0.0010	<0.00030	0.0063	0.48	<0.00020	<0.020	3.4	0.037	<0.00020	0.00073	<0.10	1.1	<0.00020	0.68	<0.00010	2.1	0.029	2.4	<0.00020	<0.0010	0.0012	<0.00010	<0.0010	0.042
		SW-135	0.045	0.00082	0.00050	<0.010	<0.0010	<0.020	0.000067	10	<0.0010	<0.00030	0.0067	0.49	<0.00020	<0.020	3.4	0.038	<0.00020	0.00082	<0.10	1.2	<0.00020	0.72	<0.00010	2.2	0.029	2.5	<0.00020	<0.0010	0.0014	<0.00010	<0.0010	0.042
	RPD		*2.2%*	*NC*	*20%*	*NC*	*NC*	*NC*	*7.8%*	*0.0%*	*NC*	*NC*	*6.2%*	*2.1%*	*NC*	*NC*	*0.0%*	*2.7%*	*NC*	*12%*	*NC*	*8.7%*	*NC*	*5.7%*	*NC*	*4.7%*	*0.0%*	*4.1%*	*NC*	*NC*	*15%*	*NC*	*NC*	*0.0%*
	31-Oct-23		0.063	<0.00060	0.00035	0.013	<0.0010	0.052	0.000070	18	<0.0010	<0.00030	0.0059	0.36	<0.00020	<0.020	4.6	0.029	<0.00020	0.00072	<0.10	2.1	<0.00020	0.8	<0.00010	3.1	0.039	10	<0.00020	<0.0010	0.0026	<0.00010	<0.0010	0.051
Cofferdam	4-Oct-23		0.069	<0.00060	0.00031	0.017	<0.0010	0.021	0.00036	56	<0.0010	0.00034	0.0080	2.3	<0.00020	<0.020	8.9	0.079	<0.00020	0.0010	<0.10	4.6	<0.00020	1.0	<0.00010	3.5	0.063	55	<0.00020	<0.0010	0.0035	<0.00010	<0.0010	0.11
	17-Oct-23		0.061	<0.00060	0.00042	<0.010	<0.0010	<0.020	0.00032	11	<0.0010	<0.00030	0.012	0.35	<0.00020	<0.020	3.2	0.059	<0.00020	0.00076	<0.10	1.7	<0.00020	1.5	<0.00010	4.4	0.027	3.5	<0.00020	<0.0010	0.0024	<0.00010	<0.0010	0.15
	31-Oct-23		0.37	<0.00060	0.00050	0.013	<0.0010	0.027	0.00050	12	<0.0010	0.00044	0.017	1.3	0.00061	<0.020	3.8	0.083	<0.00020	0.0011	<0.10	2.0	<0.00020	2.0	<0.00010	6.5	0.032	3.7	<0.00020	<0.0010	0.018	0.00010	<0.0010	0.18
Diversion	17-Oct-23		0.068	<0.00060	0.00046	0.011	<0.0010	<0.020	0.00033	11	<0.0010	<0.00030	0.013	0.40	<0.00020	<0.020	3.5	0.065	<0.00020	0.00089	<0.10	1.7	<0.00020	1.6	<0.00010	4.6	0.029	3.8	<0.00020	<0.0010	0.0028	<0.00010	<0.0010	0.16
	31-Oct-23		0.17	<0.00060	0.00056	0.011	<0.0010	0.020	0.00053	12	<0.0010	0.00052	0.014	0.66	0.00020	<0.020	3.6	0.13	<0.00020	0.0010	<0.10	1.8	<0.00020	1.5	<0.00010	6.0	0.03	3.5	<0.00020	<0.0010	0.0079	<0.00010	<0.0010	0.21
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10-0.50*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																	
Protection of Aquatic Life and Wildlife																																	
Tier II Objective - Chronic			-	-	-	-	-	-	*0.00018 [2a]*	-	*0.056*	-	*0.00598 [2a]*	-	*0.00164 [2a]*	-	-	-	-	*0.0336 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0771 [2a]*
Tier II Objective - Acute			-	-	-	-	-	-	*0.00125 [2a]*	-	*1.176*	-	*0.00857 [2a]*	-	*0.0421 [2a]*	-	-	-	-	*0.302 [2a]*	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.0771 [2a]*
Tier III Guideline			*0.1 (pH ≥ 6.5) 0.005 (pH <6.5)*	-	-	-	-	-	-	-	-	-	-	*0.3*	-	-	-	-	*0.073*	-	-	-	*0.001*	-	*0.0001*	-	-	-	*0.0008*	-	-	*0.015*	-	-

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
a. Calculated as per Manitoba Conservation (2011) using mean total hardness of 59.4 mg/L as $CaCO_3$ as measured in Cold Lake on May 11, 2016.

- Values above MWQSOG value.

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
TRIP BLANK	16-May-23		0.0047	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	30-May-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	13-Jun-23		0.0036	<0.00060	<0.00020	<0.010	<0.0010	<0.020	0.000032	<0.30	<0.0010	<0.00030	0.0024	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	27-Jun-23		0.0046	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	11-Jul-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	25-Jul-23		0.0036	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	9-Aug-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	22-Aug-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	6-Sep-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0042
	19-Sep-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	4-Oct-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0043
	17-Oct-23		0.0035	<0.00060	<0.00020	<0.010	<0.0010	0.022	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.001*	*0.020*	*0.020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.10*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.

TABLE 7
RAINBOW TROUT 96 HR LC_{50} TOXICITY RESULTS
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Concentration (%vol/vol)	Start				24 hours				48 hours				72 hours				96 hours								Result
			Temperature (°C)	pH	Conductivity (µS/cm)	DO (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Temperature (°C)	pH	Conductivity (µS/cm)	DO (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	96 hrs LC_{50} (% vol/vol)
CAMP LAKE DISCHARGE	16-May-23	0	16	7.6	309	8.9	0	0	0	0	0	0	0	0	0	0	0	0	16	7.2	315	8.5	0	0	0	0	>100
		6.25	16	7.8	306	8.7	0	0	0	0	0	0	0	0	0	0	0	0	16	7.6	308	8.2	0	0	0	0	
		12.5	16	7.8	302	9.0	0	0	0	0	0	0	0	0	0	0	0	0	16	7.6	307	8.3	0	0	0	0	
		25	15	7.8	296	8.9	0	0	0	0	0	0	0	0	0	0	0	0	15	7.7	299	8.6	0	0	0	0	
		50	15	7.6	284	8.8	0	0	0	0	0	0	0	0	0	0	0	0	16	7.6	288	8.7	0	0	0	0	
		100	15	6.8	263	9.0	0	0	0	0	0	0	0	0	0	0	0	0	16	7.1	271	8.8	0	0	0	0	
	11-Jul-23	0	14	7.8	53	10.2	0	0	0	0	0	0	0	0	0	0	0	0	14	7.7	53	10.2	0	0	0	0	>100
		6.25	14	7.8	76	10.3	0	0	0	0	0	0	0	0	0	0	0	0	14	7.6	76	10.0	0	0	0	0	
		12.5	14	7.7	94	10.3	0	0	0	0	0	0	0	0	0	0	0	0	14	7.3	94	9.9	0	0	0	0	
		25	14	7.6	130	10.3	0	0	0	0	0	0	0	0	0	0	0	0	14	7.5	130	9.9	0	0	0	0	
		50	14	7.5	209	10.3	0	0	0	0	0	0	0	0	0	0	0	0	14	7.3	209	10.0	0	0	0	0	
		100	14	7.2	327	10.2	0	0	0	0	0	0	0	0	0	0	0	0	14	7.4	327	10.1	0	0	0	0	
	06-Sep-23	0	14	7.5	306	9.3	0	0	0	0	0	0	0	0	0	0	0	0	14	7.4	312	9	0	0	0	0	>100
		6.25	14	7.6	305	9.4	0	0	0	0	0	0	0	0	0	0	0	0	14	7.3	310	8.8	0	0	0	0	
		12.5	14	7.6	304	9.3	0	0	0	0	0	0	0	0	0	0	0	0	14	7.5	308	9	0	0	0	0	
		25	14	7.6	304	9.7	0	0	0	0	0	0	0	0	0	0	0	0	14	7.4	310	8.9	0	0	0	0	
		50	14	7.5	303	9.9	0	0	0	0	0	0	0	0	0	0	0	0	14	7.3	310	8.9	0	0	0	0	
		100	14	6.7	299	9.9	0	0	0	0	0	0	0	0	0	0	0	0	14	6.7	316	9.0	0	0	0	0	
Metal and Diamond Mining Effluent Regulations [1]																											
Rainbow trout 96 hr LC_{50}			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100 [1a]

Notes:
"-" = No Data

1. Metal and Diamond Mining Effluent Regulations (MDMER) discharge quality limits, SOR/2002-222, Minister of Justice, amended June 9, 2023.
   a. An LC_{50} value >100% indicates discharge is not acutely toxic to fish.

BOLD - Exceedance of MDMER Criteria

TABLE 9
2023 GROUNDWATER MONITORING AND FIELD CHEMISTRY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Depth to Water (m)	Depth to Bottom (m)	Stick up (m)	Temperature (°C)	pH	EC (µS/cm)	DO (mg/L)	ORP (mV)	Notes
BEDROCK WELLS											
MW-01-BR	14-Jun-23		5.008	11.55	0.841	6.5	7.38	2247	5.82	17.4	
	3-Oct-23		5.969	11.488	0.839	6.5	7.48	2265	7.15	112.4	light grey, no odour
MW-02-BR	14-Jun-23		0.752	10.400	0.940	8.4	8.15	677	3.16	88.5	
	3-Oct-23		1.597	10.350	1.000	8.0	8.25	736	3.34	112	clear, no odour
MW-04-BR	14-Jun-23		0.956	14.273	1.088	6.5	8.57	890	5.04	53.1	
	3-Oct-23		1.353	14.224	1.001	6.7	8.69	1046	7.11	115.6	clear, no odour
MW-05-BR	14-Jun-23		3.605	16.115	0.905	7.6	6.49	207.8	6.15	167.5	
	3-Oct-23		6.971	16.122	0.919	11.5	6.63	299.5	6.61	103.2	clear, no odour
MW-06-BR	14-Jun-23	MW-100	1.508	7.48	1.005	8.4	6.07	734	2.89	125.3	
	3-Oct-23		1.612	7.473	1.022	8.6	6.17	680	2.31	140.5	clear, no odour
MW-07-BR	14-Jun-23		2.467	10.298	0.953	8.2	4.8	508	9.83	267.1	
	3-Oct-23		4.444	10.297	0.993	8.7	5.11	827	5.67	184.4	light yellow with particulates, no odour
MW-08-BR	14-Jun-23		8.947	15.976	0.910	9.20	6.16	398.2	9.54	214.3	
	3-Oct-23		11.924	15.974	0.910	9.60	6.66	514	8.06	92	light grey, no odour
OVERBURDEN WELLS											
MW-03-OB	14-Jun-23		1.275	8.193	1.082	6.4	7.28	854	2.27	-49.8	
	3-Oct-23	MW-100	1.736	8.187	1.110	6.0	7.09	848	1.5	139.9	Dark brown, silty, no odour
MW-04-OB	14-Jun-23		0.641	8.631	0.705	9.2	7.58	1039	5.04	58.6	
	3-Oct-23		1.064	8.631	0.645	8.5	7.65	1201	5.12	115.2	brown, silty, waste water odour
MW-09-OB	14-Jun-23		0.820	6.491	0.970	5.8	10.59	941	1.86	-5.0	
	3-Oct-23		1.021	6.449	0.977	9.8	6.66	968	1.14	97.6	light grey, no odour
MW-10-OB	14-Jun-23		1.362	6.273	1.213	10.1	6.86	929	3.08	-17.4	
	3-Oct-23		1.554	6.271	1.258	8.5	6.58	945	2.64	122.3	clear, no odour
MW-11-OB	14-Jun-23		0.799	7.681	0.926	9.6	7.15	1018	4.11	-36.7	
	3-Oct-23		0.956	7.678	0.885	9.2	7.13	1039	3.49	90.0	clear, silty, no odour

Notes:
"-" = no value DO = Dissolved Oxygen EC = Electrical Conductivity ORP = Oxygen Reduction Potential

TABLE 10
2023 GENERAL WATER QUALITY
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																		
			Anion Sum (meq/L)	Cation Sum (meq/L)	Ionic Balance (%)	pH (units)	E.C. (µS/cm)	Alkalinity (PP as $CaCO_3$)	Alkalinity (Total as $CaCO_3$)	Bicarbonate	Carbonate	Hydroxide	Chloride	Sulphate	Hardness as $CaCO_3$	Nitrate	Nitrate as N	Nitrite	Nitrite as N	Nitrate & Nitrite as N	T.D.S.
BEDROCK WELLS																					
MW-01-BR	14-Jun-23		30	29	2.2	7.74	2200	<1.0	350	420	<1.0	<1.0	54	1000	1300	0.22	0.049	<0.033	<0.010	0.049	1800
	3-Oct-23		31	31	0.38	7.6	2300	<1.0	370	450	<1.0	<1.0	65	1100	1400	0.1	0.023	<0.033	<0.010	0.023	1900
MW-02-BR	14-Jun-23		6.6	6.9	2.5	8.07	630	<1.0	180	220	<1.0	<1.0	20	120	120	<0.044	<0.010	<0.033	<0.010	<0.010	390
	3-Oct-23		7.2	7.2	0.23	7.64	670	<1.0	190	240	<1.0	<1.0	29	120	130	<0.044	<0.010	<0.033	<0.010	<0.010	420
MW-04-BR	14-Jun-23		8.8	9.5	3.6	8.25	880	<1.0	200	240	<1.0	<1.0	20	200	130	0.37	0.083	<0.033	<0.010	0.083	550
	3-Oct-23		10	10	0.067	8.08	990	<1.0	240	290	<1.0	<1.0	30	230	100	0.51	0.11	<0.033	<0.010	0.11	630
MW-05-BR	14-Jun-23		2	2.1	NC	6.71	200	<1.0	54	65	<1.0	<1.0	<1.0	43	98	0.064	0.015	<0.033	<0.010	0.015	120
	3-Oct-23		3	2.7	4.7	6.51	260	<1.0	100	130	<1.0	<1.0	<1.0	44	130	0.19	0.044	<0.033	<0.010	0.044	160
MW-06-BR	14-Jun-23		7	7.1	1.2	6.19	700	<1.0	22	27	<1.0	<1.0	<1.0	310	330	<0.044	<0.010	<0.033	<0.010	<0.010	460
		MW-100	7.4	7.4	0.32	6.18	710	<1.0	25	30	<1.0	<1.0	<1.0	330	340	<0.044	<0.010	<0.033	<0.010	<0.010	490
	RPD		*6%*	*4%*	*116%*	*0%*	*1%*	*NC*	*13%*	*11%*	*NC*	*NC*	*NC*	*6%*	*3%*	*NC*	*NC*	*NC*	*NC*	*NC*	*6%*
	3-Oct-23		6.3	5.8	4.1	5.81	620	<1.0	22	27	<1.0	<1.0	<1.0	280	260	<0.044	<0.010	<0.033	<0.010	<0.010	400
MW-07-BR	14-Jun-23		4.8	4.3	5.7	4.43	490	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	230	200	1.4	0.32	<0.010	<0.010	0.32	310
	3-Oct-23		7.8	8.4	3.4	4.8	770	<1.0	1.2	1.5	<1.0	<1.0	<1.0	370	390	4.1	0.92	<0.033	<0.010	0.92	540
MW-08-BR	14-Jun-23		4.0	4.2	2.4	6.46	400	<1.0	29	35	<1.0	<1.0	<1.0	160	190	1.4	0.31	<0.033	0.31	0.31	260
	3-Oct-23		4.7	4.3	5	6.36	450	<1.0	59	72	<1.0	<1.0	<1.0	170	200	1.4	0.32	<0.033	<0.010	0.32	290
OVERBURDEN WELLS																					
MW-03-OB	14-Jun-23		9.2	10	4.1	7.53	820	<1.0	200	240	<1.0	<1.0	1.7	250	450	<0.044	<0.010	<0.033	<0.010	<0.010	560
	3-Oct-23		9.4	9.4	0.34	6.95	820	<1.0	210	260	<1.0	<1.0	2	250	420	<0.044	<0.010	<0.033	<0.010	<0.010	550
			9.3	9.5	1.2	7.1	820	<1.0	210	250	<1.0	<1.0	2.2	240	430	<0.22	<0.050	<0.033	<0.010	<0.050 [3]	550
	RPD		*1%*	*1%*	*112%*	*2%*	*0%*	*NC*	*0%*	*4%*	*NC*	*NC*	*10%*	*4%*	*2%*	*NC*	*NC*	*NC*	*NC*	*NC*	*0%*
MW-04-OB	14-Jun-23		12	12	3.2	7.81	1000	<1.0	340	410	<1.0	<1.0	13	210	560	<0.044	<0.010	<0.033	<0.010	<0.010	660
	3-Oct-23		14	15	2.2	7.77	1200	<1.0	380	460	<1.0	<1.0	16	300	660	<0.044	<0.010	<0.033	<0.010	<0.010	810
MW-09-OB	14-Jun-23		9.6	10	3.4	6.62	870	<1.0	60	73	<1.0	<1.0	<1.0	400	460	<0.22	<0.050	<0.033	<0.010	<0.050	630
	3-Oct-23		10	10	0.26	6.29	900	<1.0	100	130	<1.0	<1.0	<1.0	390	450	<0.22	<0.050	<0.16	<0.050 [3]	0.014	640
MW-10-OB	14-Jun-23		9.9	10	2.3	6.56	870	<1.0	65	80	<1.0	<1.0	<1.0	410	450	<0.044	<0.010	<0.033	<0.010	<0.010	650
	3-Oct-23		9.7	10	1.7	6.19	880	<1.0	77	94	<1.0	<1.0	<1.0	390	430	<0.22	<0.050	<0.16	<0.050 [3]	0.035	630
MW-11-OB	14-Jun-23		12	13	4.7	7.58	1000	<1.0	170	210	<1.0	<1.0	1	390	600	<0.044	<0.010	<0.033	<0.010	<0.010	720
	3-Oct-23		12	12	1.4	6.77	1000	<1.0	170	210	<1.0	<1.0	1.1	390	550	0.083	0.019	<0.033	<0.010	0.019	710
QA/QC																					
FIELD BLANK	14-Jun-23		0	0.0160	NC	4.80	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.010	<0.010	<0.033	<0.010	<0.010	<10
	3-Oct-23		0	0.011	NC	4.95	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.044	<0.010	<0.033	<0.010	<0.010	<10
TRIP BLANK	14-Jun-23		0	0.007	NC	5.15	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.044	<0.010	<0.033	<0.010	<0.010	<10
	3-Oct-23		0	0.012	NC	4.93	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50	<0.044	<0.010	<0.033	<0.010	<0.010	<10
Laboratory Detection Limits			-	-	-	-	*2.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0-25*	*0.50*	*0.044-0.22*	*0.010-0.050*	*0.033*	*0.010*	*0.010-0.050*	*10-25*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																					
Protection of Freshwater Aquatic Life																					
Tier III Guideline						*6.5 - 9.0*												*13*	*0.06*		

Notes:

"-" = No Data E.C. = Electrical Conductivity T.D.S. = Total Dissolved Solids RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
3. Detection limits raised due to matrix interference.

- Values outside of MWQSOG range (pH) or specified maximum value (nitrite).

TABLE 11
2023 DISSOLVED METALS IN GROUNDWATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																														
			Aluminum (Al) Dissolved	Antimony (Sb) Dissolved	Arsenic (As) Dissolved	Barium (Ba) Dissolved	Beryllium (Be) Dissolved	Boron (B) Dissolved	Cadmium (Cd) Dissolved	Calcium (Ca) Dissolved	Chromium (Cr) Dissolved	Cobalt (Co) Dissolved	Copper (Cu) Dissolved	Iron (Fe) Dissolved	Lead (Pb) Dissolved	Lithium (Li) Dissolved	Magnesium (Mg) Dissolved	Manganese (Mn) Dissolved	Mercury (Hg) Dissolved	Molybdenum (Mo) Dissolved	Nickel (Ni) Dissolved	Phosphorus (P) Dissolved	Potassium (K) Dissolved	Selenium (Se) Dissolved	Silicon (Si) Dissolved	Silver (Ag) Dissolved	Sodium (Na) Dissolved	Strontium (Sr) Dissolved	Sulphur (S) Dissolved	Thallium (Tl) Dissolved	Tin (Sn) Dissolved	Titanium (Ti) Dissolved	Uranium (U) Dissolved	Vanadium (V) Dissolved	Zinc (Zn) Dissolved
BEDROCK WELLS																																		
MW-01-BR	14-Jun-23		0.0048	<0.00060	0.00052	0.02	<0.0010	0.19	0.000068	270	<0.0010	0.0062	0.0046	0.073	<0.00020	0.051	160	0.35	<0.0000019	0.003	0.0041	<0.10	21	0.0032	6.7	<0.00010	44	1.9	350	<0.00020	<0.0010	<0.0010	0.074	<0.0010	0.016
	3-Oct-23		<0.0030	<0.00060	0.0016	0.05	<0.0010	0.21	<0.000020	300	<0.0010	0.006	<0.0010	2.9	<0.00020	0.048	170	1.1	<0.0000019	0.0033	0.0032	<0.10	19	0.00055	6.6	<0.00010	48	2.1	340	<0.00020	<0.0010	<0.0010	0.12	0.0011	<0.0030
MW-02-BR	14-Jun-23		0.0035	<0.00060	0.00059	0.042	<0.0010	0.48	<0.000020	26	<0.0010	0.0016	0.0036	<0.060	<0.00020	0.084	14	0.058	<0.0000019	0.00068	<0.00050	<0.10	6	<0.00020	7.3	<0.00010	98	0.36	41	<0.00020	<0.0010	<0.0010	0.0058	<0.0010	<0.0030
	3-Oct-23		0.0059	<0.00060	0.0006	0.034	<0.0010	0.54	<0.000020	27	<0.0010	0.0024	<0.0010	0.15	<0.00020	0.078	15	0.057	<0.0000019	0.0008	<0.00050	<0.10	6.2	<0.00020	6.6	<0.00010	100	0.37	40	<0.00020	<0.0010	<0.0010	0.0064	<0.0010	<0.0030
MW-04-BR	14-Jun-23		0.0031	<0.00060	0.0046	0.031	<0.0010	0.45	<0.000021	25	<0.0010	0.00041	<0.0010	<0.060	<0.00020	0.13	16	0.13	<0.0000019	0.0065	0.0011	0.1	6.1	0.00033	5.9	<0.00010	160	0.44	74	<0.00020	<0.0010	<0.0010	0.0075	<0.0010	<0.0030
	3-Oct-23		0.0039	0.00086	0.0058	0.027	<0.0010	0.49	<0.000020	20	<0.0010	0.00035	<0.0010	<0.060	<0.00020	0.11	13	0.093	<0.0000019	0.0074	0.0012	<0.10	5.2	0.00023	5.6	<0.00010	190	0.36	78	<0.00020	<0.0010	<0.0010	0.01	0.0022	<0.0030
MW-05-BR	14-Jun-23		0.019	<0.00060	<0.00020	0.02	<0.0010	<0.020	0.00011	32	<0.0010	0.0075	0.0036	<0.060	<0.00020	<0.020	4.6	0.35	<0.0000019	<0.00020	0.0025	<0.10	3.6	<0.00020	6	<0.00010	1.5	0.034	15	<0.00020	<0.0010	<0.0010	0.0021	<0.0010	0.046
	3-Oct-23		0.017	<0.00060	<0.00020	0.031	<0.0010	<0.020	0.000057	40	<0.0010	0.0027	0.0029	<0.060	<0.00020	<0.020	6.4	0.2	<0.0000019	<0.00020	0.0015	<0.10	4.1	<0.00020	5.7	<0.00010	1.8	0.041	14	<0.00020	<0.0010	<0.0010	0.0017	<0.0010	0.015
MW-06-BR	14-Jun-23		0.0077	<0.00060	<0.00020	0.024	<0.0010	0.041	0.110	95	<0.0010	0.047	0.37	2.5	<0.00020	0.05	22	1.9	<0.0000019	<0.00020	0.017	<0.10	8.1	<0.00020	8.6	<0.00010	4.9	0.17	130	<0.00020	<0.0010	<0.0010	0.0012	<0.0010	34
	14-Jun-23	MW-100	0.0081	<0.00060	<0.00020	0.026	<0.0010	0.042	0.110	99	<0.0010	0.048	0.37	2.2	<0.00020	0.054	22	1.9	<0.0000019	<0.00020	0.017	<0.10	8.2	<0.00020	8.3	<0.00010	5.4	0.18	110	<0.00020	<0.0010	<0.0010	0.0012	<0.0010	35
	RPD		*5%*	*NC*	*NC*	*8%*	*NC*	*2%*	*0%*	*4%*	*NC*	*2%*	*0%*	*13%*	*NC*	*8%*	*0%*	*0%*	*NC*	*NC*	*0%*	*NC*	*1%*	*NC*	*4%*	*NC*	*10%*	*6%*	*17%*	*NC*	*NC*	*NC*	*0%*	*NC*	*3%*
	3-Oct-23		0.07	0.0014	0.00025	0.018	<0.0010	0.041	0.1	74	<0.0010	0.041	0.48	4.5	0.0052	0.044	18	1.5	<0.0000019	<0.00020	0.014	<0.10	7.6	<0.00020	7.5	<0.00010	4.5	0.14	98	0.00025	<0.0010	<0.0010	0.0019	<0.0010	28
MW-07-BR	14-Jun-23		4.6	<0.012	<0.0040	0.019	<0.040	<0.020	0.057	57	<0.020	0.036	6.2	0.076	<0.0040	<0.020	13	0.58	<0.0000019	<0.0040	0.019	0.14	7.3	<0.0040	12	<0.0020	2.7	0.076	74	<0.0040	<0.020	<0.020	0.0036	<0.020	14
	3-Oct-23		2.1	<0.00060	0.00025	0.019	<0.0010	0.021	0.061	120	<0.0010	0.018	3.2	<0.060	0.00051	0.025	20	0.36	0.0000025	<0.00020	0.015	<0.10	13	0.0012	11	<0.00010	3.8	0.13	140	<0.00020	<0.0010	<0.0010	0.0043	<0.0010	14
MW-08-BR	14-Jun-23		0.068	<0.00060	<0.00020	0.022	<0.0010	0.029	0.0024	56	<0.0010	0.041	0.12	0.072	<0.00020	0.045	12	0.4	<0.0000019	0.00033	0.022	0.12	5.6	0.00034	12	<0.00010	4	0.11	60	<0.00020	<0.0010	<0.0010	0.0017	<0.0010	1.5
	3-Oct-23		0.11	<0.00060	<0.00020	0.026	<0.0010	0.032	0.0029	58	<0.0010	0.052	0.23	<0.060	<0.00020	0.035	13	0.36	<0.0000019	0.00033	0.024	<0.10	5.7	0.00031	9.9	<0.00010	3.9	0.13	52	<0.00020	<0.0010	<0.0010	0.0037	<0.0010	1.6
OVERBURDEN WELLS																																		
MW-03-OB	14-Jun-23		<0.0030	<0.00060	0.00078	0.1	<0.0010	0.071	<0.000020	140	<0.0010	0.0011	0.0013	0.11	<0.00020	0.041	26	1.1	<0.0000019	0.00033	0.0012	<0.10	8.4	<0.00020	10	<0.00010	16	0.41	92	<0.00020	<0.0010	<0.0010	0.0015	<0.0010	0.23
	3-Oct-23		<0.0030	0.00071	0.0022	0.092	<0.0010	0.069	<0.000020	130	<0.0010	0.00095	<0.0010	3.3	<0.00020	0.04	25	0.98	<0.0000019	0.0005	0.0012	<0.10	7.9	<0.00020	9	<0.00010	14	0.39	82	<0.00020	<0.0010	<0.0010	0.0017	<0.0010	0.33
			<0.0030	0.0011	0.0021	0.093	<0.0010	0.068	<0.000020	130	<0.0010	0.0009	<0.0010	3.4	<0.00020	0.037	26	1	<0.0000019	0.00047	0.0011	<0.10	8	<0.00020	9.3	<0.00010	14	0.4	84	<0.00020	<0.0010	<0.0010	0.0016	<0.0010	0.3
	RPD		*NC*	*43%*	*5%*	*1%*	*NC*	*1%*	*NC*	*0%*	*NC*	*5%*	*NC*	*3%*	*NC*	*8%*	*4%*	*2%*	*NC*	*6%*	*9%*	*NC*	*1%*	*NC*	*3%*	*NC*	*0%*	*3%*	*2%*	*NC*	*NC*	*NC*	*6%*	*NC*	*10%*
MW-04-OB	14-Jun-23		<0.0030	<0.00060	<0.00020	0.094	<0.0010	0.17	0.00016	140	<0.0010	<0.00030	0.002	<0.060	<0.00020	0.047	48	0.56	<0.0000019	<0.00020	<0.00050	<0.10	4.7	<0.00020	11	<0.00010	26	0.7	75	<0.00020	<0.0010	<0.0010	0.00056	<0.0010	0.05
	3-Oct-23		1.8	<0.00060	0.00051	0.13	<0.0010	0.15	0.000034	170	0.0055	0.0016	0.004	5	0.0013	0.043	58	0.59	<0.0000019	<0.00020	0.0042	0.11	5.4	<0.00020	11	<0.00010	30	0.85	100	<0.00020	<0.0010	0.16	0.0018	0.0061	0.032
MW-09-OB	14-Jun-23		<0.0030	<0.00060	0.00059	0.017	<0.0010	0.051	0.00034	130	<0.0010	0.041	<0.0010	17	<0.00020	0.061	32	2.3	<0.0000019	<0.00020	0.015	<0.10	6.9	<0.00020	10	<0.00010	6.6	0.24	150	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	31
	3-Oct-23		0.057	<0.00060	0.0015	0.023	<0.0010	0.068 [3]	0.00039	130	<0.0010	0.035	<0.0010	14	<0.00020	0.052	30	2.1	<0.0000019	<0.00020	0.013	<0.10	6.8	<0.00020	9.4	<0.00010	7.3 (2)	0.25	130	<0.00020	<0.0010	0.0053	<0.00010	<0.0010	24
MW-10-OB	14-Jun-23		0.0032	<0.00060	<0.00020	0.021	<0.0010	0.082	0.0031	140	<0.0010	0.037	<0.0010	13	<0.00020	0.064	28	2.5	<0.0000019	0.00046	0.017	<0.10	7.1	<0.00020	9.8	<0.00010	13	0.26	150	<0.00020	<0.0010	<0.0010	0.00072	<0.0010	16
	3-Oct-23		0.0031	<0.00060	0.00067	0.021	<0.0010	0.084	0.0016	130	<0.0010	0.037	<0.0010	20	<0.00020	0.055	27	2.3	<0.0000019	0.00075	0.017	<0.10	7.2	<0.00020	9.5	<0.00010	12	0.25	140	<0.00020	<0.0010	<0.0010	0.00073	<0.0010	18
MW-11-OB	14-Jun-23		0.015	<0.00060	0.0009	0.062	<0.0010	0.059	<0.000020	170	<0.0010	0.0046	0.0023	0.51	<0.00020	0.047	40	1.9	<0.0000019	0.00026	0.0021	<0.10	6.5	<0.00020	9.6	<0.00010	10	0.55	130	<0.00020	<0.0010	<0.0010	0.00032	<0.0010	1.3
	3-Oct-23		0.047	<0.00060	0.0025	0.082	<0.0010	0.063	<0.000020	160	<0.0010	0.0044	<0.0010	4	<0.00020	0.045	36	1.8	<0.0000019	0.0003	0.0021	<0.10	5.8	<0.00020	9.3	<0.00010	9.7	0.57	130	<0.00020	<0.0010	0.0033	0.00017	<0.0010	1.3
QA/QC																																		
FIELD BLANK	14-Jun-23		<0.060	<0.012	<0.0040	<0.010	<0.020	<0.020	<0.00040	<0.30	<0.020	<0.0060	<0.020	<0.060	<0.0040	<0.020	<0.20	<0.0040	<0.0000019	<0.0040	<0.010	<0.10	<0.30	<0.0040	<0.50	<0.0020	<0.50	<0.020	<0.20	<0.0040	<0.020	<0.020	<0.0020	0.02	<0.060
	3-Oct-23		<0.0030	0.00079	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.0000019	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	0.0019	<0.0010	<0.00010	<0.0010	<0.0030
TRIP BLANK	14-Jun-23		<0.060	<0.012	<0.0040	<0.010	<0.020	<0.020	<0.00040	<0.30	<0.020	<0.0060	<0.020	<0.060	<0.0040	<0.020	<0.20	<0.0040	<0.0000019	<0.0040	<0.010	<0.10	<0.30	<0.0040	<0.50	<0.0020	<0.50	<0.020	<0.20	<0.0040	<0.020	<0.020	<0.0020	0.023	<0.060
	3-Oct-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.0000019	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.0000019*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.50*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																		
Protection of Aquatic Life and Wildlife																																		
Tier II Objective (acute)			-	-	-	-	-	-	*0.00120 - 0.0077* (2a)	-	*0.56 - 1.8* (2a)	-	*0.013 - 0.050* (2a)	-	*0.063 - 0.28* (2a)	-	-	-	-	-	*0.46 - 1.5* (2a)	-	-	-	-	-	-	-	-	-	-	-	-	*0.12 - 0.38* (2a)
Tier II Objective (chronic)			-	-	-	-	-	-	*0.00024 - 0.00064* (2a)	-	*0.073 - 0.23* (2a)	-	*0.0088 - 0.029* (2a)	-	*0.0025 - 0.011* (2a)	-	-	-	-	-	*0.051 - 0.17* (2a)	-	-	-	-	-	-	-	-	-	-	-	-	*0.12 - 0.38* (2a)

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. MWQSOG Tier II Objectives for dissolved metals are dependent on the hardness of the sample (exception is Arsenic and Chromium VI). Equations used to calculate the hardness-dependent objectives for dissolved metals are provided in the MWQSOG.
3. Matrix spike exceeds acceptance limits due to probable matrix interference.

- Values above MWQSOG value.

TABLE 12
2023 TOTAL METALS IN GROUNDWATER
SHERRIDON MINE SITE, MANITOBA

Sample ID	Date	Field Duplicate Sample ID	Parameter [1]																																		
			Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (Ar)	Total Barium (Ba)	Total Beryllium (Be)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Lithium (Li)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Mercury (Hg)	Total Molybdenum (Mb)	Total Nickel (Ni)	Total Phosphorus (P)	Total Potassium (K)	Total Selenium (Se)	Total Silicon (Si)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Sulphur (S)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)
BEDROCK WELLS																																					
MW-01-BR	14-Jun-23		2.4	<0.00060	0.0018	0.11	<0.0010	0.18	0.00015	270	0.005	0.01	0.018	6.7	0.0036	0.038	160	0.88	0.0000091	0.0034	0.007	0.14	20	0.0037	14.0	<0.00010	40	1.7	320	<0.00020	0.002	0.1500	0.082	0.008	0.028
	3-Oct-23		4.3	<0.00060	0.003	0.12	<0.0010	0.21	0.00014	310	0.0069	0.012	0.021	9.8	0.0058	0.059	190	1	0.0000071	0.003	0.0078	0.22	21	0.0022	13	<0.00010	47	2.2	350	<0.00020	0.0023	0.31	0.15	0.015	0.032
MW-02-BR	14-Jun-23		0.63	<0.00060	0.00082	0.042	<0.0010	0.44	0.000035	24	<0.0010	0.004	0.0064	0.62	0.0002	0.061	13	0.064	0.0000032	0.00077	0.00065	<0.10	5.8	<0.00020	7.7	<0.00010	87	0.32	33	0.0006	<0.0010	0.023	0.006	0.001	0.003
	3-Oct-23		0.47	<0.00060	0.00074	0.046	<0.0010	0.48	<0.000020	27	<0.0010	0.0031	0.0046	0.46	<0.00020	0.083	15	0.066	<0.0000019	0.00076	0.00059	<0.10	6.1	<0.00020	7.3	<0.00010	99	0.35	39	<0.00020	<0.0010	0.017	0.0064	<0.0010	0.0039
MW-04-BR	14-Jun-23		0.91	<0.00060	0.0046	0.039	<0.0010	0.42	0.000093	24	0.0018	0.0012	0.0034	1.4	0.0016	0.094	16	0.14	0.0000022	0.0071	0.0024	0.15	6.1	0.00025	11	<0.00010	140	0.41	66	<0.00020	0.0012	0.044	0.0089	0.0027	0.0081
	3-Oct-23		2.7	<0.00060	0.0077	0.039	<0.0010	0.48	0.000037	22	0.0031	0.0016	0.0049	1.6	0.0022	0.12	16	0.13	<0.0000019	0.0086	0.0035	0.14	6	0.0004	8.5	<0.00010	200	0.39	83	<0.00020	0.0011	0.083 (1)	0.012	0.004	0.008
MW-05-BR	14-Jun-23		2.3	<0.00060	0.00053	0.028	<0.0010	<0.020	0.00016	30	0.0011	0.011	0.013	2.4	0.0018	<0.020	5	0.37	0.0000029	<0.00020	0.0033	<0.10	4.1	0.00049	10	<0.00010	1.7	0.034	14	<0.00020	0.0011	0.0850	0.0027	0.0026	0.06
	3-Oct-23		2.9	<0.00060	0.00052	0.046	<0.0010	<0.020	0.000087	42	0.0021	0.014	0.019	3.1	0.0013	<0.020	7.4	0.33	0.0000025	0.00021	0.0033	<0.10	5	<0.00020	10	<0.00010	2.2	0.036	14	<0.00020	0.0016	0.14	0.0021	0.0033	0.029
MW-06-BR	14-Jun-23		0.075	<0.00060	0.00021	0.022	<0.0010	0.037	0.13	86	<0.0010	0.049	0.49	5.9	0.0072	0.03	20	1.7	<0.0000019	<0.00020	0.017	<0.10	7.6	<0.00020	7.8	<0.00010	4.3	0.15	110	0.00049	<0.0010	<0.0010	0.0026	<0.0010	33
	14-Jun-23	MW-100	0.079	<0.00060	0.00032	0.023	<0.0010	0.041	0.13	88	<0.0010	0.048	0.48	6.1	0.0074	0.03	20	1.8	<0.0000019	<0.00020	0.018	<0.10	7.8	0.00023	8.1	<0.00010	4.4	0.15	110	0.00072	<0.0010	0.0011	0.0026	<0.0010	33
	RPD		*5%*	*NC*	*42%*	*4%*	*NC*	*10%*	*0%*	*2%*	*NC*	*2%*	*2%*	*3%*	*3%*	*0%*	*0%*	*6%*	*NC*	*NC*	*6%*	*NC*	*3%*	*NC*	*4%*	*NC*	*2%*	*0%*	*0%*	*NC*	*NC*	*NC*	*0%*	*NC*	*0%*
	3-Oct-23		0.12	<0.00060	0.00021	0.021	<0.0010	0.04	0.13	77	<0.0010	0.056	0.68	4.8	0.011	0.04	18	1.5	<0.0000019	<0.00020	0.02	<0.10	7.6	<0.00020	7.8	<0.00010	4.5	0.14	95	0.00027	<0.0010	0.0011	0.0028	<0.0010	26
MW-07-BR	14-Jun-23		5.8	<0.00060	0.00021	0.019	<0.0010	<0.020	0.068	52	<0.0010	0.039	6.7	0.19	0.00071	<0.020	12	0.56	0.0000028	<0.00020	0.021	0.1	6.5	0.00095	12	0.00011	2.4	0.072	76	0.00024	<0.0010	0.0024	0.0041	<0.0010	16
	3-Oct-23		3.7	<0.00060	0.00023	0.02	<0.0010	0.023	0.077	110	<0.0010	0.03	5.5	<0.060	0.0008	<0.020	19	0.54	<0.0000019	<0.00020	0.02	0.11	11	0.0013	12	<0.00010	3.6	0.11	130	<0.00020	<0.0010	<0.0010	0.0059	<0.0010	19
MW-08-BR	14-Jun-23		2.2	<0.00060	0.00038	0.027	<0.0010	0.026	0.0028	55	0.0014	0.055	0.24	1.2	0.0013	0.029	12	0.39	<0.0000019	0.00055	0.03	<0.10	5.7	0.00047	14	<0.00010	3.8	0.11	52	0.00024	0.0018	0.034	0.0037	0.0013	1.7
	3-Oct-23		4.3	<0.00060	0.00079	0.039	<0.0010	0.035	0.0029	67	0.0023	0.064	0.42	2	0.0024	0.049	16	0.42	0.0000028	0.00052	0.032	<0.10	6.6	0.00037	14	<0.00010	4.6	0.14	57	<0.00020	0.0017	0.057	0.011	0.0023	1.7
OVERBURDEN WELLS																																					
MW-03-OB	14-Jun-23		100	<0.0012	0.027	1.1	<0.010	<0.020	0.002	190	0.28	0.074	0.28	170	0.056	<0.20	97	3.1	0.000006	0.0024	0.19	3.3	46	0.0013	120	0.00051	19	0.58	96	0.0016	0.0086	6.2	0.0150	0.28	28
	3-Oct-23		40	<0.0012	0.012	0.49	0.0021	0.28	0.00055	160	0.12	0.03	0.089	65	0.023	0.12	53	1.9	0.000029	0.0013	0.08	1.2	24	0.00048	67	0.00022	19	0.48	90	0.00046	0.0036	2.8	0.0077	0.12	7
			47	0.00082	0.013	0.57	0.0023	<0.20	0.00057	160	0.12	0.031	0.092	76	0.024	<0.20	60	2	0.000025	0.0015	0.082	1.2	28	0.00049	83	0.00024	19	0.48	91	0.00048	0.004	3.1	0.0081	0.13	7
	RPD		*16%*	*NC*	*8%*	*15%*	*9%*	*NC*	*4%*	*0%*	*0%*	*3%*	*3%*	*16%*	*4%*	*NC*	*12%*	*5%*	*15%*	*14%*	*2%*	*0%*	*15%*	*2%*	*21%*	*9%*	*0%*	*0%*	*1%*	*4%*	*11%*	*10%*	*5%*	*8%*	*0%*
MW-04-OB	14-Jun-23		12	<0.00060	0.0019	0.2	<0.0010	0.16	0.00019	150	0.031	0.0071	0.04	18	0.0051	<0.10	57	0.77	0.000008	<0.00020	0.02	<0.50	8.9	0.00024	31	<0.00010	27	0.74	76	<0.00020	0.0012	0.94	0.0017	0.034	0.096
	3-Oct-23		0.0049	<0.00060	0.00021	0.15	<0.0010	0.15	<0.000020	180	<0.0010	<0.00030	<0.0010	0.56	<0.00020	0.05	63	0.58	<0.0000019	<0.00020	<0.00050	<0.10	5.6	<0.00020	9.5	<0.00010	32	0.83	110	<0.00020	<0.0010	<0.0010	0.0014	<0.0010	<0.0030
MW-09-OB	14-Jun-23		2.9	<0.00060	0.0016	<0.050	<0.0010	0.11	0.00093	130	0.0065	0.047	0.0044	22	0.0012	<0.10	33	2.3	<0.0000019	<0.00020	0.02	<0.50	7.9	<0.00020	13	<0.00010	7.5	0.26	150	0.00056	<0.0010	0.2	0.00026	0.0064	30
	3-Oct-23		1.7	<0.00060	0.0017	0.035	<0.0010	0.058	0.00058	140	0.0035	0.04	0.0024	18	0.00062	0.069	35	2.3	<0.0000019	0.00027	0.016	<0.10	7.9	<0.00020	14	<0.00010	7.9	0.23	140	<0.00020	<0.0010	0.1	0.00014	0.0035	22
MW-10-OB	14-Jun-23		3.4	<0.00060	0.00066	0.049	<0.0010	0.08	0.013	120	0.0069	0.04	0.043	22	0.0013	0.046	27	2.3	<0.0000019	0.00062	0.021	<0.10	7.9	<0.00020	17	<0.00010	12	0.24	130	<0.00020	0.0014	0.21	0.0016	0.0076	18
	3-Oct-23		1.1	<0.00060	0.00087	0.029	<0.0010	0.084	0.0042	120	0.0026	0.047	0.0066	22	0.00038	0.053	26	2.4	<0.0000019	0.00081	0.023	<0.10	7.5	<0.00020	12	<0.00010	12	0.24	140	<0.00020	<0.0010	0.071	0.00099	0.0027	17
MW-11-OB	14-Jun-23		0.58	<0.00060	0.0022	0.07	<0.0010	0.06	0.000038	160	0.0015	0.005	<0.0010	4.2	0.00028	0.04	36	1.9	<0.0000019	0.00031	0.003	<0.10	6	<0.00020	11	<0.00010	9	0.52	130	0.00033	0.0011	0.042	0.00023	0.0014	1.4
	3-Oct-23		1	<0.00060	0.003	0.091	<0.0010	0.063	0.000053	170	0.0026	0.0052	0.0032	5	0.00047	0.046	38	1.9	<0.0000019	0.00037	0.0037	<0.10	6.5	<0.00020	13	<0.00010	10	0.57	130	<0.00020	<0.0010	0.08	0.00026	0.0025	1.4
QA/QC																																					
FIELD BLANK	14-Jun-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	0.000030	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.0000019	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	0.0032
	3-Oct-23		<0.0030	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.0000019	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
TRIP BLANK	14-Jun-23		0.003	<0.00060	<0.00020	<0.010	<0.0010	<0.020	0.000037	<0.30	<0.0010	<0.00030	<0.0010	<0.060	0.00022	<0.020	<0.20	<0.0040	<0.0000019	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
	3-Oct-23		0.0034	<0.00060	<0.00020	<0.010	<0.0010	<0.020	<0.000020	<0.30	<0.0010	<0.00030	<0.0010	<0.060	<0.00020	<0.020	<0.20	<0.0040	<0.0000019	<0.00020	<0.00050	<0.10	<0.30	<0.00020	<0.50	<0.00010	<0.50	<0.020	<0.20	<0.00020	<0.0010	<0.0010	<0.00010	<0.0010	<0.0030
Laboratory Detection Limits			*0.0030*	*0.00060*	*0.00020*	*0.010*	*0.0010*	*0.020*	*0.000020*	*0.30*	*0.0010*	*0.00030*	*0.0010*	*0.060*	*0.00020*	*0.020*	*0.20*	*0.0040*	*0.0000019 - 0.0000038*	*0.00020*	*0.00050*	*0.10*	*0.30*	*0.00020*	*0.50*	*0.00010*	*0.50*	*0.020*	*0.20*	*0.00020*	*0.0010*	*0.0010*	*0.00010*	*0.0010*	*0.0030*
Manitoba Water Quality Standards, Objectives, and Guidelines [2]																																					
Protection of Cool Water Aquatic Life																																					
Tier II Objective (acute)			-	-	-	-	-	-	*0.0021 - 0.0087* [2a]	-	*1.8 - 5.6* [2a]	-	*0.014 - 0.052* [2a]	-	*0.080 - 0.48* [2a]	-	-	-	-	-	*0.46 - 1.5* [2a]	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.12 - 0.39* [2a]
Tier II Objective (chronic)			-	-	-	-	-	-	*0.00027 - 0.00076* [2a]	-	*0.085 - 0.27* [2a]	-	*0.0092 - 0.031* [2a]	-	*0.0031 - 0.077* [2a]	-	-	-	-	-	*0.051 - 0.17* [2a]	-	-	-	-	-	-	-	-	-	-	-	-	-	*0.12 - 0.39* [2a]
Tier III Guideline			*0.1 (pH ≥ 6.5) 0.005 (pH <6.5)*	-	-	-	-	-	-	-	-	-	-	*0.3*	-	-	-	-	*0.000026*	*0.073*	-		-	*0.001*	-	*0.0001*	-	-	-	*0.0008*	-	-	*0.015*	-	-

Notes:
"-" = No Data NC = Not Calculated RPD = Relative Percent Difference

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.
2. Manitoba Water Quality Standards, Objectives, and Guidelines (MWQSOG). Manitoba Water Stewardship, 2011.
   a. Guideline values are dependent on hardness value of specific samples. Equations used to calculate guideline value are provided in Manitoba Water Quality Standards, Objectives, and Guidelines, 2011.
   Values for Dissolved Metals calculated using both factors in equations presented in guideline document. Calculated using sample specific total harness as CaCO3 as measured on September 20, 2022.

- Exceedance of MWQSOG Criteria

TABLE 13
COMPARISON OF KEY PARAMETER CONCENTRATIONS IN THE CAMP LAKE DISCHARGE
(2008 VS 2023)
SHERRIDON MINE SITE, MANITOBA

Parameter	Units	Fraction	2008	2023 (13 samples)			
				Mean	Max	Min	% Change
Aluminum	mg/L	Total	1.47	0.06	0.12	0.036	-96%
		Dissolved	1.43	0.013	0.025	0.0047	-99%
Cadmium	mg/L	Total	0.00178	0.00051	0.00089	0.00032	-71%
		Dissolved	0.00174	0.00038	0.00078	0.00022	-78%
Copper	mg/L	Total	0.149	0.016	0.036	0.0082	-89%
		Dissolved	0.153	0.009	0.021	0.0043	-94%
Iron	mg/L	Total	21.0	2.39	3.9	1.60	-89%
		Dissolved	20.0	0.59	1.2	0.11	-97%
Zinc	mg/L	Total	0.71	0.16	0.31	0.094	-78%
		Dissolved	0.698	0.12	0.25	0.067	-83%
pH	pH units	N/A	3.4	6.87	7.34	6.39	102%

TABLE 14
COMPARISON OF KEY DISSOLVED METALS PARAMETER CONCENTRATIONS IN COLD LAKE
(2008 TO 2023)
SHERRIDON MINE SITE, MANITOBA

Parameter	Year		Parameter Concentration [1]									
			CL2 (sfc)	CL2 (btm)	CL3 (sfc)	CL3 (btm)	CL4 (sfc)	CL4 (btm)	CL5 (sfc)	CL5 (btm)	CL6 (sfc)	CL6 (btm)
Aluminum	2023	Mean	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.012	0.012
		Max	0.030	0.021	0.026	0.031	0.028	0.024	0.030	0.022	0.026	0.029
		Min	0.0090	0.0075	0.0083	0.0090	0.0086	0.0078	0.0085	0.0090	0.0067	0.0074
	2008	September	0.368	0.346	0.401	0.365	0.301	0.273	0.196	0.196	0.0435	0.0416
		% Change	-96%	-96%	-96%	-96%	-95%	-95%	-93%	-93%	-71%	-72%
Cadmium	2023	Mean	0.000048	0.000057	0.00013	0.000079	0.000063	0.000048	0.000056	0.000043	0.000045	0.000029
		Max	0.00011	0.00011	0.00033	0.00025	0.00011	0.000090	0.000092	0.00011	0.000060	0.000040
		Min	0.000021	0.000022	0.000022	0.000024	0.000021	0.000023	0.000026	0.000020	0.000027	0.000021
	2008	September	0.000718	0.000691	0.000673	0.000669	0.000626	0.000592	0.000524	0.000520	0.000185	0.000178
		% Change	-93%	-92%	-80%	-88%	-90%	-92%	-89%	-92%	-76%	-84%
Copper	2023	Mean	0.0055	0.0056	0.0062	0.0059	0.0053	0.0052	0.0051	0.0051	0.0044	0.0040
		Max	0.0089	0.0089	0.013	0.012	0.0088	0.0079	0.0083	0.0089	0.0074	0.0061
		Min	0.0034	0.0038	0.0034	0.0042	0.0035	0.0036	0.0037	0.0038	0.0030	0.0030
	2008	September	0.0392	0.0388	0.0396	0.0380	0.0343	0.0317	0.0271	0.0267	0.0108	0.0107
		% Change	-86%	-86%	-84%	-85%	-84%	-84%	-81%	-81%	-59%	-63%
Iron	2023	Mean	0.13	0.19	0.22	0.17	0.12	0.20	0.11	0.17	0.093	0.089
		Max	0.24	0.47	0.45	0.54	0.19	0.43	0.17	0.43	0.12	0.12
		Min	0.069	0.087	0.085	0.069	0.067	0.069	0.061	0.080	0.062	0.064
	2008	September	1.35	1.23	1.33	0.779	0.362	0.216	0.117	0.122	0.206	0.214
		% Change	-91%	-84%	-83%	-78%	-68%	-7%	-8%	37%	-55%	-59%
Zinc	2023	Mean	0.017	0.020	0.032	0.025	0.019	0.015	0.016	0.014	0.013	0.010
		Max	0.046	0.048	0.10	0.11	0.051	0.044	0.044	0.043	0.028	0.029
		Min	0.0046	0.0043	0.0044	0.0050	0.0039	0.0044	0.0040	0.0043	0.0050	0.0033
	2008	September	0.279	0.274	0.277	0.273	0.249	0.239	0.215	0.211	0.0871	0.0849
		% Change	-94%	-93%	-88%	-91%	-92%	-94%	-92%	-94%	-85%	-88%

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.

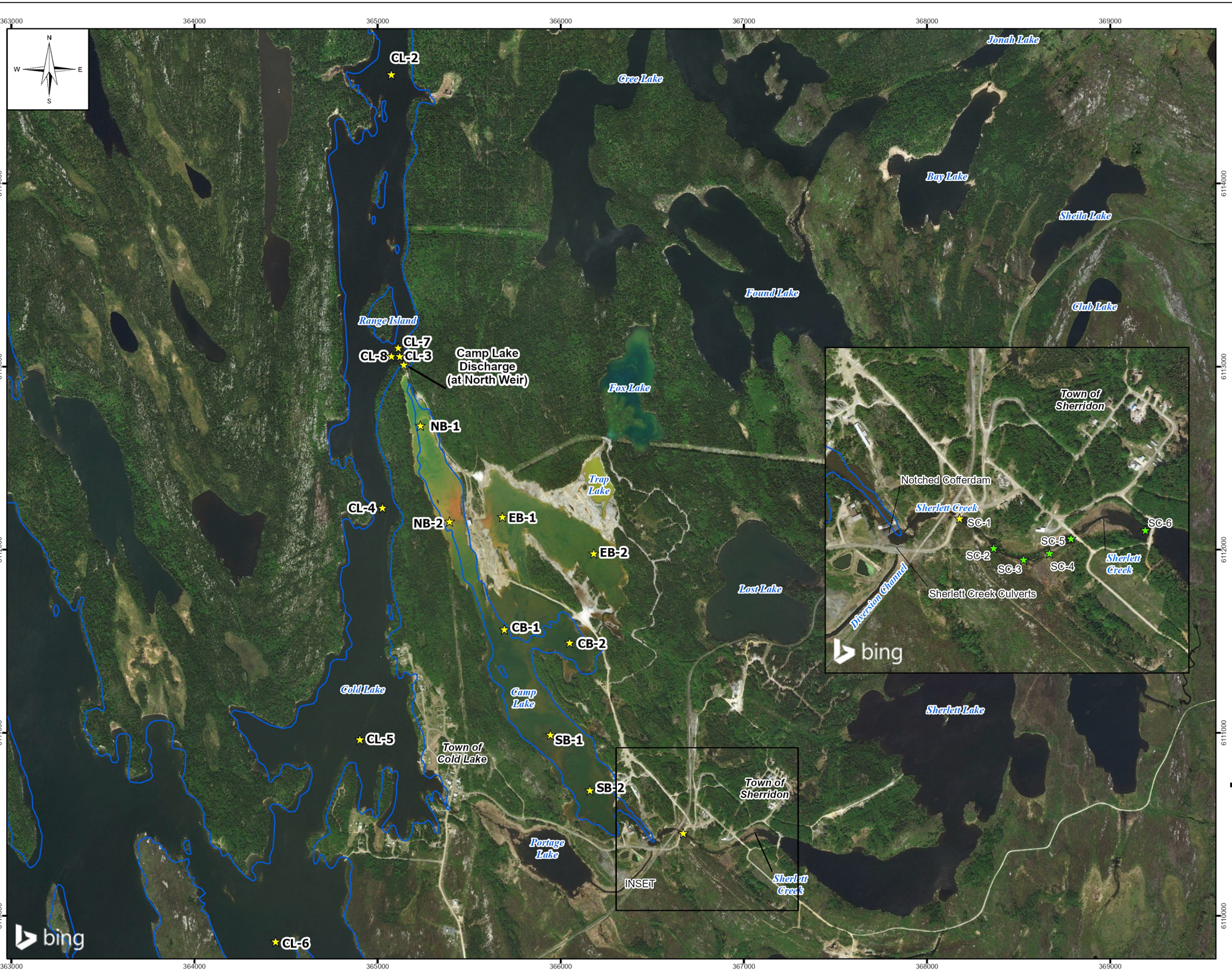
TABLE 15
COMPARISON OF KEY TOTAL METALS PARAMETER CONCENTRATIONS IN COLD LAKE
(2008 TO 2023)
SHERRIDON MINE SITE, MANITOBA

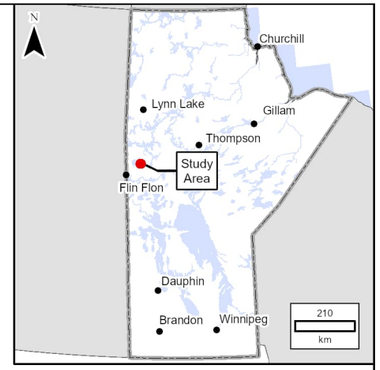
Parameter	Year		Parameter Concentration [1]									
			CL2 (sfc)	CL2 (btm)	CL3 (sfc)	CL3 (btm)	CL4 (sfc)	CL4 (btm)	CL5 (sfc)	CL5 (btm)	CL6 (sfc)	CL6 (btm)
Aluminum	2023	Mean	0.048	0.053	0.056	0.059	0.064	0.065	0.055	0.063	0.056	0.071
		Max	0.076	0.071	0.089	0.088	0.19	0.088	0.082	0.094	0.084	0.18
		Min	0.032	0.040	0.034	0.033	0.043	0.040	0.035	0.042	0.028	0.032
	2008	September	0.39	0.38	0.38	0.36	0.31	0.27	0.23	0.23	0.081	0.074
		% Change	-88%	-86%	-85%	-84%	-80%	-76%	-76%	-73%	-30%	-3%
Cadmium	2023	Mean	0.000061	0.000075	0.000131	0.000086	0.000066	0.000062	0.000064	0.000067	0.000044	0.000043
		Max	0.00013	0.00014	0.00045	0.00028	0.00016	0.00012	0.00013	0.00011	0.000079	0.000089
		Min	0.000026	0.000029	0.000031	0.000030	0.000021	0.000025	0.000024	0.000037	0.000021	0.000022
	2008	September	0.00073	0.00075	0.00076	0.00072	0.00068	0.00063	0.00057	0.00056	0.00022	0.00022
		% Change	-92%	-90%	-83%	-88%	-90%	-90%	-89%	-88%	-80%	-80%
Copper	2023	Mean	0.0062	0.0070	0.0080	0.0070	0.0061	0.0064	0.0056	0.0096	0.0048	0.0051
		Max	0.0098	0.0088	0.017	0.013	0.0098	0.0086	0.0091	0.052	0.0069	0.0069
		Min	0.0044	0.0060	0.0051	0.0044	0.0045	0.0046	0.0042	0.00061	0.0032	0.004
	2008	September	0.046	0.045	0.046	0.044	0.040	0.037	0.032	0.032	0.013	0.013
		% Change	-86%	-85%	-83%	-84%	-85%	-83%	-83%	-70%	-63%	-59%
Iron	2023	Mean	0.32	0.52	0.53	0.54	0.30	0.64	0.26	0.45	0.19	0.24
		Max	0.46	0.94	1.3	1.30	0.53	1.1	0.4	1.10	0.33	0.59
		Min	0.21	0.30	0.24	0.20	0.17	0.29	0.13	0.20	0.10	0.14
	2008	September	1.6	1.8	1.8	1.6	1.3	1.2	0.99	1.0	0.54	0.52
		% Change	-80%	-71%	-70%	-67%	-78%	-46%	-74%	-55%	-65%	-55%
Zinc	2023	Mean	0.022	0.027	0.045	0.029	0.026	0.026	0.022	0.023	0.017	0.017
		Max	0.057	0.056	0.14	0.081	0.061	0.096	0.054	0.050	0.034	0.034
		Min	0.010	0.011	0.011	0.011	0.0095	0.011	0.0086	0.0092	0.0076	0.0098
	2008	September	0.29	0.29	0.29	0.28	0.26	0.25	0.22	0.22	0.098	0.094
		% Change	-92%	-90%	-85%	-90%	-90%	-90%	-90%	-90%	-83%	-82%

1. All values are expressed in milligrams per litre (mg/L) unless otherwise specified.

FIGURES

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LEGEND:

- Biweekly Water Sampling Location
- Additional Sherlett Creek Sampling Location
- Lake

NOTES:

1. Image Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
2. All units are metric and in metres unless otherwise specified. Transverse Mercator Projection, NAD 1983, Zone 14. Elevations are in metres above sea level (MSL).

200 0 200 400 600 800
Metres

SCALE: 1:20,000 METRIC 11"x17"

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OAM SUBPROGRAM PROJECT
SHERRIDON MINE SITE
2023 WATER QUALITY SUMMARY REPORT

SITE PLAN AND SURFACE WATER SAMPLING LOCATIONS

AUGUST 2024	FIGURE 01	REV: 0

FileName: R:\Projects\2021\21-1357-005\Design\GIS\DATA\ArcPro\2023_WQSR\figures.aprx 21-1357-005_Fig01
11"X17" PLOT SCALE 1:1

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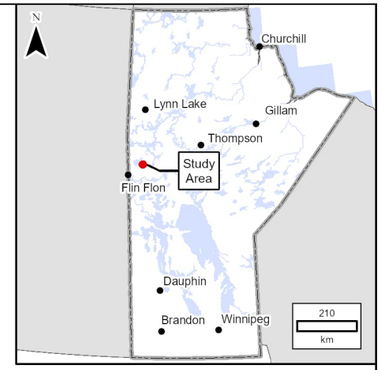
366750 367000 367250 367500

6110500 6110250 6110000

N W E S

MW-01-BR
SC-1
Wastewater Treatment Plant
MW-02-BR
Water Treatment Plant
SC-6
MW-04-BR
MW-04-OB
SC-5
MW-05-BR
SC-2
Sherlett Creek
SC-4
MW-03-BR
SC-3
Sherlett Lake
MW-11-OB
MW-09-OB
MW-10-OB
Wetland Area
MW-06-BR
Former East Mine Workings Area
MW-07-BR
MW-08-BR

bing



LEGEND:

- Biweekly Water Sampling Location
- Additional Sherlett Creek Sampling Location
- Bedrock Monitoring Well
- Overburden Monitoring Well
- Wetland Area

NOTES:
1. Image Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.
2. All units are metric and in metres unless otherwise specified. Transverse Mercator Projection, NAD 1983, Zone 14. Elevations are in metres above sea level (MSL).

25 0 25 50 75 100
Metres

SCALE: 1:3,000 METRIC 11"x17"

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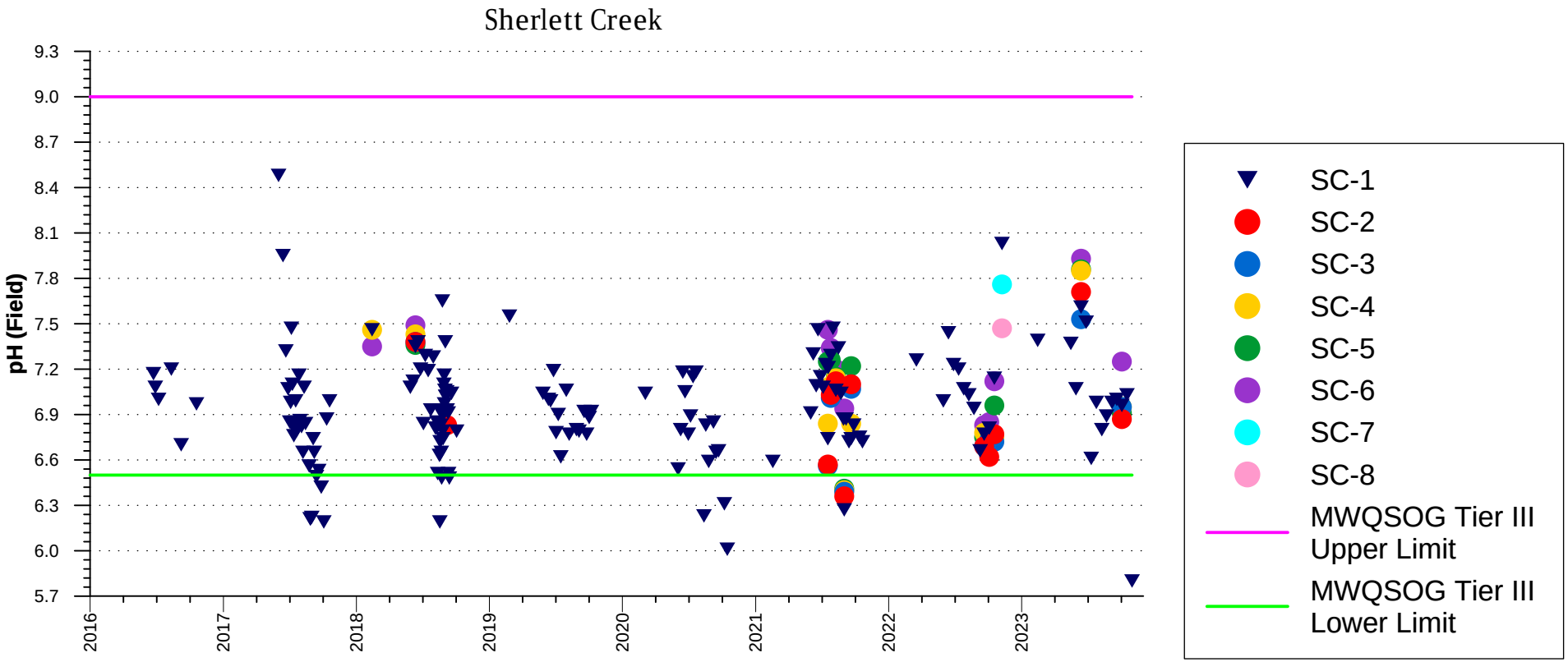
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OAM SUBPROGRAM PROJECT
SHERRIDON MINE SITE
2023 WATER QUALITY SUMMARY REPORT

GROUNDWATER MONITORING WELL LOCATIONS

AUGUST 2024	FIGURE 02	REV: 0

FileName: R:\Projects\2021\21-1357-005\Design\GIS\DATA\ArcPro\2023_WQSR\figures.aprx 21-1357-005_Fig02
11"x17" PLOT SCALE 1:1



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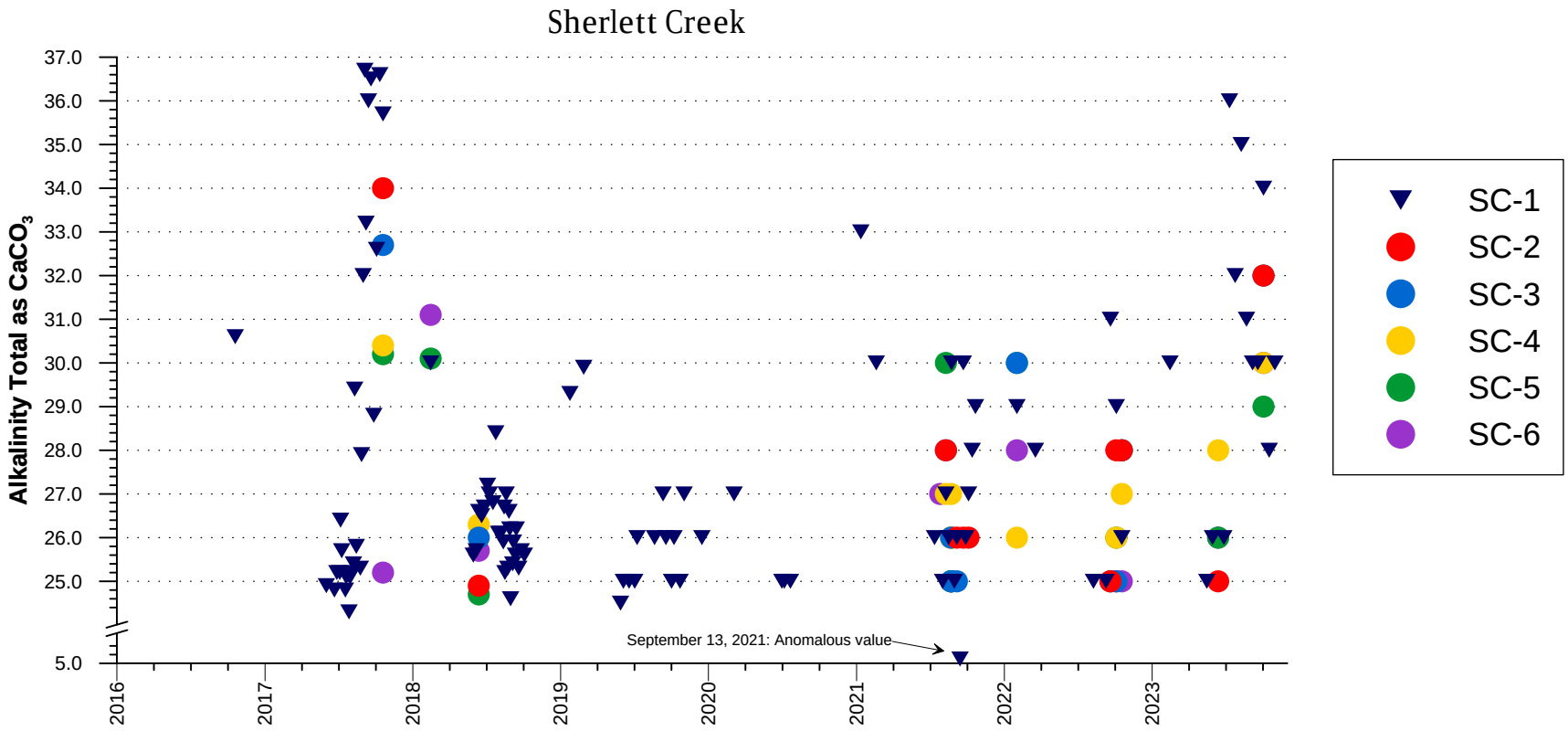
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — FIELD pH (2016 - 2023)

AUGUST 2024 | FIGURE 04 | REV: 0



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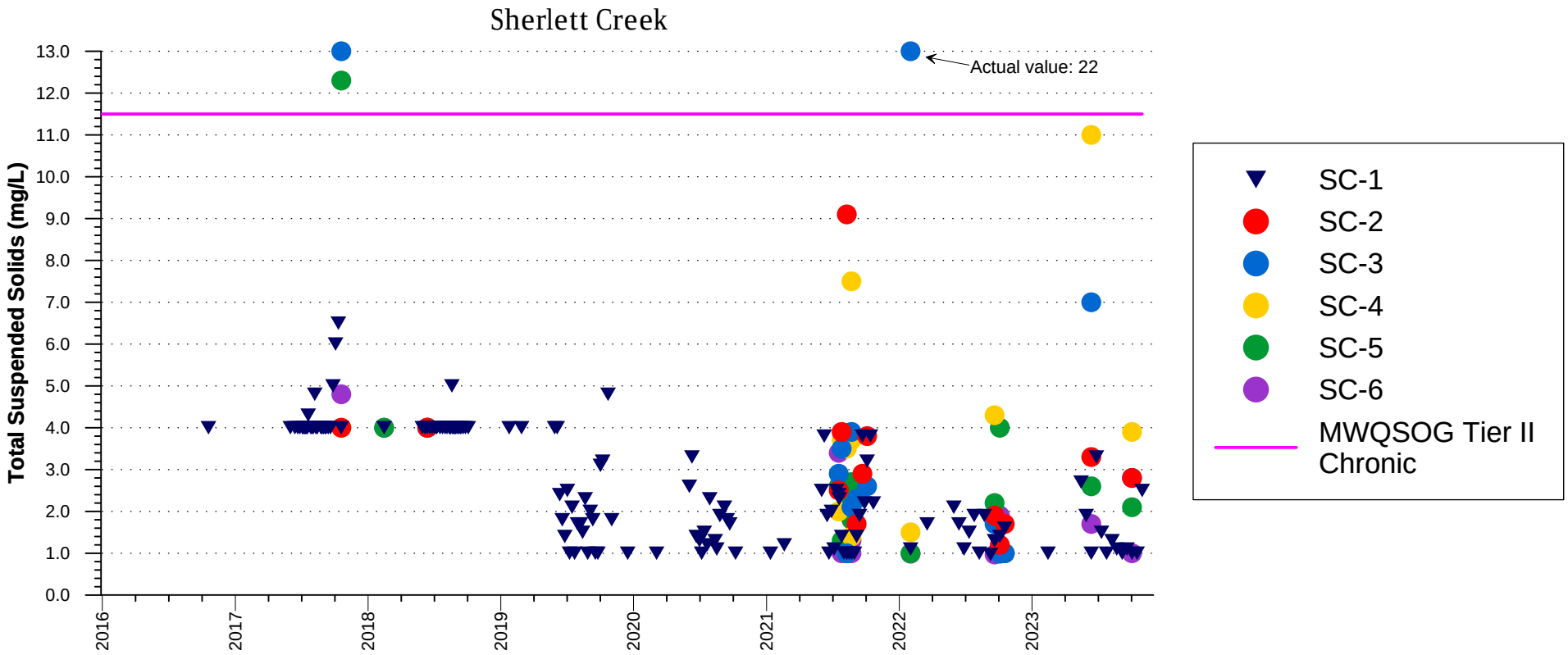
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — TOTAL ALKALINITY
(2016 - 2023)

AUGUST 2024	FIGURE 05	REV: 0



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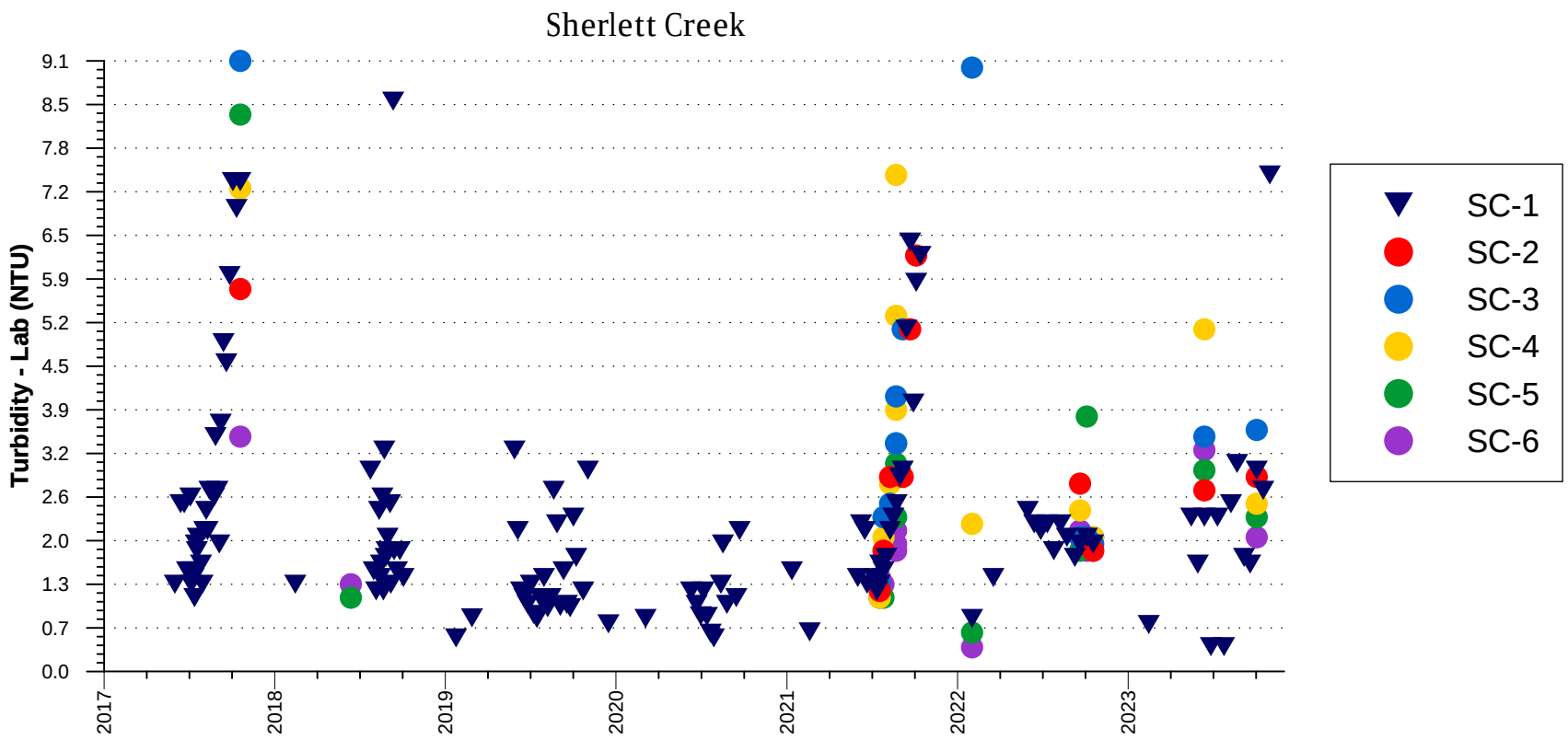
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK
TOTAL SUSPENDED SOLIDS (2016 - 2023)

AUGUST 2024	FIGURE 06	REV: 0



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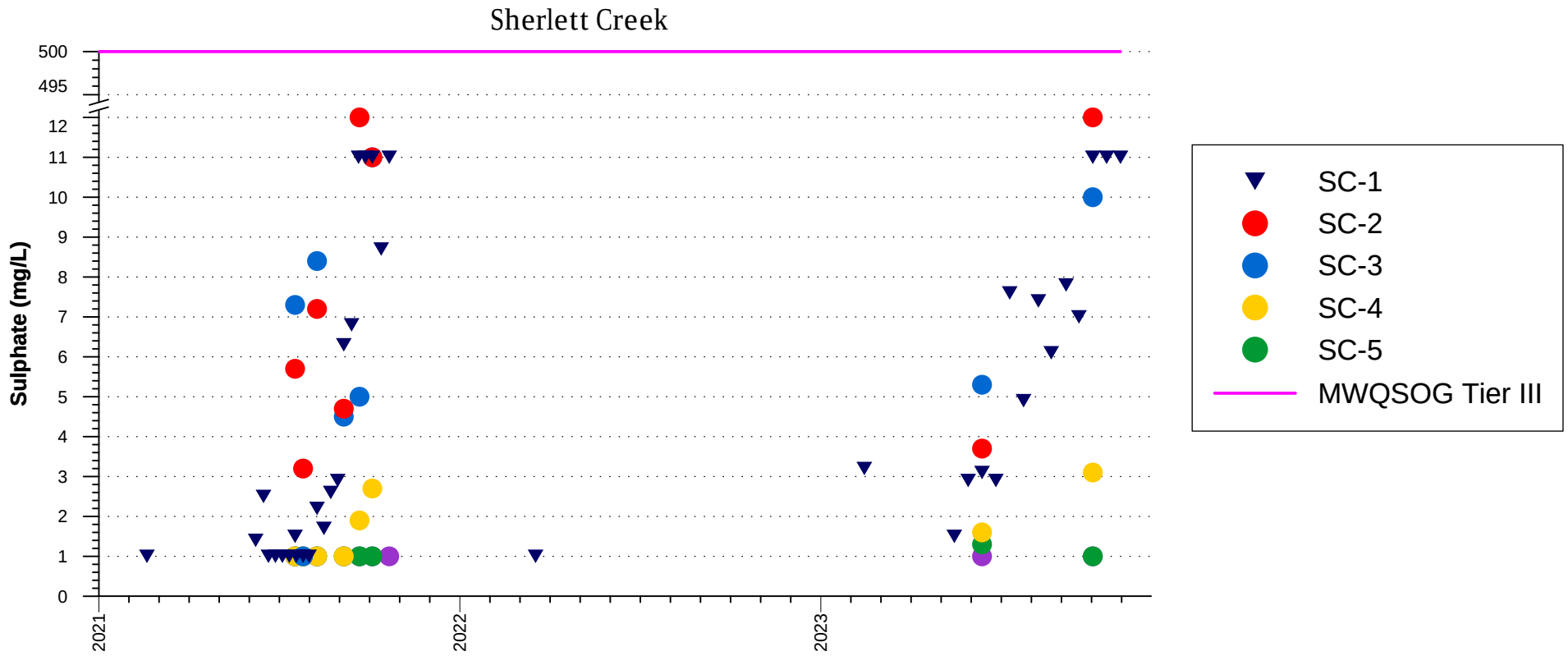
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — LAB TURBIDITY
(2017 - 2023)

AUGUST 2024	FIGURE 07	REV: 0



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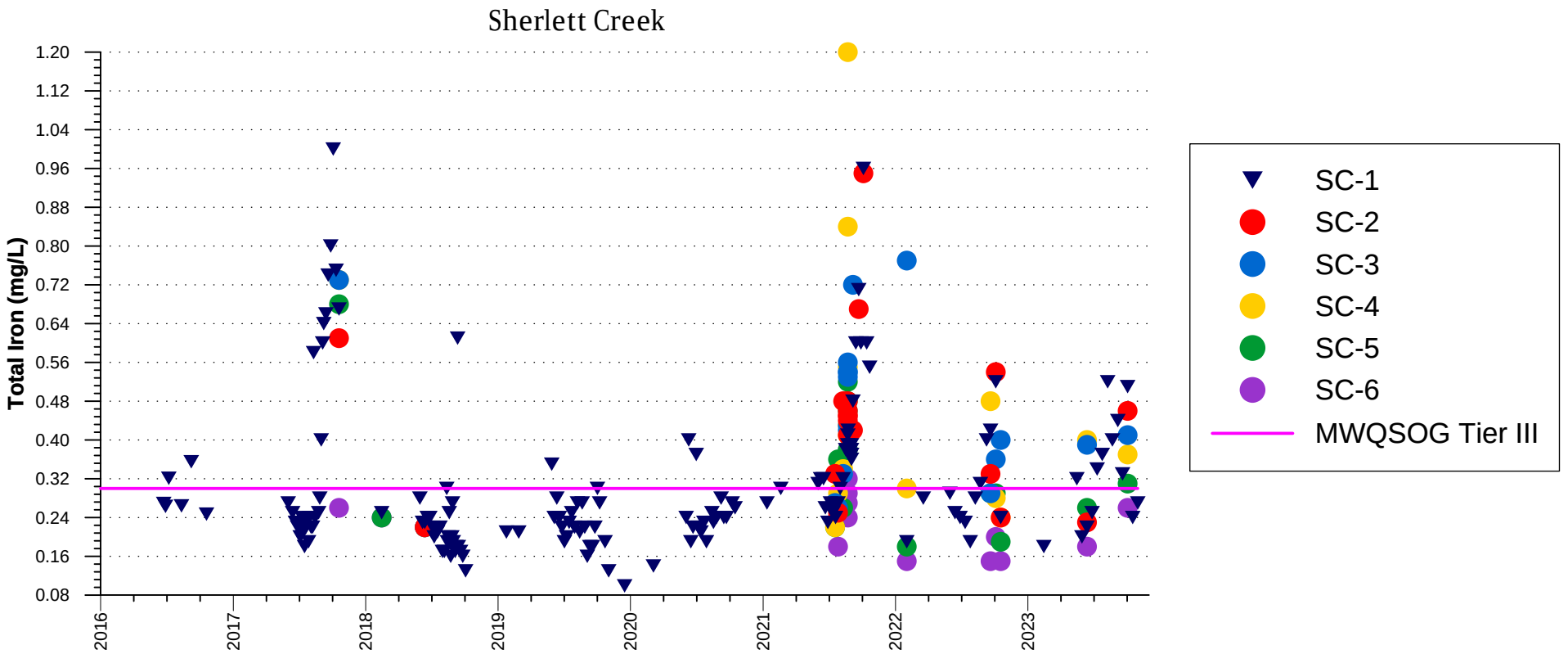
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — SULPHATE
(2021 - 2023)

AUGUST 2024	FIGURE 08	REV: 0



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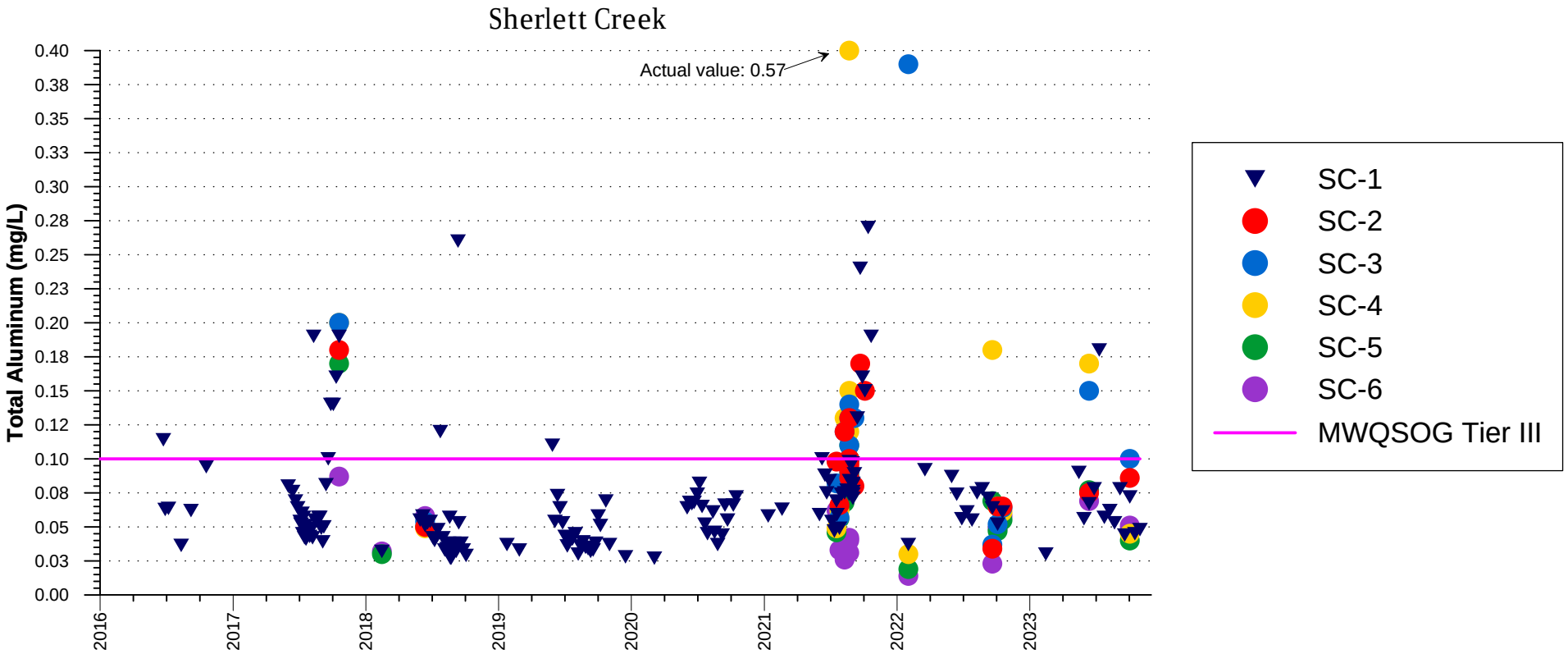
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — TOTAL IRON
(2016 - 2023)

AUGUST 2024	FIGURE 09	REV: 0



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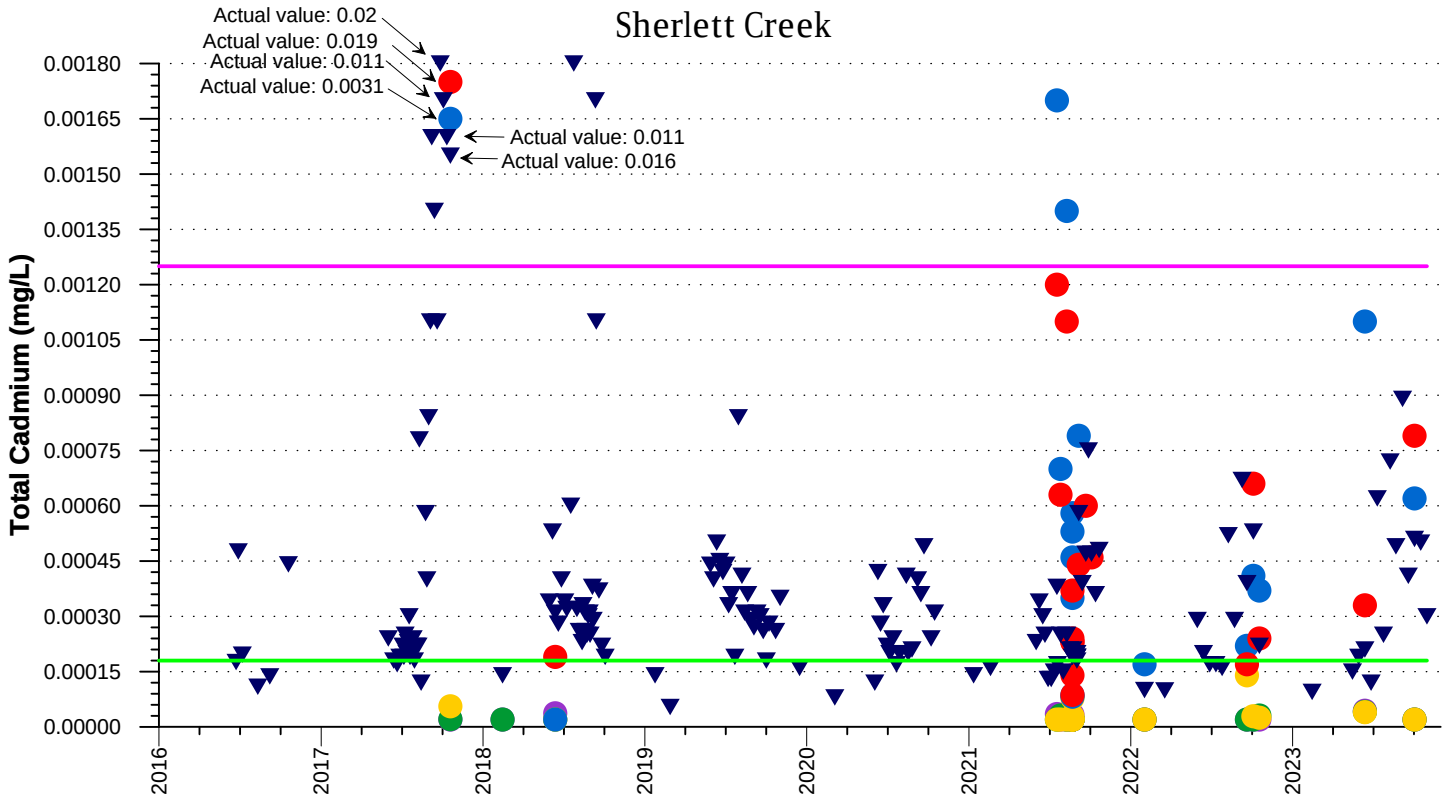
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — TOTAL ALUMINUM
(2016 - 2023)

AUGUST 2024	FIGURE 10	REV: 0



SC-1
SC-2
SC-3
SC-4
SC-5
SC-6
MWQSOG Tier II Acute
MWQSOG Tier II Chronic

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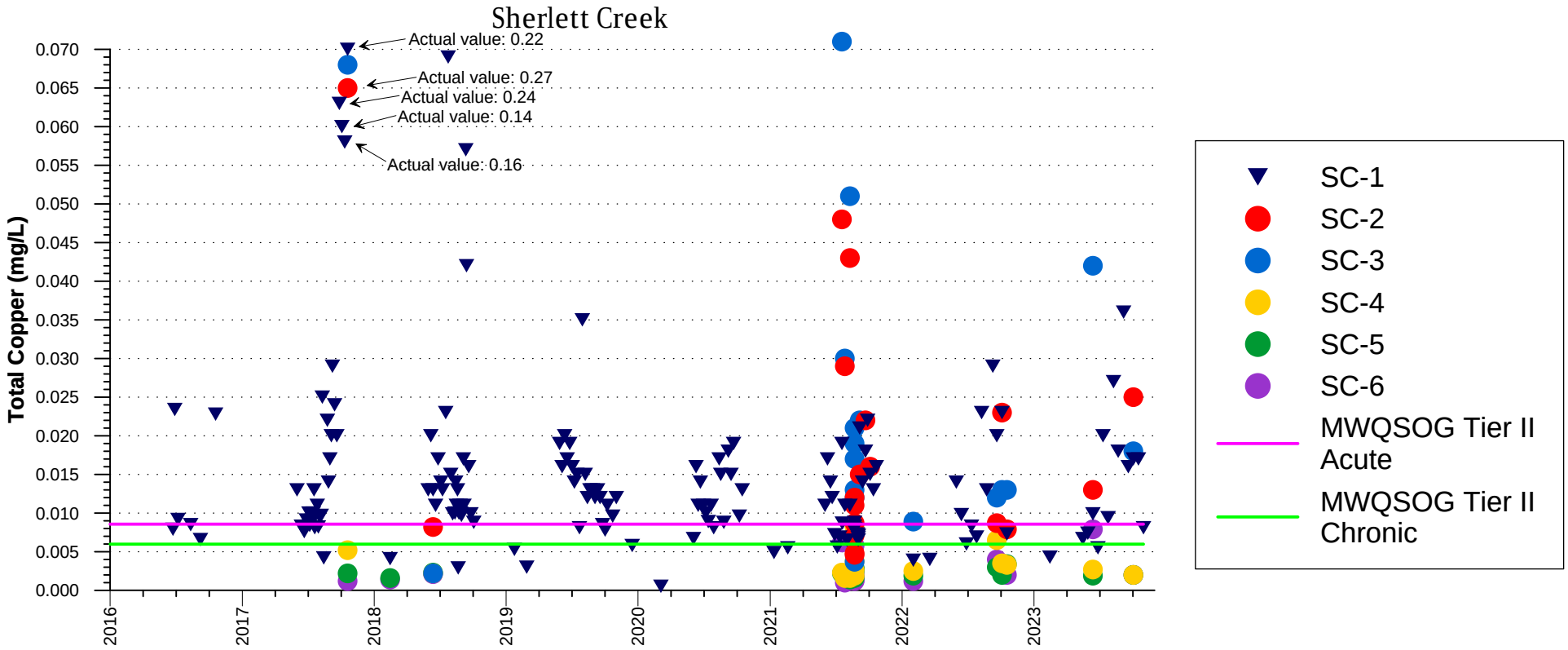
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — TOTAL CADMIUM
(2016 - 2023)

AUGUST 2024 | FIGURE 11 | REV: 0



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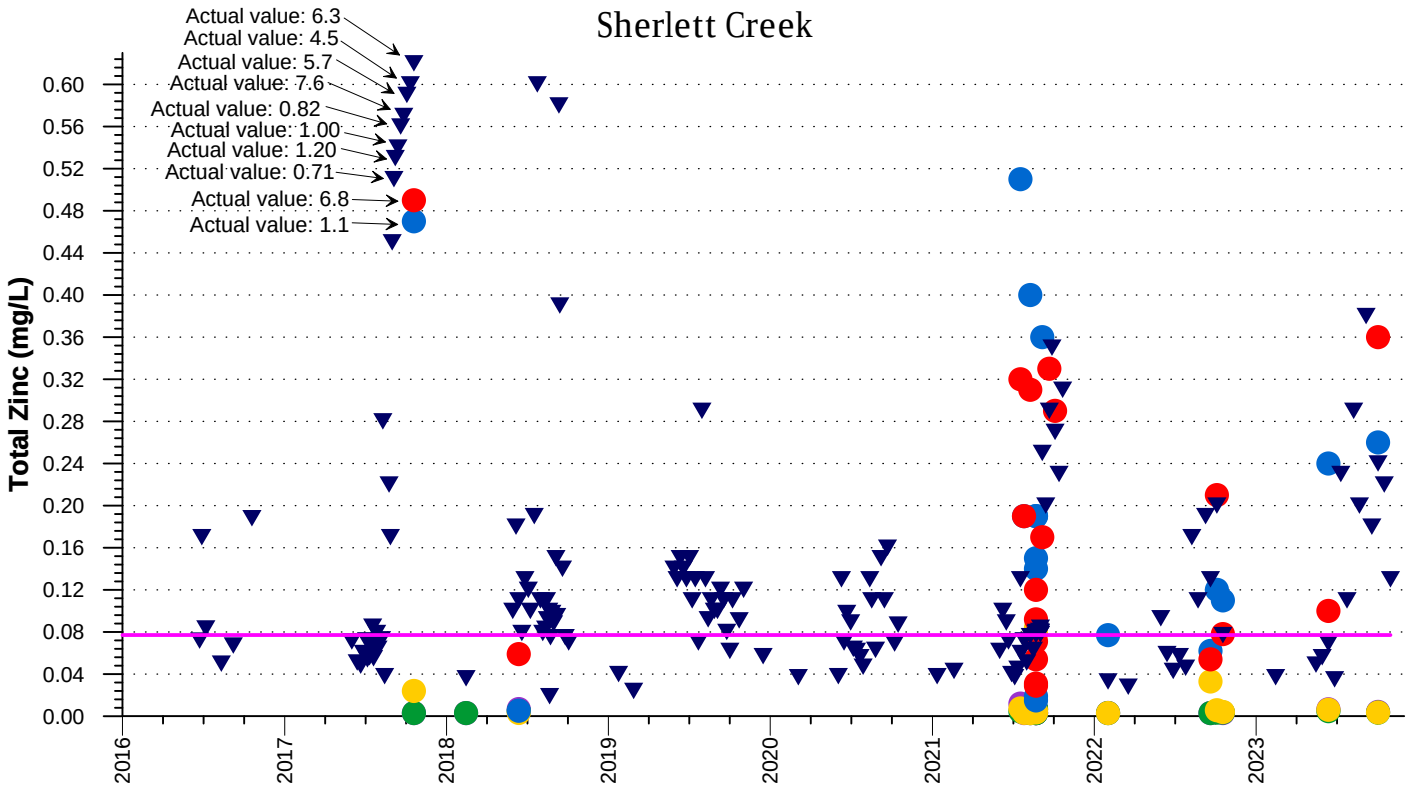
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — TOTAL COPPER
(2016 - 2023)

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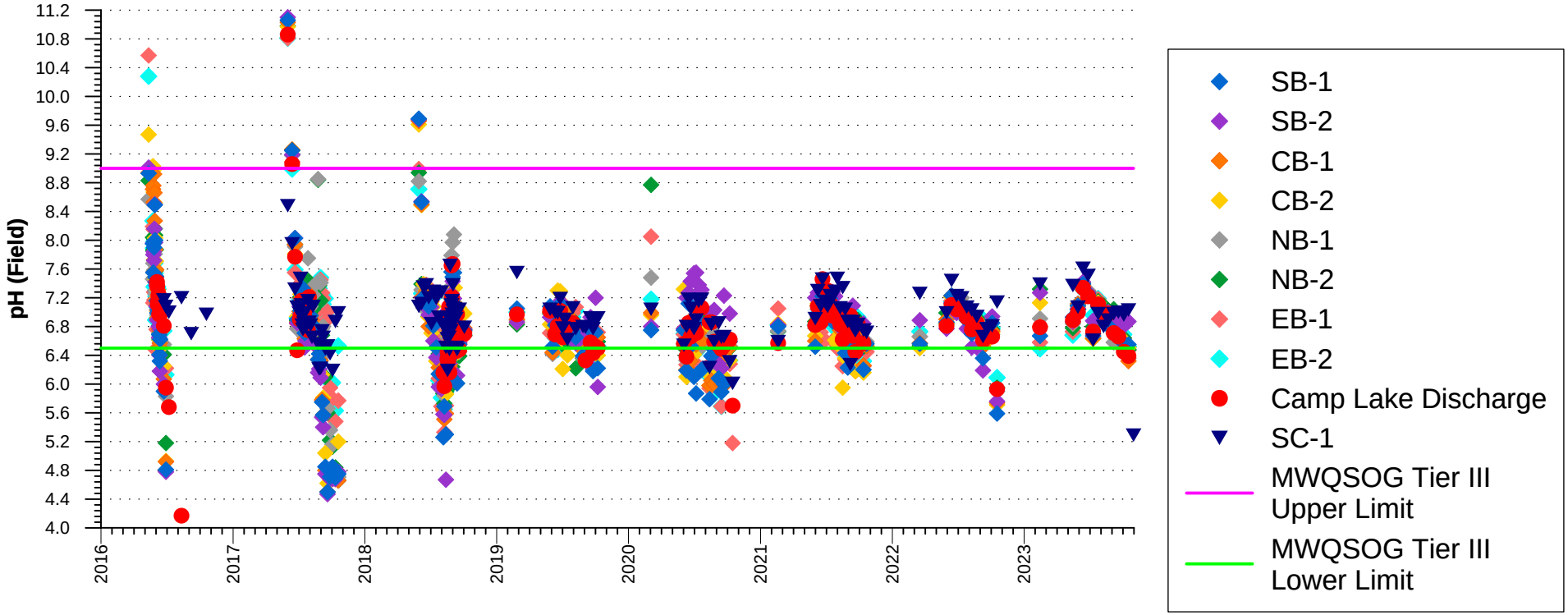
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

SHERLETT CREEK — TOTAL ZINC
(2016 - 2023)

AUGUST 2024	FIGURE 13	REV: 0

Camp Lake and SC-1



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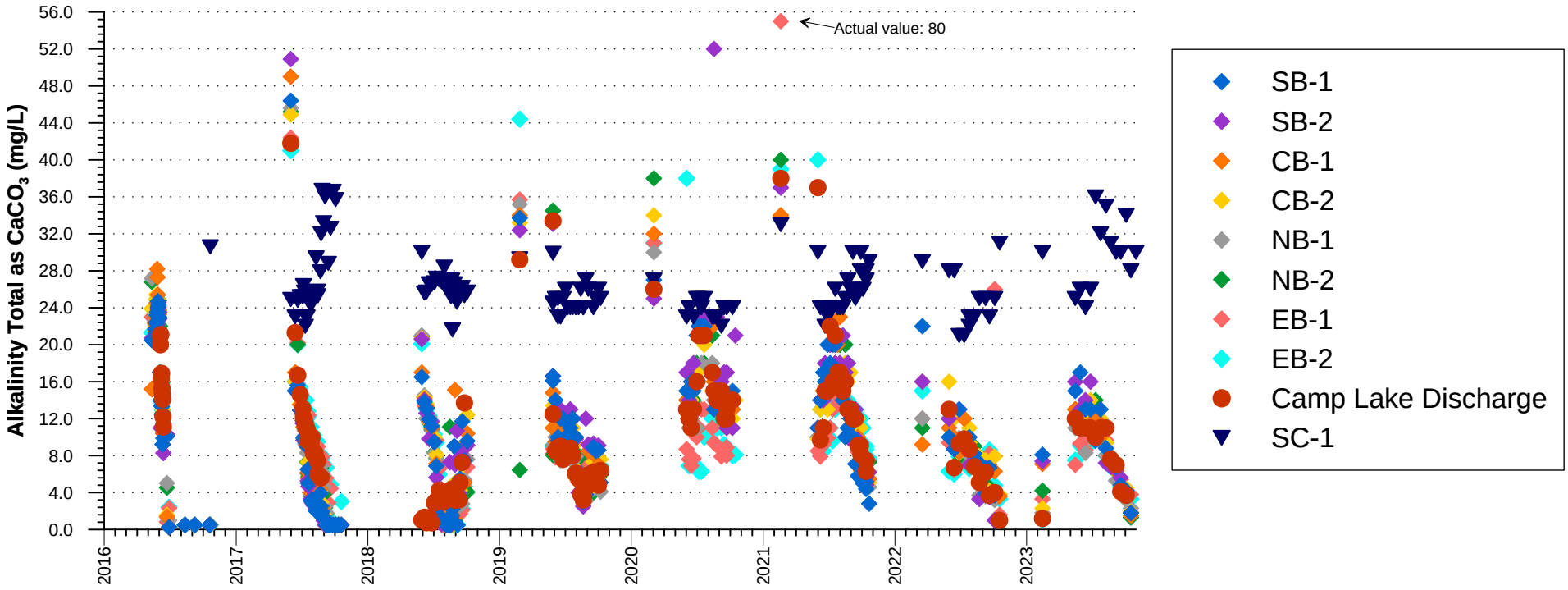
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — FIELD pH
(2016 - 2023)

AUGUST 2024	FIGURE 14	REV: 0

Camp Lake and SC-1



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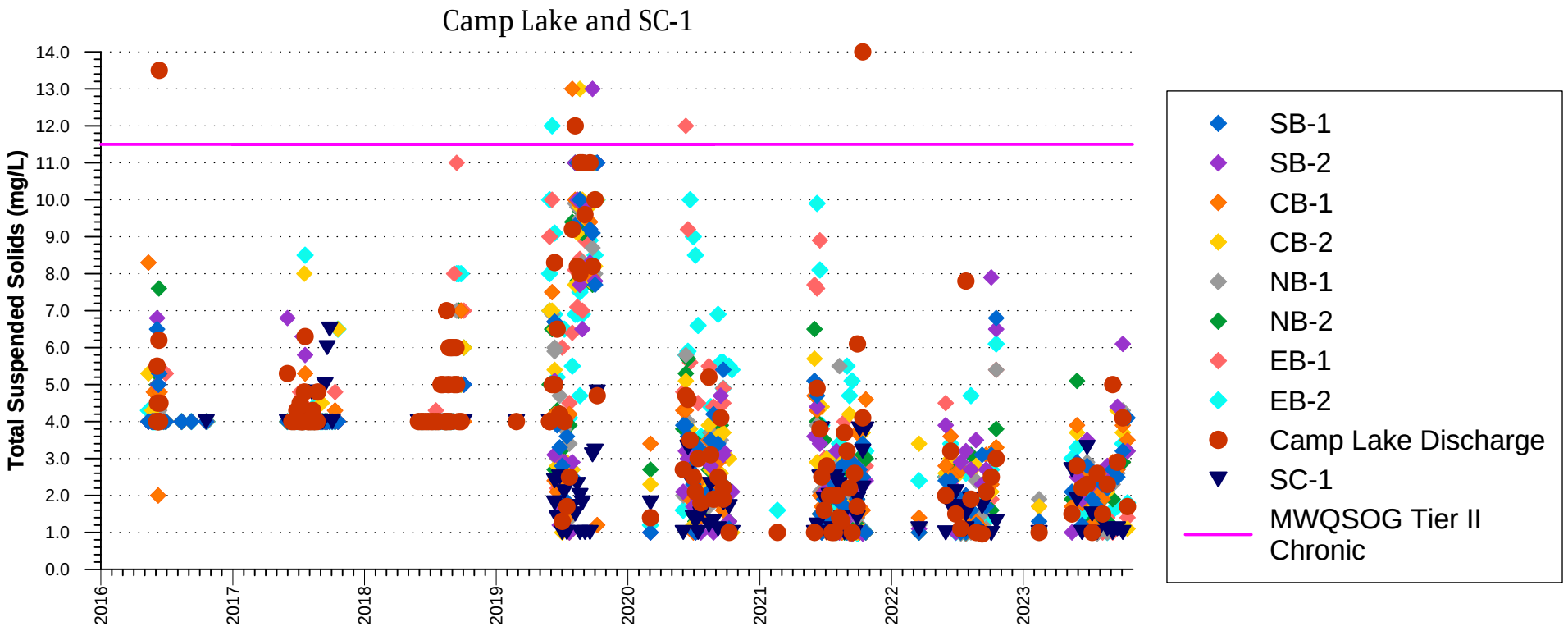
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL ALKALINITY (2016 - 2023)

AUGUST 2024	FIGURE 15	REV: 0



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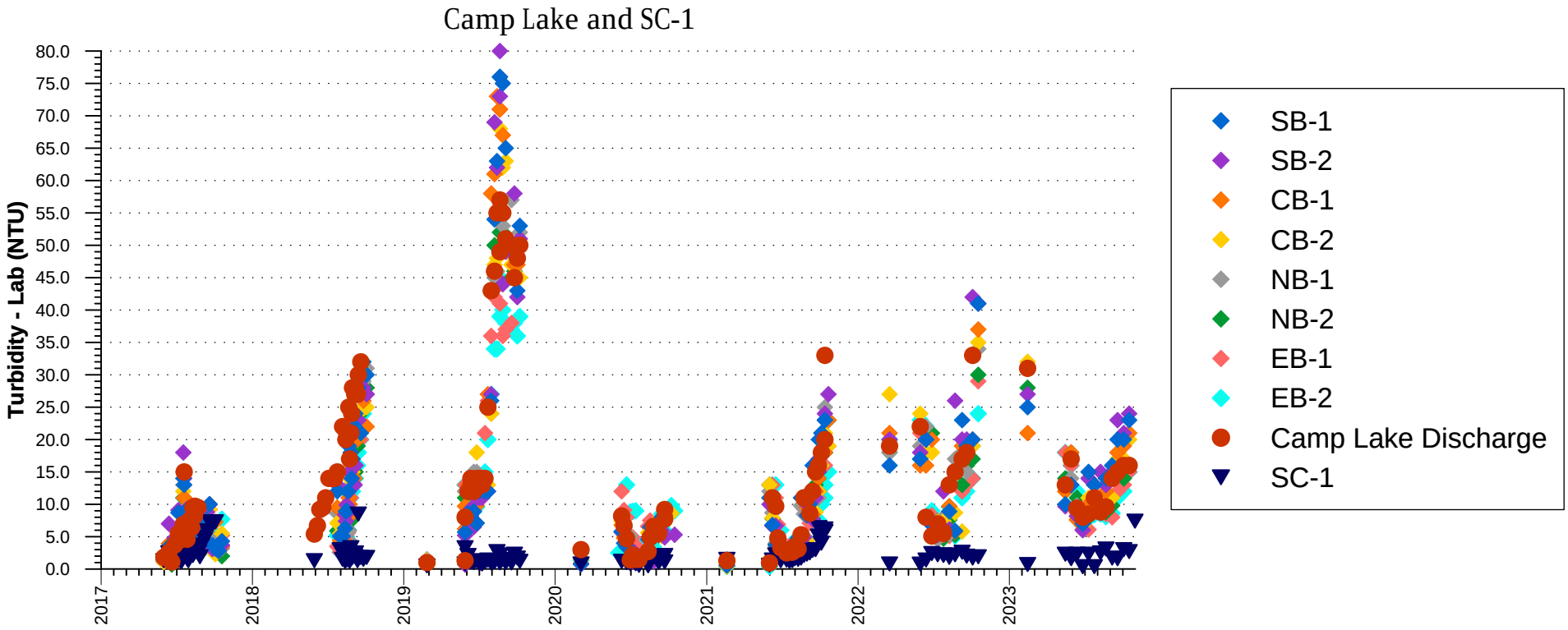
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL SUSPENDED SOLIDS (2016 - 2023)

AUGUST 2024	FIGURE 16	REV: 0



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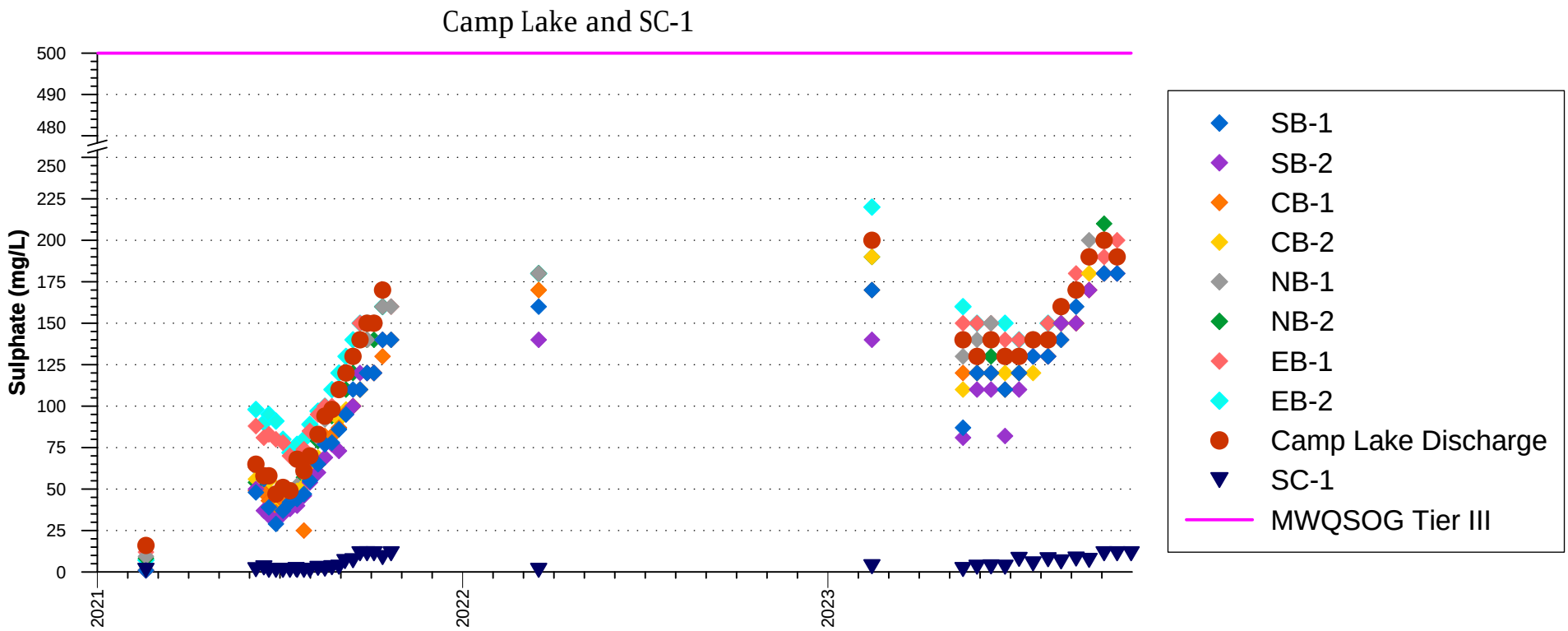
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — LAB TURBIDITY
(2017 - 2023)

AUGUST 2024	FIGURE 17	REV: 0



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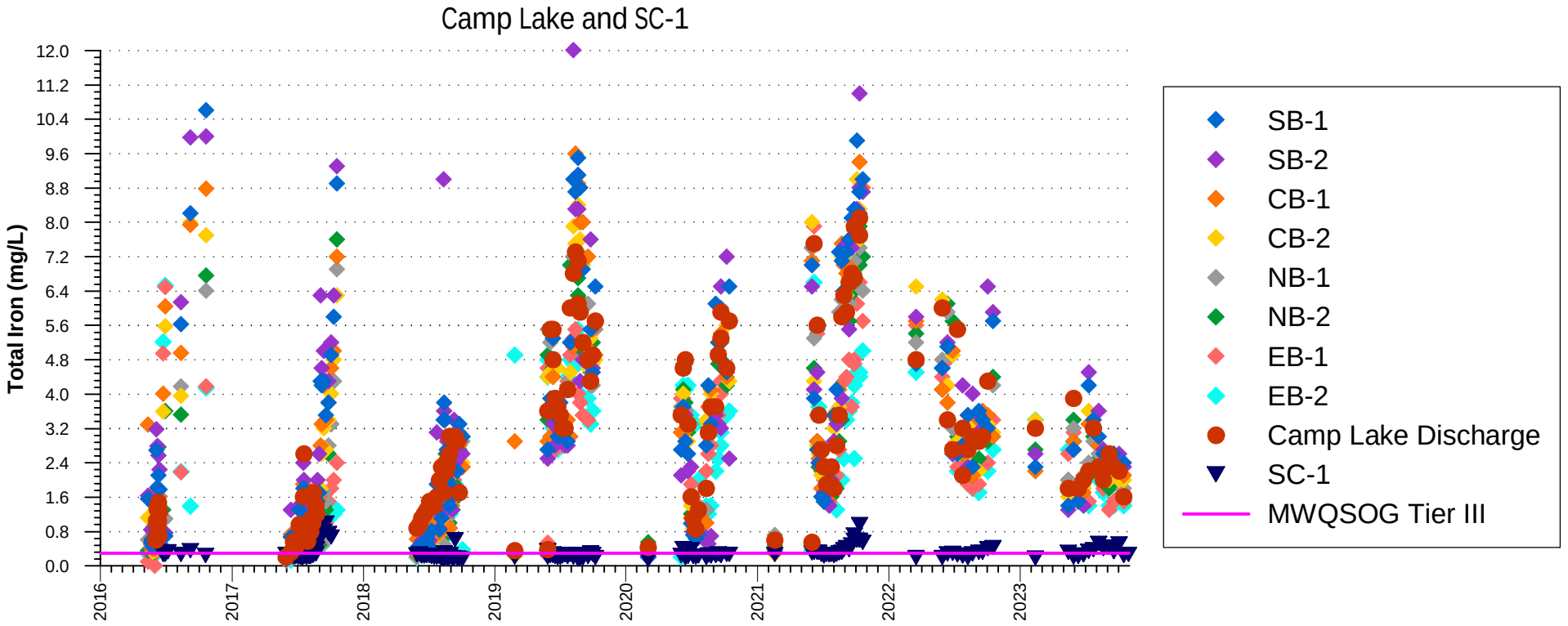
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — SULPHATE
(2021 - 2023)

AUGUST 2024 | FIGURE 18 | REV: 0



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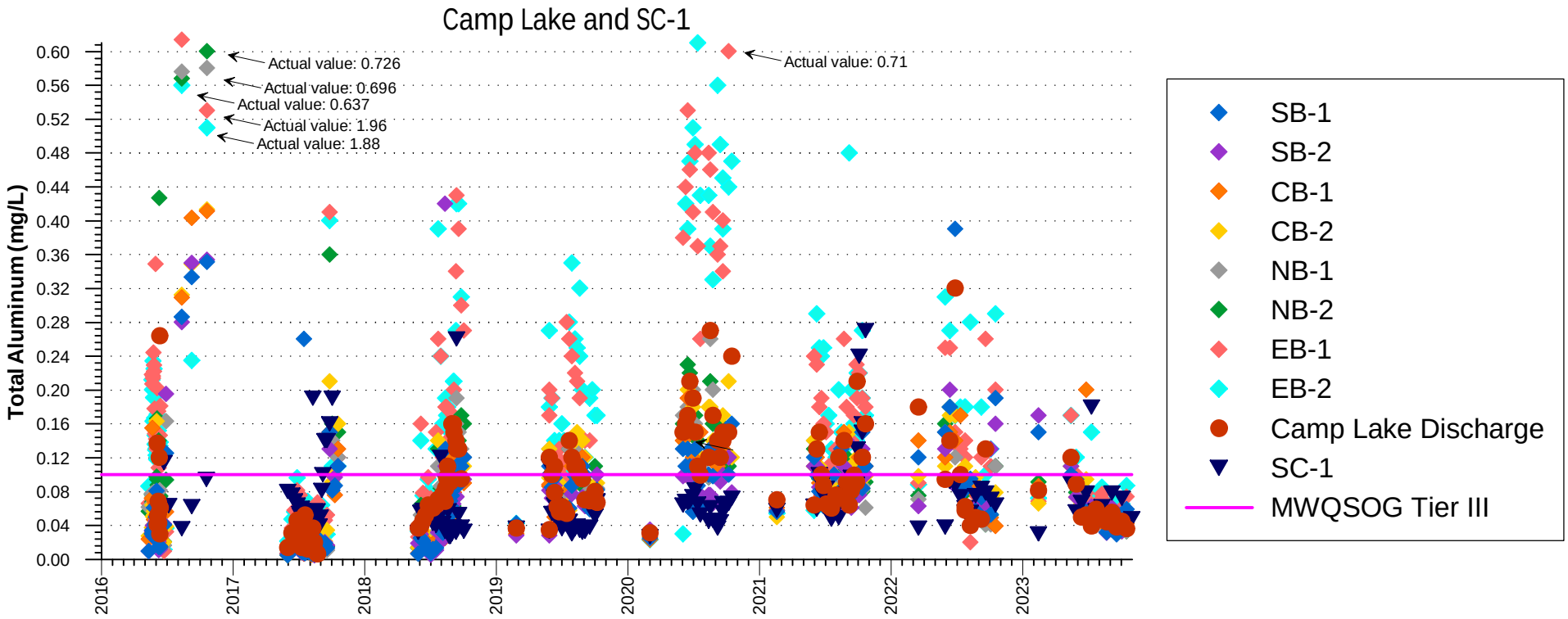
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL IRON
(2016 - 2023)

AUGUST 2024	FIGURE 19	REV. 0



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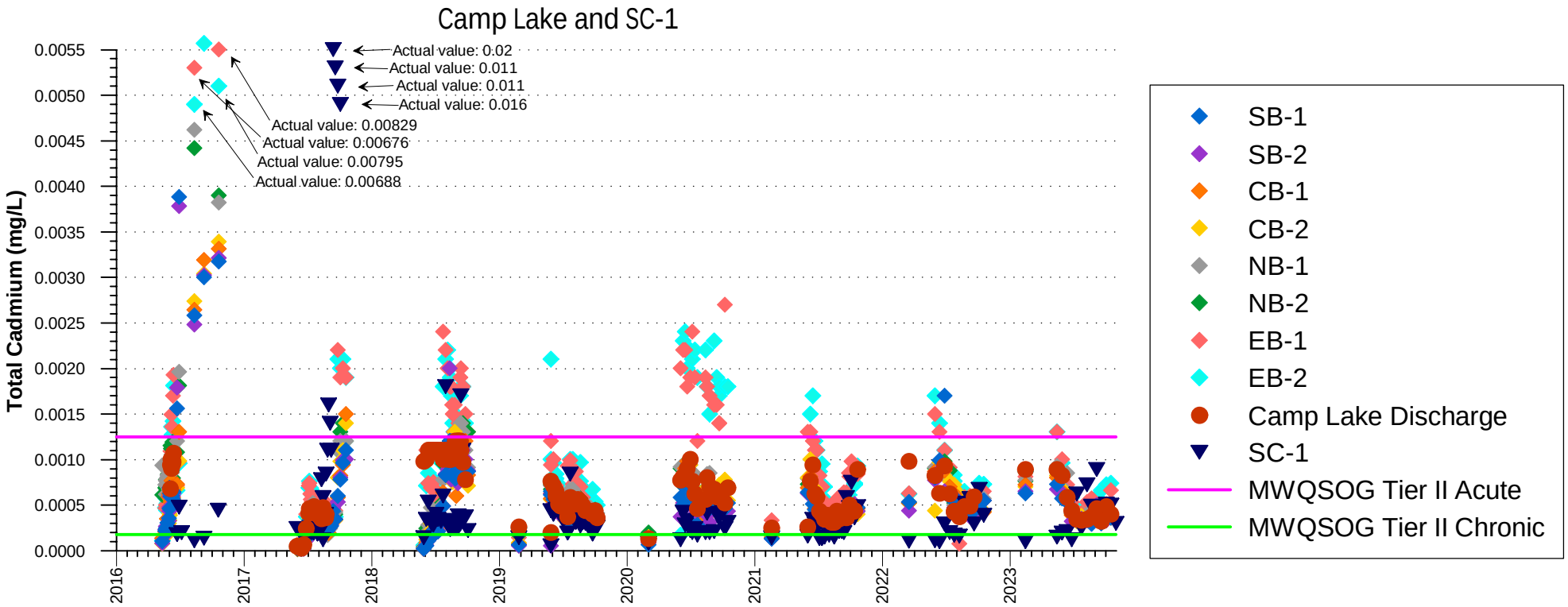
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL ALUMINUM (2016 - 2023)

AUGUST 2024	FIGURE 20	REV: 0



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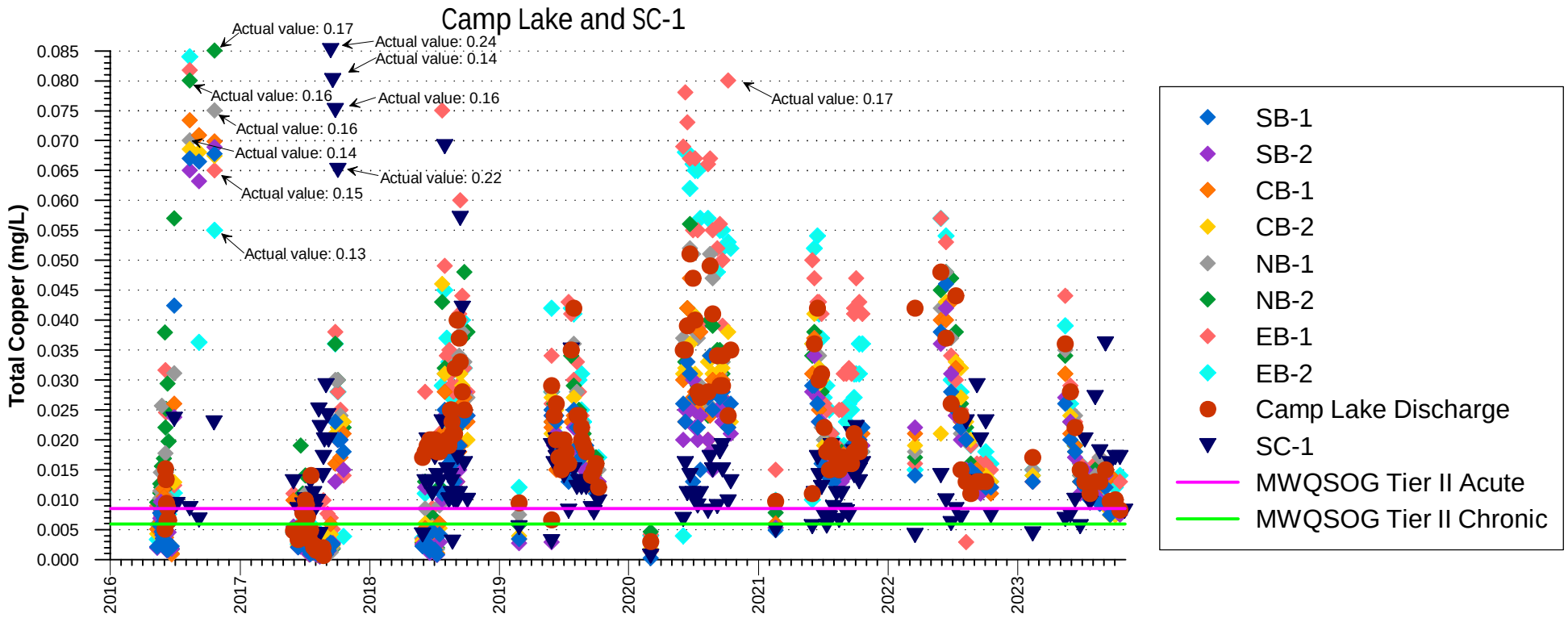
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL CADMIUM (2016 - 2023)

AUGUST 2024	FIGURE 21	REV. 0



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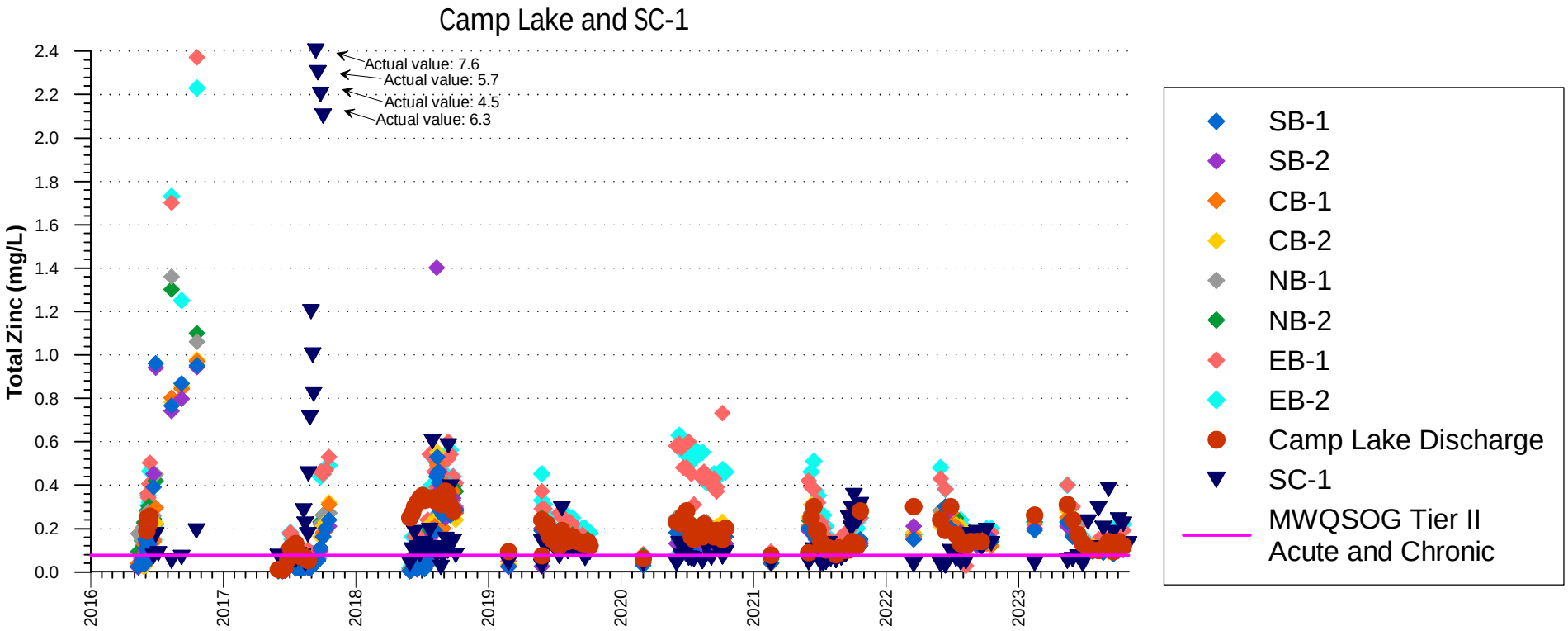
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL COPPER
(2016 - 2023)

AUGUST 2024	FIGURE 22	REV. 0



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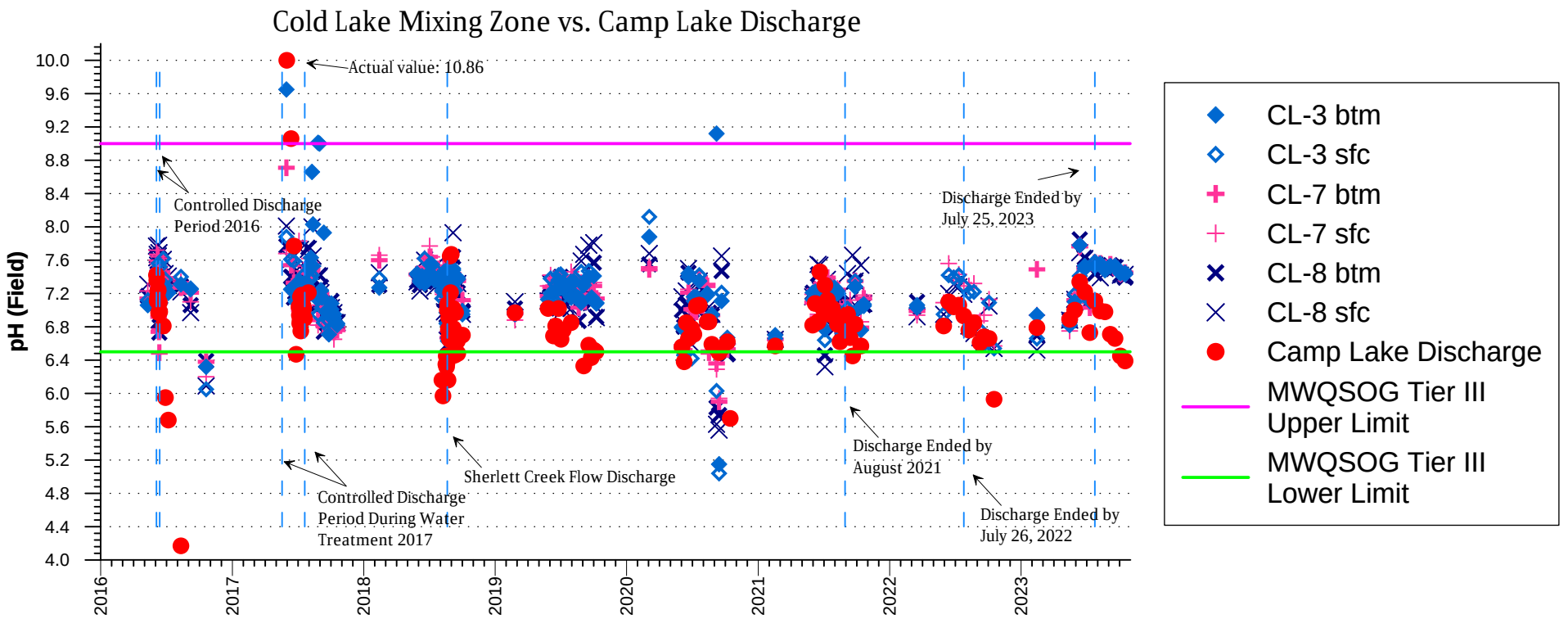
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

CAMP LAKE AND SC-1 — TOTAL ZINC
(2016 - 2023)

AUGUST 2024	FIGURE 23	REV. 0



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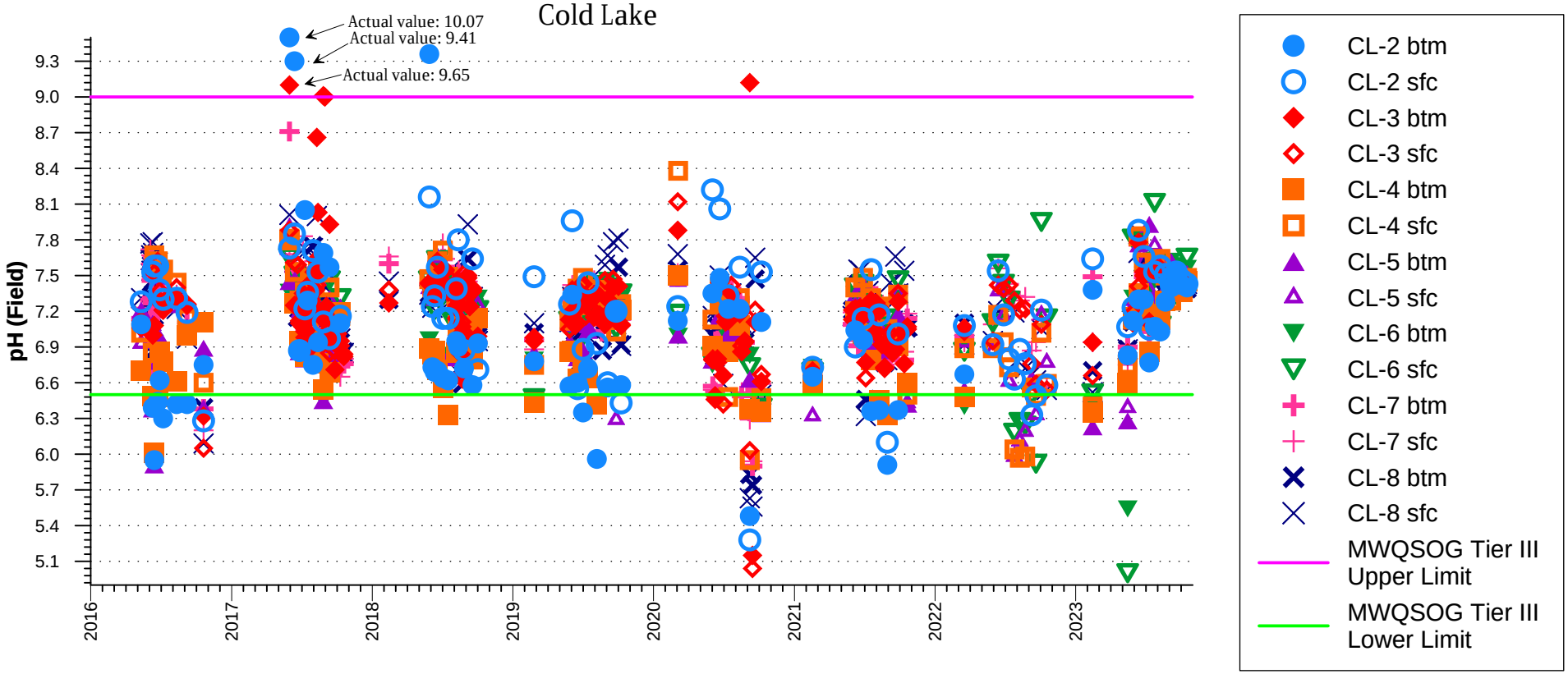
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
FIELD pH (2016 - 2023)

AUGUST 2024	FIGURE 24	REV: 0



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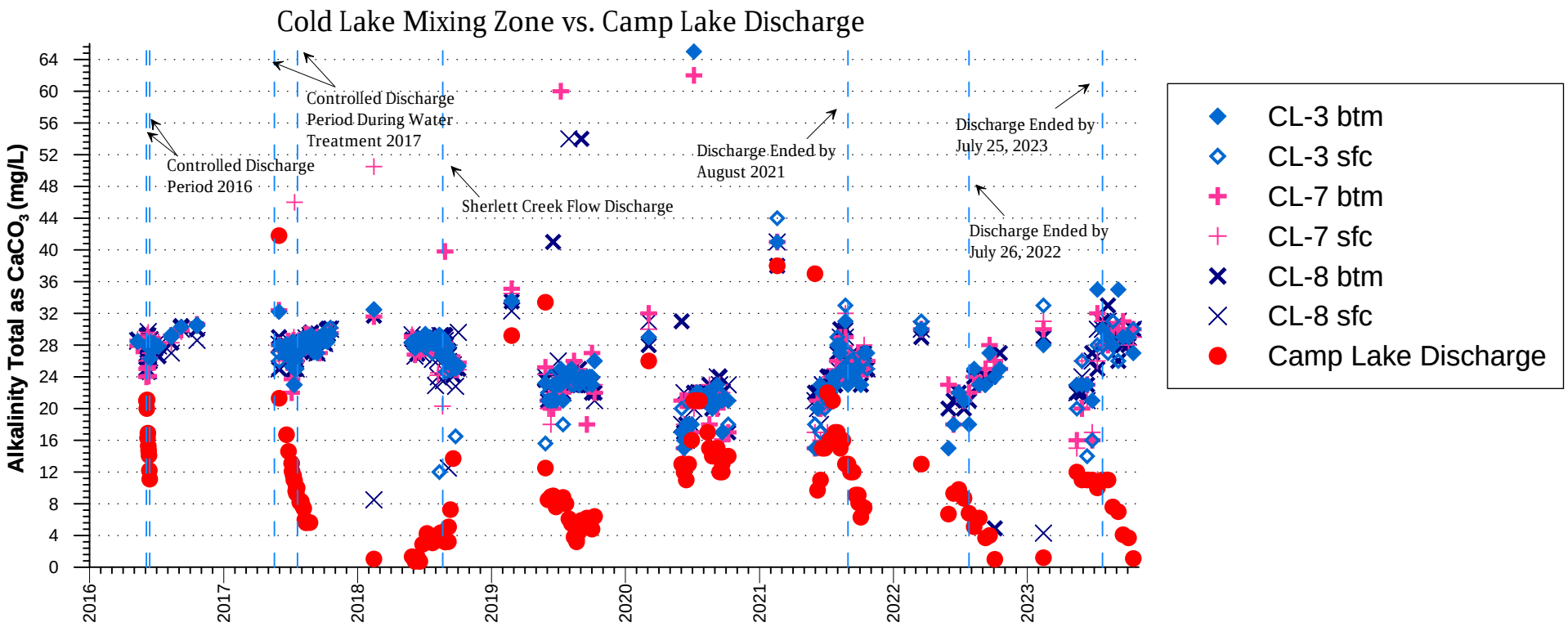
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — FIELD pH (2016 - 2023)

AUGUST 2024	FIGURE 25	REV: 0



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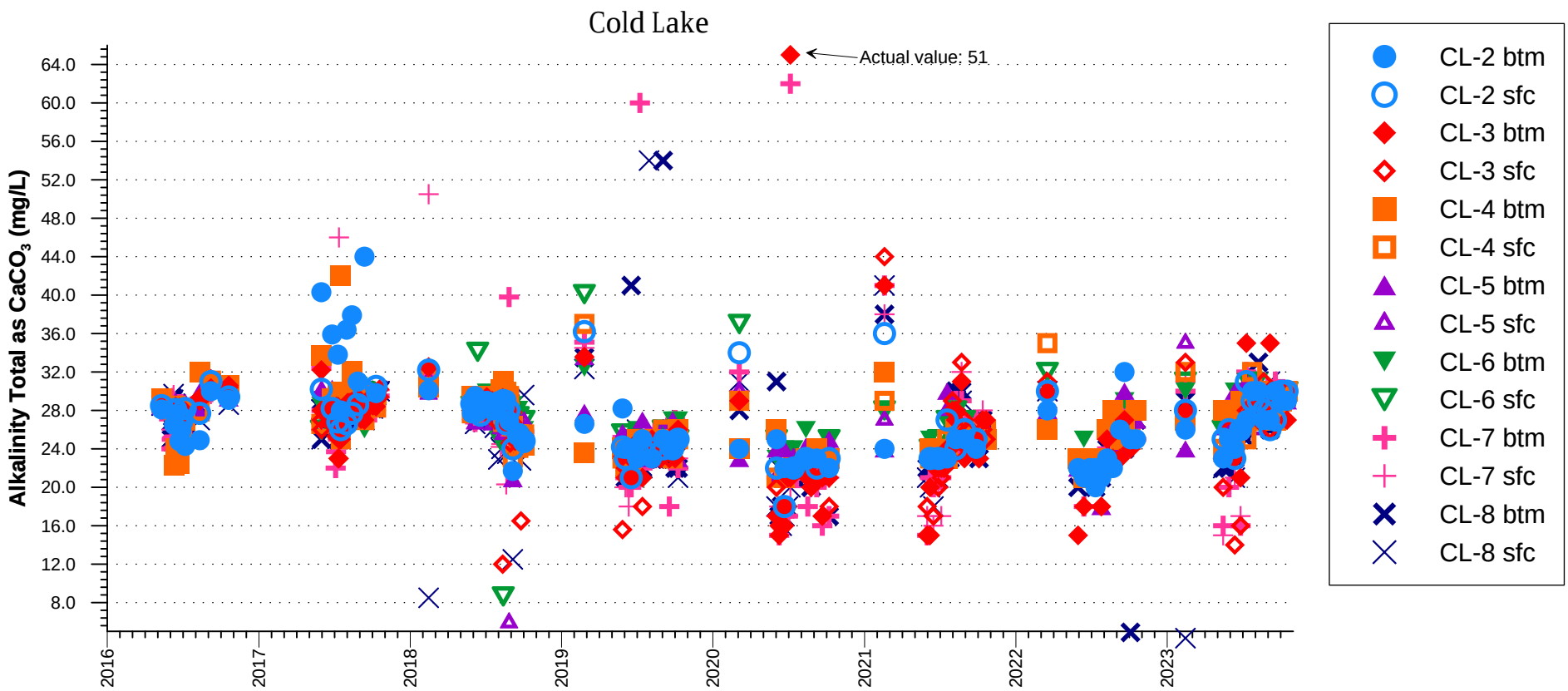
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL ALKALINITY (2016 - 2023)

AUGUST 2024	FIGURE 26	REV: 0



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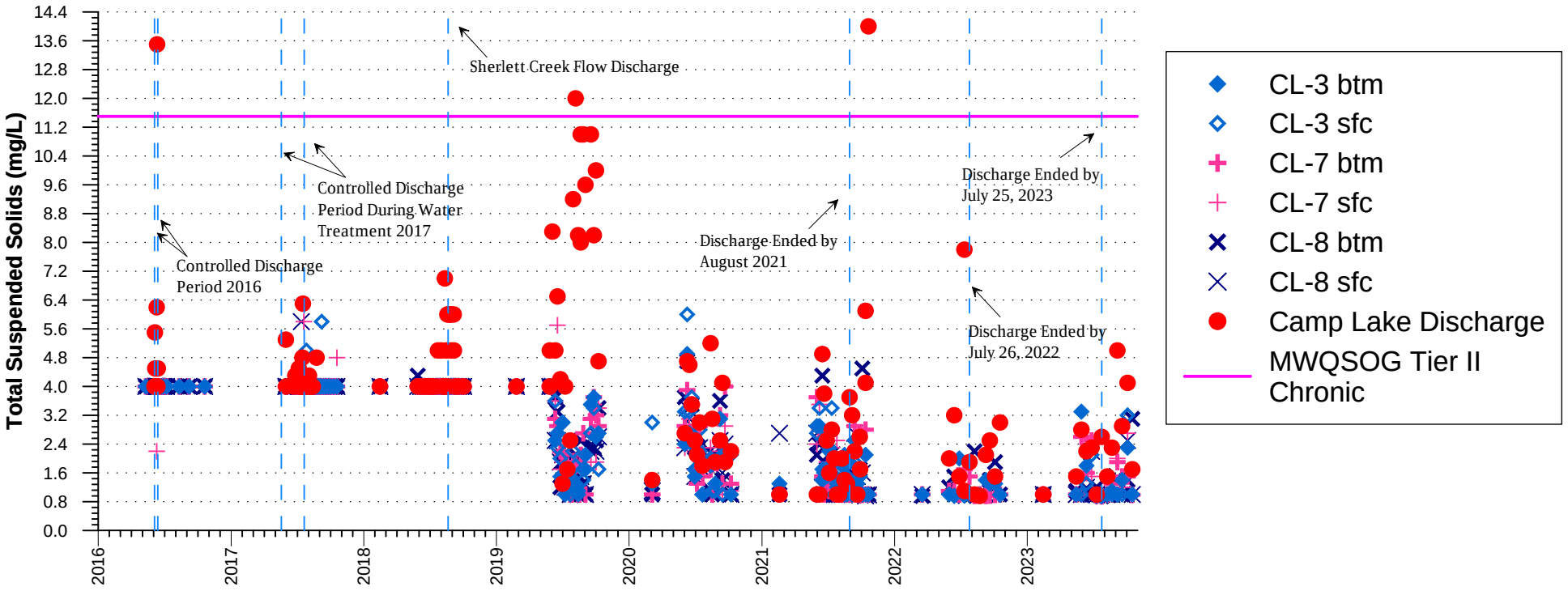
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL ALKALINITY
(2016 - 2023)

AUGUST 2024	FIGURE 27	REV: 0

Cold Lake Mixing Zone vs. Camp Lake Discharge



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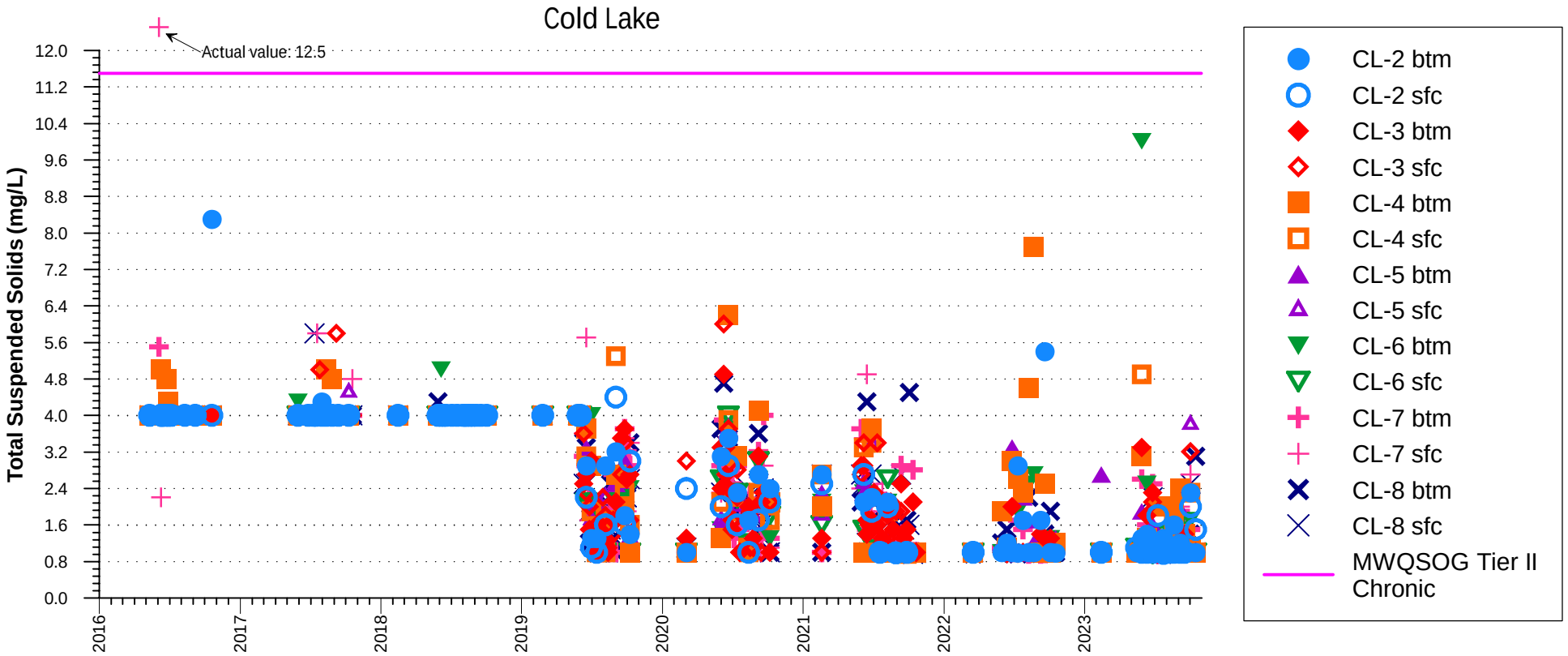
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL SUSPENDED SOLIDS (2016 - 2023)

AUGUST 2024	FIGURE 28	REV: 0



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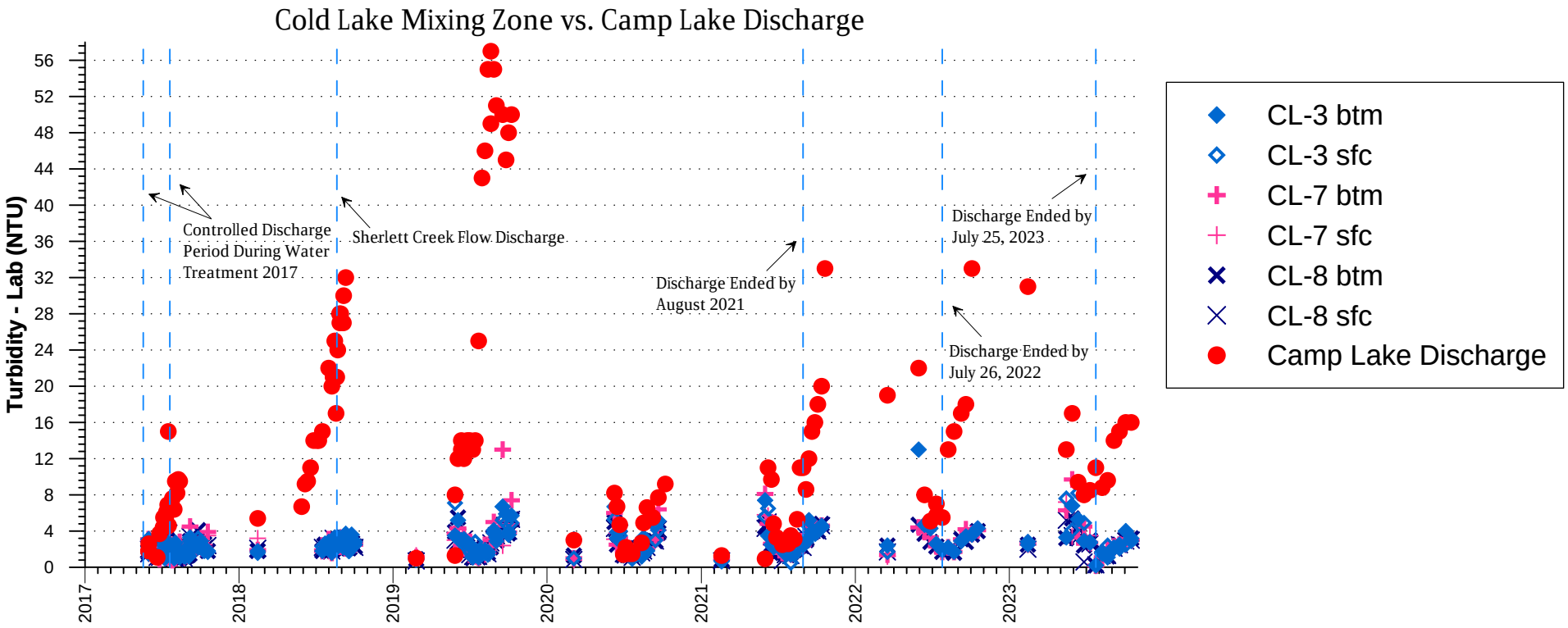
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL SUSPENDED SOLIDS (2016 - 2023)

AUGUST 2024	FIGURE 29	REV. 0



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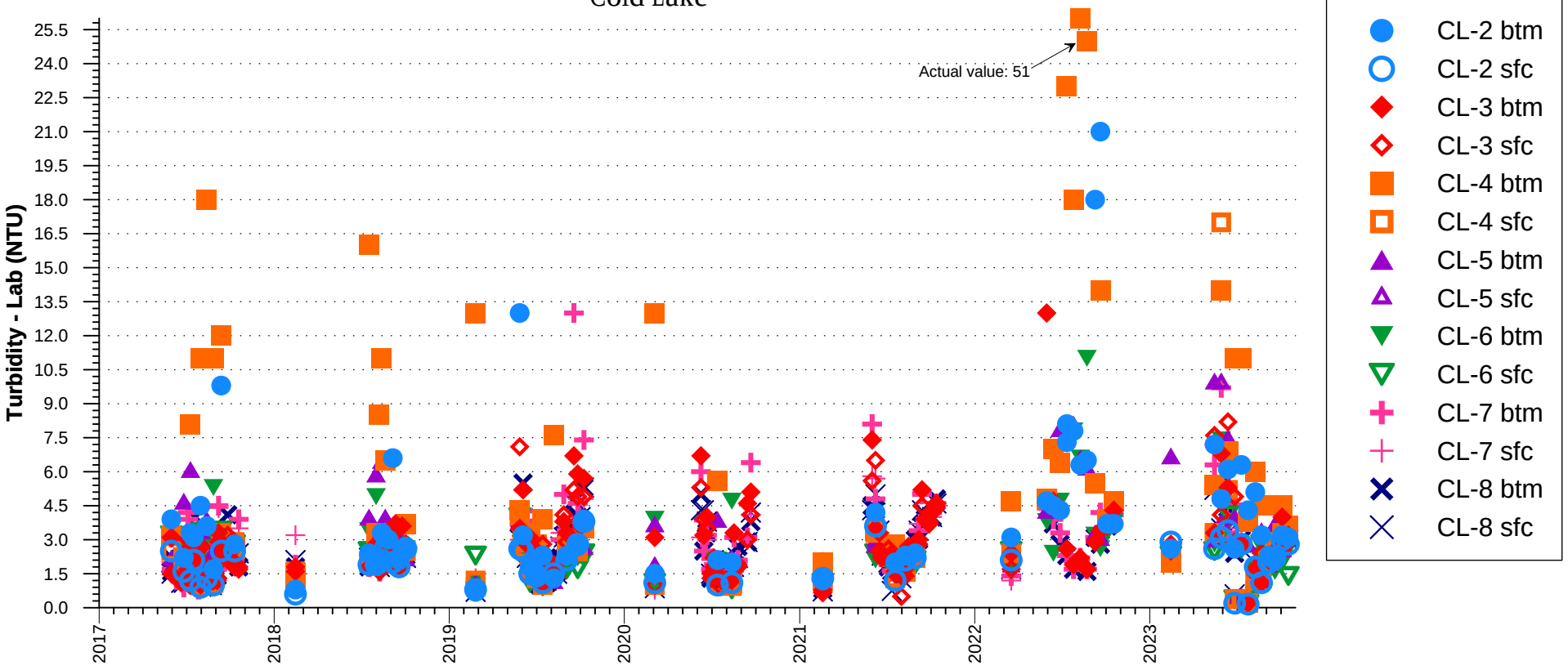
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
LAB TURBIDITY (2017 - 2023)

AUGUST 2024	FIGURE 30	REV: 0

Cold Lake



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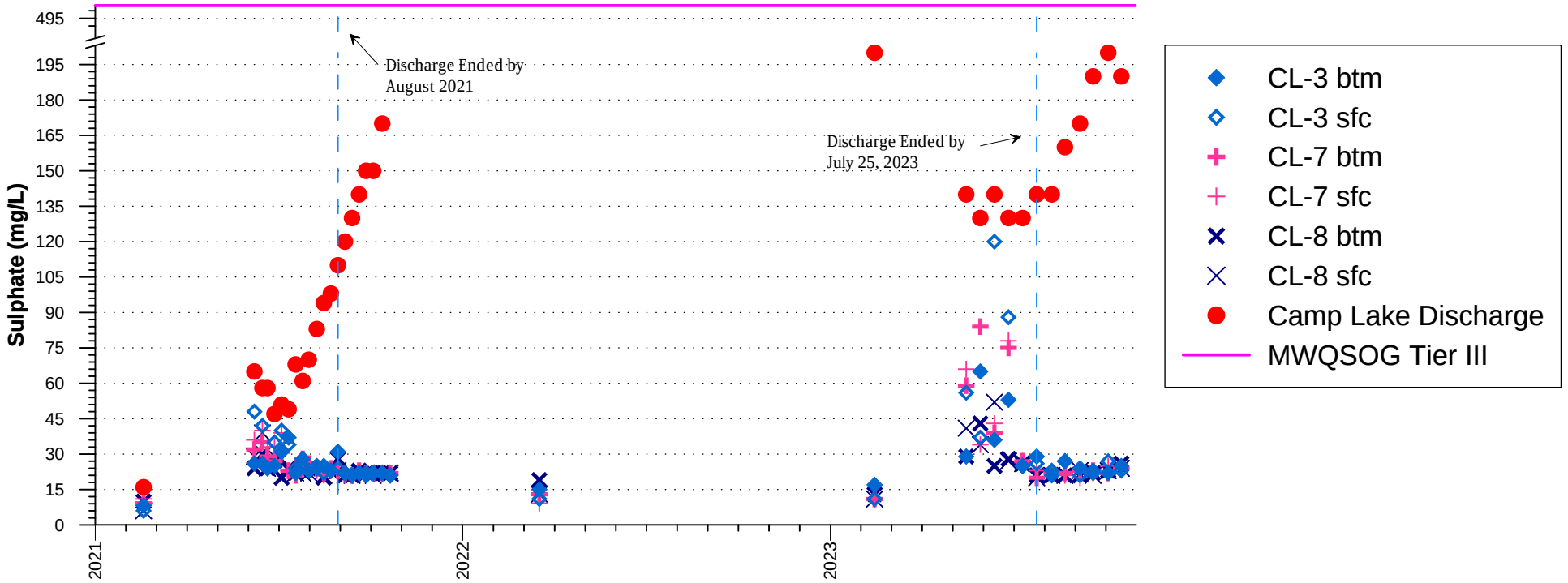
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — LAB TURBIDITY (2017 - 2023)

AUGUST 2024	FIGURE 31	REV: 0

Cold Lake Mixing Zone vs. Camp Lake Discharge



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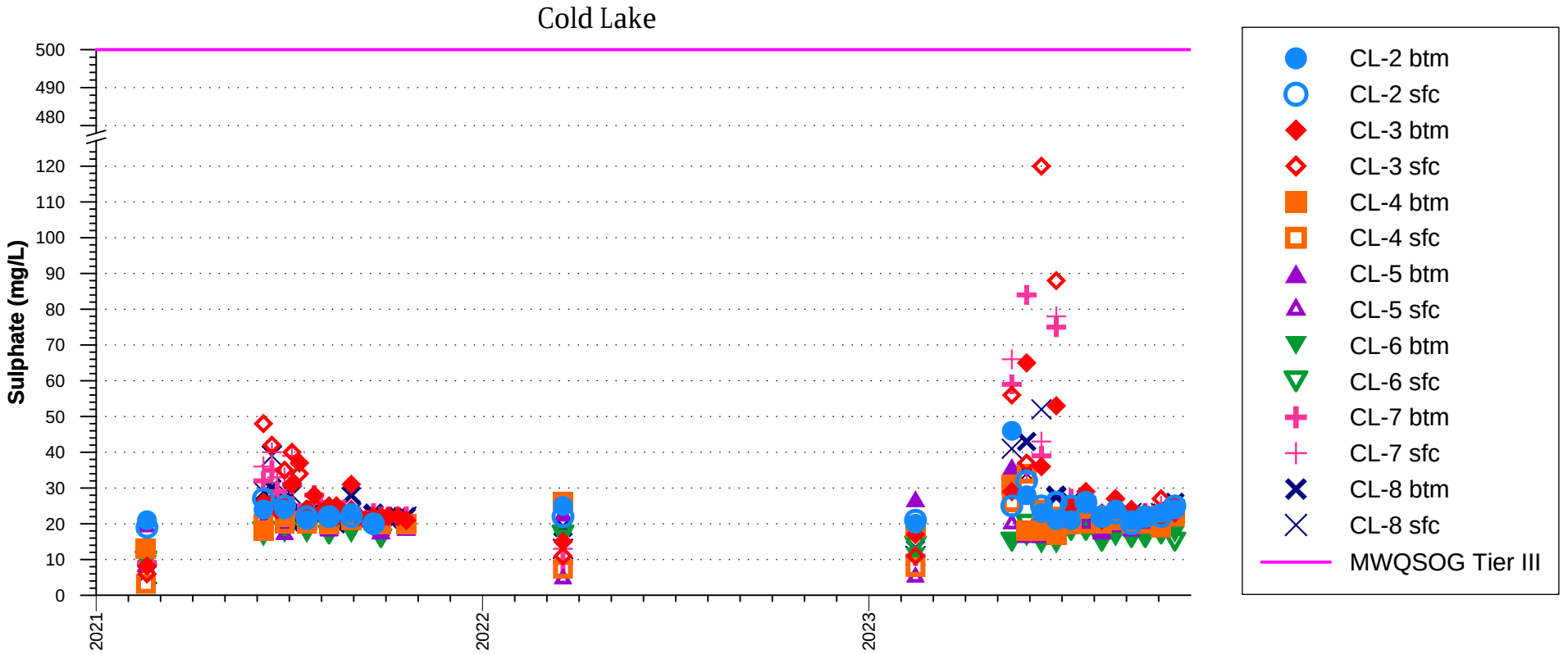
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
SULPHATE (2021 - 2023)

AUGUST 2024	FIGURE 32	REV: 0



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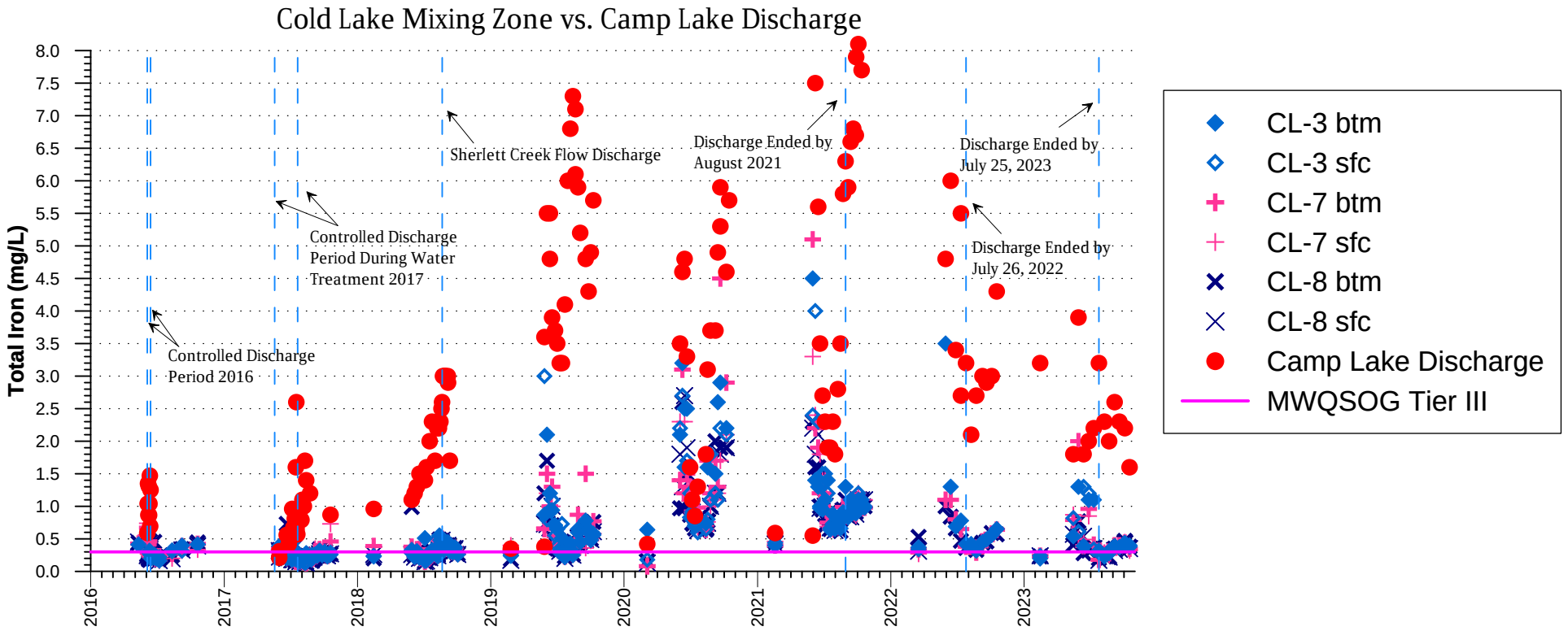
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — SULPHATE (2021 - 2023)

AUGUST 2024	FIGURE 33	REV: 0



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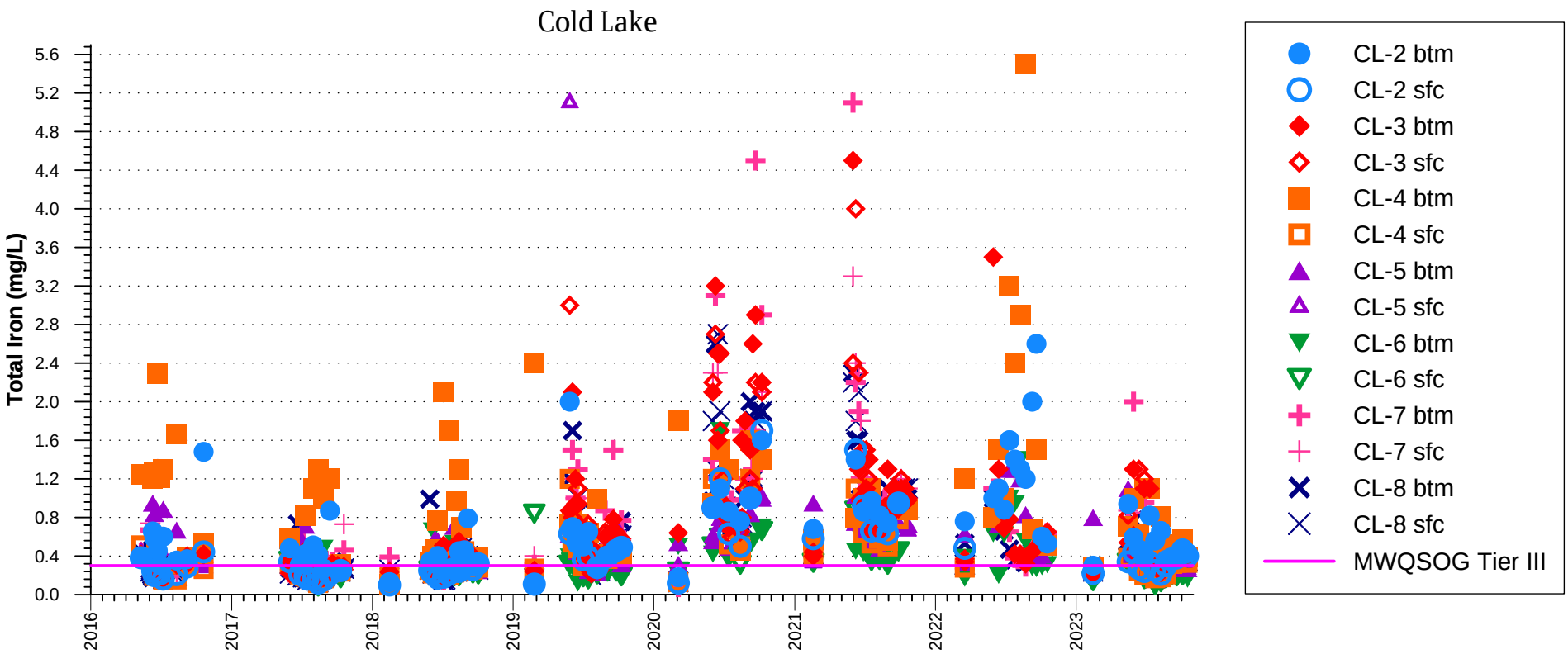
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL IRON (2016 - 2023)

AUGUST 2024	FIGURE 34	REV: 0



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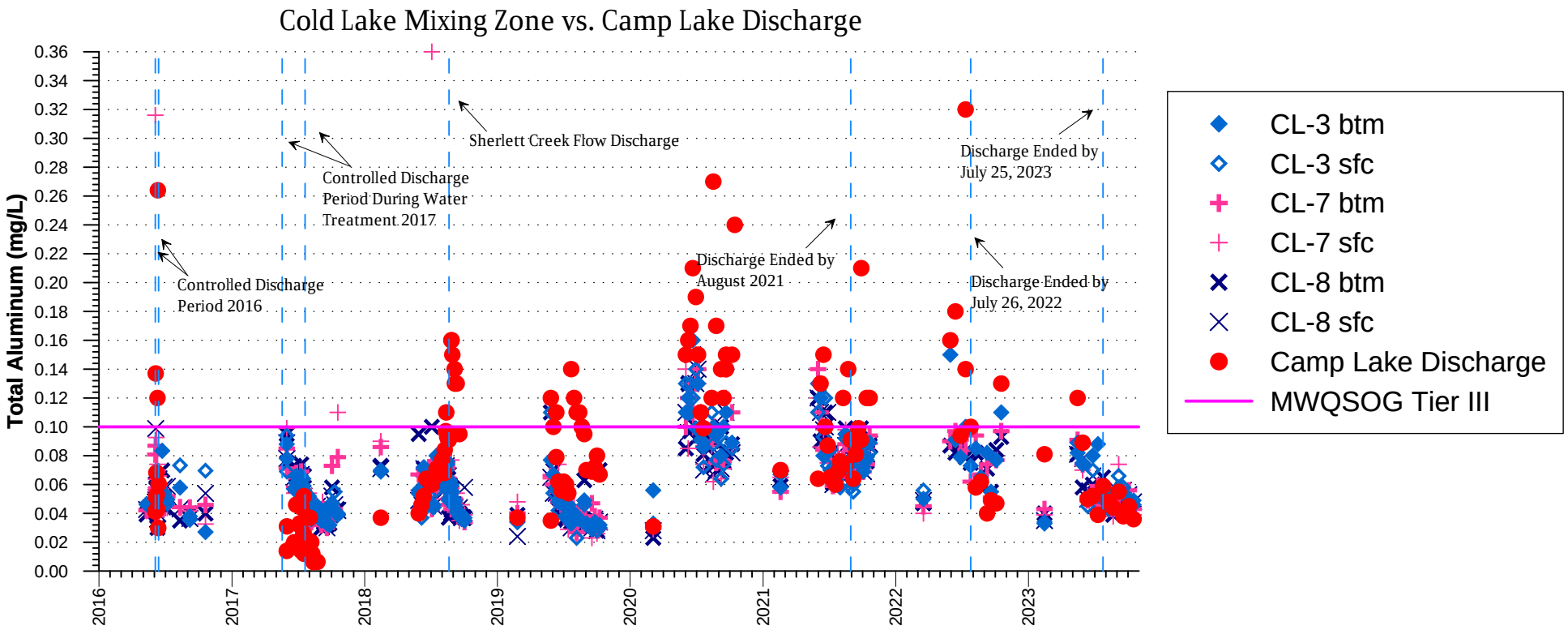
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL IRON (2016 - 2023)

AUGUST 2024	FIGURE 35	REV: 0



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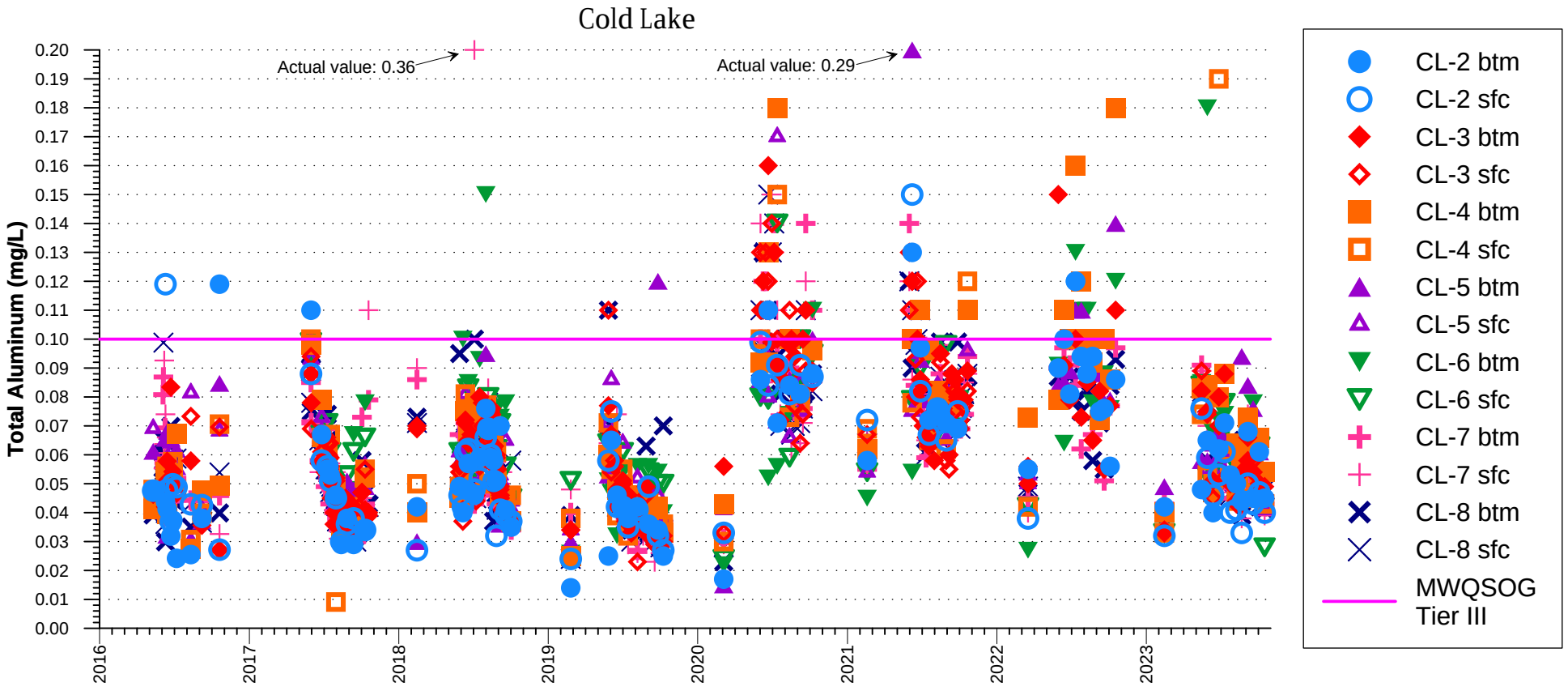
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL ALUMINUM (2016 - 2023)

AUGUST 2024	FIGURE 36	REV: 0



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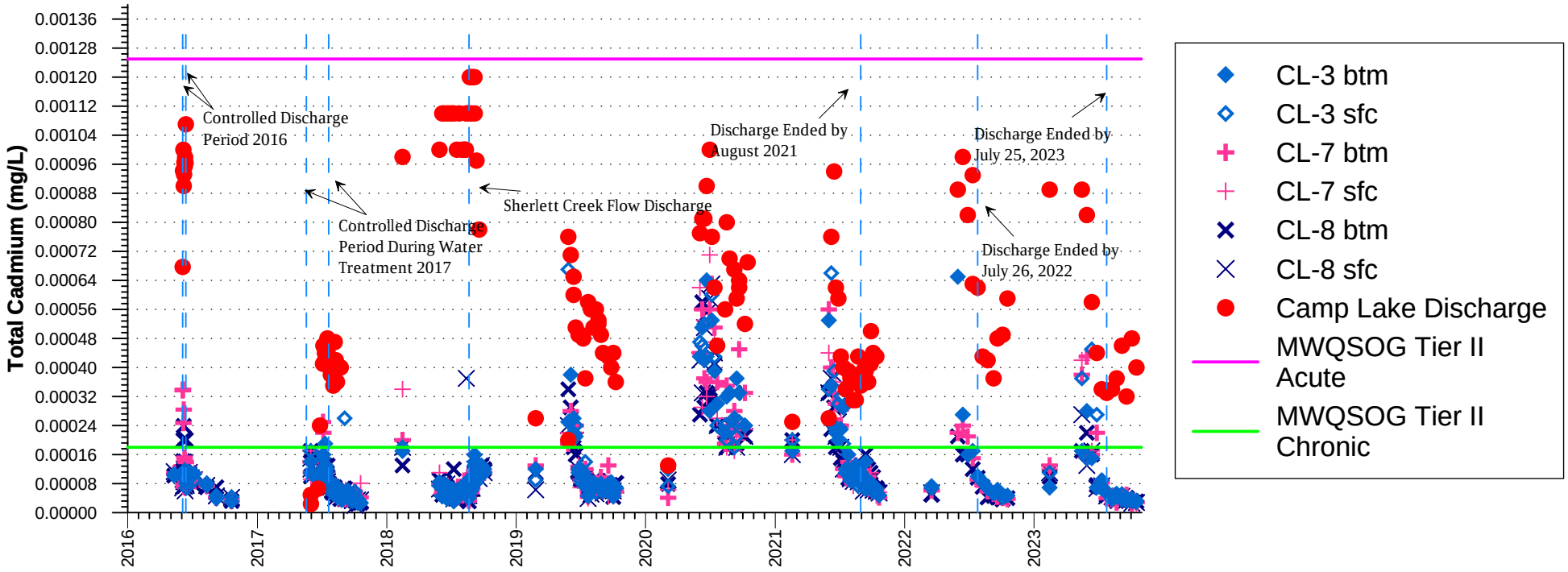
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL ALUMINUM (2016 - 2023)

AUGUST 2024	FIGURE 37	REV: 0

Cold Lake Mixing Zone vs. Camp Lake Discharge



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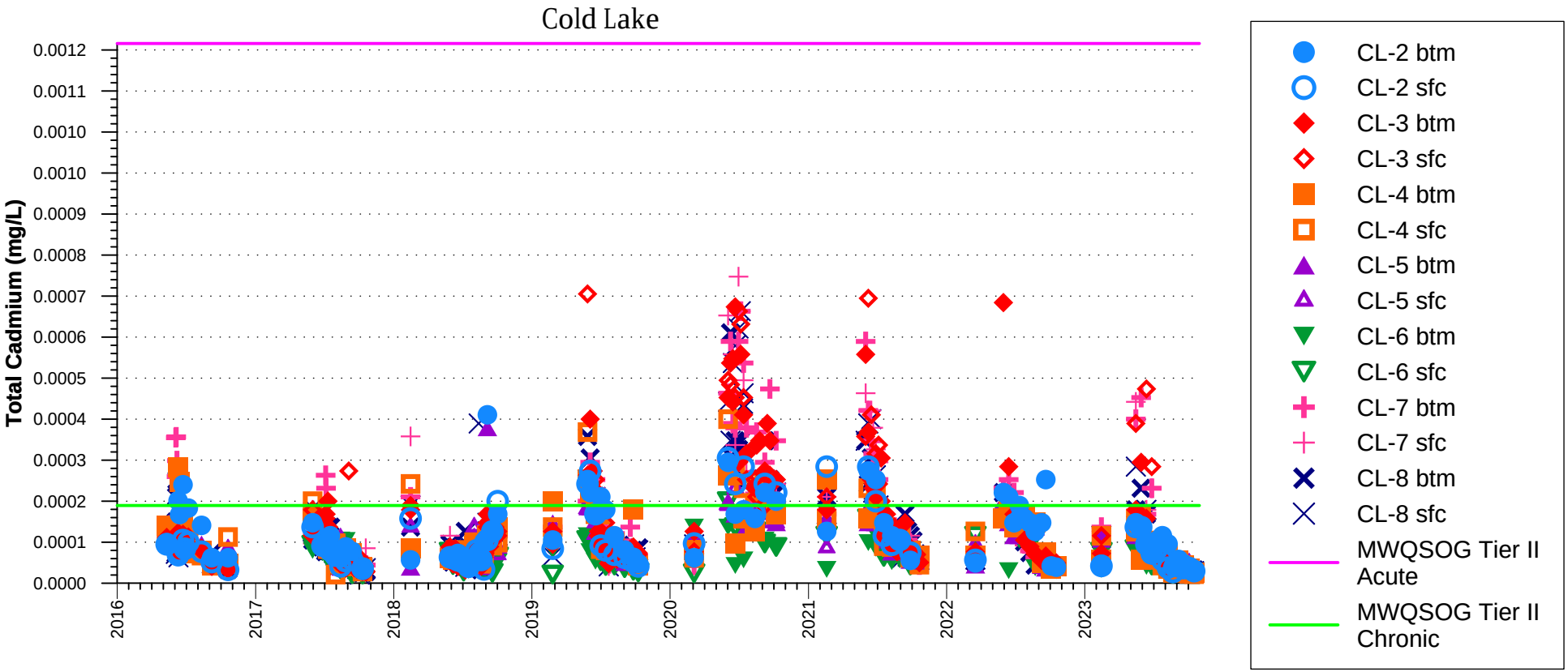
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL CADMIUM (2016 - 2023)

AUGUST 2024	FIGURE 38	REV: 0



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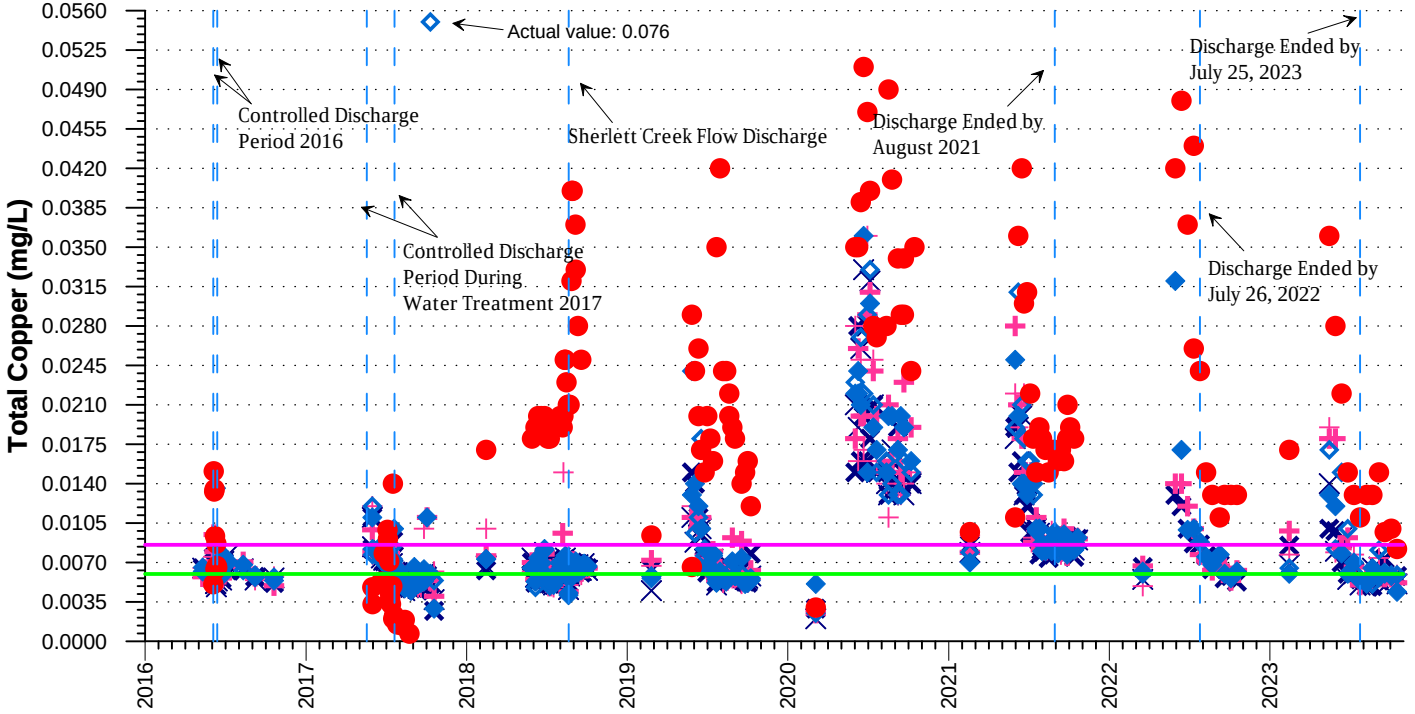
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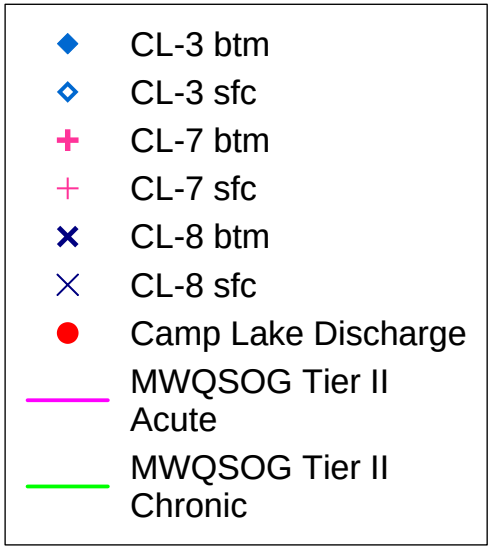
2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL CADMIUM (2016 - 2023)

AUGUST 2024	FIGURE 39	REV: 0

Cold Lake Mixing Zone vs. Camp Lake Discharge





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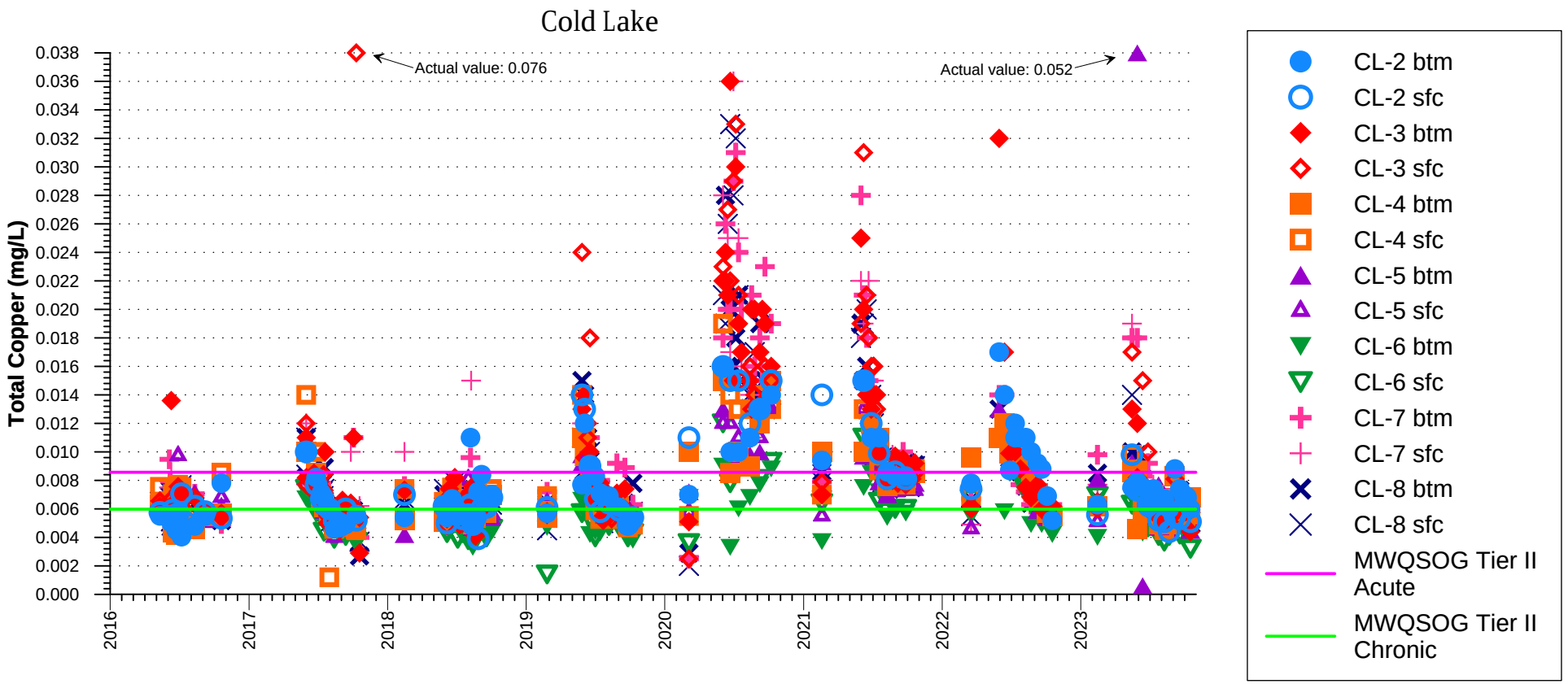
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL COPPER (2016 - 2023)

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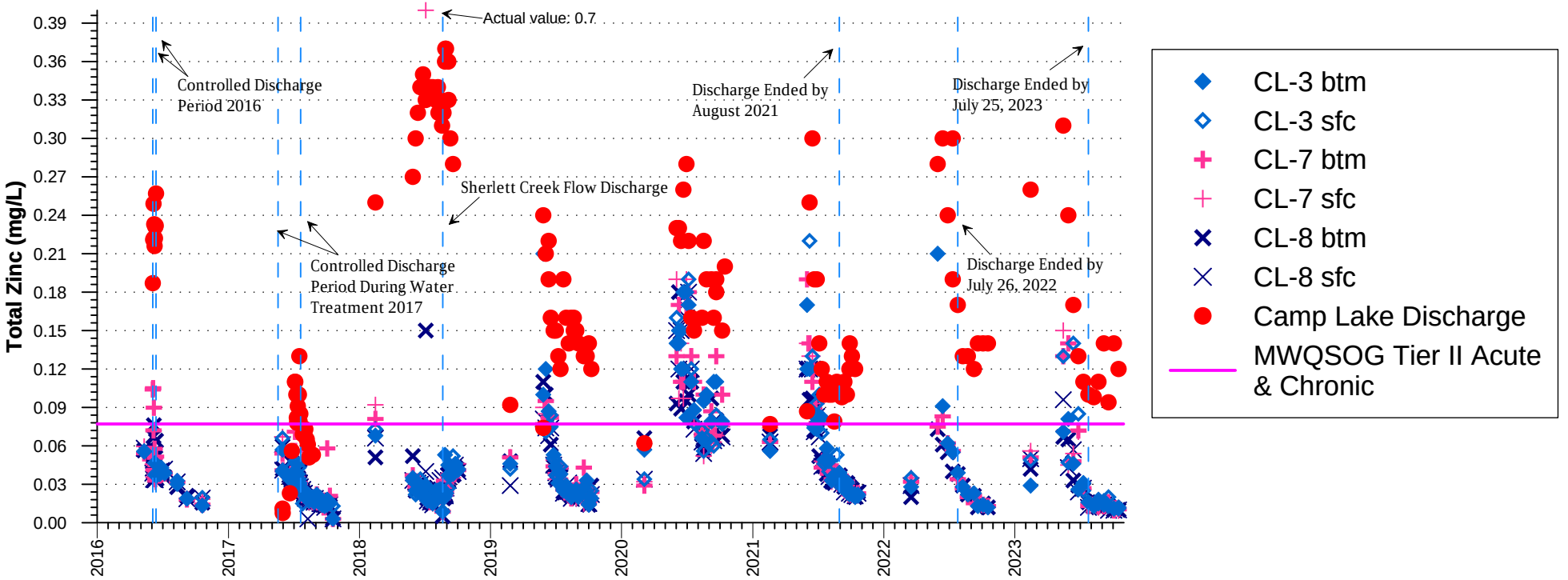
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL COPPER (2016 - 2023)

AUGUST 2024	FIGURE 41	REV: 0

Cold Lake Mixing Zone vs. Camp Lake Discharge



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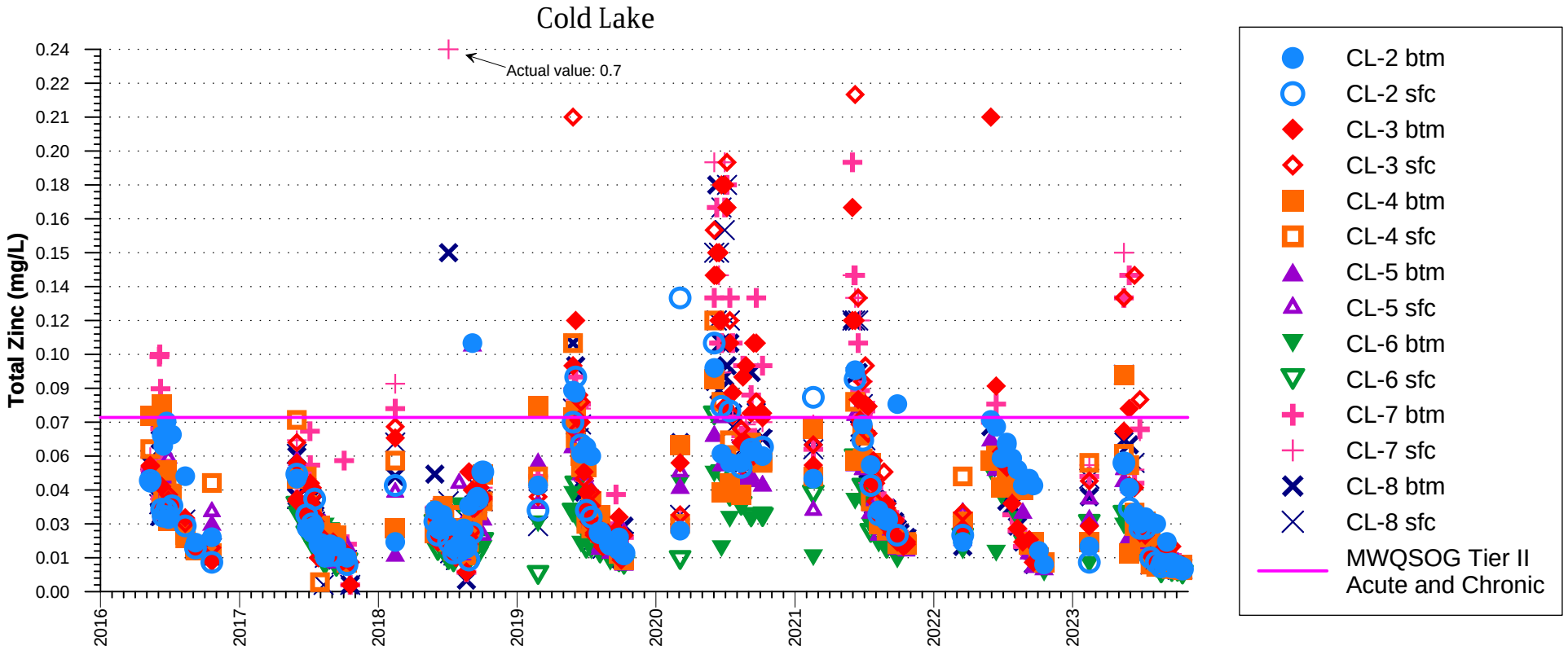
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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE MIXING ZONE VS. CAMP LAKE DISCHARGE
TOTAL ZINC (2016 - 2023)

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2023 WATER QUALITY SUMMARY REPORT
SHERRIDON MINE SITE

COLD LAKE — TOTAL ZINC (2016 - 2023)

AUGUST 2024	FIGURE 43	REV: 0

APPENDIX A

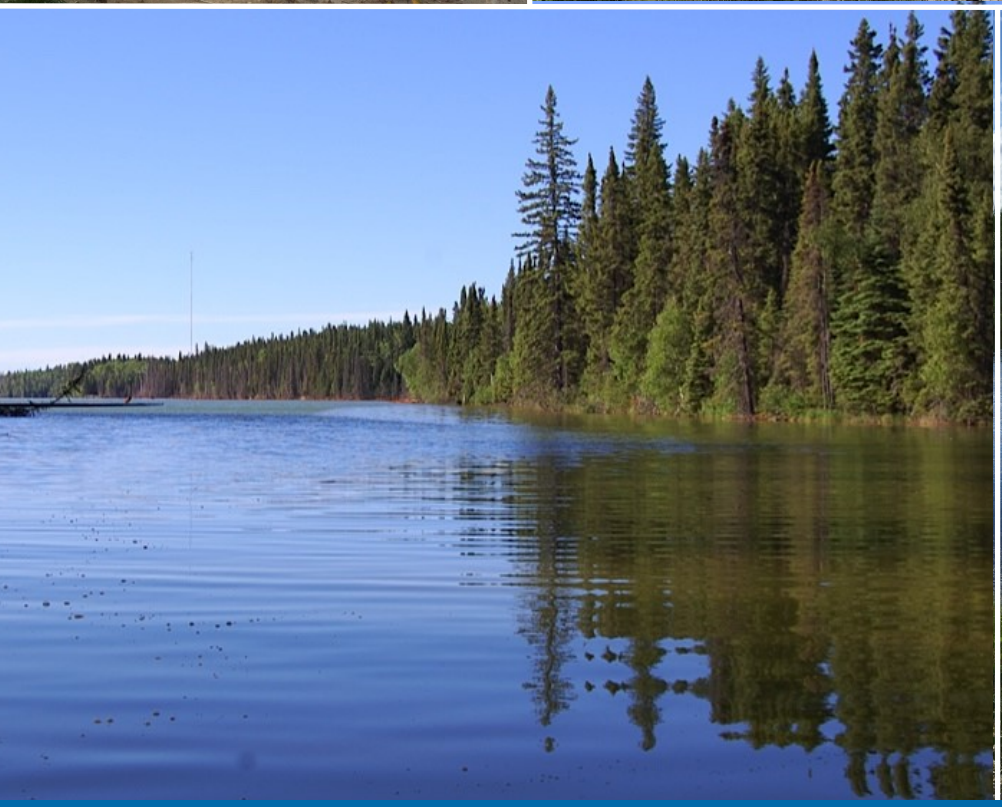
Sherridon Adaptive Management Plan

Sherridon Mine Orphan Mine Site Reclamation Project: Adaptive Mgmt. Plan











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TETRA TECH

Sherridon Orphan Mine Site Reclamation Project: Adaptive Management Plan

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August 2022

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August 16, 2022
Date

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EXECUTIVE SUMMARY

The Sherridon Orphaned Mine Site is located on the east shore of Camp Lake, approximately 65 km northeast of Flin Flon, Manitoba. The copper-zinc mine was operated by Sherritt Gordon Mines between 1928 and 1952. The communities of Cold Lake and Sherridon developed in the early 20th century in conjunction with development and operation of the Sherridon Mine. The mine site is since abandoned and is now the responsibility of the Province of Manitoba (the Province).

The Province commissioned a reclamation plan and associated design for the site in 2006. The design study recommended tailings relocation in combination with flooding as the preferred option for site reclamation. The reclamation plan included the relocation of 47 hectares of land-based tailings into Camp Lake. Construction associated with the Sherridon Orphan Mine Reclamation Project (the Project) began in 2009 and was completed in early September 2021.

Adaptive management is a means of assessing, managing, and planning for uncertainties associated with a particular project or program. This draft Adaptive Management Plan (AMP) has been developed to describe the framework used by the Province for identification of unanticipated adverse project effects as well as for monitoring and managing project uncertainties. The AMP identifies linkages between management plans and monitoring programs and defines how results from environmental monitoring programs will contribute to the adaptive management process. This process provides a means of identifying changes in the environment as a result of the project that fall outside of acceptable or expected thresholds to be addressed and mitigated. The AMP also provides a communications plan along with recommendations for communication frequency based on project performance.

The Sherridon Project AMP has been developed to cover the remaining two project phases: i.) post-construction transition; and ii.) final closure. The primary project components requiring monitoring during these two phases include:

- Water quality
- Camp Lake water level
- Adaptive Monitoring Requirements (Sampling Frequency)
- Inspection and Maintenance of Built Structures

Decision flowsheets have been developed to assist in guiding the Province in managing these project components and proactively mitigating any challenges that may arise over the long-term. The decision flowsheets provide a simple, graphical, representation of how adaptive management decisions are made in response to project conditions that may develop. Colour coding of the flowsheet cells indicates the risk of the indicated project condition to the aquatic environment and should also be used by the Province to communicate risk conditions and adaptive responses to project stakeholders.

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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
AMP	Adaptive Management Plan
ARD	Acid Rock Drainage
CEAA	Canadian Environmental Assessment Agency
CL	Cold Lake
CB	Central Basin (Camp Lake)
DFO	Fisheries and Oceans Canada
EB	East Basin (Camp Lake)
ECCC	Environment and Climate Change Canada
EOR	Engineer of Record
ha	Hectare
HHERA	Human Health and Ecological Risk Assessment
IAA	Impact Assessment Agency of Canada
INAP	International Network for Acid Prevention
km^2	Square Kilometer
m	Meter
masl	Meters Above Sea Level
MECP	Manitoba Environment, Climate and Parks
MDMER	Metal and Diamond Mining Effluent Regulations
MEND	Mine Environment Neutral Drainage Program – a collaboration of the federal government and the Mining Association of Canada
MWQSOG	Manitoba Water Quality Standards, Objectives and Guidelines
NB	North Basin (Camp Lake)
NOAMI	National Orphaned/Abandoned Mines Initiative - a co-operative program guided by an advisory committee that brings together the mining industry, federal/provincial/territorial governments, environmental organizations and First Nations
OAM	Orphaned and Abandoned Mines
the Project	Sherridon Orphan Mine Reclamation Project
SC	Sherlett Creek
SCC	Sherridon Community Council
SB	South Basin (Camp Lake)
the Province	Province of Manitoba
TSS	Total Suspended Solids

1 INTRODUCTION

Adaptive Management is a means of assessing, managing, and planning for uncertainties associated with a particular project or program. The general process for adaptive management begins with a problem followed by an assessment of alternative means of managing that problem, and ultimately selecting the solution (Figure 1). The next step is solution design, followed by implementation. Monitoring is a key component of the adaptive process because the monitoring findings ultimately determine if any adjustment (or replacement) of the solution, or restatement of the problem are required.

The Sherridon Orphaned Mine Reclamation Project (the "Project") has employed adaptive management since project construction began. Going forward, this document formalizes and describes the framework for identification of unanticipated adverse project effects as well as for monitoring and managing project uncertainties. The AMP also provides the structure for communication between the Province and communities/stakeholders.

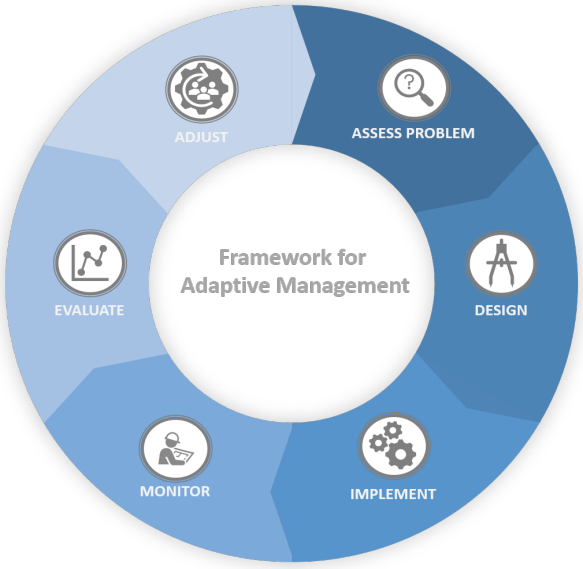


Figure 1 Framework for Adaptive Management.

The AMP includes a Monitoring Program Framework, project-specific water quality performance objectives, and an Adaptive Management Response Framework. The AMP identifies linkages between management plans and monitoring programs and defines how results from environmental monitoring programs will contribute to the adaptive management process. This process provides a means of identifying changes in the environment as a result of the project that fall outside of acceptable or expected thresholds to be addressed and mitigated.

Now that the construction phase of the project is complete, the Sherridon Project AMP has been developed to cover the two remaining project phases: the post-construction or transition phase (approx. 2022-2026) and final closure (2026+).

2 PROJECT BACKGROUND

The Sherridon Orphaned Mine Site is located on the east shore of Camp Lake, approximately 65 km northeast of Flin Flon, Manitoba (Figure 2). The copper-zinc mine was operated by Sherritt Gordon Mines between 1928 and 1952. The communities of Cold Lake and Sherridon developed in the early 20th century in conjunction with development and operation of the Sherridon Mine. The mine site is since abandoned and is now the responsibility of the Province of Manitoba.

The Province commissioned a reclamation plan and associated design for the site in 2006. The design study recommended tailings relocation in combination with flooding as the preferred option for site reclamation. The reclamation plan included the relocation of 47 hectares (ha) of land-based tailings into Camp Lake, which is known to effectively control acid rock drainage (ARD) from sulphide tailings and is a recognized best management practice (SRK 2005). This “sub-aqueous” tailings disposal method had already demonstrated specific effectiveness for the Sherridon sulphide tailings through the analysis of water from Fox Lake (adjacent to Camp Lake) in which tailings had been deposited during mining operations (Moncur et al. 2012). The objectives of the reclamation plan and additional detail are provided in Section 3.0.

Construction associated with the reclamation plan began in 2009 and was completed in early September 2021 (Appendix A). The bulk of the mine waste was relocated to Camp Lake between 2009 and 2012. Subsequent work focused on identifying and removing smaller quantities of residual mine waste from areas adjacent to Camp Lake and removal of the site access road, which was constructed from mine waste.

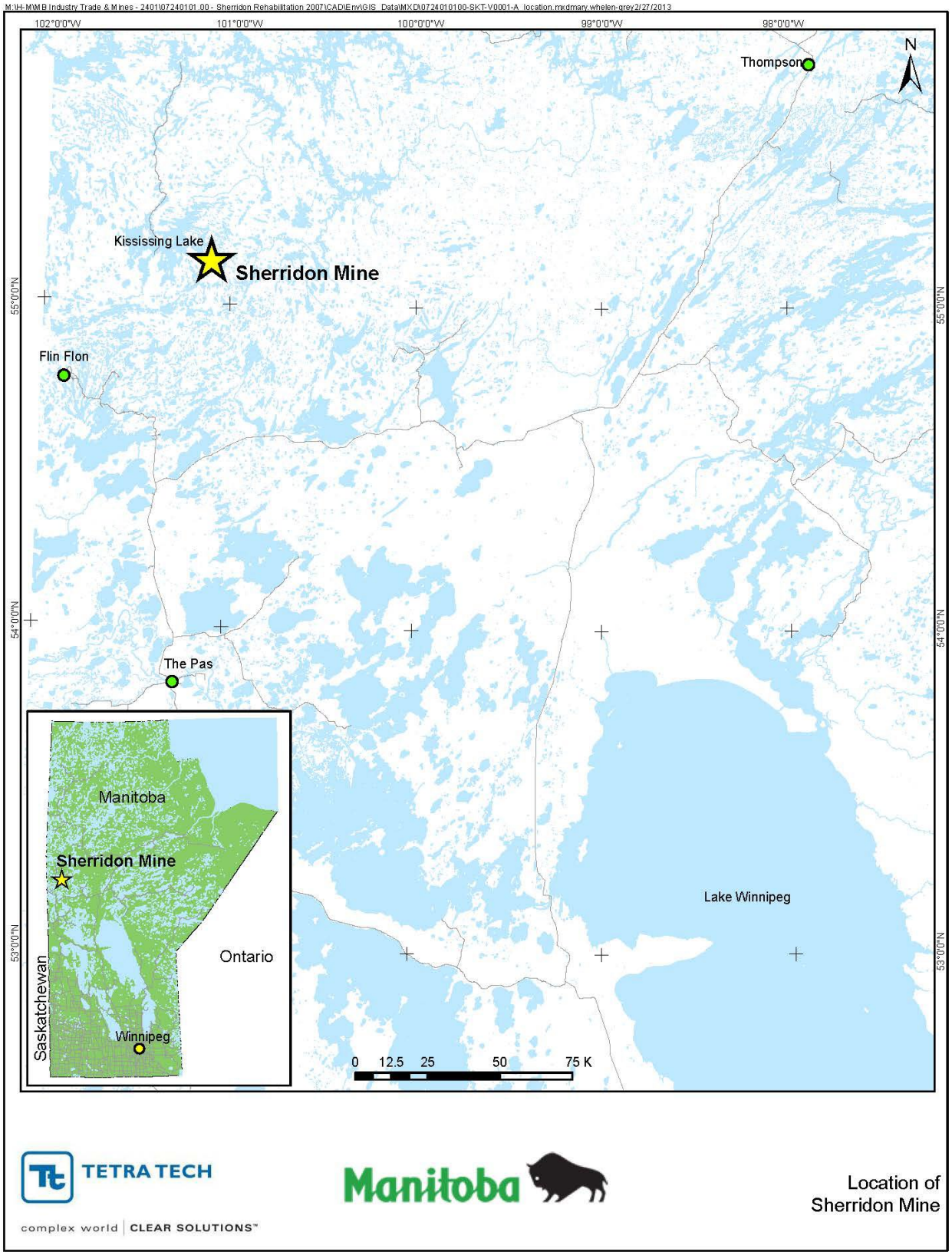


Figure 2 Location of the Sherridon Orphan Mine in Manitoba.

3 RECLAMATION PLAN

3.1 PLAN OBJECTIVES

The objectives for the Sherridon reclamation project were based on the findings of the Human Health and Ecological Risk Assessment (HHERA) completed in 2004 (UMA/SENES 2004). The HHERA determined that acid rock drainage originating from the tailings presented a significant ecological risk to aquatic life in Kississing Lake. Tailings dusting was identified as an important quality of life issue for the Community of Sherridon, requiring control, but was not found to be a risk to human health or the natural environment. No aspect of the project or its historical environmental effects was identified as a risk to human health (UMA/SENES 2004).

The reclamation objectives for the project were therefore threefold:

- Improve site safety
- Eliminate tailings dusting
- Control acid rock drainage from the Sherridon mine waste to prevent any further degradation of aquatic habitat in Kississing Lake

The Project was intended and designed to prevent further degradation of the environment related to historic mining operations. The Project was not intended or designed to return the site to pre-mining conditions. The scope of the reclamation Project did not extend to addressing historical effects on Kississing Lake, which, accordioning to UMA/SENES 2004, concluded that mine-related metals in soil, dust, drinking water, or diet (fish, berries, wildlife, etc.) were below levels where there would be a potential concern for human health.

3.2 PLAN DEVELOPMENT

The reclamation plan design for the Sherridon Orphan Mine Project was the product of a multi-step design and approval process in which six potentially applicable reclamation approaches were evaluated and compared, leading to recommendation of sub-aqueous disposal as the preferred approach. The plan, prepared by a team of three established and experienced engineering firms, was reviewed by Manitoba (Mines Branch), which also consulted with national and international agencies involved in managing acid rock drainage (e.g., MEND, NOAMI, INAP), and by the inter-departmental planning committee of the Manitoba government, which included representatives of all Provincial government departments and some federal departments and agencies (Fisheries and Oceans Canada (DFO), Environment Canada, and the Canadian Environmental Assessment Agency (now referred to as the Impact Assessment Agency)). Additional detail is provided in Appendix B.

All reclamation projects involve some changes to the initial plan as work proceeds. These changes often are a result of findings in the course of the work, since it is impossible to know in advance of the work everything that will be encountered during excavation and material relocation. The sub-aqueous disposal reclamation approach remains unchanged, but the execution approach has been modified several times to address requests from the community

(e.g., provision to maintain some flow down lower Sherlett Creek), decisions made by the contractor, and matters identified in the course of reclamation. These are further discussed in Appendix C.

3.3 ENVIRONMENTAL MONITORING

Environmental monitoring was a key element of the reclamation plan and will continue to be through the adaptive management phase. Water quality monitoring is the primary indicator of whether the project is continuing to function as designed or requires some form of further assessment or alteration.

3.3.1 Pre-Project

A baseline environmental study was conducted to document environmental conditions in Kississing Lake in the 2008 open water season immediately before the reclamation work started (Tetra Tech WEI 2016). The pre-construction study was designed to document conditions at that time, identifying ecologically appropriate reference areas in Kississing Lake that have not been affected by the historical discharge from Camp Lake to enable quantitative assessment of the effects to date and to assess the geographic extent of effects. The study design also maximized the use of studies conducted prior to 2008, to provide as full a picture of conditions in the lake as possible. Repeating the study over time will then allow determination of the rate of recovery of aquatic conditions in the lake.

3.3.2 Construction Phase

Monitoring has been instrumental in identifying issues associated with the remaining adjacent mine waste to target further reclamation work. The monitoring program for the construction phase of the Sherridon Project is complete. This was focused on water quality to support management of the construction activities to advance the project while preventing degradation of water quality in the Cold Lake arm of Kississing Lake which directly receives inflow from Camp Lake. In addition, the monitoring program has provided a preliminary measure of the performance of the subaqueous mine waste disposal, and an ongoing assessment of the significance of runoff from any mine waste remaining adjacent to Camp Lake.

The water quality monitoring program has evolved considerably to reflect environmental management requirements at different stages of project construction since it was first implemented in 2013. The initial focus was on the pH of Camp Lake, as pH was the primary indicator of project performance at that time. No discharge was planned in 2013 and more detailed water quality information beyond pH was not required. The sampling and analytical program expanded in 2015 in preparation for a controlled discharge of treated water from Camp Lake to include a wider range of water quality parameters (metals, TSS, alkalinity, toxicity) in Camp Lake and stations in Cold Lake. The focus of this program was on determining the suitability of water quality in Camp Lake for discharge following lime treatment and demonstrated that the lake could be treated successfully although no discharge was conducted.

The scope of water quality monitoring expanded further in 2016 to support the first discharge of treated water from Camp Lake. Discharge quality thresholds based on the Metal Mining Effluent Regulations (now the Metal and Diamond Mining Effluent Regulations (MDMER; Minister of Justice 2021)) were set to manage the first treated discharge and to

inform project management actions. Monitoring included frequent sampling during the discharge and a period of post-discharge sampling of downstream conditions.

Discharge quality thresholds were added to management of the 2017 discharge based on 2016 monitoring results (turbidity, iron) and the MWQSOGs (aluminum, cadmium) in addition to the MDMER thresholds (toxicity, pH, TSS, copper, zinc) that were applied in 2016. Sampling was initiated in both Camp Lake and Cold Lake shortly following ice-out and continued through the discharge and on to the end of the open water season. The mixing zone monitoring area was established and sampling frequency in Camp Lake, the discharge, and the mixing zone, was increased during the discharge period.

There was a further increase in sampling frequency in 2017 to include daily sampling of the discharge and frequent sampling of Camp Lake and the mixing zone and this approach continued during the spring 2018 discharge of treated water. Water quality sampling frequency was relaxed to weekly during the open water season once Sherlett Creek flow was returned to Camp Lake in August 2018 and has continued at this frequency though 2021.

A full list of the 2021 sampling parameters is included in Appendix D.

3.3.3 Sampling Locations

The monitoring program samples four distinct areas (Figure 3 and Table 1.0):

- Sherlett Creek above the inlet to Camp Lake (one station, SC-1) – documents background water quality in the dominant surface water inflow to the lake. Additional stations on Sherlett Creek upstream of SC-1 (identified as SC-2, SC-3, SC-4, SC-5, and SC-6) are periodically sampled as well, but SC-1 is the primary monitoring location.
- Camp Lake (8 stations, 2 in each of the South (SB-1 and SB-2), Central (CB-1 and CB-2), North (NB-1 and NB-2), and East (EB-1 and EB-2) basins of the lake); – documents water quality in the lake and allows for determination of how remaining adjacent mine waste and construction activities are affecting water quality
- Camp Lake discharge (one station) and Cold Lake mixing zone (3 stations, CL-3, CL-7, and CL-8) – to document discharge water quality and how the discharge attenuates within the mixing zone. Stations CL-7 and CL-8 are located at the margin of the mixing zone, 100 m from the point of discharge entry to the lake. Both stations were added as part of the reclamation project monitoring program. Station CL-3 is located within the mixing zone 75 m from the point of discharge entry to the lake and is an historical monitoring station employed by studies prior to the reclamation project. The mixing zone size is based on the Manitoba Water Quality Standards Objectives and Guidelines (MWQSOG; Manitoba Water Stewardship 2011) specification of a 100 m radius from the point of discharge entry to the lake.
- Cold Lake (4 stations (CL-2, CL-4, CL-5, and CL-6) – to document water quality within Cold Lake. Stations CL-2, CL-4, and CL-5 are historical monitoring stations. Station CL-6 was added as part of the pre-construction baseline study conducted as part of the reclamation project.

Sampling frequency varies with location and time of year. During the open water season of the construction phase, Sherlett Creek, Camp Lake, the Camp Lake discharge (water quality), and the Cold Lake mixing zone stations were typically sampled weekly, and the Cold Lake stations were sampled monthly. All locations are sampled once during the winter ice cover period, subject to safe ice conditions. Discharge toxicity is sampled monthly during the open water season.

3.3.4 Program Adaptation

Sampling locations can be added to address specific questions that may arise in the future and that may not be adequately considered with existing locations. These additional locations may be sampled only for a specific period to ask a particular question or, if long term data are needed, these may become part of the continuing program.

In general, sampling locations cannot be “moved” without a significant risk of losing comparability with historical data. Unless there is compelling data to the contrary, a sampling station relocation should be viewed as an abandonment of the historical station coupled with establishment of a new station. Considerable caution should be exercised before deciding to abandon a sampling station. At a minimum, a period of paired sampling of the historical and new location is necessary to establish comparability before the historical location is abandoned in favour of a new location. One year of paired sampling is a typical minimum paired sampling period, and longer may be advisable for locations that are not otherwise frequently sampled.

Similar caution should be exercised in the event that a change in analytical laboratories is contemplated. A program of paired analyses from both the historical and proposed new labs for all critical sampling locations is essential to establish comparability. Step changes in temporal trends almost always occur as a result of a lab change and need to be fully understood before completing a transition to a new laboratory service provider.

3.3.5 Reporting

Annual water quality reports for the Project are prepared every spring documenting the previous year’s sampling program, analytical results, and discussing the findings. Summary memos are typically provided throughout the open water season at varying frequencies to update interested parties on project activities and interim findings.

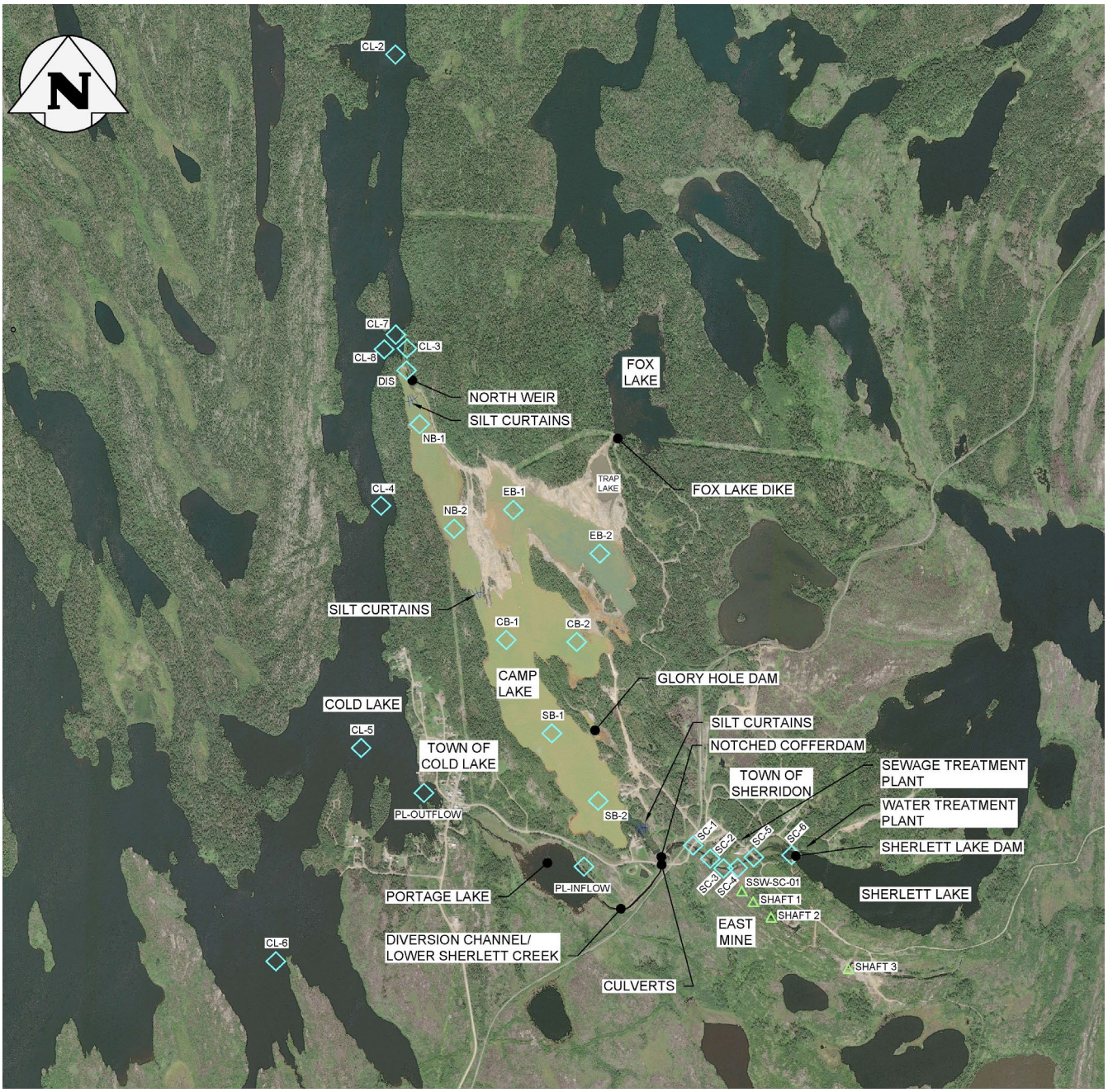


Figure 3 Sherridon Orphan Mine Project water quality monitoring stations.

Table 1 Sherridon Orphan Mine Reclamation Project water quality sampling station GPS locations (UTM Zone 14).

Camp Lake		
Sample ID	**Easting**	**Northing**
CB-1	365683	6111532
CB-2	366054	6111523
EB-1	365724	6112218
EB-2	366173	6111982
NB-1	365228	6112789
NB-2	365415	6112114
SB-1	365918	6111047
SB-2	366164	6110692
Cold Lake		
Sample ID	**Easting**	**Northing**
CL-2	365105	6114587
CL-3	365108	6113059
CL-4	365029	6112231
CL-5	364921	6110966
CL-6	364479	6109859
CL-7	365112	6113098
CL-8	365072	6113055
Sherlett Creek		
Sample ID	**Easting**	**Northing**
SC-1	386666	6110452
SC-2	366757	6110380
SC-3	366819	6110343
SC-4	366898	6110369
SC-5	366975	6110404
SC-6	367184	6110406

3.4 PLAN PERFORMANCE TO DATE

Indicative water quality trends are consistent with the pre-construction model predictions (DJRC 2021).

3.5 ANTICIPATED FUTURE OUTCOMES

The completed reclamation project is expected to:

- Eliminate surface-stockpiled tailings and waste rock, the associated tailings dusting, and the generation and runoff of ARD from the tailings/waste stockpiles into Camp Lake; and,
- Considerably improve water quality in Camp Lake such that it eliminates the Camp Lake discharge as a risk to the health of aquatic life in Kississing Lake.

Tailings dusting has already been eliminated as a result of the relocation of the bulk of the mine waste to the lake.

The expectation of considerable improvement in water quality is based on the water quality model predictions developed for the post-construction period during the project planning phase (Appendix E). These predictions were based on extensive information on Sherridon tailings and mine waste properties collected during project planning, along with site specific groundwater studies and sampling of Sherlett Creek upstream of Camp Lake. The modelling was completed for the key water quality parameters associated with protection of aquatic life - copper and zinc – and key indicators of acid rock drainage control – pH and sulphate. Cadmium originates from the same minerals as the zinc and is expected to behave in the same manner.

Key model predictions were that post-reclamation water quality in Camp Lake would primarily be determined by inflowing Sherlett Creek water quality and that water quality in Camp Lake would quickly approach that in Sherlett Creek on completion of construction. Overall, the submerged tailings were predicted to have a negligible to small effect on overlying water quality following the approximately 4-year transition period.

Subsequent water quality monitoring on Sherlett Creek has demonstrated the considerable variability of several key parameter concentrations. This variability needs to be kept in mind going forward when evaluating post-construction project performance and has been considered in development of the Post-construction Water Quality Performance Objectives (Appendix E).

4 ADAPTIVE MANAGEMENT

The Draft Sherridon Project AMP has been developed to cover the remaining two project phases: i.) post-construction transition; and ii.) final closure. The post-construction transition phase represents a period of improving water quality in Camp lake following removal of the adjacent mine waste/ARD runoff sources and elimination of construction disturbances in the watershed. The transition period represents the time expected to be necessary for the lake to fully respond to the relief from ARD loading. Predictive water quality modelling conducted during project planning indicated the transition period is expected to be relatively short, occurring over approximately four years, followed by the closure period characterized by minor water quality fluctuations related to the project works. The closure phase of the reclamation project represents the period of largely stable operation of the reclamation works. The start of this phase is tentatively set at four years post-construction, but the actual start time for this phase is when Camp Lake discharge water quality has stabilized as demonstrated by monitoring during the post-construction phase.

The primary project components requiring monitoring during these two phases include:

- Water quality
- Camp Lake water level
- Adaptive Monitoring Requirements (Sampling Frequency)
- Inspection and Maintenance of Built Structures

Decision flowsheets have been developed to assist in guiding the project owner in managing these project components and proactively mitigating any challenges that may arise over the long-term. The decision flowsheets provide a simple, graphical, representation of how adaptive management decisions are made in response to project conditions that may develop. Colour coding of the flowsheet cells indicates the risk of the indicated project condition to the aquatic environment (Appendix F) and may also be used by the project owner to communicate risk conditions and adaptive responses to project stakeholders (see Section 5).

4.1 WATER QUALITY

4.1.1 Management Concerns

Specific questions to be addressed include:

1. Has completion of the removal of remaining mine waste adjacent to Camp Lake –
    a. Reduced key metal concentrations (specifically copper and zinc) in the Camp Lake discharge to meet the post-construction water quality performance objectives developed for the project (Table 1).
    b. Caused iron concentrations (and specifically particulate iron) in Camp Lake to decrease such that the associated red turbidity in Camp Lake also has decreased to a level that is no longer an issue of aesthetic concern to local stakeholders.

2. Status of Kississing Lake Recovery

   Mining and mine waste affected water were discharged to the Cold Lake arm of Kississing Lake for about 80 years - from around 1928 until 2008. Kississing Lake is expected to slowly recover as a result of the reclamation project. That recovery will take considerable time, although signs of recovery are already evident. Local residents have observed the return of fish to the Cold Lake arm of Kississing Lake and use of Sherlett Creek by fish. Manitoba Fisheries Branch (now Manitoba Natural Resources and Northern Development) staff also have observed fish occurring within the discharge mixing zone. Water quality in Cold Lake has considerably improved and surficial sediment quality also is showing some initial signs of improvement since the uncontrolled discharge from Camp Lake was discontinued in late 2008. However, a quantitative assessment of recovery to date (e.g., repeat of the 2008 baseline study) remains to be done and the long-term recovery monitoring plan remains to be formalized. It should be noted that the recovery of Kississing Lake is a natural consequence of the project but was not an objective of the reclamation project. The end of the construction period is an appropriate milestone to re-visit the status of Kississing Lake recovery to date and establish a benchmark against which future recovery can be compared.

4.1.2 Management Thresholds

Post-construction water quality performance objectives (Table 1) have been developed to provide a means of evaluating performance of the reclamation project following completion of construction and informing the Adaptive Management Plan. The full basis for these objectives is detailed in DJRC (2022) attached in Appendix E.

The water quality performance objectives should not be considered as regulatory limits. Their purpose is to provide a means for evaluating the performance of the reclamation works in comparison to the expectations developed during project planning. Now that construction is completed, water quality in Camp Lake is expected to gradually approach the objectives over a four-year transition period. Monitoring to date indicates water quality is improving as fast or faster than predicted, although this trend may vary over the next few years.

The important diagnostic consideration is that the trend toward the objectives occurs, and at a rate of improvement such that there is a reasonable expectation that the objectives will be realized within four years of construction completion. Slow or absent improvement should trigger investigation of potential causes, which may or may not require the application of corrective or mitigative measures. Faster improvement than expected should move the monitoring program to confirmation monitoring, possibly followed by a reduced monitoring frequency.

Table 2. Proposed Post-construction Camp Lake Water Quality Performance Objectives to be achieved within 4 years following completion of construction.

Parameter (units)	Proposed Camp Lake Water Quality Performance Objectives
pH, field (pH units)	$6.5 \leq pH \leq 9.0$[1]
Sulphate (mg/L)	Ambient SC-1 +7+25%[2,3]
TSS (mg/L)	11.5 mg/L[4]
Turbidity (NTU)	Ambient SC-1 + 25%
Iron (total) (mg/L)	Ambient SC-1 + 25%
Aluminum (total) (mg/L)	Ambient SC-1 + 25%
Cadmium (total) (mg/L)	Ambient SC-1 + 25%
Copper (total) (mg/L)	Ambient SC-1 + 30%[5]
Zinc (total) (mg/L)	Ambient SC-1 + 25%

1. MWQSOG Tier II Objective – determined to be reasonable based on pre-construction predictions and monitoring record.
2. Ambient SC-1 refers to the current concentration measured at Sherlett Creek station SC-1 within the last 7 days.
3. Based on pre-construction prediction (from SENES 2008) plus 25% allowance for sampling and analytical variation as per DJRC (2022).
4. MSWQOG Tier II Objective for SC-1 determined as per Appendix A of DJRC (2022) and reasonable based on monitoring record.
5. Based on pre-construction prediction that total Cu will be 5 to 10% higher than in Sherlett Creek (from SENES 2008) plus 25% allowance for sampling and analytical variation as per DJRC (2022).

4.1.3 Management Actions

4.1.3.1 Water Quality Monitoring

The environmental monitoring program during the post-closure period will again primarily focus on water quality in Camp Lake since this determines the resulting discharge quality on which project objectives are evaluated. The initial scope of post-construction water quality monitoring is proposed as a continuation of the program conducted during the construction phase, with the same parameters (Table 1) and locations (Table 2) at a slightly decreased sampling frequency (bi-weekly during the open water season in place of the present weekly frequency). This scope should apply for at least the first two post-construction years. The “Water Quality” and “Adaptive Monitoring Requirements” decision flowsheets should be applied to water quality management during the post-construction phase and beyond. The “Water Cover” decision flow-sheet describes management decisions associated with low rainfall years that can erode water cover and affect water quality. There is a specific trigger for increased water quality monitoring frequency if water cover management is required.

4.1.3.2 Establish Post-Construction Benchmark for Kississing Lake

Mining and mine waste affected water were discharged to the Cold Lake arm of Kississing Lake for about 80 years - from around 1927 until 2008. Kississing Lake is expected to slowly recover as a result of the reclamation project, but that recovery will take considerable time, although signs of recovery are already evident. Local residents have observed the return of fish to the Cold Lake arm of Kississing Lake and use of Sherlett Creek by fish. Manitoba Environment, Climate and Parks also have observed fish occurring within the discharge mixing zone. Water quality in Cold Lake has considerably improved and surficial sediment quality also is showing some initial signs of improvement. However, a quantitative assessment of recovery to date remains to be completed.

The baseline environmental study conducted in 2008 provides a framework for long term recovery monitoring, representing the basic structure and sampling locations to be used for a similar post-construction study. Additions to the plan can always be made, but reductions should be avoided unless considered essential. It is recommended that this study be completed in 2022 or 2023.

4.1.4 Applicable Decision Flowsheets

- Water Quality
- Adaptive Management Requirements

4.2 WATER LEVEL/COVER

4.2.1 Management Concerns

Subaqueous storage of sulphide mine waste (tailings and waste rock) is an established best management practice for the long-term control of acid rock drainage. Effective control requires a minimum water cover of 1.0 m. The design of the Sherridon project established a target minimum water cover of 1.5 m to provide a factor of safety over the minimum requirement. The Sherlett Creek watershed covers over 100 km^2, and runoff is expected to maintain the 1 m minimum water cover under all but the most extreme drought conditions.

4.2.2 Management Thresholds

As described above, the target minimum water cover over tailings established for the Project is 1.5 m design cover level (316.0 masl) with a minimum water cover of 1.0 m (315.5 masl).

4.2.3 Management Actions

4.2.3.1 Lake Level Monitoring

Maintenance of the water cover over the mine waste is a critical success factor for the project. Loss of water cover can expose the waste to air, which would result in oxidation of the sulphides in the exposed waste and the resulting generation of acid rock drainage.

The water level on Camp Lake has been regularly monitored during project construction as part of weekly water quality sampling conducted during the open water season. As the project moves to less frequent sampling in the post-construction period, there will need to be a mechanism for the measurement and remote monitoring of the lake level to ensure the water cover is maintained (i.e., installation of continuous water level monitoring with remote access for data downloads).

4.2.3.2 Water Cover Management

Water cover management on Camp Lake would require pumping of water from an adjacent water body to restore water cover over the mine waste. Planning for water cover management would require selection of a water body to provide the water and plans for the installation of pumping capacity to deliver the necessary water. Examination of historical precipitation records indicates that water cover management is expected to rarely be necessary, such that the provision of temporary pumping capacity as needed is likely to be adequate. However, climate change is a reality and the effect of climate change on precipitation and local watershed runoff into the future remains somewhat uncertain. Should more extreme and longer drought conditions develop in the future than have been documented in the past, a permanent makeup water pumping capacity may become necessary.

4.2.4 Applicable Decision Flowsheets

- Water Cover
- Water Quality
- Adaptive Management Requirements

4.3 ADAPTIVE MONITORING REQUIREMENTS

4.3.1 Management Concerns

The primary objective of the Project is to manage the Sherridon mine waste such that discharges from Camp Lake do not present a risk to aquatic life. Project performance is assessed by monitoring water quality in Sherlett Creek, which flows into Camp Lake, in Camp Lake, and in the Cold Lake arm of Kississing Lake, which directly receives inflow from Camp Lake with subsequent comparison of the results to water quality performance objectives. Appropriate management of sampling frequency will ensure that water quality degradation does not go unnoticed.

4.3.2 Management Thresholds

The threshold for increasing/reducing sampling frequency is whether or not the measured water quality is meeting or trending toward the water quality objectives set for the project.

4.3.3 Management Actions

The frequency of water quality monitoring is determined by project phase and performance in comparison to the objectives; therefore, monitoring should continue as follows:

- Sherlett Creek – necessary for calculation of the objectives
- All four basins of Camp Lake to assess local performance of tailings management within the lake
- Camp Lake discharge, which is the location where the objectives are applied
- Cold Lake, within and outside the mixing zone

Monitoring frequency is highest during the initial post-construction period and is progressively reduced over time based on measured water quality.

4.3.4 Applicable Decision Flowsheets

- Adaptive Monitoring Requirements
- Water Quality

4.4 INSPECTION AND MAINTENANCE OF BUILT STRUCTURES

4.4.1 Management Concerns

The project is reliant upon the integrity of several built structures that need to remain in place for the project to function as planned, including: the Sherlett Lake level control dam; the coffer dam at the inflow to Camp Lake; the level control plates and diversion culverts at the inflow to the Sherlett Creek diversion channel; the Fox Lake outflow dyke; the Glory Hole dam; and the Camp Lake north weir. Management must include understanding and maintaining the structural integrity of this infrastructure over the long-term. Silt curtains have also been installed in Camp Lake and fencing has been installed along the diversion channel; both will require ongoing monitoring as long as they are in place (albeit not necessary for the project to function as planned).

4.4.2 Management Thresholds

Inspections must be conducted to determine if structures are functioning for intended purpose and/or if there is an apparent/impending risk of failure.

4.4.3 Management Actions

A program of periodic engineering inspections, informed by a Failure-Mode-Effects analysis to identify critical issues and appropriate management responses, should be developed, and implemented. A Dam Safety Review (including site inspection) was recently completed for the Project. The following management actions are summarized from Tetra Tech 2022.

- Establish Engineer of Record (EOR)
- Conduct Routine Surveillance in conjunction with water quality sampling (EOR to determine frequency; monthly frequency during open water season is recommended to initiate inspection program). Monitoring and reporting

should include but is not limited to beaver activity, vegetation growth, weathering, exposed rebar, cracking, ponding of water, fencing, signage, etc.

- Conduct formal annual inspections (should be conducted by the EOR)

4.4.4 Applicable Decision Flowsheets

Inspection and Maintenance of Built Structures

Silt Curtain Inspection and Maintenance

5 PROJECT COMMUNICATIONS

The community of Sherridon was established to house and service the mine workers; however, many of the original families have remained in the area long since mining ceased. Kississing Lake provides source of income and sustenance for many residents of Sherridon and Cold Lake. The residents have long expressed that Kississing Lake is of critical importance to their health and livelihood. Active communication between the communities of Sherridon and Cold Lake, Manitoba Environment, Climate and Parks (MECP), and other key stakeholders is of the utmost importance to successful AMP development, implementation, and long-term monitoring. To ensure that two-way communication occurs consistently moving forward, the following communication plan is proposed for implementation starting in Spring 2022.

1. **Project Website**. The project website will provide current information about project status and upcoming events, reports and memos of public interest, and photographs.

2. **Project Email Address**. A project specific email address and phone number will be established and provided to the public via the website. Questions or concerns related to the project may be submitted at any time. All incoming emails or phone calls will be received by Manitoba Environment, Climate and Parks with responses issued as quickly as possible. The email address may also be utilized for submitting photographs or observations from site to assist the Owner or its consultants in implementing the adaptive management plan, as needed.

3. **Communications Log**. A formal communications log will be developed and used to track all correspondence related to the project that is received from the public. The log will identify from whom the correspondence was received, when it was received, the form of the communication (email, phone call, meeting, etc.), a description of the query, a date by which follow up correspondence is required and submitted, and the person designated to provide the follow up. A sample communications log is included in Appendix G.

4. **Meetings**. Quarterly, semi-annual or annual meetings will be held via tele or video conference. Additional meetings may be proposed as necessary to address specific issues of concern that may require resolution before the next regular meeting (see item 5 below). It is anticipated that the need for meetings will decrease over time as the project moves past the post-construction transition state. At each regular meeting, a monitoring program update will be provided along with a summary of the communications received and responses provided since the last regular meeting. Time will be provided for a question-and-answer period, as appropriate to the matters under consideration. The meetings will provide a space for respectful open dialogue regarding topics of interest related to the long-term monitoring program and will provide an opportunity for two-way information sharing.

5. **Report Distribution.** Annual monitoring reports and other monitoring-related documents will be distributed to stakeholders following review and approval by Manitoba Environment, Climate and Parks. These reports have been shared with stakeholder groups over the years, including the Canadian federal government (Environment and Climate Change Canada, Fisheries and Oceans Canada), the provincial government (Manitoba Mines Branch, Conservation and Climate, Fisheries, Water Management, Indigenous and Northern Affairs) as well as the Sherridon Community Council, Manitoba Métis Federation, and Mathias Colomb Cree Nation.

6. **Additional Communication Triggers**. The AMP uses a colour coded system to manage project risks but also to trigger communication between the project owner and project stakeholders. Generally, the colour coding corresponds to maintenance of water quality (as per objectives presented in Appendix B). Colour coding in relation to communication triggers is as follows:

   a. Green = Project is performing as planned, water quality is meeting project objectives or trending toward, normal monitoring, maintain regular communication schedule with stakeholders

   b. Yellow = Project is performing as planned with no immediate risk to aquatic environment, but observations made of water quality trending away from project objectives, initiate investigation of cause, notify stakeholders of investigatory activities

   c. Orange = Project is not performing as planned with increased potential of risk to aquatic environment if the issue is not addressed. Investigate and apply corrective action. Communication with project stakeholders should continue until resolved (frequency dependent on nature and timing of issue).

   d. Red = Project is not performing as planned with potential for unacceptable risk to aquatic environment if the issue is not addressed. Response may include stopping the discharge, if appropriate to the issue, and immediate investigation of cause and application of corrective action as soon as possible. Frequent communication with stakeholders until resolved.

   Regular communications will be the responsibility of the project owner so that the community have a full understanding of any issues and what actions the owner or its consultant are taking to investigate and/or mitigate the problem and follow up communications will occur until the issue is resolved.

7. **Community monitor position.** The Province would like to establish a role for a community monitor who would assist the monitoring team with field work. This person would be appointed by Sherridon Community Council (SCC) and would provide liaison between OAM staff and SCC, as required.

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APPENDIX A – SHERRIDON ORPHAN MINE RECLAMATION PROJECT TIMELINE.

Sherridon Orphan Mine Reclamation:
Milestone Timeline

TETRA TECH

1928-1952
Mine Operated by Sherrit Gordon Mines



2000
Manitoba established the OAM Site Rehabilitation Program to address concerns associated with orphaned/abandoned mine sites.



2007-2008
Reclamation Plan Design



2008-2012
- Construct & commission Sherlett Creek diversion & WTP
- Discharge treated lake water, relocate 7 million tonnes of mine waste to Camp Lake



2013-2015
Refill Camp Lake, monitor & manage lake pH / water level



2016-2017
- Water quality monitoring & management
- Controlled discharge from Camp Lake
- Decommission & remove WTP & associated materials (waste rock, causeway materials, sludge)



2018
- Fox Lake & Glory Hole isolation
- Restore Sherlett Ck flow through Camp Lake
- Identify & initiate additional tailings removal
- Water quality monitoring & management.



2019
- Water Quality Monitoring
- No Construction Activity



2020
- Completion of tailings removal
- Removal of mine access road
- Water quality monitoring
- Preparation of draft adaptive management plan



2021-Ongoing
- Completion of tailings removal (2021)
- Adaptive Management Plan formalization & ongoing monitoring/communications



APPENDIX B – RECLAMATION PLAN DESIGN

The reclamation plan design for the Sherridon Project was designed to:

- Improve site safety
- Eliminate tailings dust
- Control acid rock drainage from the Sherridon mine waste

The final design was the product of a multi-step design and approval process. The first step was conceptual design, in which six potentially applicable reclamation approaches were evaluated and compared, leading to recommendation of sub-aqueous disposal as the preferred approach. The conceptual plan was reviewed by Manitoba (Mines Branch), which also consulted with national and international agencies involved in managing acid rock drainage (e.g., MEND, ICARD), and by the inter-departmental planning committee of the Manitoba government, which included representatives of all Provincial government departments and some federal departments and agencies (Fisheries and Oceans Canada (DFO), Environment Canada, and the Canadian Environmental Assessment Agency (now referred to as the Impact Assessment Agency)).

The subaqueous disposal approach was selected for a number of reasons:

- Subaqueous disposal is a recognized best management practice for the prevention of acid rock drainage from sulphide mine waste
- The effectiveness of subaqueous disposal in controlling acid generation from the Sherridon tailings was demonstrated by the placement of tailings in Fox Lake during historical operations
- Tailings dusting is eliminated, because all the tailings would be under water cover
- Long-term water treatment also is not expected to be required, because of the demonstrated effectiveness of the ARD control provided by sub-aqueous disposal resulting in lower cost.

The conceptual design was approved by the Mines Branch following review and the project moved to detailed design. Detailed design considered two approaches to sub-aqueous disposal – high level flooding, which minimized relocation of mine waste by using a system of dykes and dams for containment of the water cover over the mine waste, and a low-level design involving relocation of most of the mine waste (i.e., all that was not already under water or below the final design elevation for the tailings) to Camp Lake and using the natural topography to provide containment. The high-level design was ruled out part-way through the process due to unfavourable foundation conditions for the dam construction needed in Camp Lake. The low-level sub-aqueous disposal design was selected for construction.

The foundational element of the reclamation plan involved the sub-aqueous disposal of the mine waste (tailings and waste rock) that were stockpiled on land adjacent to Camp Lake. This involved temporary diversion of Sherlett Creek around Camp Lake, dewatering of Camp Lake by pumping water through a water treatment plant and discharging the treated water to the Cold Lake Arm of Kississing Lake, and relocation of the mine waste from the stockpile to Camp Lake using a truck and shovel method. The mine waste placed in Camp Lake was track packed in lifts, or layers. The

upper 3 m of mine waste placed in the lake were mixed with lime before placement and packing to assist with neutralization.

The South, Central, and North basins of Camp Lake largely contain placed tailings (i.e., tailings moved from the on-land tailings stockpile) and waste rock. The East basin is almost entirely underlain by cut-down tailings (i.e., tailings that were in place before the reclamation project but were “cut down” to the final design tailings elevation.

The final design elevation for the packed tailings surface was 316.5 m ASL. With the planned 1.5 m deep water cover, the final design water elevation for Camp Lake was 318.0 m ASL. The 1.5 m water cover was selected based on other studies that identified 1 m as the minimum water cover necessary for effective ARD control and then adding a 0.5 m, or 50% buffer to that requirement. Some settlement of the tailings was expected to occur over time, and since has, further increasing the depth of water cover in the basins with placed tailings (South, Central, and North).

Once all the mine waste located above elevation 316.5 m ASL had been relocated to Camp Lake, the lake was then to be refilled with water from Cold Lake, treated as necessary to pH 9.0 using the water treatment plant, and the flow of Sherlett Creek through Camp Lake would be restored.

Restoration of Sherlett Creek flow through Camp Lake is a critical design element for the project. The large Sherlett Creek watershed is sufficient to maintain some creek flow in extreme drought conditions and is therefore necessary to maintain the water cover on Camp Lake under those same conditions without requiring active management. Operation as a flow-through system also ensures that high-flow conditions are managed without requiring active management. Another important contribution of Sherlett Creek is the delivery of alkalinity – on an annual basis, Sherlett Creek delivers as much alkalinity as was typically added during the annual lime treatments.

For this reason, any decision to close the discharge needs to consider the risks associated with closure along with any benefits. Closure of the discharge should only be considered if the discharge quality is representing a risk to aquatic life. An obvious example of this risk is if the toxicity testing shows mortality – without question that should trigger an immediate discharge closure. However, there are other indicators to be monitored that should trigger a discharge closure in advance of an indication of acute toxicity. These include metals (copper, zinc), TSS concentrations, or pH in the discharge approaching the MDMER effluent quality limits.

The primary risk associated with closing of the discharge is that it also requires re-direction of all Sherlett Creek flow to lower Sherlett Creek because Camp Lake has limited storage capacity. This redirection also would eliminate the associated inflow of alkalinity to Camp Lake, which in most circumstances would result in the development of acidic conditions in the lake and would require lime treatment before a discharge could be resumed. Based on past experience, lime treatment is to be avoided if at all possible due to the difficulty associated with preventing fugitive emissions of lime dust during application and from the lake surface and the effect of these emissions on the adjacent community. In this regard, consideration of discharge closure should be limited to situations where it is absolutely necessary to prevent an acutely toxic discharge from occurring. Although issues related to the appearance of the water leaving Camp Lake also are important, discharge closure does not appear to be an acceptable management action given the likely requirement for a subsequent lime treatment before a discharge could be resumed.

APPENDIX C – PLAN MODIFICATIONS

All reclamation projects involve some changes to the initial plan as work proceeds. These changes often are a result of findings in the course of the work, since it is impossible to know in advance of the work everything that will be encountered in the course of excavation and material relocation. The sub-aqueous disposal reclamation approach remains unchanged, but the execution approach has been modified several times to address requests from the community, decisions made by the contractor, and matters identified in the course of reclamation.

Community Requests – The original project design involved routing of the entire flow of Sherlett Creek through Camp Lake via the natural inflow and outflow at the south end of Camp Lake. This would have meant that all water flow in lower Sherlett Creek would first pass through Camp Lake. The Community indicated they did not want water from Camp Lake flowing through the Community. The adaptive response to this request was to route all the Sherlett Creek flow out the north end of Camp Lake (which was the flow route of the creek at the time the reclamation project began) and plug the culverts in the south basin so no water could flow directly from Camp Lake to Portage Lake. Once the Sherlett Creek diversion was implemented, routing all the creek flow down through Portage Lake and lower Sherlett Creek to Kississing Lake, fish started using the creek in spring. The Community was most pleased with the return of the fish, which prompted them to request that flows be maintained in the creek on completion of the project. In response, the project team developed a flow-splitting plan to provide flows to both Camp Lake and lower Sherlett Creek.

Contractor Decisions – The reclamation construction contract was set up as a performance-based contract, which allows the contractor to make changes to the method of work provided that the change or changes have the same result as the original plan. Under this arrangement, any changes made by the contractor are made at their own risk, such that additional costs that result from the change are borne by the contractor.

The original plan called for batch lime treatment of the highly acidic water in what were called the “acid ponds” to remove the bulk of the acidity from the water in the ponds before transfer to the water treatment plant for final treatment before discharge. The contractor decided to skip the initial batch treatment of these waters and instead chose to transfer the untreated acidic water to Camp Lake for treatment through the water treatment plant. The contractor’s water treatment consultant assured them that the plant would handle the acid water from the ponds and the change was approved subject to the requirement that any discharge of water treatment plant sludge to Camp Lake did not exceed a specific depth. However, the treatment plant had difficulty treating the more acidic water, treatment took much longer than planned, and the volume of sludge deposited in Camp Lake considerably exceeded that allowed in the contract specification. The contractor was required to remove the sludge from the lake at their expense.

The contractor also chose to construct the water treatment plant and associated facilities on a pad built with acid-generating waste rock. This introduced the complexity that the waste rock could not be relocated to Camp Lake, or otherwise managed appropriately, until the water treatment plant was removed. This remaining waste rock on site contributed to the acid load to Camp Lake following refilling of the lake

Fox Lake Outlet Reinforcement – Removal of tailings from the area around the outlet of Fox Lake resulted in removal of the material that had been supporting the lake outlet and lowering the crest of the outlet, creating a risk of outlet berm failure during wet periods. A temporary clay berm was installed across the outlet, and a permanent structure was designed to restore outlet berm stability and to provide an overflow spillway to allow discharges from the lake during wet periods without compromising outlet integrity

Glory Hole Isolation – the mining company left several "glory holes" (openings to surface where ore in the crown pillar (the roof of the mine) was mined out at the end of mine life). One glory hole is located adjacent to the east side of the South basin of Camp Lake. The glory hole was not observed to be connected to Camp Lake prior to construction but a connection was clearly evident during construction. This connection likely developed during construction, when the water level in the South basin of Camp Lake was raised to facilitate dewatering of the North basin for waste placement. The connection persisted following establishment of the final operating level on Camp Lake, and a dyke was specified to isolate the Glory Hole from Camp Lake.

Remaining Mine Waste, Water Management, and Lime Treatment – Camp Lake was refilled in 2013, following relocation of much, but not all, of the mine waste. The large tailings stockpile had been removed and relocated to the lake, but waste rock remained on the former mine site, which also was the site of the water treatment plant. The site access road and causeway through the margin of Camp Lake, both constructed with waste rock, and ore/waste rock in the area of an ore loadout adjacent to a former mine shaft also remained between the access road and the South basin of Camp Lake.

In addition to these remaining adjacent mine waste sources, more recent site investigation has indicated the occurrence of mine waste (primarily tailings) adjacent to Camp Lake along the north shore of the East basin, around the peninsula that separates the East basin from the Central basin, and between the East basin and Fox Lake. Some of these materials were identified as mineral soils during the previous period of waste relocation and had been covered with erosion control matting, which was eventually eroded away by the acid drainage. Other waste material had become buried under overburden when placed during mine operations but was exposed by erosion of the overburden by rainfall and one or more overflow discharges from Fox Lake following removal of tailings on top of the overburden.

Acid drainage originating from the adjacent mine wastes and entering Camp Lake quickly acidified the lake after it was filled, and the aggregate acid load to the lake was greater than the ability of the water treatment plant to neutralize the acidity. Some residual mine waste was expected to remain adjacent to Camp Lake following the mine waste relocation, but the actual residual quantity that remained was much greater than planned, for all the reasons indicated above. Consequently, it was not possible to use the plant to treat the lake to an acceptable quality for discharge although the lake still required treatment before any discharge could be implemented.

Simply leaving the lake isolated also was not an option because natural accumulations of rainfall and local watershed runoff also necessitated controlled discharges to maintain containment, so it was necessary to find an approach that could address this treatment requirement.

Batch lime treatment was selected as the most rapid means to treat the entire lake. Lime was applied to the surface of lake ice in late winter 2014. Sampling in late May, following ice-out, indicated the treatment had increased lake pH from the range of pH 3.45 to 4.09, when sampled in 2013, to pH 6.03 to 7.55, demonstrating that batch lime treatment could effectively treat the lake but that higher lime loading would be necessary to achieve the pH of about 9.0 needed to effectively precipitate copper and zinc, the principal metals of concern. The increased pH was short lived, however, dropping to between pH 3.55 and 4.40 by June 10. The rapid post-treatment drop in pH indicated a significant uncontrolled source or sources of acidity to the lake basin remained to be addressed by the reclamation project.

Further investigation in summer 2014 determined that the subaqueous tailings were performing as expected, with black/dark grey unoxidised tailings found over the entire 12 cm length of a core taken in the Camp Bay area (Central basin) of Camp Lake. Subaqueous disposal functions to control acid generation from sulphide tailings by maintaining anoxic conditions in the tails and the core sample indicated the necessary anoxia was being maintained. Remaining adjacent mine waste materials were identified as the key contributors of acid drainage to Camp Lake requiring removal. The accumulated water treatment plant sludge in the North basin also was identified as a source of metals to the lake that required removal. The residual adjacent mine waste along the north shoreline of the East basin was not identified as an issue at this time. Acid generation from the waste had not yet started, and water quality in the East basin was generally much better than in the rest of Camp Lake.

A batch lime treatment was applied to the lake in late winter 2015, with a higher lime loading than in 2014, with the intention of conducting a controlled discharge to lower the lake level following verification that acceptable water quality had been achieved. Effective water treatment was achieved by the treatment, but a discharge was delayed by consultation with the Community and, by the time agreement to discharge had been reached with the Community, water quality had degraded due to the continuing inflow of acidity from the adjacent mine wastes and no discharge could occur.

Lime treatment and a controlled discharge were completed in 2016, enabling the construction works to resume. The water treatment plant sludge in the North basin of Camp Lake was dredged and transferred to Trap Lake. Waste rock was removed from the area of the water treatment plant, the causeway was removed, and removal of the access road was started, progressing from the edge of Camp Lake to the crest of the first hill.

The remainder of the planned construction works were planned for completion in 2017. A winter lime treatment was applied, followed by a controlled discharge in spring. Construction access to the site was restricted in 2017 such that it was not possible to complete the planned works (including reinstatement of Sherlett Creek flow through Camp Lake) which resulted in additional water treatment being needed to control pH. An alternative lake treatment was tested in late summer, using liquid sodium hydroxide instead of lime, but sodium hydroxide precipitates from solution below about 12 °C and the cooling ambient temperatures soon made it impossible to effectively apply the treatment.

The final batch lime treatment of Camp Lake was done in late winter 2018, followed by a controlled discharge to lower the lake level. Construction work resumed in July, with the Glory Hole dyke being completed, followed by removal of the ore and waste from around the ore loadout, and completion of the Fox Lake outlet dyke and spillway. The Sherlett Creek cofferdam was notched, and the tailings berm was removed to allow the creek to flow back into and through Camp Lake, beginning in mid-August. No lime treatments have been necessary to maintain water quality in Camp Lake since Sherlett Creek flow was restored, even though the construction works have not been completed.

The residual mine waste located adjacent to Camp Lake along the north shore of the East basin was identified in 2018. Oxidation had progressed to the stage where there was obvious yellow/orange colouration on the surface of the waste and water quality in the East basin was worse than in other lake basins – while water quality the South, Central and North basins had improved, East basin water quality was deteriorating. Removal of this material was added to the workplan, along with a thorough inspection of the adjacent areas to identify all remaining mine waste for removal.

APPENDIX D – WATER QUALITY PARAMETERS

Water quality monitoring sampled a wide range of water quality parameters (typically 75 lab-analysed parameters and 7 field-measured parameters; Table 1), but has primarily focused on what we have termed, since 2015, the "key parameters" for the project: pH, alkalinity, TSS, and the total fractions of the metals iron, aluminum, cadmium, copper, and zinc. The key parameters are those which have been found to be relevant to understanding the effects of water from Camp Lake on receiving water quality in Cold Lake. Some of the key parameters have historically occurred in Camp Lake in concentrations at or above the applicable MWQSOGs (pH, aluminum, cadmium, copper, iron, and zinc; Tetra Tech WEI (2016) and DJRC (2016)). Alkalinity was first introduced as a key parameter to track the performance of lime treatments and, through its consumption over the season, as a measure of continuing acid sources to the lake. With the lime treatment discontinued and Sherlett Creek inflow augmenting buffering capacity in Camp Lake, alkalinity is now monitored to assess the performance of the project in maintaining adequate alkalinity. TSS is a focus because of local concerns regarding the effect of any discharge from Camp Lake on the appearance of water in Cold Lake.

Turbidity, both field and lab measured, was added to the analyses in the 2017 program, and has been continued, to provide another means of detecting possible changes in appearance of the water and is considered here as a key parameter. Total and dissolved organic carbon were added to the 2021 program to provide a better understanding of factors affecting metal partitioning between the dissolved and particulate phases. Dissolved sulphate also was added to the 2021 program to allow comparison with pre-project model predictions.

Table 1.0 Sherridon Orphan Mine Reclamation Project measured water quality parameters (2021).

Parameter
Physical/Chemical (mg/L)
pH (pH units)
Alkalinity ($CaCO_3$)
Bicarbonate (HCO_3)
Carbonate (CO_3)
Hydroxide (OH)
Total Hardness ($CaCO_3$)
Hardness ($CaCO_3$)
Dissolved Hardness ($CaCO_3$)
Turbidity (NTU)
Total Suspended Solids (TSS)
Dissolved Organic Carbon (C)
Total Organic Carbon (C)
Dissolved Sulphate (SO_4)
Acute Toxicity (LC_{50})
Total and Dissolved Metals (mg/L)
Aluminum (Al)
Antimony (Sb)
Arsenic (As)
Barium (Ba)
Beryllium (Be)
Boron (B)
Cadmium (Cd)
Calcium (Ca)
Chromium (Cr)
Cobalt (Co)
Copper (Cu)
Iron (Fe)
Lead (Pb)
Lithium (Li)
Magnesium (Mg)
Manganese (Mn)
Molybdenum (Mo)
Nickel (Ni)
Phosphorus (P)
Potassium (K)
Selenium (Se)
Silicon (Si)
Silver (Ag)
Sodium (Na)

Strontium (Sr)
Sulphur (S)
Thallium (Tl)
Tin (Sn)
Titanium (Ti)
Uranium (U)
Vanadium (V)
Zinc (Zn)

APPENDIX E – WATER QUALITY PERFORMANCE OBJECTIVES

technical memorandum

DJRC | D.J. Ramsey Consulting Ltd.

To: Jennifer Wilson, Tetra Tech Canada Inc.

From: Doug Ramsey

Date: 29 May 2022

Re: Sherridon Reclamation Project – Development of Post-construction Water Quality Performance Objectives

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Jennifer

Post-construction water quality in Camp Lake was modelled during project planning to estimate the water quality improvement expected following completion of the construction works. The model predictions indicated that post-construction water quality in Camp Lake will be strongly influenced by Sherlett Creek water quality, with small to no incremental increases in parameter concentrations in passing through Camp Lake. Modelling was focused on total copper and zinc, as the key metal parameters targeted for control, and on pH and sulphate, as measures of the significance of any residual ARD generation from the submerged tailings.

The planning-level modelling provided sufficient insight to assess the effectiveness of the selected subaqueous disposal reclamation approach but stopped short of developing post-construction water quality performance objectives. This memo extends the pre-construction modelling results to performance objectives to be applied during the post-construction monitoring period. The modelling results are reviewed, predictions are benchmarked against recent monitoring results as a preliminary gauge of their validity, potential types of performance objectives are considered and their applicability evaluated, leading to identification of preferred performance objectives.

1.0 Predicted Post-Construction Water Quality

Post-construction water quality in the Camp Lake discharge was modelled as part of the detailed design phase of project planning (SENES 2008). Modelling was done using the Reactive Acid Tailings Program for Base Metal Tailings (RATAP.BMT) and focused on four parameters (pH, sulphate, total copper, and total zinc).

Input terms to the model included:

- tailings dimensions (size, depth, depth to water table),
- tailings particle size distribution,
- gaseous transport characteristics (diffusion coefficient, gas filled porosity),
- precipitation (hydraulic flows),

- mineralogy (bulk density, reactive sulfide minerals, other primary minerals, secondary minerals, buffering minerals),
- water quality (background water quality, both surface (Sherlett Creek) and groundwater, and tailings porewater quality),
- pond option (pond size, depth, pond water quality, inflow water quality),

Input data were subjected to statistical analysis to identify outliers and significant data clusters. All water quality data were checked for ion balance and solid/solution equilibrium with the US Geological Survey's PHREEQC water quality program.

The model predictions indicated that post-construction water quality in Camp Lake and the discharge to Cold Lake would largely be determined by the quality of the inflowing Sherlett Creek, with relatively steady water quality achieved within about 30 to 40 months following project completion (Figures 1 to 4).

pH was estimated to be the same as in Sherlett Creek within 10 months of the end of construction and to remain the same over the 600-month modelling period (Figure 1). Sulphate concentrations were estimated to be in the 11 to 12 mg/L range over the same period (Figure 2).

The tailings placed in Camp Lake were estimated to make a minor (range of 3 to 10%; Figure 3) additional contribution to the copper concentration compared to the creek inflow. It is unlikely that this small increase would be detectable in monitoring given that the precision of determinations by commercial analytical laboratories is typically in the range of 10 to 15%. Following project completion, the total zinc concentration in the Camp Lake discharge was expected to be 20 to 25% lower compared to the concentration in the Sherlett Creek inflow (Figure 4), indicating the submerged tailings appear to be a sink for zinc rather than a source.

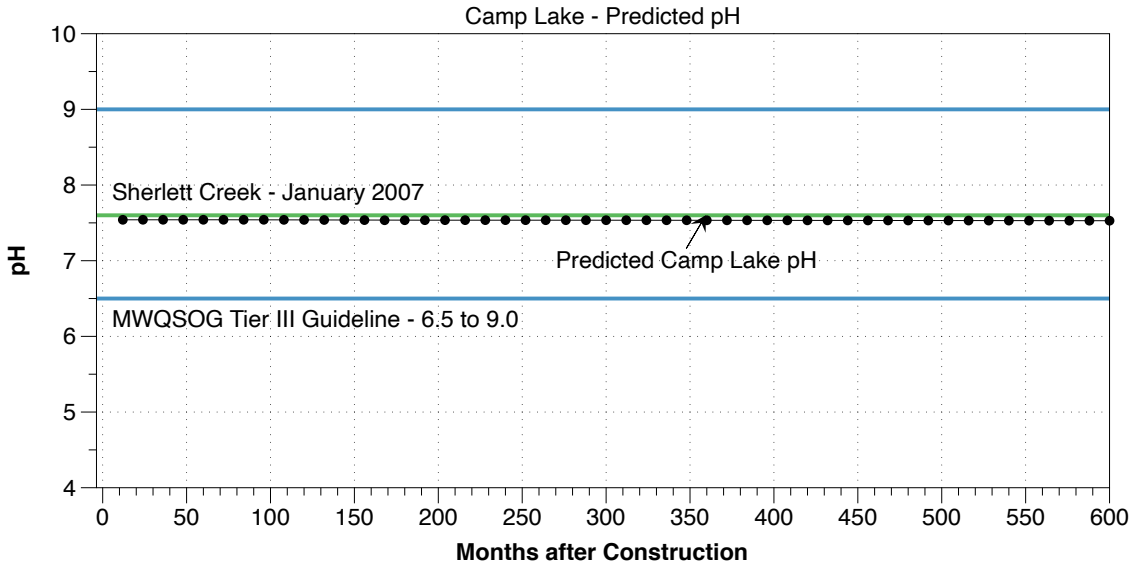


Figure 1. Predicted post-construction pH in the Camp Lake discharge.

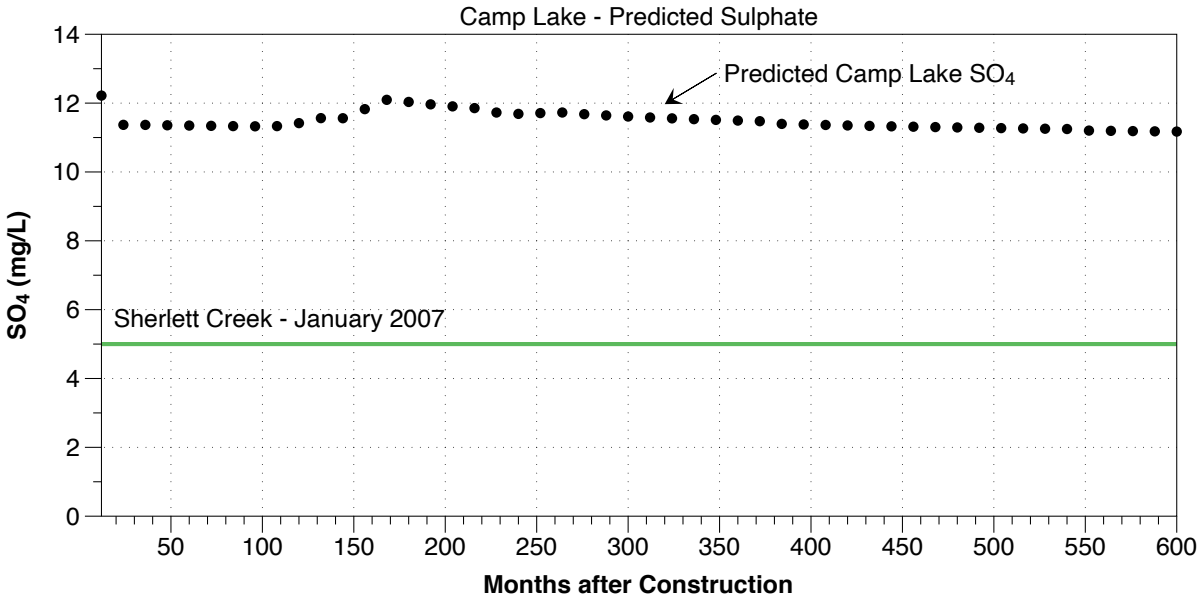


Figure 2. Predicted post-construction sulphate concentration in the Camp Lake discharge.

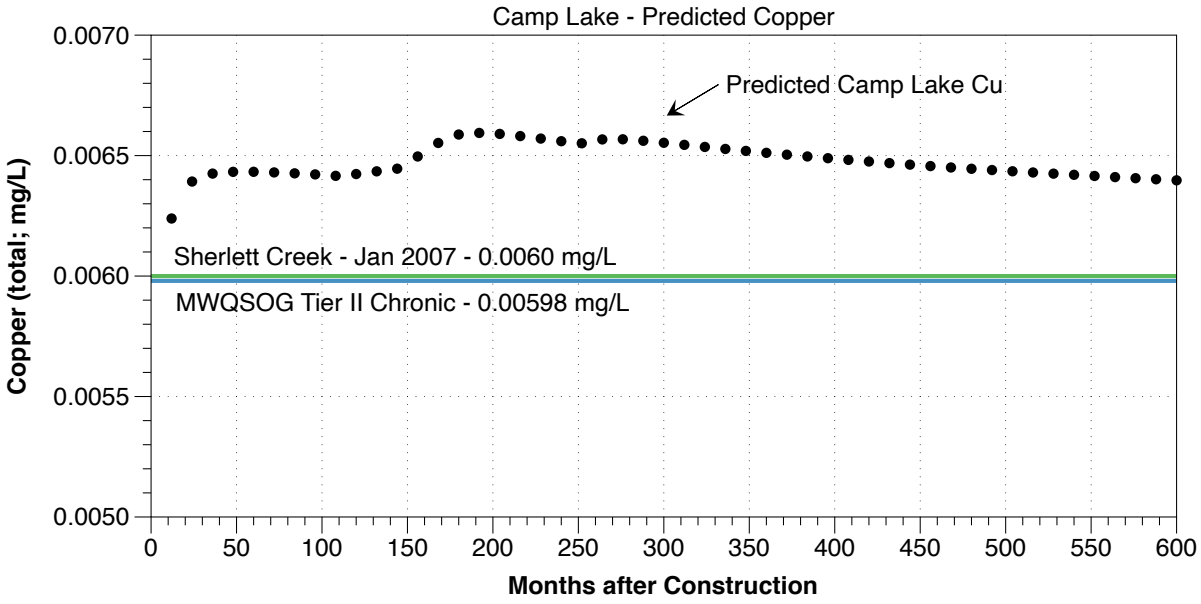


Figure 3. Predicted post-construction total copper concentration in the Camp Lake discharge.

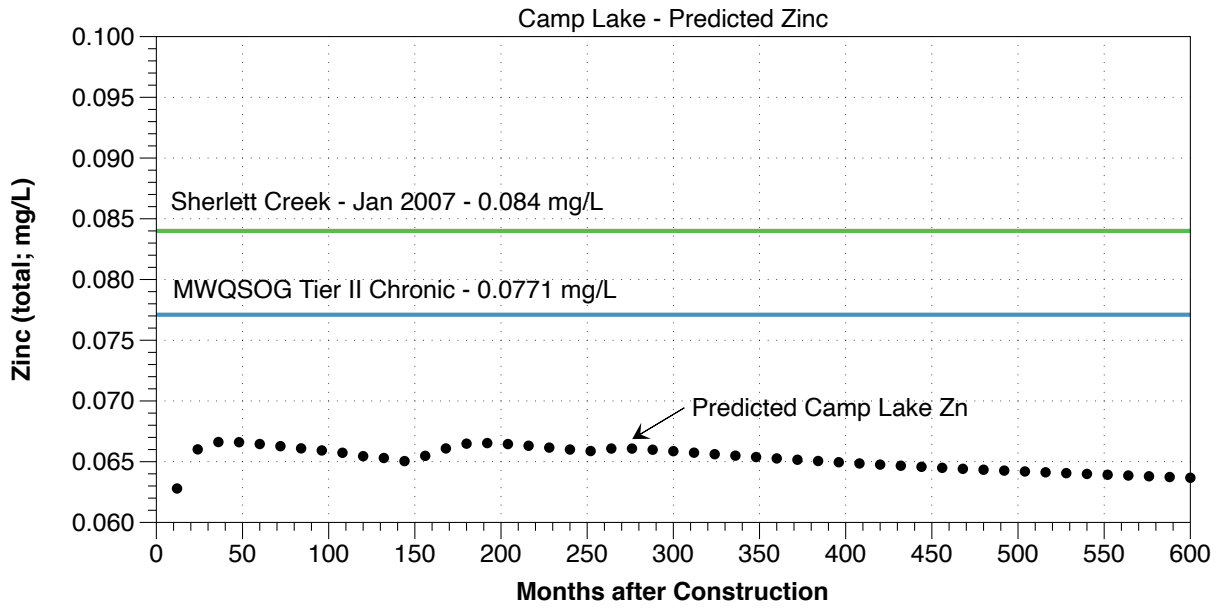


Figure 4. Predicted post-construction total zinc concentration in the Camp Lake discharge.

2.0 Benchmarking the Pre-construction Predictions

A conclusive benchmarking analysis of the Camp Lake water quality monitoring data has not yet been possible because construction was only completed in mid-September 2021. However, indicative water quality trends are consistent with the pre-construction model predictions.

Camp Lake pH quickly moved toward that in Sherlett Creek following the restoration of Sherlett Creek flow through Camp Lake in 2018 (Figure 5). By the 2020 and 2021 open water seasons, Camp Lake discharge pH matched that in Sherlett Creek on most sampling dates.

Sulphate wasn't routinely monitored through 2020 but was added to the analyses beginning in 2021.

An early indication of the validity of the predicted post-construction copper and zinc concentrations made during project planning is found in the measurements of under-ice water quality in Camp Lake during winter. Until construction is completed, mine waste remaining adjacent to the lake continues to influence water quality during the open water season (DJRC 2019, 2020, and 2021). Winter ice cover isolates the lake from runoff from the adjacent waste and provides an early means of testing the predictions.

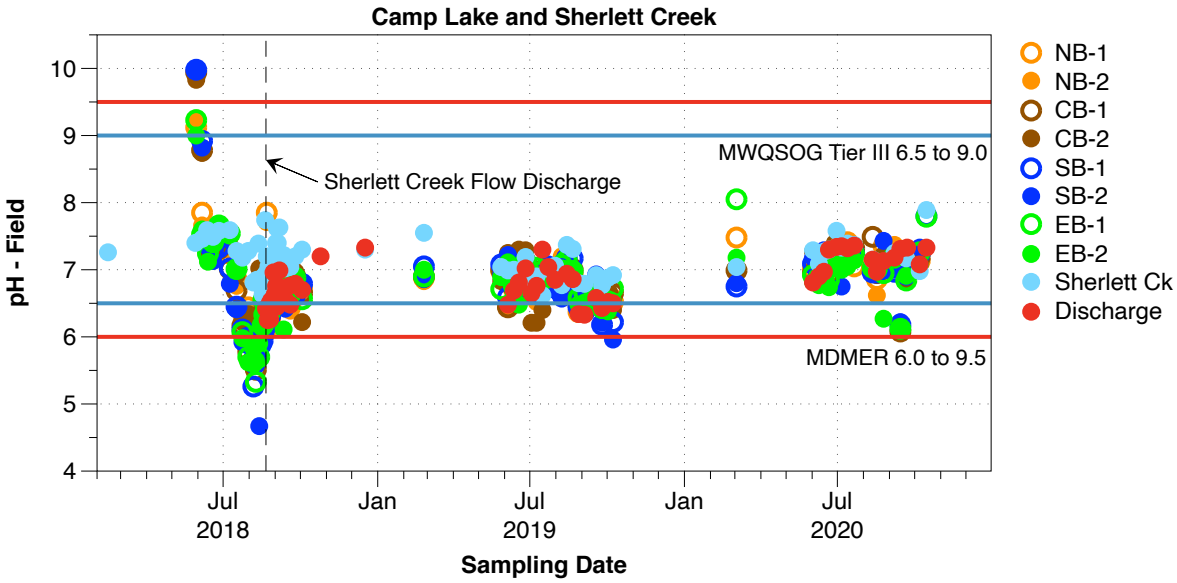


Figure 5. Field pH in Camp Lake and Sherlett Creek – 2018 to 2020.

In all three winter periods (2018/19, 2019/20, and 2020/21) since Sherlett Creek flow was restored to Camp Lake, copper and zinc concentrations in the lake have generally approached those in the inflowing Sherlett Creek (Figures 6 and 7). On this basis, the post-construction water quality predictions appear to be valid provided that the remaining mine waste adjacent to Camp Lake is removed.

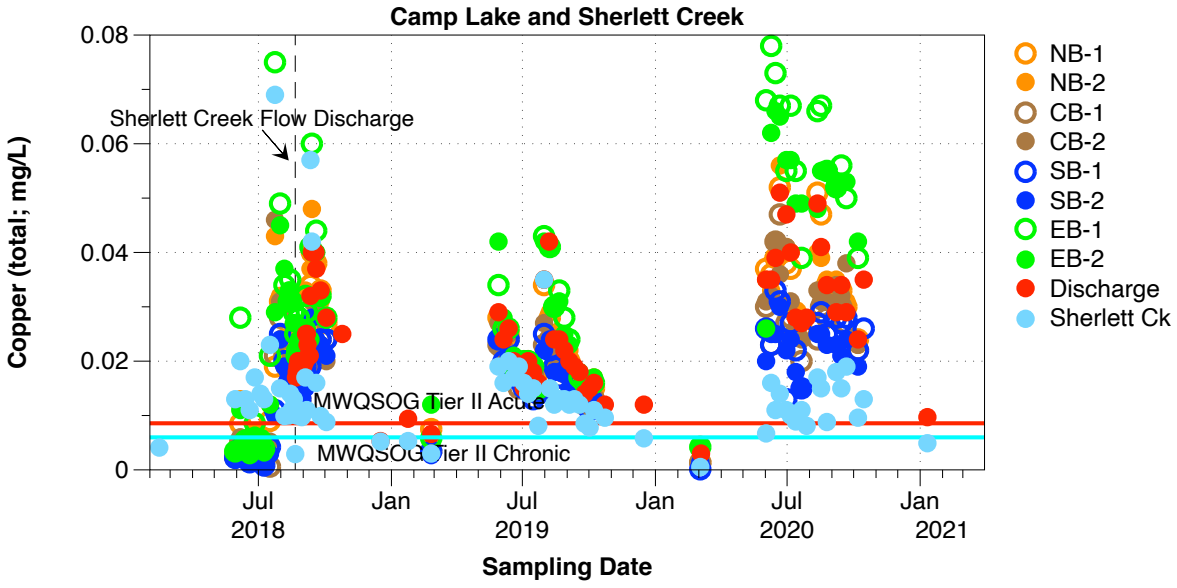


Figure 6. Total copper concentrations in Camp Lake and Sherlett Creek – 2018 to 2020.

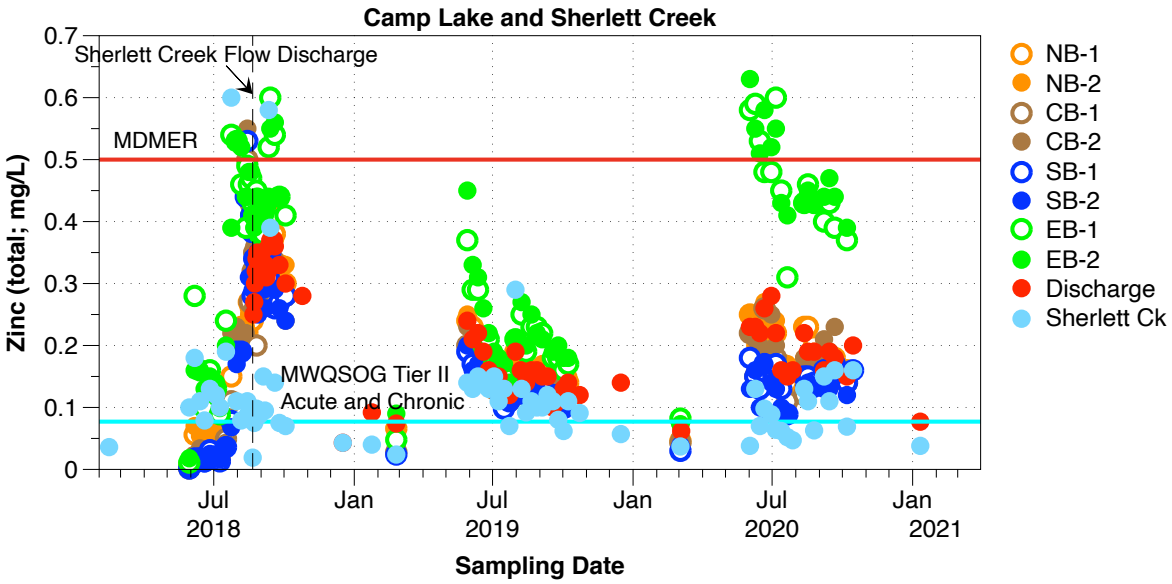


Figure 7. Total zinc concentrations in Camp Lake and Sherlett Creek – 2018 to 2020.

3.0 Potential Post-construction Performance Criteria

The preliminary model validations discussed above indicate that post-construction water quality in Camp Lake, and the lake discharge, will largely depend on Sherlett Creek water quality. Likewise, the post-construction performance metrics for the project will need to be based primarily on Sherlett Creek water quality. There are three possible approaches, used either individually or in combination, to set the metrics:

- apply existing regulatory criteria (e.g., MWQSOGs, MDMER effluent quality standards) as fixed objective concentrations;
- establish a fixed objective concentration for each parameter of interest based on model predictions; or
- establish a current background "plus" objective, represented by the current background condition plus an allowance to account for the predicted Camp Lake influence along with sampling and analytical uncertainty.

3.1 Regulatory Criteria Approach

Regulatory criteria to potentially consider include the Metal and Diamond Mining Effluent Regulations (MDMER; Minister of Justice 2020, current regulations at the time the analysis was conducted in early 2021) and the Manitoba Water Quality Standards Objectives and Guidelines (MWQSOGs; Manitoba Water Stewardship 2011).

The MDMER effluent quality standards represent the minimum acceptable effluent quality for an operating mine site, subject to the limitation that lower concentrations may be required at some sites to prevent adverse effects. The MDMER are not applicable to closed out mine sites – once a mine site attains "closed-out" status, the authorization to apply the MDMER standards is withdrawn by Environment Canada. The Sherridon site is approaching closed out status as a result of the reclamation project, consequently, the MDMER have not been considered further here.

The MWQSOGs are used by Manitoba to manage surface water quality and can be considered as reasonable potential performance metrics provided the background parameter concentration in Sherlett Creek does not already exceed the applicable criterion. However, concentrations of several key parameters (cadmium, copper, and zinc) almost always exceed the applicable MWQSOGs in Sherlett Creek (Table 1A in Appendix A), eliminating use of this approach for these parameters.

3.2 Fixed Objective Concentration

3.2.1 Model Prediction Approach

A fixed objective concentration for a parameter can also be assigned on the basis of water quality modelling predictions, provided that background concentrations are either:

- consistently much lower than the expected "project-affected" concentration, so that variations in background concentrations are relatively unimportant; or

- if background concentrations are similar to project-affected concentrations, that the background values are relatively constant so that variations in parameter concentrations can reasonably be attributed to the project and not to background variability.

Neither condition is fully met by water quality in Sherlett Creek. Predicted water quality in the Camp Lake discharge is very close to, or the same as, quality in Sherlett Creek, as noted in Section 2.0 above. Some key water quality parameters in Sherlett Creek also are particularly variable – coefficients of variation for cadmium, copper, and zinc have been in the range of 174% (Cu) to 310% (Zn) from 2017 through 2020 (Table 1A in Appendix A).

3.2.2 Site-Specific Objectives

Site-specific water quality objectives, developed on the basis of a statistical analysis of the site water quality data, also can be used to set performance objectives. However, the considerable variability of some key parameters means that unacceptably high site-specific objectives would be necessary for those parameters, as shown for cadmium, copper, and zinc (Table 1A in Appendix A).

The Sherlett Creek water characteristics discussed above in relation to the potential fixed concentration objectives mean this approach could only be applied for some of the key

parameters, and there is not a suitable fixed concentration objective that could be applied for any of cadmium, copper, and zinc – which are the primary parameters of concern with respect to the protection of aquatic life.

3.2.3 Background Plus Approach

The background plus approach to setting management thresholds accommodates variability in background parameter concentrations (in Sherlett Creek in this instance) by using current background water quality measurements to which a fixed increment is applied to account for sampling and analytical uncertainty and any predicted incremental contribution from the submerged mine waste.

Current background, or ambient, water quality in this specific case is a measurement made in Sherlett Creek within the last 7 days as the paired measurement in the Camp Lake discharge. In most cases, the measurements will be made the same day but some flexibility in timing is built into the approach to account for unforeseen circumstances (e.g., samples being lost or damaged in shipment, equipment breakdown, weather delay, etc.). This degree of "currency" in the paired measurements is necessary because water quality in Sherlett Creek can change quickly, particularly during lower flow periods when the highest concentrations of cadmium, copper, and zinc tend to occur in Sherlett Creek, as shown in DJRC (2018).

The "plus" component of the management threshold represents the magnitude of the difference from the current background value necessary for a difference in concentration between the Camp Lake discharge and Sherlett Creek to be considered a significant deviation from the prediction. The "plus" is determined in consideration of the sampling variability, analytical variability, and the predicted difference.

Analytical uncertainty needs to be included in the "plus" because all water quality analyses are subject to some small procedural variability. An allowance of +/- 10 to 15% is typically considered an acceptable level of variability, depending on the parameter (e.g., 10% for metals, 15% for TSS; Environment Canada 2012). The reader should keep in mind that this refers to analytical precision under ideal laboratory conditions and that +/- 10 to 15% variability can be expected in the analytical results for identical samples. Sampling variability also needs to be considered, since two samples taken from the same location at the same time will typically yield slightly different results. An allowance, expressed as the Relative Percent Difference (RPD), of +/- 25% is generally considered acceptable for paired replicate samples (e.g., CCME 2011) – with this allowance incorporating the analytical variability. On this basis, a difference of at least 25% is necessary to conclude that the measured concentrations in a pair of samples are different.

Finally, there is the need to consider the contribution of the submerged tailings, over and above that of the inflowing Sherlett Creek, to Camp Lake water quality. Based on the pre-construction modelling, three possible scenarios need to be considered: parameter concentrations that are unaffected by the submerged tailings (e.g., pH); concentrations that increase somewhat in passing through Camp Lake (e.g., copper and SO_4); and concentrations that decrease in passing over the tailings (e.g., zinc). Aluminum, cadmium, and iron were not modelled before

construction. Cadmium should perform similarly to zinc. Winter monitoring indicates aluminum and iron in Camp Lake follow concentrations in Sherlett Creek, inferring similar performance should be expected post-construction.

4.0 Proposed Water Quality Performance Objectives

The previous sections reviewed the potential water quality performance objectives. That analysis indicated that, for most parameters considered, it will be necessary to apply objectives developed using the Background "Plus" approach to accommodate the considerable variation in parameter concentration that occurs in Sherlett Creek. The only exceptions are pH and TSS, for which the applicable MWQSOG Tier II objectives are proposed (Table 1).

Table 1. Proposed Post-construction Camp Lake Water Quality Performance Objectives to be achieved within 4 years following completion of construction.

Parameter (units)	Proposed Camp Lake Water Quality Performance Objectives
pH, field (pH units)	$6.5 \leq pH \leq 9.0$[1]
Sulphate (mg/L)	Ambient SC-1 +7+25%[2,3]
TSS (mg/L)	11.5 mg/L[4]
Turbidity (NTU)	Ambient SC-1 + 25%
Fe (total) (mg/L)	Ambient SC-1 + 25%
Al (total) (mg/L)	Ambient SC-1 + 25%
Cd (total) (mg/L)	Ambient SC-1 + 25%
Cu (total) (mg/L)	Ambient SC-1 + 30%[5]
Zn (total) (mg/L)	Ambient SC-1 + 25%

1. MWQSOG Tier II Objective – determined to be reasonable n=based on pre-construction predictions and monitoring record.
2. Ambient SC-1 refers to the current concentration measured at Sherlett Creek station SC-1 within the last 7 days.
3. Based on pre-construction prediction (Figure 2) plus 25% allowance for analytical variation – Section 3.2.3.
4. MSWQOG Tier II Objective for SC-1 determined as per Appendix A and reasonable based on monitoring record.
5. Based on pre-construction prediction that total Cu concentrations in Camp Lake will be about 5% higher than in Sherlett Creek (Figure 3) plus 25% allowance for analytical variation as per section 3.2.3.

4.1 Application of the Performance Objectives

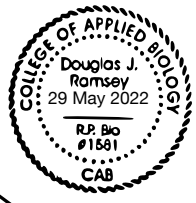
The water quality performance objectives should not be considered as regulatory limits. Their purpose is to provide a means for evaluating the performance of the reclamation works in comparison to the expectations developed during project planning. Once construction is completed, water quality in Camp Lake should be expected to gradually approach the objectives over a 3-to-4-year period. Water quality may improve to meet the objectives over a shorter period, but also may not.

The important diagnostic consideration is that the trend toward the objectives occurs, and at a rate of improvement such that there is a reasonable expectation that the objectives will be realized within 4 years of construction completion. Slow or absent improvement should trigger investigation of potential causes, which may or may not require the application of corrective or mitigative measures. Faster improvement than expected should move the monitoring program to confirmation monitoring followed by a reduced monitoring frequency.

5.0 Closure

We trust the water quality performance objectives developed herein address the needs for as specific a set of objectives as is possible in consideration of the site conditions and variations in upstream Sherlett Creek water quality. Should you have any questions regarding this memo, please contact the undersigned.

Sincerely,



Doug Ramsey, M.Sc. R.P.Bio
Principal Consultant

Third Party Disclaimer

The content of this document is not intended for the use of, nor is it intended to be relied upon by any person, firm, or corporation, other than the client and D.J. Ramsey Consulting Ltd. ("DJRC"). DJRC denies any liability whatsoever to other parties for damages or injury suffered by such third party arising from use of this document by them, without the express prior written authority of DJRC and our client. This document is subject to further restrictions imposed by the contract between the client and DJRC and these parties' permission must be sought regarding this document in all other circumstances.

Appendix A
Site-Specific Water Quality Objectives for Sherlett Creek

Site Specific Water Quality Objectives (SSWQOs) facilitate the detection of potential project-related effects on receiving water quality by accounting for site-specific physical, chemical, and biological factors that might make generic guidelines such as the MWQSOGs over-protective or under-protective.

The need for/suitability of site-specific water quality objectives as applied to Sherlett Creek was assessed for 8 of the key water quality parameters (pH, TSS, turbidity, and total iron, aluminum, cadmium, copper, and zinc) as follows based on the 2007-2020 data record.

- Data were first screened for evident outliers. All field duplicate values also were removed from the dataset.

- Values below the Reportable Detection Limit (RDL; i.e., the "less than" values) were replaced with a value equal to 0.50xRDL to calculate mean concentrations and other summary statistics. This is a convention in water quality data analysis.

- All data were then compared to the applicable generic guidelines (Table A1) and the following summary statistics were calculated for each parameter:

    - count (the total number of individual measurements);
    - count greater than the reportable detection limit (the total number of measurements that were above the "less than" value);
    - mean and median concentration;
    - count greater than the applicable generic guideline (total number of measurements, including less than RDL results, that were greater than the guideline); and,
    - count greater than both the RDL and the guideline (total number of measurements that were quantitatively detectable and were greater than the guideline).

These statistics facilitated the identification of parameters that were truly elevated relative to the guideline (i.e., those greater than both the RDL and the guideline) and the identification of problematic RDLs (i.e., RDLs that were higher than the applicable guideline) or RDLs that are higher than the ambient concentrations).

Naturally elevated parameters were identified as those that exceeded applicable guidelines at a frequency greater than 5%. Other factors considered in the identification of naturally elevated parameters included detectability (i.e., the proportion of samples with results greater than RDL) and the ratio of mean concentration to the guideline. Parameters found to exceed the applicable guidelines with a frequency of at least 5% and to exceed the applicable RDL in the majority (>50%) of samples were identified for SSWQO development.

Based on this screening analysis, the parameters fell into three categories: those never or rarely exceeding the generic guideline (pH, TSS, and turbidity); those periodically exceeding the generic guideline (Fe and Al); and those which typically exceeded the guideline (Cd, Cu, Zn). All of total iron, aluminum, cadmium, copper, and zinc were identified for SSWQO development.

The Background Concentration Procedure (BCP; CCME 2003) was employed to calculate preliminary SSWQOs. The BCP recognizes that it is not possible to meet generic water quality guidelines in surface waters where the natural concentrations of substances exceed the guidelines. Therefore, the BCP uses the site-specific monitoring data to determine the upper limit of background concentrations for the watercourse, water body, or watershed in question, which can be put forward as an SSWQO. Specific statistical procedures for defining the upper limit of background are not prescribed by CCME (2003), but typically involve a range of statistics that may define the upper 95% confidence limit of the mean concentration, including: the upper 95% confidence limit (mean + $t_{\alpha=0.05(1)}$*standard error of the mean), the mean + $t_{\alpha=0.05(1)}$*standard deviation of the mean, the mean + 2*standard deviation of the mean, the 90th or 95th percentile, or other alternatives as appropriate to the area under study (BCMELP 1997; CCME 1999).

The following summary statistics were calculated for each parameter identified as requiring the development of a SSWQO:

- sample size (count);
- sample size greater than the reportable detection limit;
- mean and median;
- standard deviation;
- standard error;
- mean + $t_{\alpha=0.05(1)}$* standard error;
- mean + $t_{\alpha=0.05(1)}$* standard deviation;
- mean + 2 * standard deviation; and,
- 95th percentile.

Water quality objectives can be used to achieve a number of water quality management goals, from maintaining average water quality to defining maximum parameter concentrations. Most typically, the objectives are used to set maximum allowable parameter concentrations in receiving waters. This type of objective is referred to as a Maximum BCP-SSWQO.

Three statistics (mean + $t_{\alpha=0.05(1)}$*standard deviation; mean + 2 standard deviations; and the 95th percentile) were examined for derivation of potential maximum BCP-SSWQOs for iron, aluminum, cadmium, copper, and zinc. Of these, the maximum BCP SSWQO based on the 95th percentile of the monitoring data provided the lowest frequency of exceedance for more of the

parameters (lowest for Fe and Al; tied for lowest for Cd and Cu; next to lowest for Zn) than either of the other measures.

Although the maximum BCP SSWQOs based on the 95th percentile have lower frequencies of exceedance than do the corresponding generic objectives, and by a very wide margin in some instances (e.g., cadmium, copper, and zinc) the occurrence of exceedances is not reduced to zero, with the natural frequency of exceedance remaining between 3% and 5% for all five parameters (Table A1).

Some of the 95th percentile BCPs derived above are particularly high in comparison to established water quality criteria. The BCPs for cadmium and copper are about 10X the applicable MWQSOGs and the BCP for zinc is about 153X the applicable MWQSOG. The zinc BCP also is about 2.4X the maximum acceptable monthly mean concentration specified under the MDMER and also exceeds the maximum acceptable concentration in a single grab sample by 18%.

Given the very high values of the BCPs for cadmium, copper, and zinc, these BCPs are not a useful tool for monitoring performance of the Sherridon project since they incorporate the very wide range of variation in Sherlett Creek water quality – variation that greatly exceeds the expected influence of Camp Lake flow-through on water quality. The values are so high they would never adequately detect poor Camp Lake performance. A more sensitive measure is needed, at least for Cd, Cu, and Zn.

Table A1. Sherlett Creek (SC-1) key parameter summary statistics, potential Maximum Background Concentration Procedure (BCP) Site Specific Water Quality Objectives (SSWQOs), and related Exceedance Reductions based on the 2017-2020 period of record.

Statistic	pH (field)	Turbidity	TSS	Fe[9]	Al[9]	Cd[9]	Cu[9]	Zn[9]
Summary Statistics								
Mean	7.15	2.1	2.0	0.27	0.060	0.00095	0.0209	0.383
Median	6.93	1.5	2.0	0.23	0.051	0.00031	0.0120	0.0980
Max	7.89	8.5	6.5	1.0	0.26	0.020	0.240	7.60
Min	6.59	0.5	0.5	0.099	0.027	0.00005	0.0005	0.0190
Count	80	87	91	101	101	101	101	101
Count >RDL	N/A	87	30	101	101	101	101	101
%>RDL	N/A	100%	33%	100%	100%	100%	100%	100%
MWQSOG[1]	6.5 to 9.0	8.1[3]	11.5[2]	0.30	0.10[4]	0.00018[5]	0.00598[6]	0.00771[7]
Count>MWQSOG[8]	0	1	0	14	9	89	93	100
%>MWQSOG[8]	0%	1%	0	14%	9%	92%	96%	99%
StDev.S				0.16	0.038	0.0029	0.0367	1.19
StDev.P				0.16	0.038	0.0029	0.0365	1.18
CV				57	63.6	304	176	310
SE				0.016	0.0038	0.00029	0.00365	0.118
2SD				0.31	0.076	0.0058	0.0734	2.38
Potential SSWQOs								
95% CI (SE)				0.304	0.0672	0.00152	0.0282	0.618
95% CI (SD)				0.584	0.136	0.00667	0.0938	2.74
Mean + 2 SD				0.586	0.137	0.00672	0.0943	2.76
95th Percentile				0.669	0.160	0.00179	0.0678	1.18
Exceedance Reductions for Each SSWQO								
Count>95% CI (SE)				14	21	7	9	8
Count>95% CI(SD)				9	7	4	4	4
Count>Mean + 2SD				9	7	4	4	4
Count>95th percentile				4	3	4	4	5
%>95% CI (SE)				14%	21%	7%	9%	8%
%>95% CI(SD)				9%	7%	4%	4%	4%
%>Mean + 2SD				9%	7%	4%	4%	4%
%>95th percentile				4%	3%	4%	4%	5%

1. MWQSOG – Manitoba Water Quality Standards Objectives and Guidelines (Manitoba Water Stewardship 2011)
2. TSS – MWQSOG Tier II Objective. Determined as highest value observed plus 5 mg/L
3. Turbidity – MWQSOG Tier II Objective. Calculated from the linear regression equation for turbidity on TSS (Turbidity = 0.69342 + 0.64783*TSS) using the TSS guideline of 11.5 mg/L
4. Al – MWQSOG Tier III Guideline for pH range ≥6.5
5. Cd – MWQSOG Tier II Chronic Exposure Objective – calculated as $[e^{\{0.7409[\ln(Hardness)]-4.719\}}]*[1.101672-\{\ln(Hardness)*(0.041838)\}]$ – values were calculated using hardness in Cold
6. Cu - MWQSOG Tier II Chronic Exposure Objective – calculated as $0.960*[e^{\{0.8545[\ln(Hardness)]-1.702\}}]$ – Cold L. hardness
7. Zn - MWQSOG Tier II Chronic Exposure Objective – calculated as $0.986*[e^{\{0.8473[\ln(Hardness)]+0.884\}}]$ – Cold L. hardness
8. For pH, refers to values both higher and lower than the MWQSOG guideline range
9. Total fraction

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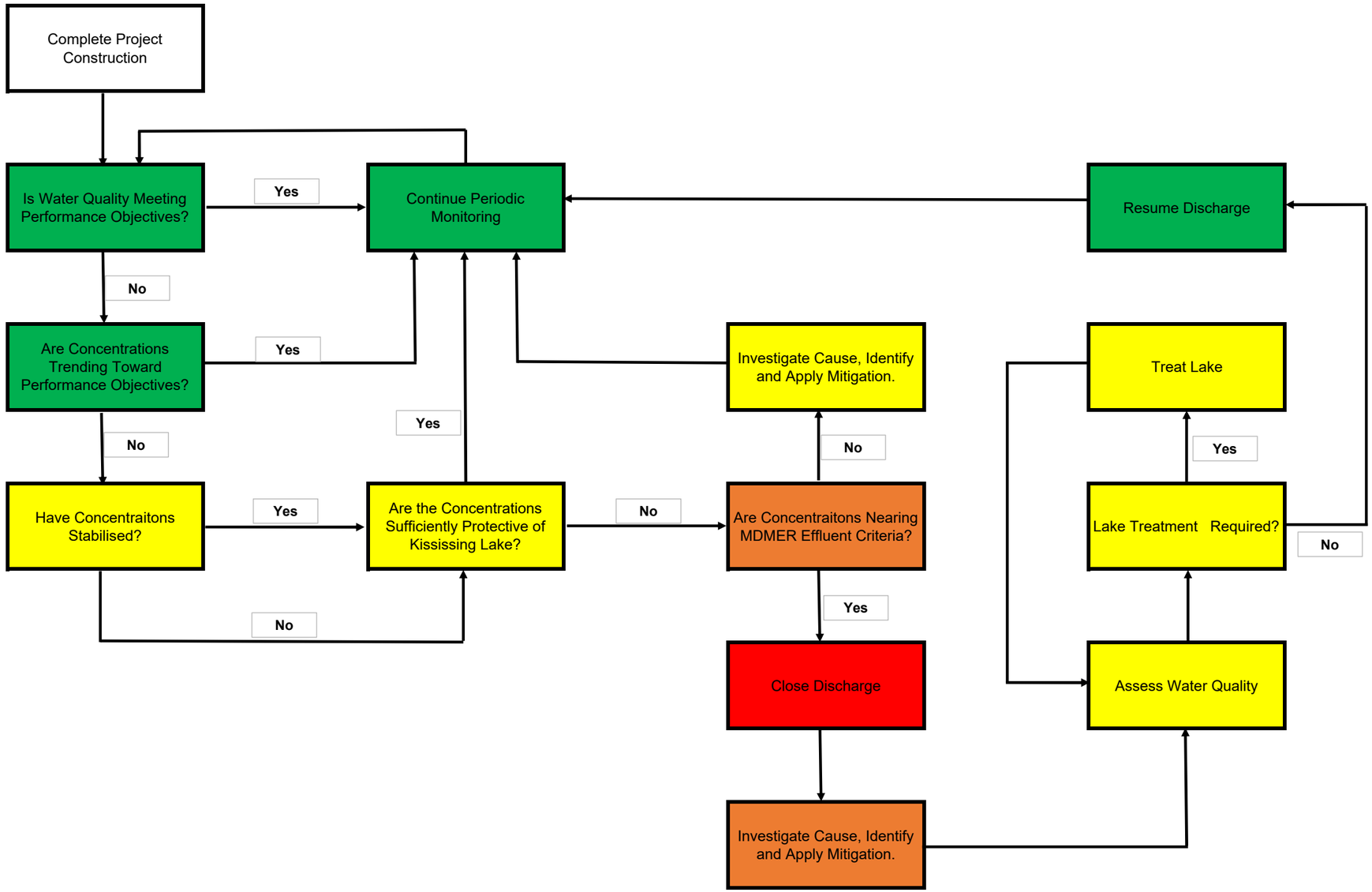
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APPENDIX F – DECISION FLOWSHEETS AND COLOUR CODING DEFINITION

Sherridon Reclamation Project - Post-Construction Water Quality Performance Evaluation Process



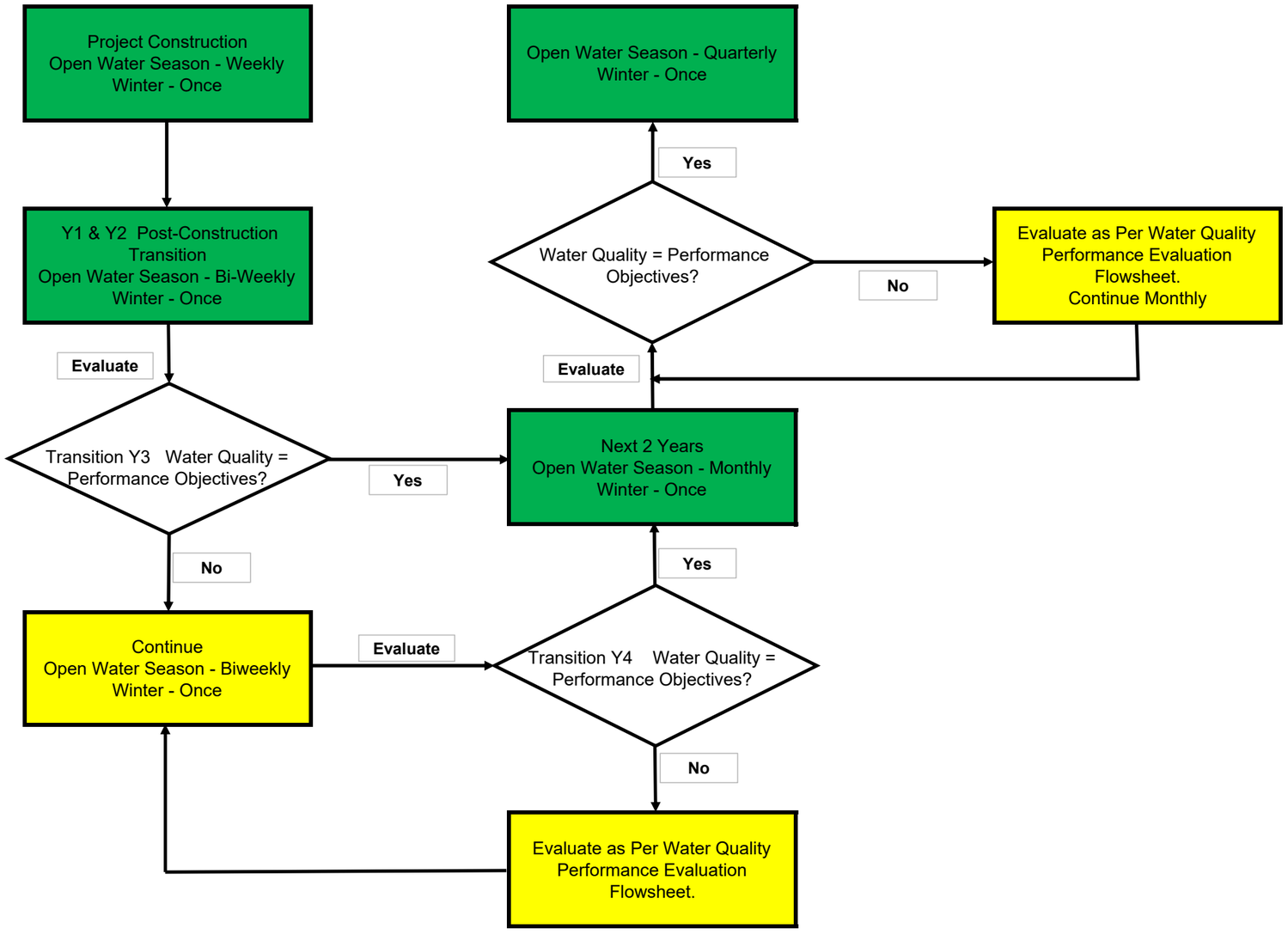
a. Green = Project is performing as planned, water quality is meeting project objectives or trending toward, normal monitoring, maintain regular communication schedule with stakeholders

b. Yellow = Project is performing as planned with no immediate risk to aquatic environment, but observations made of water quality trending away from project objectives, initiate investigation of cause, notify stakeholders of investigatory activities

c. Orange = Project is not performing as planned with increased potential of risk to aquatic environment if the issue is not addressed. Investigate and apply corrective action. Communication with project stakeholders should continue until resolved (frequency dependent on nature and timing of issue).

d. Red = Project is not performing as planned with potential for unacceptable risk to aquatic environment if the issue is not addressed. Response may include stopping the discharge, if appropriate to the issue, and immediate investigation of cause and application of corrective action as soon as possible. Frequent communication with stakeholders until resolved.

Sherridon Reclamation Project - Water Quality Monitoring Frequency



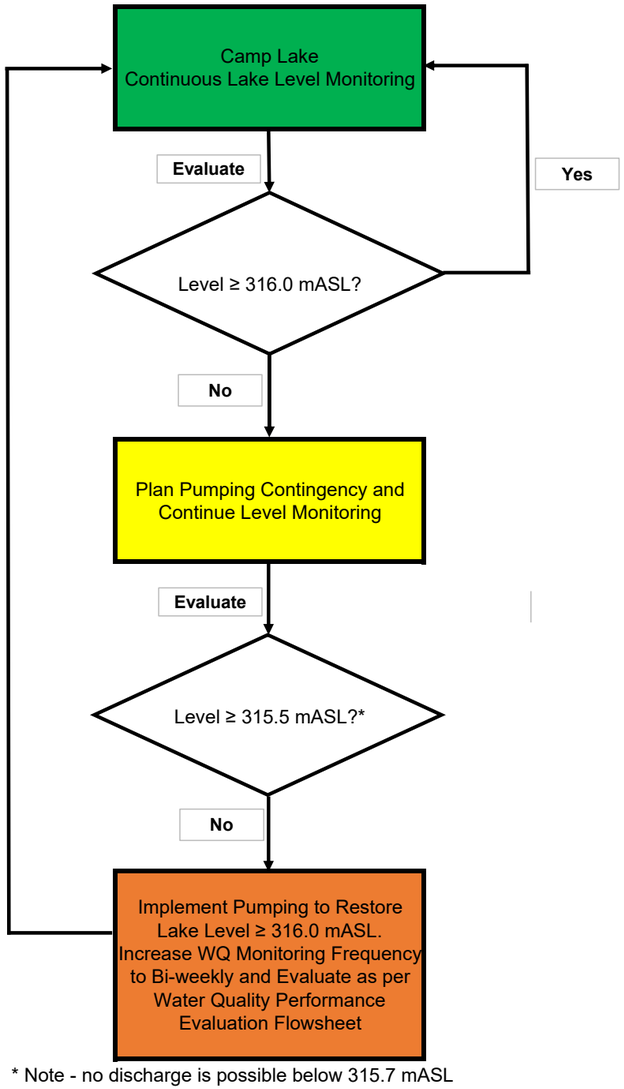
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Sherridon Reclamation Project - Camp Lake Level Monitoring



* Note - no discharge is possible below 315.7 mASL

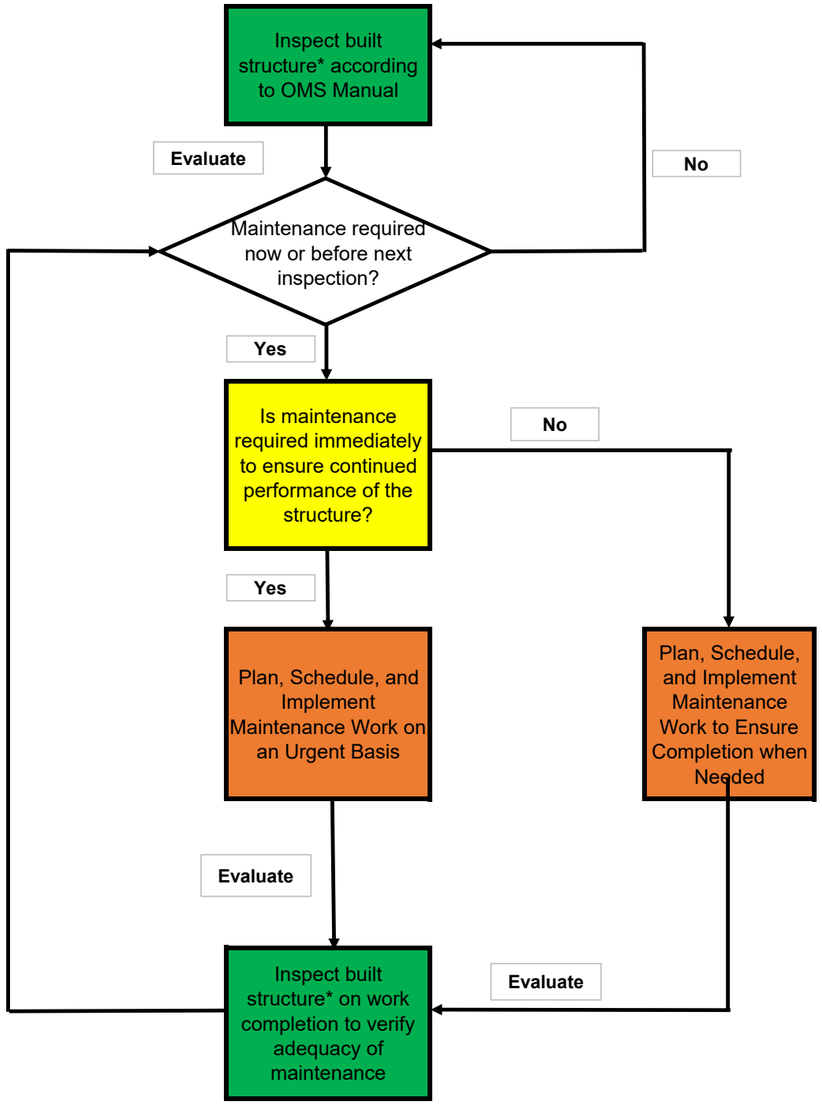
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Sherridon Reclamation Project - Inspection and Maintenance of Built Structures



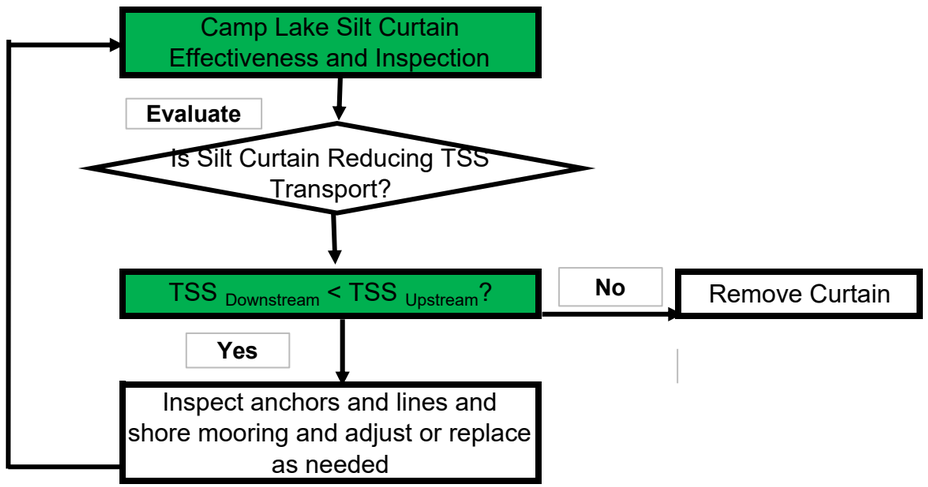
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Sherridon Reclamation Project
Silt Curtain Inspection and Management



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APPENDIX G – SAMPLE COMMUNICATIONS LOG

Communication Log: Sherridon Mine Site

Sherridon Community Council

Manitoba

Record of Communication

First Nation/Community: Sherridon Community Council
Representative:
Contact Information:

Band Office Phone:
Fax Number:

*Sherridon Community Council is a local community with Indigenous members, not a recognized First Nation Community

CURRENT TO:

Communication / Activity Log						
Date of Contact	**Manitoba Rep**	**FN / Community Rep**	**Method of Contact**	**Incoming / Outgoing**	**Summary/Action Items (include document ID if applicable)**	**Action Items / Follow-up**

APPENDIX B

Groundwater Well Logs

TETRA TECH

RECORD OF BOREHOLE

MW01-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 26, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110539

BOREHOLE LOCATION: 3.8 m northeast of intersection of Jowsey Street and Portage Road, north of community waste water treatment plant. EASTING: 366854

BORING METHOD	DEPTH SCALE m	DEPTH SCALE ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW01-BR
Auger - Solid Stem	0.00		323.67	Ground Surface								Steel Protective Casing 324.54
			323.27	***Organics*** Some fine-grained sand.								323.67
			0.40	***Silt*** Some clay, little fine-grained sand, brown, loose, low plasticity, moist.								Bentonite
	1	5	322.17									Solid 50 mm PVC
			1.50	***Clay*** Little silt, brown-grey, soft, medium plasticity, moist.								
	2	10	320.67									319.47
			3.00	***Silt*** Little clay, little fine-grained sand, brown, soft, non-plastic, moist.			C				7 5 4 5 2 8 1 3 1 2 3 1 2 1 2	319.15
	3		320.32									318.50 January 29, 2022
			3.35	***Bedrock*** Gneiss, very strong, black, slightly decomposed in upper fracture zones, moderately fractured from 3.3 m to 6 m, slightly fractured below 6 m depth. - Quartz seam at 4.98 m depth. - Quartz seam at 5.41 m depth.			C					
	4	15										
	5	20					C					
	6		316.79									Sand
	7	25	6.88	- Water bearing fracture with indications of white precipitate at 6.78 m depth.			C					Slotted 50 mm PVC
	8											
		30	314.50									
	9		9.17	- Water bearing fracture with indications of white precipitate at 9.07 m depth.			C					
	10	35	312.98									312.98
	11		10.69	***End of Borehole at 10.69m***								
	12	40										
	13											
	14	45										
	15	50										
	16											
	17	55										
	18											

Maple Leaf Drilling Ltd., B-54 Mobile
Coring

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW02-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 28, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110440

BOREHOLE LOCATION: Southeast corner of Jowsey Street and Sherlett Drive Intersection. Approximately 20 m northwest of the Sherlett Creek bridge. EASTING: 366971

BORING METHOD	DEPTH SCALE m / ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW02-BR
Auger - Solid Stem / Coring (Maple Leaf Drilling Ltd., B-54 Mobile)	0.00 / 0	316.82	Ground Surface								Steel Protective Casing 317.78
		316.57 / 0.25	***Organics*** Little silt, black-brown.								316.82
	1 / 5		***Silt*** Trace clay, brown, soft, non-plastic, moist. - From 0.6 m to 1.6 m; grey, very soft. - From 1.6 m to 4.4 m; wet.								316.26 January 29, 2022
	2 / 10										Bentonite / Solid 50 mm PVC
	3 / 10										
	4	312.42 / 4.40									
	15	312.17 / 4.65	***Sand*** Fine-grained, wet.							0 1	311.62
	5 / 20		***Bedrock*** Gneiss, very stong, black, moderately fractured from 4.65 m to 5.7 m, slightly fractured below 5.7 m depth.			C				3 2	311.32
	6 / 20					C				1 2 4	
	7 / 25	309.18 / 7.64	- Water bearing fracture zone at 7.5 m depth.			C				4 3 2 3	Sand / Slotted 50 mm PVC
	8 / 30	308.12 / 8.70	- Granite intrusion from 8.5 m to 8.7 m depth.			C				7 5 2 1	
	9 / 30	307.72 / 9.10	- Quartz seam from 8.9 m to 9.0 m depth. - Water bearing fracture at 9.0 m depth.			C					307.35
	10 / 35	307.35 / 9.47	***End of Borehole at 9.47m***								
	11 / 40										
	12 / 40										
	13 / 45										
	14 / 45										
	15 / 50										
	16 / 50										
	17 / 55										
	18										

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW03-OB

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: February 4, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110369

BOREHOLE LOCATION: East edge of wetland area on south side of Sherlett Creek. Approximately 30 m southwest of the Sherlett Creek Bridge. EASTING: 366990

BORING METHOD	DEPTH SCALE m / ft	SUBSURFACE PROFILE: ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLES: SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW03-BR
Maple Leaf Drilling Ltd., B-54 Mobile Auger - Solid Stem	0 / 0.00	317.28	Ground Surface								Steel Protective Casing 318.22; Solid 50 mm PVC
			Peat Black, moist.								317.28
		316.47									Bentonite
	1 / 5	0.81 315.98	***Silt*** Black, soft, non-plastic, moist.								316.52 Feb. 7, 2022
		1.30	***Silt*** Little clay, grey, soft, medium plasticity, moist.								316.08
	2 / 10		- From 2.21 m to 8.61 m; wet.								315.78
	3 / 10										
	4 / 15										
	5 / 15										Sand
	6 / 20										Slotted 50 mm PVC
	7 / 25										
	8 / 25	308.67									
	9 / 30	8.61 308.62	***Sand*** Fine-grained, wet.								308.62
	10 / 35	8.66	***End of Borehole at 8.66m*** Terminated at refusal on suspected bedrock.								
	11 / 35										
	12 / 40										
	13 / 45										
	14 / 45										
	15 / 50										
	16 / 50										
	17 / 55										
	18 / 55										

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW04-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: February 5, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110396

BOREHOLE LOCATION: North side of Sherlett Creek, across from wetland area. Approximately 30 m southwest of the waste water treatment plant. EASTING: 366867

BORING METHOD	DEPTH SCALE m	DEPTH SCALE ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW04-BR
Auger - Solid Stem / Coring (Maple Leaf Drilling Ltd., B-54 Mobile)	0.00		317.00	Ground Surface								Steel Protective Casing 317.97
			316.39 (0.61)	***Topsoil*** Some organics, brown-black.								317.00
	1	5	316.19 (0.81)	***Silt*** Some clay, grey, soft, medium plasticity, moist.								316.63 February 6, 2022
			315.81 (1.19)	***Silt*** Little clay, grey, soft, low plasticity, wet.								
	2	10	314.71 (2.29)	***Peat*** Brown, moist.								Solid 50 mm PVC
	3		313.60 (3.40)	***Silt*** Little organics, brown, soft, non-plastic, wet.								
	4	15		***Silt*** Trace clay, grey, soft, non-plastic, wet. - From 3.68 m to 3.76 m; little clay.								Bentonite
	5											
	6	20										
	7			- From 7.06 m to 7.62 m; little small gravel.								
		25	309.38 (7.62)	- From 7.42 m to 7.62 m; some fine-grained sand.								307.86
	8			***Bedrock*** Gneiss, very stong, black, slightly fractured.			C				3 4 2 3	
	9	30					C				0 2 1	
	10										0 1	306.87
		35					C				2 1 2	Slotted 50 mm PVC
	11											Sand
	12	40					C				0 1	
	13		303.69 (13.31)	***End of Borehole at 13.31m***								303.69
	14	45										
	15											
		50										
	16											
	17	55										
	18											

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW04-OB

Sheet 1 of 1

705-09240103-ALL

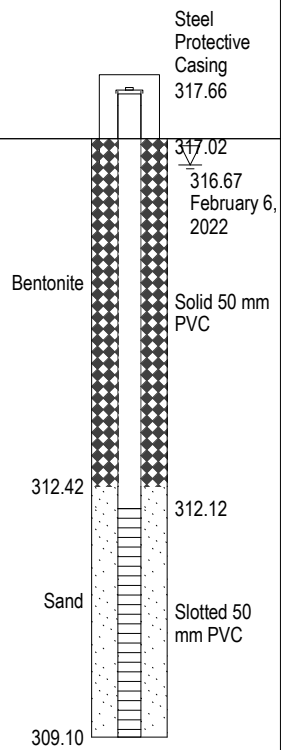
CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: February 5, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110398

BOREHOLE LOCATION: North side of Sherlett Creek, across from wetland area. Approximately 30 m southwest of the waste water treatment plant. EASTING: 366866

Tetra Tech Canada Inc.
Auger - Solid Stem

BORING METHOD	DEPTH SCALE m	DEPTH SCALE ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW04-OB
	0.00		317.02	Ground Surface								
			316.41	***Topsoil*** Some organics, brown-black.								
			0.61									
	1		316.21	***Silt*** Some clay, grey, soft, medium plasticity, moist.								
			0.81									
		5	315.83	***Silt*** Little clay, grey, soft, low plasticity, wet.								
	2		1.19									
			314.73	***Peat*** Brown, moist.								
			2.29									
	3	10		***Silt*** Little organics, brown, soft, non-plastic, wet.								
			313.62									
			3.40	***Silt*** Trace clay, grey, soft, non-plastic, wet. - From 3.68 m to 3.76 m; little clay.								
	4	15										
	5											
	6	20										
	7			- From 7.06 m to 7.72 m; little small gravel.								
		25										
			309.10	- From 7.72 m to 7.92 m; some fine-grained sand.								
	8		7.92	***End of Borehole at 7.92m*** Terminated at refusal on suspected bedrock.								
	9	30										
	10											
		35										
	11											
	12	40										
	13											
		45										
	14											
	15	50										
	16											
		55										
	17											
	18											



SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW05-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: February 5, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110368

BOREHOLE LOCATION: South side of Sherlett creek and west of the wetland area. Approximately 75 m east of Portage Road. EASTING: 366711

BORING METHOD	DEPTH SCALE m	DEPTH SCALE ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW05-BR
Coring	0	0	325.32	Ground Surface								Steel Protective Casing 326.22
			325.02	***Silt***								325.32
			0.30	Some coarse-grained sand, trace small gravel, brown, loose, non-plastic, dry.			C				1 3 4	
	1	5	324.32								0 1 1	Bentonite
			1.00	***Bedrock***Gneiss, highly weathered, red-brown colouration, pyrite crystals, iron staining on fracture surfaces.							3	Solid 50 mm PVC
	2	10		***Bedrock*** Gneiss, very stong, black, slightly fractured. - Fracture zone with iron staining at 1.93 m depth.			C				0 1 0	322.32
	3										4	
	4	15		- Fracture zone with iron staining at 3.06 m depth.			C				3	
				- Fracture zone with iron staining at 4.6 m depth.							2 1	
	5			- Fracture zone with iron staining at 5.05 m depth.			C				2	▽ 319.72 February 6, 2022
	6	20									4 2	
											5 1	
	7			- Fracture zone with iron staining at 6.93 m depth.			C				2 1	
	8	25	317.06								3 1	
			8.26	***Bedrock*** Granite, Quartz rich, hard, white to pink coloured.			C				2	
			316.30								3	Sand 316.18
	9	30	9.02	***Bedrock*** Gneiss, very stong, black, slightly fractured.							2	
	10						C				6 1	
		35									3 0	
	11						C				1	
	12	40										Slotted 50 mm PVC
				- Red-brown discolouration from 12.5 m to 13.5 m depth.							0 1	
	13						C				0 1	
		45									2	
	14										0 1	
	15	50	310.08				C				1	310.08
			15.24	***End of Borehole at 15.24m***								
	16											
		55										
	17											
	18											

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

Maple Leaf Drilling Ltd., B-54 Mobile

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW06-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: February 3, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110246

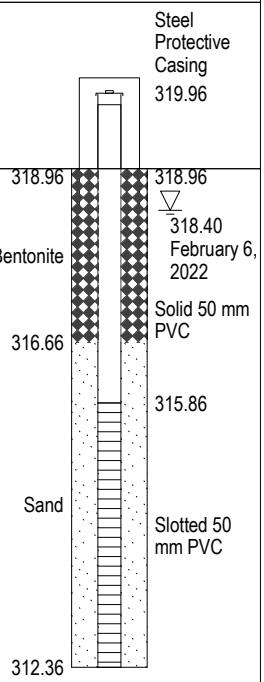
BOREHOLE LOCATION: Southern edge of the wetland to the south of Sherlett Creek, to the north of the apparent groundwater spring. EASTING: 366922

BORING METHOD: Maple Leaf Drilling Ltd., B-54 Mobile Auger - Solid Stem Coring

DEPTH SCALE m / ft

ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)
0.00 318.96	Ground Surface							
318.22 0.74	***Organics*** Trace silt, trace clay, black, moist.							
317.21 1.75	***Bedrock*** Granite, strong, pink, coarse grained, moderate fracturing. - Fracture zone from 1.4 m to 1.75 m depth, possibly water bearing.			C				4 3 6 / 2 3 / 1 2 3 / 2 1 2 / 1 2 4 / 2 3 4 / 3
314.76 4.20	- Water bearing facture at 4.1 m depth.							
314.36 4.60	***Bedrock*** Gneiss, very stong, black, slightly fractured.							
312.36 6.60	***End of Borehole at 6.60m***							

MONITORING WELL MW06-BR



SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW07-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 31, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110027

BOREHOLE LOCATION: South end of study area, Approximately 40 m east of the "Glory Hole". EASTING: 367243

BORING METHOD	DEPTH SCALE m	DEPTH SCALE ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW07-BR
Auger - Solid Stem Maple Leaf Drilling Ltd., B-54 Mobile Coring	0	0.00	327.17	Ground Surface								Steel Protective Casing 328.11
			326.33	***Silt*** Few small and large gravel, trace clay, brown, soft, low plasticity, moist.								327.17
	1	5	0.84	***Bedrock*** Gneiss, very strong, black, slightly fractured.			C				5 2 1 2	Bentonite Solid 50 mm PVC
	2						C				0 2	
	3	10	323.17				C				7 5 4 4	324.53 324.72 Feb.. 5, 2022
	4	15	4.00	***Bedrock*** Granite, strong, pink, coarse grained, moderate fracturing.							2	
	5		322.27 4.90	- Water bearing fracture at 4.7 m depth.			C				1 2	
	6	20	321.77 5.40	***Bedrock*** Gneiss, very strong, black, slightly fractured.							1	Sand Slotted 50 mm PVC
				Bedrock Granite, quartz rich strong, white, coarse grained, moderate fracturing. - Gneiss seam from 5.7 m to 5.8 m depth.			C				3 1 2 3 2	
	7	25	319.76 7.41									
	8						C				4	
	9	30	317.97 9.20	- Water bearing fracture at 9.1 m depth.			C					317.77
			317.82 9.35	***End of Borehole at 9.40m***								
	10	35										
	11											
	12	40										
	13											
	14	45										
	15											
	16	50										
	17	55										
	18											

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW08-BR

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 30, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6109904

BOREHOLE LOCATION: South end of study area, on ridge area approximately 120 m south of the "Glory Hole" EASTING: 367205

BORING METHOD	DEPTH SCALE m	DEPTH SCALE ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW08-BR
Auger - Solid Stem Coring	0.00		334.54	Ground Surface								Steel Protective Casing 335.46
			333.74 0.80	***Silt*** Some fine-grained sand, trace small gravel, light brown, loose, non-plastic, dry.			C				4 2	334.54
	1	5	333.09 1.45	***Bedrock*** Granite, quartz rich strong, white, coarse grained, weathered to 0.9 m depth.							4 5	
	2			***Bedrock*** Gneiss, very strong, black, slightly fractured.			C				2 0	
	3	10	331.19 3.35	- Water bearing fracture zone at 3.2 m depth. Iron staining of exposed fracture surfaces.			C				5 4 1	331.27 January 31, 2022
	4											Bentonite
	5	15					C				1 2 0	
	6	20					C				2 4 2	Solid 50 mm PVC
	7						C				1 2	
	8	25		- Multiple fracture zones between 7.7 m and 8.8 m depth with indications of water.			C				1 2	
	9	30	325.74 8.80 325.64 8.90	***Bedrock*** Granite, strong, pink, coarse grained, moderate fracturing.			C				1 2	325.88 325.55
	10		324.94 9.60	***Bedrock*** Granite, quartz rich strong, white, coarse grained, weathered to 0.9 m depth.			C				0 1 2	
	11	35					C				4 2	
	12	40					C				1 2	Slotted 50 mm PVC Sand
	13		321.34 13.20	***Bedrock*** Granite, strong, pink, coarse grained, moderate fracturing.			C				1 2	
	14	45	320.24 14.30	- Granite colour changes to dark red at 13.8 m depth.			C				4 1	
	15	50	319.44 15.10	***Bedrock*** Gneiss, very strong, black, slightly fractured.								319.45
	16			***End of Borehole at 15.09m***								
	17	55										
	18											

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

Maple Leaf Drilling Ltd., B-54 Mobile

TETRA TECH

RECORD OF BOREHOLE

MW09-OB

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 28, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110304

BOREHOLE LOCATION: Central portion of the wetland area to the south of Sherlett Creek. EASTING: 366912

BORING METHOD	DEPTH SCALE m / ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW09-OB
Maple Leaf Drilling Ltd., B-54 Mobile Auger - Solid Stem	0.00 / 0	317.50	Ground Surface								Steel Protective Casing 318.34
			Peat Little silt, black, moist.		MW-09-OB (0.25-0.35)	A					317.50
	1 / 5				MW-09-OB (1.50-1.75)	A					317.42 January 23, 2022
		315.50									Bentonite
	2 / 10	2.00	***Silt*** Trace clay, grey, very soft, high plasticity, moist.		MW-09-OB (2.75-3.00)	A					Solid 50 mm PVC
	3 / 15		- From 3 m to 5.5 m; wet.								314.50
	4 / 20				MW-09-OB (4.25-4.50)	A					314.20
	5 / 25	312.00	- From 5.25 m to 5.5 m; little fine-grained sand.		MW-09-OB (5.25-5.50)	A					Sand
		5.50	***End of Borehole at 5.50m*** Terminated at refusal on suspected bedrock.								Slotted 50 mm PVC
	6 / 30										311.90
	7 / 35										
	8 / 40										
	9 / 45										
	10 / 50										
	11 / 55										
	12 / 60										
	13 / 65										
	14 / 70										
	15 / 75										
	16 / 80										
	17 / 85										
	18 / 90										

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW10-OB

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 29, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110273

BOREHOLE LOCATION: South-central portion of wetland area to the south of Sherlett Creek. EASTING: 366915

BORING METHOD	DEPTH SCALE m / ft	SUBSURFACE PROFILE: ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLES: SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW10-OB
Maple Leaf Drilling Ltd., B-54 Mobile Auger - Solid Stem	0.00 / 0	318.15	Ground Surface								Steel Protective Casing 319.05
		317.85 / 0.30	***Peat*** Trace small gravel, orange-red, moist.		MW-10-OB (0.10-0.35)	A				0 0 0 0	318.15
	1 / 5	317.45 / 0.70	***Peat*** Trace silt, black, moist.		MW-10-OB (0.70-0.95)	A					Bentonite
		316.95 / 1.20	***Clay*** Little peat, black.								316.15
	2 / 10		***Silt*** Trace clay, grey, very soft, high plasticity, moist.		MW-10-OB (2.3-2.55)	A					315.75
			- From 2.8 m to 5.2 m; wet.								
	3 / 10		- From 3.2 m to 5.2 m; little fine-grained sand, trace small gravel, trace coarse-grained sand.		MW-10-OB (3.20-3.45)	A	Metals		FAIL		Sand
	4 / 15										Slotted 50 mm PVC
	5	312.97 / 5.18	***End of Borehole at 5.18m*** Terminated at refusal on suspected bedrock.		MW-10-OB (4.8-5.05)	A					312.97
	6 / 20										
	7 / 25										
	8 / 25										
	9 / 30										
	10 / 35										
	11 / 35										
	12 / 40										
	13 / 45										
	14 / 45										
	15 / 50										
	16 / 50										
	17 / 55										
	18										

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

TETRA TECH

RECORD OF BOREHOLE

MW11-OB

Sheet 1 of 1

705-09240103-ALL

CLIENT: Manitoba Environment, Climate and Parks DATE DRILLED: January 29, 2022 DATUM: Geodetic

PROJECT TITLE: Sherridon Phased Groundwater Assessment PROJECT SITE: Sherridon, Manitoba NORTHING: 6110306

BOREHOLE LOCATION: North-central portion of wetland area to the south of Sherlett Creek. EASTING: 366893

BORING METHOD	DEPTH SCALE m / ft	ELEV DEPTH (m)	DESCRIPTION	SYMBOLS	SAMPLE NAME	SAMPLE TYPE	LAB TESTING (Primary)	LAB TESTING (Secondary)	GUIDELINE COMPARISON	No. of Fractures/ 0.3 m (2 4 6 8)	MONITORING WELL MW11-OB
Maple Leaf Drilling Ltd., B-54 Mobile Auger - Solid Stem	0.00 / 0	317.27	Ground Surface								Steel Protective Casing 318.04
		317.02 / 0.25	***Peat*** Trace small gravel, trace coarse-grained sand, orange-red, moist.		MW-11-OB (0.70-0.95)	A					317.27
	1 / 5	315.47 / 1.80	***Peat*** Little silt, trace small-grained and coarse-grained sand, black, wet.								317.19 February 1, 2022
	2 / 10	314.77 / 2.50	***Silt*** Some peat, trace clay, black, soft, low plasticity, wet.		MW-11-OB (2.20-2.45)	A					Bentonite / Solid 50 mm PVC
	3 / 10		***Silt*** Trace clay, grey, very soft, non-plastic, wet.		MW-11-OB (3.30-3.50)	A	Metals		FAIL		313.67
	4 / 15										313.47
	5 / 20				MW-11-OB (4.70-4.95)	A					Sand / Slotted 50 mm PVC
	6 / 20	310.47			MW-11-OB (6.20-6.45)	A					310.47
	7 / 25	6.80	***End of Borehole at 6.80m*** Terminated at refusal on suspected bedrock.								
	8 / 25										
	9 / 30										
	10 / 35										
	11 / 35										
	12 / 40										
	13 / 45										
	14 / 45										
	15 / 50										
	16 / 50										
	17 / 55										
	18										

SCALE 1: 100.0 LOGGED BY: MR CHECKED BY: BH

TETRA TECH CANADA LOG - ANALYTICAL 705-09240103-ALL-BOR-V0001-00 SHERRIDON -X-SECT.GPJ 22-5-26

APPENDIX C.1

Laboratory Certificates of Analysis – Biweekly

Surface Water Quality

Your Project #: 21-1357-005

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 687170-01-01, 687170-02-01, 687170-03-01

Report Date: 2023/02/24
Report #: R3303486
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C311540
Received: 2023/02/16, 11:58

Sample Matrix: Water
Samples Received: 27

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	20	N/A	2023/02/21	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	7	N/A	2023/02/22	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved (1)	13	N/A	2023/02/22		Auto Calc
Cadmium - low level CCME - Dissolved (1)	14	N/A	2023/02/23		Auto Calc
Cadmium - low level CCME (Total) (1)	27	N/A	2023/02/22		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	25	N/A	2023/02/19	AB SOP-00020	SM23-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	2	N/A	2023/02/21	AB SOP-00020	SM23-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	16	N/A	2023/02/22	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	11	N/A	2023/02/23	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	20	N/A	2023/02/19		Auto Calc
Hardness (1)	7	N/A	2023/02/21		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	16	N/A	2023/02/21	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	11	N/A	2023/02/22	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	26	N/A	2023/02/19	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	1	N/A	2023/02/24	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	16	2023/02/21	2023/02/21	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	11	2023/02/21	2023/02/22	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	27	N/A	2023/02/22	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	22	2023/02/21	2023/02/21	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	5	2023/02/21	2023/02/22	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	20	N/A	2023/02/21	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (1, 6)	7	N/A	2023/02/22	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (1, 7)	19	N/A	2023/02/22	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	8	N/A	2023/02/23	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	13	2023/02/17	2023/02/17	AB SOP-00061	SM 23 2540 D m

Your Project #: 21-1357-005

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 687170-01-01, 687170-02-01, 687170-03-01

Report Date: 2023/02/24
Report #: R3303486
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C311540
Received: 2023/02/16, 11:58

Sample Matrix: Water
Samples Received: 27

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Suspended Solids (NFR) (1)	14	2023/02/18	2023/02/18	AB SOP-00061	SM 23 2540 D m
Turbidity (1)	27	N/A	2023/02/17	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.

Your Project #: 21-1357-005

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 687170-01-01, 687170-02-01, 687170-03-01

Report Date: 2023/02/24
Report #: R3303486
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C311540

Received: 2023/02/16, 11:58

(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)259-0231

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC290	BMC291	BMC292	BMC293	BMC294	BMC295		
Sampling Date		2023/02/14 08:35	2023/02/14 08:45	2023/02/14 09:00	2023/02/14 09:15	2023/02/14 09:30	2023/02/14 09:35		
COC Number		687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01		
	UNITS	CL-6 SFC	CL-6 BTM	CL-5 SFC	CL-5 BTM	CL-4 SFC	CL-4 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.055	0.027	0.074	0.071	0.11	0.047	0.020	A885353
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0098	0.012	0.015	0.022	0.020	0.010	0.0030	A887722
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	A887722
Dissolved Arsenic (As)	mg/L	0.00055	0.00047	0.00050	0.00042	0.00052	0.00050	0.00020	A887722
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	A887126
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887722
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A887126
Dissolved Calcium (Ca)	mg/L	14	12	11	16	12	14	0.30	A887126
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887722
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	A887722
Dissolved Copper (Cu)	mg/L	0.0051	0.0034	0.0043	0.0056	0.0058	0.0054	0.0010	A887722
Dissolved Iron (Fe)	mg/L	0.071	0.094	0.16	0.43	0.19	0.13	0.060	A887126
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887722
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A887126
Dissolved Magnesium (Mg)	mg/L	4.2	3.6	3.6	4.1	4.0	3.8	0.20	A887126
Dissolved Manganese (Mn)	mg/L	<0.0040	0.015	0.016	0.048	0.025	<0.0040	0.0040	A887126
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887722
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	0.00057	<0.00050	<0.00050	<0.00050	0.00050	A887722
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	A887126
Dissolved Potassium (K)	mg/L	2.0	1.7	1.8	1.9	1.9	1.8	0.30	A887126
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887722
Dissolved Silicon (Si)	mg/L	0.87	0.72	1.3	1.4	1.3	0.95	0.50	A887126
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A887722
Dissolved Sodium (Na)	mg/L	2.7	2.3	2.5	2.3	2.4	2.3	0.50	A887126
Dissolved Strontium (Sr)	mg/L	0.030	0.027	0.025	0.028	0.026	0.027	0.020	A887126
Dissolved Sulphur (S)	mg/L	5.5	4.2	2.4	10	3.2	6.9	0.20	A887126
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887722
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887722
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887722
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A887722
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887722

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC290	BMC291	BMC292	BMC293	BMC294	BMC295		
Sampling Date		2023/02/14 08:35	2023/02/14 08:45	2023/02/14 09:00	2023/02/14 09:15	2023/02/14 09:30	2023/02/14 09:35		
COC Number		687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01		
	UNITS	**CL-6 SFC**	**CL-6 BTM**	**CL-5 SFC**	**CL-5 BTM**	**CL-4 SFC**	**CL-4 BTM**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.024	0.0094	0.040	0.023	0.051	0.018	0.0030	A887722
RDL = Reportable Detection Limit									

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC296	BMC297	BMC298		BMC306		
Sampling Date		2023/02/14 09:50	2023/02/14 10:00	2023/02/14 09:05		2023/02/14 10:10		
COC Number		687170-01-01	687170-01-01	687170-01-01		687170-02-01		
	UNITS	CL-8 SFC	CL-8 BTM	SW-100	QC Batch	CL-3 SFC	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.11	0.056	0.078	A885353	0.080	0.020	A885353
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.014	0.013	0.014	A887722	0.016	0.0030	A887722
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	A887722	<0.00060	0.00060	A887722
Dissolved Arsenic (As)	mg/L	0.00041	0.00043	0.00052	A887722	0.00051	0.00020	A887722
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	A887128	<0.010	0.010	A887126
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	A887722	<0.0010	0.0010	A887722
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	A887128	<0.020	0.020	A887126
Dissolved Calcium (Ca)	mg/L	12	13	11	A887128	13	0.30	A887126
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	A887722	<0.0010	0.0010	A887722
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	A887722	<0.00030	0.00030	A887722
Dissolved Copper (Cu)	mg/L	0.0063	0.0057	0.0044	A887722	0.0061	0.0010	A887722
Dissolved Iron (Fe)	mg/L	0.13	0.10	0.16	A887128	0.14	0.060	A887126
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	A887722	<0.00020	0.00020	A887722
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	A887128	<0.020	0.020	A887126
Dissolved Magnesium (Mg)	mg/L	3.7	3.9	3.4	A887128	4.0	0.20	A887126
Dissolved Manganese (Mn)	mg/L	0.014	0.0055	0.016	A887128	0.015	0.0040	A887126
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	A887722	<0.00020	0.00020	A887722
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	A887722	<0.00050	0.00050	A887722
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	A887128	<0.10	0.10	A887126
Dissolved Potassium (K)	mg/L	1.7	1.9	1.7	A887128	1.9	0.30	A887126
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	A887722	<0.00020	0.00020	A887722
Dissolved Silicon (Si)	mg/L	0.99	0.88	1.3	A887128	1.1	0.50	A887126
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	A887722	<0.00010	0.00010	A887722
Dissolved Sodium (Na)	mg/L	2.3	2.4	2.4	A887128	2.5	0.50	A887126
Dissolved Strontium (Sr)	mg/L	0.026	0.026	0.024	A887128	0.027	0.020	A887126
Dissolved Sulphur (S)	mg/L	4.1	5.0	2.4	A887128	4.5	0.20	A887126
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	A887722	<0.00020	0.00020	A887722
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	A887722	<0.0010	0.0010	A887722
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	A887722	<0.0010	0.0010	A887722
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	A887722	<0.00010	0.00010	A887722
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	A887722	<0.0010	0.0010	A887722

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC296	BMC297	BMC298		BMC306		
Sampling Date		2023/02/14 09:50	2023/02/14 10:00	2023/02/14 09:05		2023/02/14 10:10		
COC Number		687170-01-01	687170-01-01	687170-01-01		687170-02-01		
	UNITS	**CL-8 SFC**	**CL-8 BTM**	**SW-100**	**QC Batch**	**CL-3 SFC**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.040	0.030	0.039	A887722	0.045	0.0030	A887722
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC307	BMC308	BMC309	BMC310		BMC311		
Sampling Date		2023/02/14 10:20	2023/02/14 10:40	2023/02/14 11:15	2023/02/14 11:35		2023/02/14 12:00		
COC Number		687170-02-01	687170-02-01	687170-02-01	687170-02-01		687170-02-01		
	UNITS	CL-3 BTM	CL-7 SFC	CL-7 BTM	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.060	0.10	0.11	0.036	A885353	0.041	0.020	A886087
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.011	0.014	0.020	0.014	A887707	0.013	0.0030	A887707
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	A887707	<0.00060	0.00060	A887707
Dissolved Arsenic (As)	mg/L	0.00043	0.00039	0.00056	0.00049	A887707	0.00041	0.00020	A887707
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	<0.010	A887128	<0.010	0.010	A887128
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A887707	<0.0010	0.0010	A887707
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	A887128	<0.020	0.020	A887128
Dissolved Calcium (Ca)	mg/L	13	13	12	14	A887128	15	0.30	A887128
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A887707	<0.0010	0.0010	A887707
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	A887707	<0.00030	0.00030	A887707
Dissolved Copper (Cu)	mg/L	0.0055	0.0059	0.0073	0.0059	A887707	0.0057	0.0010	A887707
Dissolved Iron (Fe)	mg/L	0.12	0.14	0.13	0.14	A887128	0.16	0.060	A887128
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	0.00028	<0.00020	A887707	<0.00020	0.00020	A887707
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	A887128	<0.020	0.020	A887128
Dissolved Magnesium (Mg)	mg/L	3.9	3.9	3.8	4.0	A887128	4.1	0.20	A887128
Dissolved Manganese (Mn)	mg/L	0.0054	0.015	0.013	<0.0040	A887128	<0.0040	0.0040	A887128
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A887707	<0.00020	0.00020	A887707
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	0.00069	<0.00050	A887707	<0.00050	0.00050	A887707
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	A887128	<0.10	0.10	A887128
Dissolved Potassium (K)	mg/L	1.8	1.9	1.9	1.9	A887128	1.9	0.30	A887128
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A887707	<0.00020	0.00020	A887707
Dissolved Silicon (Si)	mg/L	0.96	1.1	1.1	0.97	A887128	1.0	0.50	A887128
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	A887707	<0.00010	0.00010	A887707
Dissolved Sodium (Na)	mg/L	2.4	2.4	2.5	2.5	A887128	2.4	0.50	A887128
Dissolved Strontium (Sr)	mg/L	0.027	0.027	0.026	0.029	A887128	0.028	0.020	A887128
Dissolved Sulphur (S)	mg/L	5.9	4.5	4.6	7.6	A887128	7.6	0.20	A887128
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A887707	<0.00020	0.00020	A887707
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A887707	<0.0010	0.0010	A887707
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A887707	<0.0010	0.0010	A887707
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	A887707	<0.00010	0.00010	A887707
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A887707	<0.0010	0.0010	A887707

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC307	BMC308	BMC309	BMC310		BMC311		
Sampling Date		2023/02/14 10:20	2023/02/14 10:40	2023/02/14 11:15	2023/02/14 11:35		2023/02/14 12:00		
COC Number		687170-02-01	687170-02-01	687170-02-01	687170-02-01		687170-02-01		
	UNITS	**CL-3 BTM**	**CL-7 SFC**	**CL-7 BTM**	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.029	0.046	0.049	0.017	A887707	0.018	0.0030	A887707
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC312			BMC312			BMC313		
Sampling Date		2023/02/14 11:45			2023/02/14 11:45			2023/02/14 13:35		
COC Number		687170-02-01			687170-02-01			687170-02-01		
	UNITS	SW-101	RDL	QC Batch	SW-101 Lab-Dup	RDL	QC Batch	EB-1	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.038	0.020	A886087				0.83	0.020	A886087
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.026	0.0030	A887722	0.022	0.0030	A887722	0.016	0.0030	A887707
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	A887722	<0.00060	0.00060	A887722	<0.00060	0.00060	A887707
Dissolved Arsenic (As)	mg/L	0.00047	0.00020	A887722	0.00041	0.00020	A887722	0.00023	0.00020	A887707
Dissolved Barium (Ba)	mg/L	<0.010	0.010	A887128				0.019	0.010	A887128
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	A887722	<0.0010	0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Boron (B)	mg/L	<0.020	0.020	A887128				<0.020	0.020	A887128
Dissolved Calcium (Ca)	mg/L	15	0.30	A887128				74	0.30	A887128
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	A887722	<0.0010	0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	A887722	<0.00030	0.00030	A887722	0.00060	0.00030	A887707
Dissolved Copper (Cu)	mg/L	0.0061	0.0010	A887722	0.0059	0.0010	A887722	0.011	0.0010	A887707
Dissolved Iron (Fe)	mg/L	0.17	0.060	A887128				0.42	0.060	A887128
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	A887722	<0.00020	0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Lithium (Li)	mg/L	<0.020	0.020	A887128				<0.020	0.020	A887128
Dissolved Magnesium (Mg)	mg/L	4.1	0.20	A887128				13	0.20	A887128
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	A887128				0.13	0.0040	A887128
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	A887722	<0.00020	0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	A887722	<0.00050	0.00050	A887722	0.0019	0.00050	A887707
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	A887128				<0.10	0.10	A887128
Dissolved Potassium (K)	mg/L	1.9	0.30	A887128				6.1	0.30	A887128
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	A887722	<0.00020	0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Silicon (Si)	mg/L	1.1	0.50	A887128				1.8	0.50	A887128
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	A887722	<0.00010	0.00010	A887722	<0.00010	0.00010	A887707
Dissolved Sodium (Na)	mg/L	2.4	0.50	A887128				4.4	0.50	A887128
Dissolved Strontium (Sr)	mg/L	0.027	0.020	A887128				0.064	0.020	A887128
Dissolved Sulphur (S)	mg/L	8.0	0.20	A887128				79	0.20	A887128
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	A887722	<0.00020	0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	A887722	<0.0010	0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	A887722	<0.0010	0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	A887722	<0.00010	0.00010	A887722	<0.00010	0.00010	A887707

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC312			BMC312			BMC313		
Sampling Date		2023/02/14 11:45			2023/02/14 11:45			2023/02/14 13:35		
COC Number		687170-02-01			687170-02-01			687170-02-01		
	UNITS	**SW-101**	**RDL**	**QC Batch**	**SW-101 Lab-Dup**	**RDL**	**QC Batch**	**EB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	A887722	<0.0010	0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Zinc (Zn)	mg/L	0.015	0.0030	A887722	0.014	0.0030	A887722	0.24	0.0030	A887707

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC314			BMC314			BMC315		
Sampling Date		2023/02/14 13:50			2023/02/14 13:50			2023/02/14 13:45		
COC Number		687170-02-01			687170-02-01			687170-02-01		
	UNITS	EB-2	RDL	QC Batch	EB-2 Lab-Dup	RDL	QC Batch	SW-102	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.88	0.020	A886087				0.81	0.020	A886087
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.022	0.0030	A887707				0.016	0.0030	A887707
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	A887707				<0.00060	0.00060	A887707
Dissolved Arsenic (As)	mg/L	0.00020	0.00020	A887707				0.00026	0.00020	A887707
Dissolved Barium (Ba)	mg/L	0.019	0.010	A887128	0.019	0.010	A887128	0.018	0.010	A887128
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	A887707				<0.0010	0.0010	A887707
Dissolved Boron (B)	mg/L	<0.020	0.020	A887128	<0.020	0.020	A887128	<0.020	0.020	A887128
Dissolved Calcium (Ca)	mg/L	75	0.30	A887128	77	0.30	A887128	69	0.30	A887128
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	A887707				<0.0010	0.0010	A887707
Dissolved Cobalt (Co)	mg/L	0.00066	0.00030	A887707				0.00062	0.00030	A887707
Dissolved Copper (Cu)	mg/L	0.013	0.0010	A887707				0.011	0.0010	A887707
Dissolved Iron (Fe)	mg/L	0.50	0.060	A887128	0.52	0.060	A887128	0.40	0.060	A887128
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	A887707				<0.00020	0.00020	A887707
Dissolved Lithium (Li)	mg/L	<0.020	0.020	A887128	<0.020	0.020	A887128	<0.020	0.020	A887128
Dissolved Magnesium (Mg)	mg/L	13	0.20	A887128	13	0.20	A887128	12	0.20	A887128
Dissolved Manganese (Mn)	mg/L	0.13	0.0040	A887128	0.13	0.0040	A887128	0.13	0.0040	A887128
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	A887707				<0.00020	0.00020	A887707
Dissolved Nickel (Ni)	mg/L	0.0021	0.00050	A887707				0.0018	0.00050	A887707
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	A887128	<0.10	0.10	A887128	<0.10	0.10	A887128
Dissolved Potassium (K)	mg/L	6.2	0.30	A887128	6.4	0.30	A887128	5.7	0.30	A887128
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	A887707				<0.00020	0.00020	A887707
Dissolved Silicon (Si)	mg/L	1.7	0.50	A887128	1.8	0.50	A887128	1.7	0.50	A887128
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	A887707				<0.00010	0.00010	A887707
Dissolved Sodium (Na)	mg/L	4.4	0.50	A887128	4.5	0.50	A887128	4.1	0.50	A887128
Dissolved Strontium (Sr)	mg/L	0.067	0.020	A887128	0.068	0.020	A887128	0.061	0.020	A887128
Dissolved Sulphur (S)	mg/L	83	0.20	A887128	85	0.20	A887128	76	0.20	A887128
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	A887707				<0.00020	0.00020	A887707
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	A887707				<0.0010	0.0010	A887707
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	A887707				<0.0010	0.0010	A887707
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	A887707				<0.00010	0.00010	A887707

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC314			BMC314			BMC315		
Sampling Date		2023/02/14 13:50			2023/02/14 13:50			2023/02/14 13:45		
COC Number		687170-02-01			687170-02-01			687170-02-01		
	UNITS	**EB-2**	**RDL**	**QC Batch**	**EB-2 Lab-Dup**	**RDL**	**QC Batch**	**SW-102**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	A887707				<0.0010	0.0010	A887707
Dissolved Zinc (Zn)	mg/L	0.26	0.0030	A887707				0.23	0.0030	A887707

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC333		BMC334	BMC335	BMC336	BMC337		
Sampling Date		2023/02/14 14:15		2023/02/14 14:25	2023/02/14 13:25	2023/02/14 14:00	2023/02/14 12:50		
COC Number		687170-03-01		687170-03-01	687170-03-01	687170-03-01	687170-03-01		
	UNITS	**SB-1**	**QC Batch**	**SB-2**	**CB-1**	**CB-2**	**NB-1**	**RDL**	**QC Batch**
Elements									
Dissolved Cadmium (Cd)	ug/L	0.59	A886087	0.58	0.60	0.72	0.77	0.020	A886087
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.019	A887722	0.017	0.017	0.015	0.031	0.0030	A887707
Dissolved Antimony (Sb)	mg/L	<0.00060	A887722	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	A887707
Dissolved Arsenic (As)	mg/L	0.00026	A887722	0.00028	0.00023	0.00022	0.00024	0.00020	A887707
Dissolved Barium (Ba)	mg/L	0.015	A887128	0.014	0.017	0.018	0.018	0.010	A887128
Dissolved Beryllium (Be)	mg/L	<0.0010	A887722	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887707
Dissolved Boron (B)	mg/L	<0.020	A887128	<0.020	<0.020	<0.020	<0.020	0.020	A887128
Dissolved Calcium (Ca)	mg/L	55	A887128	53	63	72	74	0.30	A887128
Dissolved Chromium (Cr)	mg/L	<0.0010	A887722	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887707
Dissolved Cobalt (Co)	mg/L	0.00046	A887722	0.00041	0.00047	0.00054	0.00051	0.00030	A887707
Dissolved Copper (Cu)	mg/L	0.0093	A887722	0.0088	0.0093	0.011	0.011	0.0010	A887707
Dissolved Iron (Fe)	mg/L	0.29	A887128	0.29	0.32	0.38	0.38	0.060	A887128
Dissolved Lead (Pb)	mg/L	<0.00020	A887722	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887707
Dissolved Lithium (Li)	mg/L	<0.020	A887128	<0.020	<0.020	<0.020	<0.020	0.020	A887128
Dissolved Magnesium (Mg)	mg/L	9.7	A887128	9.1	11	13	13	0.20	A887128
Dissolved Manganese (Mn)	mg/L	0.11	A887128	0.096	0.12	0.12	0.12	0.0040	A887128
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A887722	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887707
Dissolved Nickel (Ni)	mg/L	0.0012	A887722	0.0014	0.0015	0.0023	0.0016	0.00050	A887707
Dissolved Phosphorus (P)	mg/L	<0.10	A887128	<0.10	<0.10	<0.10	<0.10	0.10	A887128
Dissolved Potassium (K)	mg/L	4.7	A887128	4.4	5.3	5.9	6.0	0.30	A887128
Dissolved Selenium (Se)	mg/L	<0.00020	A887722	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887707
Dissolved Silicon (Si)	mg/L	1.5	A887128	1.4	1.7	1.6	1.7	0.50	A887128
Dissolved Silver (Ag)	mg/L	<0.00010	A887722	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A887707
Dissolved Sodium (Na)	mg/L	3.5	A887128	3.3	3.9	4.2	4.3	0.50	A887128
Dissolved Strontium (Sr)	mg/L	0.050	A887128	0.048	0.056	0.061	0.064	0.020	A887128
Dissolved Sulphur (S)	mg/L	57	A887128	54	67	76	81	0.20	A887128
Dissolved Thallium (Tl)	mg/L	<0.00020	A887722	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887707
Dissolved Tin (Sn)	mg/L	<0.0010	A887722	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887707
Dissolved Titanium (Ti)	mg/L	<0.0010	A887722	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887707
Dissolved Uranium (U)	mg/L	<0.00010	A887722	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A887707
Dissolved Vanadium (V)	mg/L	<0.0010	A887722	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887707

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC333		BMC334	BMC335	BMC336	BMC337		
Sampling Date		2023/02/14 14:15		2023/02/14 14:25	2023/02/14 13:25	2023/02/14 14:00	2023/02/14 12:50		
COC Number		687170-03-01		687170-03-01	687170-03-01	687170-03-01	687170-03-01		
	UNITS	**SB-1**	**QC Batch**	**SB-2**	**CB-1**	**CB-2**	**NB-1**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.17	A887722	0.17	0.18	0.21	0.22	0.0030	A887707
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC338		BMC339		BMC340		
Sampling Date		2023/02/14 13:00		2023/02/14 12:25		2023/02/14 14:40		
COC Number		687170-03-01		687170-03-01		687170-03-01		
	UNITS	NB-2	QC Batch	CLD	QC Batch	SC-1	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.74	A886087	0.71	A886087	0.089	0.020	A886087
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.017	A887707	0.019	A887722	0.015	0.0030	A887707
Dissolved Antimony (Sb)	mg/L	<0.00060	A887707	<0.00060	A887722	<0.00060	0.00060	A887707
Dissolved Arsenic (As)	mg/L	0.00027	A887707	0.00027	A887722	0.00051	0.00020	A887707
Dissolved Barium (Ba)	mg/L	0.018	A887128	0.017	A887128	<0.010	0.010	A891522
Dissolved Beryllium (Be)	mg/L	<0.0010	A887707	<0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Boron (B)	mg/L	<0.020	A887128	<0.020	A887128	<0.020	0.020	A891522
Dissolved Calcium (Ca)	mg/L	67	A887128	73	A887128	9.3	0.30	A891522
Dissolved Chromium (Cr)	mg/L	<0.0010	A887707	<0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Cobalt (Co)	mg/L	0.00053	A887707	0.00053	A887722	<0.00030	0.00030	A887707
Dissolved Copper (Cu)	mg/L	0.010	A887707	0.011	A887722	0.0037	0.0010	A887707
Dissolved Iron (Fe)	mg/L	0.35	A887128	0.39	A887128	<0.060	0.060	A891522
Dissolved Lead (Pb)	mg/L	<0.00020	A887707	<0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Lithium (Li)	mg/L	<0.020	A887128	<0.020	A887128	<0.020	0.020	A891522
Dissolved Magnesium (Mg)	mg/L	11	A887128	12	A887128	3.0	0.20	A891522
Dissolved Manganese (Mn)	mg/L	0.12	A887128	0.12	A887128	0.010	0.0040	A891522
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A887707	<0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Nickel (Ni)	mg/L	0.0017	A887707	0.0016	A887722	<0.00050	0.00050	A887707
Dissolved Phosphorus (P)	mg/L	<0.10	A887128	<0.10	A887128	<0.10	0.10	A891522
Dissolved Potassium (K)	mg/L	5.6	A887128	5.9	A887128	1.7	0.30	A891522
Dissolved Selenium (Se)	mg/L	<0.00020	A887707	<0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Silicon (Si)	mg/L	1.7	A887128	1.6	A887128	1.1	0.50	A891522
Dissolved Silver (Ag)	mg/L	<0.00010	A887707	<0.00010	A887722	<0.00010	0.00010	A887707
Dissolved Sodium (Na)	mg/L	4.0	A887128	4.2	A887128	2.1	0.50	A891522
Dissolved Strontium (Sr)	mg/L	0.059	A887128	0.062	A887128	0.027	0.020	A891522
Dissolved Sulphur (S)	mg/L	73	A887128	79	A887128	1.6	0.20	A891522
Dissolved Thallium (Tl)	mg/L	<0.00020	A887707	<0.00020	A887722	<0.00020	0.00020	A887707
Dissolved Tin (Sn)	mg/L	<0.0010	A887707	<0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Titanium (Ti)	mg/L	<0.0010	A887707	<0.0010	A887722	<0.0010	0.0010	A887707
Dissolved Uranium (U)	mg/L	<0.00010	A887707	<0.00010	A887722	<0.00010	0.00010	A887707
Dissolved Vanadium (V)	mg/L	<0.0010	A887707	<0.0010	A887722	<0.0010	0.0010	A887707
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BMC338		BMC339		BMC340		
Sampling Date		2023/02/14 13:00		2023/02/14 12:25		2023/02/14 14:40		
COC Number		687170-03-01		687170-03-01		687170-03-01		
	UNITS	**NB-2**	**QC Batch**	**CLD**	**QC Batch**	**SC-1**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.22	A887707	0.22	A887722	0.034	0.0030	A887707
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC290	BMC291	BMC292	BMC293	BMC294	BMC295		
Sampling Date		2023/02/14 08:35	2023/02/14 08:45	2023/02/14 09:00	2023/02/14 09:15	2023/02/14 09:30	2023/02/14 09:35		
COC Number		687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01		
	UNITS	CL-6 SFC	CL-6 BTM	CL-5 SFC	CL-5 BTM	CL-4 SFC	CL-4 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.073	0.032	0.095	0.11	0.11	0.055	0.020	A885723
Total Aluminum (Al)	mg/L	0.033	0.032	0.035	0.049	0.033	0.040	0.0030	A887926
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	A887926
Total Arsenic (As)	mg/L	0.00060	0.00056	0.00046	0.00048	0.00050	0.00050	0.00020	A887926
Total Barium (Ba)	mg/L	0.011	0.011	<0.010	0.011	0.010	<0.010	0.010	A887928
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887926
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A887928
Total Calcium (Ca)	mg/L	12	11	9.7	15	11	12	0.30	A887928
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887926
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	A887926
Total Copper (Cu)	mg/L	0.0069	0.0040	0.0051	0.0081	0.0062	0.0062	0.0010	A887926
Total Iron (Fe)	mg/L	0.14	0.20	0.26	0.80	0.29	0.29	0.060	A887928
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A887928
Total Magnesium (Mg)	mg/L	3.5	3.4	3.0	3.6	3.3	3.4	0.20	A887928
Total Manganese (Mn)	mg/L	0.0080	0.023	0.019	0.054	0.027	0.0080	0.0040	A887928
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	0.00054	<0.00050	0.00051	0.00050	A887926
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	A887928
Total Potassium (K)	mg/L	1.7	1.5	1.4	1.7	1.6	1.5	0.30	A887928
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Silicon (Si)	mg/L	0.83	0.79	1.2	1.6	1.2	0.95	0.50	A887928
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A887926
Total Sodium (Na)	mg/L	2.4	2.2	2.2	2.1	2.1	2.1	0.50	A887928
Total Strontium (Sr)	mg/L	0.031	0.030	0.025	0.030	0.028	0.028	0.020	A887928
Total Sulphur (S)	mg/L	4.7	3.9	2.2	9.3	2.8	6.3	0.20	A887928
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887926
Total Titanium (Ti)	mg/L	0.0010	0.0014	0.0013	0.0012	<0.0010	0.0014	0.0010	A887926
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A887926
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A887926

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC290	BMC291	BMC292	BMC293	BMC294	BMC295		
Sampling Date		2023/02/14 08:35	2023/02/14 08:45	2023/02/14 09:00	2023/02/14 09:15	2023/02/14 09:30	2023/02/14 09:35		
COC Number		687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01	687170-01-01		
	UNITS	**CL-6 SFC**	**CL-6 BTM**	**CL-5 SFC**	**CL-5 BTM**	**CL-4 SFC**	**CL-4 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.030	0.012	0.041	0.033	0.057	0.022	0.0030	A887926
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC296	BMC297			BMC297		
Sampling Date		2023/02/14 09:50	2023/02/14 10:00			2023/02/14 10:00		
COC Number		687170-01-01	687170-01-01			687170-01-01		
	UNITS	CL-8 SFC	CL-8 BTM	RDL	QC Batch	CL-8 BTM Lab-Dup	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.11	0.099	0.020	A885723			
Total Aluminum (Al)	mg/L	0.035	0.040	0.0030	A887926	0.033	0.0030	A887926
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	A887926	<0.00060	0.00060	A887926
Total Arsenic (As)	mg/L	0.00052	0.00058	0.00020	A887926	0.00049	0.00020	A887926
Total Barium (Ba)	mg/L	<0.010	0.010	0.010	A887928	<0.010	0.010	A887928
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	A887926	<0.0010	0.0010	A887926
Total Boron (B)	mg/L	<0.020	<0.020	0.020	A887928	<0.020	0.020	A887928
Total Calcium (Ca)	mg/L	11	11	0.30	A887928	11	0.30	A887928
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	A887926	<0.0010	0.0010	A887926
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	A887926	<0.00030	0.00030	A887926
Total Copper (Cu)	mg/L	0.0068	0.0085	0.0010	A887926	0.0066	0.0010	A887926
Total Iron (Fe)	mg/L	0.24	0.23	0.060	A887928	0.21	0.060	A887928
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	A887926	<0.00020	0.00020	A887926
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	A887928	<0.020	0.020	A887928
Total Magnesium (Mg)	mg/L	3.3	3.3	0.20	A887928	3.3	0.20	A887928
Total Manganese (Mn)	mg/L	0.018	0.011	0.0040	A887928	0.011	0.0040	A887928
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	A887926	<0.00020	0.00020	A887926
Total Nickel (Ni)	mg/L	0.00058	0.00056	0.00050	A887926	0.00066	0.00050	A887926
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	A887928	<0.10	0.10	A887928
Total Potassium (K)	mg/L	1.6	1.6	0.30	A887928	1.6	0.30	A887928
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	A887926	<0.00020	0.00020	A887926
Total Silicon (Si)	mg/L	1.0	0.96	0.50	A887928	0.93	0.50	A887928
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	A887926	<0.00010	0.00010	A887926
Total Sodium (Na)	mg/L	2.2	2.2	0.50	A887928	2.2	0.50	A887928
Total Strontium (Sr)	mg/L	0.028	0.028	0.020	A887928	0.028	0.020	A887928
Total Sulphur (S)	mg/L	3.8	4.7	0.20	A887928	4.7	0.20	A887928
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	A887926	<0.00020	0.00020	A887926
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	A887926	<0.0010	0.0010	A887926
Total Titanium (Ti)	mg/L	0.0019	0.0015	0.0010	A887926	0.0019	0.0010	A887926
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	A887926	<0.00010	0.00010	A887926
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	A887926	<0.0010	0.0010	A887926

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC296	BMC297			BMC297		
Sampling Date		2023/02/14 09:50	2023/02/14 10:00			2023/02/14 10:00		
COC Number		687170-01-01	687170-01-01			687170-01-01		
	UNITS	**CL-8 SFC**	**CL-8 BTM**	**RDL**	**QC Batch**	**CL-8 BTM Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.050	0.042	0.0030	A887926	0.035	0.0030	A887926

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC298		BMC306		BMC307	BMC308		
Sampling Date		2023/02/14 09:05		2023/02/14 10:10		2023/02/14 10:20	2023/02/14 10:40		
COC Number		687170-01-01		687170-02-01		687170-02-01	687170-02-01		
	UNITS	SW-100	QC Batch	CL-3 SFC	QC Batch	CL-3 BTM	CL-7 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.15	A885723	0.11	A885723	0.069	0.12	0.020	A885723
Total Aluminum (Al)	mg/L	0.080	A888011	0.034	A887926	0.033	0.039	0.0030	A888011
Total Antimony (Sb)	mg/L	<0.00060	A888011	<0.00060	A887926	<0.00060	<0.00060	0.00060	A888011
Total Arsenic (As)	mg/L	0.00057	A888011	0.00049	A887926	0.00049	0.00061	0.00020	A888011
Total Barium (Ba)	mg/L	0.010	A888012	<0.010	A887928	<0.010	0.010	0.010	A888012
Total Beryllium (Be)	mg/L	<0.0010	A888011	<0.0010	A887926	<0.0010	<0.0010	0.0010	A888011
Total Boron (B)	mg/L	<0.020	A888012	<0.020	A887928	<0.020	<0.020	0.020	A888012
Total Calcium (Ca)	mg/L	9.7	A888012	11	A887928	11	11	0.30	A888012
Total Chromium (Cr)	mg/L	0.0012	A888011	<0.0010	A887926	<0.0010	<0.0010	0.0010	A888011
Total Cobalt (Co)	mg/L	<0.00030	A888011	<0.00030	A887926	<0.00030	<0.00030	0.00030	A888011
Total Copper (Cu)	mg/L	0.033	A888011	0.0065	A887926	0.0060	0.0077	0.0010	A888011
Total Iron (Fe)	mg/L	0.25	A888012	0.24	A887928	0.20	0.21	0.060	A888012
Total Lead (Pb)	mg/L	0.00073	A888011	<0.00020	A887926	<0.00020	<0.00020	0.00020	A888011
Total Lithium (Li)	mg/L	<0.020	A888012	<0.020	A887928	<0.020	<0.020	0.020	A888012
Total Magnesium (Mg)	mg/L	3.0	A888012	3.3	A887928	3.2	3.3	0.20	A888012
Total Manganese (Mn)	mg/L	0.019	A888012	0.018	A887928	0.0096	0.018	0.0040	A888012
Total Molybdenum (Mo)	mg/L	0.00074	A888011	<0.00020	A887926	<0.00020	<0.00020	0.00020	A888011
Total Nickel (Ni)	mg/L	0.036	A888011	0.00069	A887926	<0.00050	<0.00050	0.00050	A888011
Total Phosphorus (P)	mg/L	<0.10	A888012	<0.10	A887928	<0.10	<0.10	0.10	A888012
Total Potassium (K)	mg/L	1.7	A888012	1.6	A887928	1.4	1.4	0.30	A888012
Total Selenium (Se)	mg/L	0.00028	A888011	<0.00020	A887926	<0.00020	<0.00020	0.00020	A888011
Total Silicon (Si)	mg/L	1.3	A888012	1.0	A887928	0.90	1.0	0.50	A888012
Total Silver (Ag)	mg/L	<0.00010	A888011	<0.00010	A887926	<0.00010	<0.00010	0.00010	A888011
Total Sodium (Na)	mg/L	2.4	A888012	2.2	A887928	2.1	2.1	0.50	A888012
Total Strontium (Sr)	mg/L	0.026	A888012	0.028	A887928	0.028	0.028	0.020	A888012
Total Sulphur (S)	mg/L	2.2	A888012	3.8	A887928	4.8	3.8	0.20	A888012
Total Thallium (Tl)	mg/L	<0.00020	A888011	<0.00020	A887926	<0.00020	<0.00020	0.00020	A888011
Total Tin (Sn)	mg/L	0.0019	A888011	<0.0010	A887926	<0.0010	<0.0010	0.0010	A888011
Total Titanium (Ti)	mg/L	0.0015	A888011	<0.0010	A887926	0.0011	0.0010	0.0010	A888011
Total Uranium (U)	mg/L	<0.00010	A888011	<0.00010	A887926	<0.00010	<0.00010	0.00010	A888011
Total Vanadium (V)	mg/L	<0.0010	A888011	<0.0010	A887926	<0.0010	<0.0010	0.0010	A888011

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC298		BMC306		BMC307	BMC308		
Sampling Date		2023/02/14 09:05		2023/02/14 10:10		2023/02/14 10:20	2023/02/14 10:40		
COC Number		687170-01-01		687170-02-01		687170-02-01	687170-02-01		
	UNITS	**SW-100**	**QC Batch**	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**CL-7 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.24	A888011	0.049	A887926	0.029	0.056	0.0030	A888011
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC309	BMC310		BMC311		BMC312		
Sampling Date		2023/02/14 11:15	2023/02/14 11:35		2023/02/14 12:00		2023/02/14 11:45		
COC Number		687170-02-01	687170-02-01		687170-02-01		687170-02-01		
	UNITS	CL-7 BTM	CL-2 SFC	QC Batch	CL-2 BTM	QC Batch	SW-101	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.13	0.040	A885723	0.044	A885723	0.055	0.020	A885723
Total Aluminum (Al)	mg/L	0.043	0.032	A888011	0.042	A887926	0.037	0.0030	A888011
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	A888011	<0.00060	A887926	<0.00060	0.00060	A888011
Total Arsenic (As)	mg/L	0.00065	0.00052	A888011	0.00049	A887926	0.00038	0.00020	A888011
Total Barium (Ba)	mg/L	0.011	0.010	A888012	<0.010	A887928	<0.010	0.010	A888012
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	A888011	<0.0010	A887926	<0.0010	0.0010	A888011
Total Boron (B)	mg/L	<0.020	<0.020	A888012	<0.020	A887928	<0.020	0.020	A888012
Total Calcium (Ca)	mg/L	11	13	A888012	13	A887928	12	0.30	A888012
Total Chromium (Cr)	mg/L	0.0018	<0.0010	A888011	<0.0010	A887926	<0.0010	0.0010	A888011
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	A888011	<0.00030	A887926	<0.00030	0.00030	A888011
Total Copper (Cu)	mg/L	0.0098	0.0056	A888011	0.0063	A887926	0.0057	0.0010	A888011
Total Iron (Fe)	mg/L	0.24	0.22	A888012	0.30	A887928	0.28	0.060	A888012
Total Lead (Pb)	mg/L	0.00062	<0.00020	A888011	<0.00020	A887926	<0.00020	0.00020	A888011
Total Lithium (Li)	mg/L	<0.020	<0.020	A888012	<0.020	A887928	<0.020	0.020	A888012
Total Magnesium (Mg)	mg/L	3.2	3.5	A888012	3.5	A887928	3.4	0.20	A888012
Total Manganese (Mn)	mg/L	0.017	<0.0040	A888012	0.0043	A887928	0.0042	0.0040	A888012
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	A888011	<0.00020	A887926	<0.00020	0.00020	A888011
Total Nickel (Ni)	mg/L	0.0012	<0.00050	A888011	<0.00050	A887926	0.00054	0.00050	A888011
Total Phosphorus (P)	mg/L	<0.10	<0.10	A888012	<0.10	A887928	<0.10	0.10	A888012
Total Potassium (K)	mg/L	1.5	1.6	A888012	1.6	A887928	1.5	0.30	A888012
Total Selenium (Se)	mg/L	<0.00020	<0.00020	A888011	<0.00020	A887926	<0.00020	0.00020	A888011
Total Silicon (Si)	mg/L	1.0	0.97	A888012	1.0	A887928	1.0	0.50	A888012
Total Silver (Ag)	mg/L	<0.00010	<0.00010	A888011	<0.00010	A887926	<0.00010	0.00010	A888011
Total Sodium (Na)	mg/L	2.2	2.2	A888012	2.2	A887928	2.1	0.50	A888012
Total Strontium (Sr)	mg/L	0.028	0.031	A888012	0.030	A887928	0.029	0.020	A888012
Total Sulphur (S)	mg/L	3.8	6.6	A888012	6.8	A887928	6.5	0.20	A888012
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	A888011	<0.00020	A887926	<0.00020	0.00020	A888011
Total Tin (Sn)	mg/L	<0.0010	<0.0010	A888011	<0.0010	A887926	<0.0010	0.0010	A888011
Total Titanium (Ti)	mg/L	0.0015	<0.0010	A888011	0.0012	A887926	<0.0010	0.0010	A888011
Total Uranium (U)	mg/L	<0.00010	<0.00010	A888011	<0.00010	A887926	<0.00010	0.00010	A888011
Total Vanadium (V)	mg/L	<0.0010	<0.0010	A888011	<0.0010	A887926	<0.0010	0.0010	A888011

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC309	BMC310		BMC311		BMC312		
Sampling Date		2023/02/14 11:15	2023/02/14 11:35		2023/02/14 12:00		2023/02/14 11:45		
COC Number		687170-02-01	687170-02-01		687170-02-01		687170-02-01		
	UNITS	**CL-7 BTM**	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**QC Batch**	**SW-101**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.051	0.013	A888011	0.020	A887926	0.017	0.0030	A888011
RDL = Reportable Detection Limit									

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC313	BMC314	BMC315			BMC315		
Sampling Date		2023/02/14 13:35	2023/02/14 13:50	2023/02/14 13:45			2023/02/14 13:45		
COC Number		687170-02-01	687170-02-01	687170-02-01			687170-02-01		
	UNITS	EB-1	EB-2	SW-102	RDL	QC Batch	SW-102 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.81	0.87	0.82	0.020	A885723			
Total Aluminum (Al)	mg/L	0.068	0.072	0.072	0.0030	A888011	0.071	0.0030	A888011
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	A888011	<0.00060	0.00060	A888011
Total Arsenic (As)	mg/L	0.00039	0.00034	0.00040	0.00020	A888011	0.00030	0.00020	A888011
Total Barium (Ba)	mg/L	0.020	0.022	0.020	0.010	A888012	0.020	0.010	A888012
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A888011	<0.0010	0.0010	A888011
Total Boron (B)	mg/L	<0.020	0.021	<0.020	0.020	A888012	<0.020	0.020	A888012
Total Calcium (Ca)	mg/L	62	68	60	0.30	A888012	62	0.30	A888012
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A888011	<0.0010	0.0010	A888011
Total Cobalt (Co)	mg/L	0.00058	0.00064	0.00057	0.00030	A888011	0.00059	0.00030	A888011
Total Copper (Cu)	mg/L	0.015	0.015	0.015	0.0010	A888011	0.015	0.0010	A888011
Total Iron (Fe)	mg/L	3.2	3.4	3.1	0.060	A888012	3.2	0.060	A888012
Total Lead (Pb)	mg/L	0.00024	<0.00020	0.00021	0.00020	A888011	0.00022	0.00020	A888011
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	A888012	<0.020	0.020	A888012
Total Magnesium (Mg)	mg/L	11	11	10	0.20	A888012	10	0.20	A888012
Total Manganese (Mn)	mg/L	0.12	0.13	0.12	0.0040	A888012	0.12	0.0040	A888012
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A888011	<0.00020	0.00020	A888011
Total Nickel (Ni)	mg/L	0.0016	0.0017	0.0017	0.00050	A888011	0.0016	0.00050	A888011
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	A888012	<0.10	0.10	A888012
Total Potassium (K)	mg/L	5.1	5.4	4.9	0.30	A888012	5.0	0.30	A888012
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A888011	<0.00020	0.00020	A888011
Total Silicon (Si)	mg/L	1.7	1.9	1.7	0.50	A888012	1.8	0.50	A888012
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	A888011	<0.00010	0.00010	A888011
Total Sodium (Na)	mg/L	3.9	4.2	3.8	0.50	A888012	3.9	0.50	A888012
Total Strontium (Sr)	mg/L	0.072	0.078	0.070	0.020	A888012	0.072	0.020	A888012
Total Sulphur (S)	mg/L	67	75	65	0.20	A888012	67	0.20	A888012
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A888011	<0.00020	0.00020	A888011
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A888011	<0.0010	0.0010	A888011
Total Titanium (Ti)	mg/L	0.0032	0.0027	0.0026	0.0010	A888011	0.0020	0.0010	A888011
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	A888011	<0.00010	0.00010	A888011
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A888011	<0.0010	0.0010	A888011

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC313	BMC314	BMC315			BMC315		
Sampling Date		2023/02/14 13:35	2023/02/14 13:50	2023/02/14 13:45			2023/02/14 13:45		
COC Number		687170-02-01	687170-02-01	687170-02-01			687170-02-01		
	UNITS	**EB-1**	**EB-2**	**SW-102**	**RDL**	**QC Batch**	**SW-102 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.22	0.23	0.22	0.0030	A888011	0.23	0.0030	A888011

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC333	BMC334		BMC335		BMC336		
Sampling Date		2023/02/14 14:15	2023/02/14 14:25		2023/02/14 13:25		2023/02/14 14:00		
COC Number		687170-03-01	687170-03-01		687170-03-01		687170-03-01		
	UNITS	SB-1	SB-2	QC Batch	CB-1	QC Batch	CB-2	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.63	0.65	A885723	0.72	A886088	0.70	0.020	A886088
Total Aluminum (Al)	mg/L	0.15	0.17	A887926	0.086	A887926	0.066	0.0030	A888011
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	A887926	<0.00060	A887926	<0.00060	0.00060	A888011
Total Arsenic (As)	mg/L	0.00034	0.00028	A887926	0.00038	A887926	0.00036	0.00020	A888011
Total Barium (Ba)	mg/L	0.018	0.018	A887928	0.020	A887928	0.019	0.010	A888012
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	A887926	<0.0010	A887926	<0.0010	0.0010	A888011
Total Boron (B)	mg/L	<0.020	<0.020	A887928	<0.020	A887928	<0.020	0.020	A888012
Total Calcium (Ca)	mg/L	48	49	A887928	58	A887928	59	0.30	A888012
Total Chromium (Cr)	mg/L	0.0056	<0.0010	A887926	<0.0010	A887926	<0.0010	0.0010	A888011
Total Cobalt (Co)	mg/L	0.00056	0.00057	A887926	0.00060	A887926	0.00056	0.00030	A888011
Total Copper (Cu)	mg/L	0.013	0.013	A887926	0.013	A887926	0.014	0.0010	A888011
Total Iron (Fe)	mg/L	2.3	2.6	A887928	2.2	A887928	3.4	0.060	A888012
Total Lead (Pb)	mg/L	0.00032	<0.00020	A887926	<0.00020	A887926	<0.00020	0.00020	A888011
Total Lithium (Li)	mg/L	<0.020	<0.020	A887928	<0.020	A887928	<0.020	0.020	A888012
Total Magnesium (Mg)	mg/L	8.3	8.3	A887928	9.8	A887928	9.8	0.20	A888012
Total Manganese (Mn)	mg/L	0.10	0.098	A887928	0.12	A887928	0.11	0.0040	A888012
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	A887926	<0.00020	A887926	<0.00020	0.00020	A888011
Total Nickel (Ni)	mg/L	0.0016	0.0016	A887926	0.0016	A887926	0.0014	0.00050	A888011
Total Phosphorus (P)	mg/L	<0.10	<0.10	A887928	<0.10	A887928	<0.10	0.10	A888012
Total Potassium (K)	mg/L	4.1	4.1	A887928	5.1	A887928	4.7	0.30	A888012
Total Selenium (Se)	mg/L	<0.00020	<0.00020	A887926	<0.00020	A887926	<0.00020	0.00020	A888011
Total Silicon (Si)	mg/L	1.7	1.7	A887928	1.8	A887928	1.6	0.50	A888012
Total Silver (Ag)	mg/L	<0.00010	<0.00010	A887926	<0.00010	A887926	<0.00010	0.00010	A888011
Total Sodium (Na)	mg/L	3.3	3.2	A887928	3.9	A887928	3.6	0.50	A888012
Total Strontium (Sr)	mg/L	0.056	0.057	A887928	0.067	A887928	0.068	0.020	A888012
Total Sulphur (S)	mg/L	49	51	A887928	61	A887928	64	0.20	A888012
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	A887926	<0.00020	A887926	<0.00020	0.00020	A888011
Total Tin (Sn)	mg/L	<0.0010	<0.0010	A887926	<0.0010	A887926	<0.0010	0.0010	A888011
Total Titanium (Ti)	mg/L	0.0069	0.0081	A887926	0.0034	A887926	0.0024	0.0010	A888011
Total Uranium (U)	mg/L	<0.00010	<0.00010	A887926	<0.00010	A887926	<0.00010	0.00010	A888011
Total Vanadium (V)	mg/L	<0.0010	<0.0010	A887926	<0.0010	A887926	<0.0010	0.0010	A888011

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC333	BMC334		BMC335		BMC336		
Sampling Date		2023/02/14 14:15	2023/02/14 14:25		2023/02/14 13:25		2023/02/14 14:00		
COC Number		687170-03-01	687170-03-01		687170-03-01		687170-03-01		
	UNITS	**SB-1**	**SB-2**	**QC Batch**	**CB-1**	**QC Batch**	**CB-2**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.19	0.20	A887926	0.22	A887926	0.20	0.0030	A888011
RDL = Reportable Detection Limit									

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC337		BMC338	BMC339	BMC340		
Sampling Date		2023/02/14 12:50		2023/02/14 13:00	2023/02/14 12:25	2023/02/14 14:40		
COC Number		687170-03-01		687170-03-01	687170-03-01	687170-03-01		
	UNITS	NB-1	QC Batch	NB-2	CLD	SC-1	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.77	A886088	0.76	0.89	0.095	0.020	A886088
Total Aluminum (Al)	mg/L	0.078	A888011	0.091	0.081	0.030	0.0030	A887926
Total Antimony (Sb)	mg/L	<0.00060	A888011	<0.00060	<0.00060	<0.00060	0.00060	A887926
Total Arsenic (As)	mg/L	0.00036	A888011	0.00030	0.00032	0.00069	0.00020	A887926
Total Barium (Ba)	mg/L	0.020	A888012	0.020	0.019	<0.010	0.010	A887928
Total Beryllium (Be)	mg/L	<0.0010	A888011	<0.0010	<0.0010	<0.0010	0.0010	A887926
Total Boron (B)	mg/L	<0.020	A888012	<0.020	<0.020	<0.020	0.020	A887928
Total Calcium (Ca)	mg/L	61	A888012	59	63	9.2	0.30	A887928
Total Chromium (Cr)	mg/L	<0.0010	A888011	<0.0010	<0.0010	<0.0010	0.0010	A887926
Total Cobalt (Co)	mg/L	0.00052	A888011	0.00058	0.00064	<0.00030	0.00030	A887926
Total Copper (Cu)	mg/L	0.015	A888011	0.014	0.017	0.0043	0.0010	A887926
Total Iron (Fe)	mg/L	3.2	A888012	2.7	3.2	0.18	0.060	A887928
Total Lead (Pb)	mg/L	0.00028	A888011	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Lithium (Li)	mg/L	<0.020	A888012	<0.020	<0.020	<0.020	0.020	A887928
Total Magnesium (Mg)	mg/L	10	A888012	9.8	10	2.9	0.20	A887928
Total Manganese (Mn)	mg/L	0.11	A888012	0.11	0.11	0.017	0.0040	A887928
Total Molybdenum (Mo)	mg/L	<0.00020	A888011	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Nickel (Ni)	mg/L	0.0017	A888011	0.0015	0.0017	<0.00050	0.00050	A887926
Total Phosphorus (P)	mg/L	<0.10	A888012	<0.10	<0.10	<0.10	0.10	A887928
Total Potassium (K)	mg/L	5.0	A888012	4.9	5.1	1.4	0.30	A887928
Total Selenium (Se)	mg/L	<0.00020	A888011	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Silicon (Si)	mg/L	1.7	A888012	1.7	1.6	1.3	0.50	A887928
Total Silver (Ag)	mg/L	<0.00010	A888011	<0.00010	<0.00010	<0.00010	0.00010	A887926
Total Sodium (Na)	mg/L	3.8	A888012	3.7	3.8	1.9	0.50	A887928
Total Strontium (Sr)	mg/L	0.070	A888012	0.068	0.070	0.024	0.020	A887928
Total Sulphur (S)	mg/L	67	A888012	63	68	1.5	0.20	A887928
Total Thallium (Tl)	mg/L	<0.00020	A888011	<0.00020	<0.00020	<0.00020	0.00020	A887926
Total Tin (Sn)	mg/L	<0.0010	A888011	<0.0010	<0.0010	<0.0010	0.0010	A887926
Total Titanium (Ti)	mg/L	0.0030	A888011	0.0034	0.0032	0.0014	0.0010	A887926
Total Uranium (U)	mg/L	<0.00010	A888011	<0.00010	<0.00010	<0.00010	0.00010	A887926
Total Vanadium (V)	mg/L	<0.0010	A888011	<0.0010	<0.0010	<0.0010	0.0010	A887926

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BMC337		BMC338	BMC339	BMC340		
Sampling Date		2023/02/14 12:50		2023/02/14 13:00	2023/02/14 12:25	2023/02/14 14:40		
COC Number		687170-03-01		687170-03-01	687170-03-01	687170-03-01		
	UNITS	**NB-1**	**QC Batch**	**NB-2**	**CLD**	**SC-1**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.22	A888011	0.23	0.26	0.037	0.0030	A887926
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC290			BMC290			BMC291		
Sampling Date		2023/02/14 08:35			2023/02/14 08:35			2023/02/14 08:45		
COC Number		687170-01-01			687170-01-01			687170-01-01		
	UNITS	CL-6 SFC	RDL	QC Batch	CL-6 SFC Lab-Dup	RDL	QC Batch	CL-6 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	52	0.50	A885355				44	0.50	A885355
Total Hardness (CaCO3)	mg/L	43.8	0.50	A885836				41.0	0.50	A885836
Misc. Inorganics										
pH	pH	6.94	N/A	A888226				7.08	N/A	A888167
Total Organic Carbon (C)	mg/L	12	0.50	A889277				11	0.50	A889277
Total Suspended Solids	mg/L	1.0	1.0	A886531	2.1	1.0	A886531	<1.0	1.0	A886531
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12 (1)	0.50	A890435				11 (1)	0.50	A890435
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A888222				<1.0	1.0	A888165
Alkalinity (Total as CaCO3)	mg/L	31	1.0	A888222				30	1.0	A888165
Bicarbonate (HCO3)	mg/L	38	1.0	A888222				36	1.0	A888165
Carbonate (CO3)	mg/L	<1.0	1.0	A888222				<1.0	1.0	A888165
Hydroxide (OH)	mg/L	<1.0	1.0	A888222				<1.0	1.0	A888165
Sulphate (SO4)	mg/L	14	1.0	A887212				11	1.0	A887212
Physical Properties										
Turbidity	NTU	2.3	0.10	A886175	2.1	0.10	A886175	2.3	0.10	A886175

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C311540
Report Date: 2023/02/24

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RJ

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC292		BMC293		BMC294			BMC294		
Sampling Date		2023/02/14 09:00		2023/02/14 09:15		2023/02/14 09:30			2023/02/14 09:30		
COC Number		687170-01-01		687170-01-01		687170-01-01			687170-01-01		
	UNITS	CL-5 SFC	QC Batch	CL-5 BTM	QC Batch	CL-4 SFC	RDL	QC Batch	CL-4 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L	43	A885355	58	A885355	47	0.50	A885355			
Total Hardness (CaCO3)	mg/L	36.5	A885836	51.2	A885836	39.9	0.50	A885836			
Misc. Inorganics											
pH	pH	6.94	A888226	6.99	A888167	7.11	N/A	A888167			
Total Organic Carbon (C)	mg/L	15	A890628	9.6	A890628	13	0.50	A889277			
Total Suspended Solids	mg/L	<1.0	A886531	2.7	A886531	<1.0	1.0	A886531			
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	15 (1)	A890435	9.7 (1)	A890435	16 (1)	0.50	A890435			
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	A888222	<1.0	A888165	<1.0	1.0	A888165			
Alkalinity (Total as CaCO3)	mg/L	35	A888222	24	A888165	32	1.0	A888165			
Bicarbonate (HCO3)	mg/L	42	A888222	29	A888165	40	1.0	A888165			
Carbonate (CO3)	mg/L	<1.0	A888222	<1.0	A888165	<1.0	1.0	A888165			
Hydroxide (OH)	mg/L	<1.0	A888222	<1.0	A888165	<1.0	1.0	A888165			
Sulphate (SO4)	mg/L	5.1	A887212	27	A887212	7.9	1.0	A887796	7.8	1.0	A887796
Physical Properties											
Turbidity	NTU	2.4	A886175	6.7	A886175	2.1	0.10	A886175			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C311540
Report Date: 2023/02/24

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RJ

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC295			BMC296		BMC297	BMC298		
Sampling Date		2023/02/14 09:35			2023/02/14 09:50		2023/02/14 10:00	2023/02/14 09:05		
COC Number		687170-01-01			687170-01-01		687170-01-01	687170-01-01		
	UNITS	**CL-4 BTM**	**RDL**	**QC Batch**	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**SW-100**	**RDL**	**QC Batch**
Calculated Parameters										
Hardness (CaCO3)	mg/L	50	0.50	A885355	45	A885355	49	41	0.50	A885355
Total Hardness (CaCO3)	mg/L	44.4	0.50	A885836	40.9	A885836	41.6	36.6	0.50	A885836
Misc. Inorganics										
pH	pH	6.89	N/A	A888226	6.78	A887640	7.06	7.04	N/A	A887640
Total Organic Carbon (C)	mg/L	10	0.50	A889277	12	A889277	12	14	0.50	A889277
Total Suspended Solids	mg/L	<0.99	0.99	A886531	<1.0	A886531	<1.0	<1.0	1.0	A886531
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12 (1)	0.50	A890435	13 (1)	A890435	12 (1)	15 (1)	0.50	A889489
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A888222	<1.0	A887630	<1.0	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L	27	1.0	A888222	4.3	A887630	29	31	1.0	A887630
Bicarbonate (HCO3)	mg/L	33	1.0	A888222	5.2	A887630	35	38	1.0	A887630
Carbonate (CO3)	mg/L	<1.0	1.0	A888222	<1.0	A887630	<1.0	<1.0	1.0	A887630
Hydroxide (OH)	mg/L	<1.0	1.0	A888222	<1.0	A887630	<1.0	<1.0	1.0	A887630
Sulphate (SO4)	mg/L	19	1.0	A887212	11	A887210	13	5.4	1.0	A887210
Physical Properties										
Turbidity	NTU	2.0	0.10	A886175	2.0	A886175	2.5	2.4	0.10	A886175

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC306		BMC307		BMC308		
Sampling Date		2023/02/14 10:10		2023/02/14 10:20		2023/02/14 10:40		
COC Number		687170-02-01		687170-02-01		687170-02-01		
	UNITS	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**RDL**	**QC Batch**
Calculated Parameters								
Hardness (CaCO3)	mg/L	48	A886091	49	A886091	48	0.50	A886091
Total Hardness (CaCO3)	mg/L	40.6	A885836	40.5	A885836	40.6	0.50	A885836
Misc. Inorganics								
pH	pH	6.93	A888226	7.02	A887640	7.05	N/A	A887640
Total Organic Carbon (C)	mg/L	14	A889277	13	A889277	12	0.50	A889277
Total Suspended Solids	mg/L	<1.0	A886531	<1.0	A886531	<1.0	1.0	A886531
Lab Filtered Inorganics								
Dissolved Organic Carbon (C)	mg/L	13 (1)	A890435	11 (1)	A889489	13 (1)	0.50	A890435
Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	A888222	<1.0	A887630	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L	33	A888222	28	A887630	31	1.0	A887630
Bicarbonate (HCO3)	mg/L	40	A888222	34	A887630	38	1.0	A887630
Carbonate (CO3)	mg/L	<1.0	A888222	<1.0	A887630	<1.0	1.0	A887630
Hydroxide (OH)	mg/L	<1.0	A888222	<1.0	A887630	<1.0	1.0	A887630
Sulphate (SO4)	mg/L	11	A887212	17	A887210	11	1.0	A887210
Physical Properties								
Turbidity	NTU	2.5	A886175	2.8	A886175	2.5	0.10	A886175

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC308			BMC309		BMC310		
Sampling Date		2023/02/14 10:40			2023/02/14 11:15		2023/02/14 11:35		
COC Number		687170-02-01			687170-02-01		687170-02-01		
	UNITS	CL-7 SFC Lab-Dup	RDL	QC Batch	CL-7 BTM	QC Batch	CL-2 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				47	A886091	53	0.50	A886091
Total Hardness (CaCO3)	mg/L				39.6	A885836	46.1	0.50	A885836
Misc. Inorganics									
pH	pH				7.07	A887640	7.07	N/A	A887640
Total Organic Carbon (C)	mg/L				13	A890628	11	0.50	A890628
Total Suspended Solids	mg/L				<1.0	A886531	<1.0	1.0	A886655
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	14	0.50	A890435	13 (1)	A889489	12 (1)	0.50	A889489
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	A887630	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L				30	A887630	28	1.0	A887630
Bicarbonate (HCO3)	mg/L				37	A887630	34	1.0	A887630
Carbonate (CO3)	mg/L				<1.0	A887630	<1.0	1.0	A887630
Hydroxide (OH)	mg/L				<1.0	A887630	<1.0	1.0	A887630
Sulphate (SO4)	mg/L				11	A887210	21	1.0	A887210
Physical Properties									
Turbidity	NTU				2.6	A886175	2.9	0.10	A886175

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC310			BMC311		BMC312		
Sampling Date		2023/02/14 11:35			2023/02/14 12:00		2023/02/14 11:45		
COC Number		687170-02-01			687170-02-01		687170-02-01		
	UNITS	CL-2 SFC Lab-Dup	RDL	QC Batch	CL-2 BTM	QC Batch	SW-101	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				54	A886091	53	0.50	A886091
Total Hardness (CaCO3)	mg/L				46.3	A885836	44.5	0.50	A885836
Misc. Inorganics									
pH	pH				7.09	A887640	7.06	N/A	A887640
Total Organic Carbon (C)	mg/L				11	A889277	10	0.50	A890628
Total Suspended Solids	mg/L	<1.0	1.0	A886655	<1.0	A886655	<1.0	1.0	A886655
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L				11 (1)	A889489	10 (1)	0.50	A890435
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	A887630	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L				26	A887630	27	1.0	A887630
Bicarbonate (HCO3)	mg/L				32	A887630	33	1.0	A887630
Carbonate (CO3)	mg/L				<1.0	A887630	<1.0	1.0	A887630
Hydroxide (OH)	mg/L				<1.0	A887630	<1.0	1.0	A887630
Sulphate (SO4)	mg/L				20	A887210	20	1.0	A887210
Physical Properties									
Turbidity	NTU				2.6	A886175	3.0	0.10	A886175

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC313		BMC314		BMC315		BMC333		
Sampling Date		2023/02/14 13:35		2023/02/14 13:50		2023/02/14 13:45		2023/02/14 14:15		
COC Number		687170-02-01		687170-02-01		687170-02-01		687170-03-01		
	UNITS	**EB-1**	**QC Batch**	**EB-2**	**QC Batch**	**SW-102**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**
Calculated Parameters										
Hardness (CaCO3)	mg/L	240	A886091	240	A886091	220	A886091	180	0.50	A886091
Total Hardness (CaCO3)	mg/L	198	A885836	216	A885836	192	A885836	153	0.50	A885836
Misc. Inorganics										
pH	pH	6.13	A887640	5.61	A887640	6.15	A887640	6.40	N/A	A887640
Total Organic Carbon (C)	mg/L	9.3	A889277	8.3	A890628	9.0	A889277	8.7	0.50	A889277
Total Suspended Solids	mg/L	1.7	A886655	<1.0	A886655	<1.0	A886655	1.3	1.0	A886655
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.2 (1)	A889489	8.5 (1)	A889489	8.7 (1)	A889489	9.4 (1)	0.50	A889489
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	A887630	<1.0	A887630	<1.0	A887630	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L	3.3	A887630	1.0	A887630	3.0	A887630	8.1	1.0	A887630
Bicarbonate (HCO3)	mg/L	4.0	A887630	1.2	A887630	3.7	A887630	9.9	1.0	A887630
Carbonate (CO3)	mg/L	<1.0	A887630	<1.0	A887630	<1.0	A887630	<1.0	1.0	A887630
Hydroxide (OH)	mg/L	<1.0	A887630	<1.0	A887630	<1.0	A887630	<1.0	1.0	A887630
Sulphate (SO4)	mg/L	200	A887210	220	A887210	200	A887210	170	5.0	A887793
Physical Properties										
Turbidity	NTU	31 (2)	A886175	31 (2)	A886175	32 (2)	A886175	25 (2)	0.20	A886175

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C311540
Report Date: 2023/02/24

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RJ

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC333			BMC334		BMC335	BMC336		
Sampling Date		2023/02/14 14:15			2023/02/14 14:25		2023/02/14 13:25	2023/02/14 14:00		
COC Number		687170-03-01			687170-03-01		687170-03-01	687170-03-01		
	UNITS	SB-1 Lab-Dup	RDL	QC Batch	SB-2	QC Batch	CB-1	CB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				170	A886091	200	230	0.50	A886091
Total Hardness (CaCO3)	mg/L				156	A885836	185	187	0.50	A885836
Misc. Inorganics										
pH	pH	6.47	N/A	A887640	6.45	A887640	6.48	6.04	N/A	A887640
Total Organic Carbon (C)	mg/L				6.9	A890628	9.4	8.4	0.50	A889277
Total Suspended Solids	mg/L				1.0	A886655	<1.0	1.7	1.0	A886655
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				8.5 (1)	A890435	8.8 (1)	6.9 (1)	0.50	A889489
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A887630	<1.0	A887630	<1.0	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L	8.3	1.0	A887630	7.4	A887630	7.1	2.3	1.0	A887630
Bicarbonate (HCO3)	mg/L	10	1.0	A887630	9.0	A887630	8.7	2.9	1.0	A887630
Carbonate (CO3)	mg/L	<1.0	1.0	A887630	<1.0	A887630	<1.0	<1.0	1.0	A887630
Hydroxide (OH)	mg/L	<1.0	1.0	A887630	<1.0	A887630	<1.0	<1.0	1.0	A887630
Sulphate (SO4)	mg/L				140	A887210	170	190	5.0	A887210
Physical Properties										
Turbidity	NTU				27 (2)	A886223	21 (2)	32 (2)	0.20	A886223

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC337		BMC338	BMC339		BMC340		
Sampling Date		2023/02/14 12:50		2023/02/14 13:00	2023/02/14 12:25		2023/02/14 14:40		
COC Number		687170-03-01		687170-03-01	687170-03-01		687170-03-01		
	UNITS	NB-1	QC Batch	NB-2	CLD	RDL	SC-1	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	240	A886091	210	230	0.50	35	0.50	A886091
Total Hardness (CaCO3)	mg/L	195	A885836	187	199	0.50	34.9	0.50	A885836
Misc. Inorganics									
pH	pH	5.85	A887640	6.17	5.60	N/A	7.08	N/A	A887640
Total Organic Carbon (C)	mg/L	7.7	A890628	10	8.1	0.50	12	0.50	A889277
Total Suspended Solids	mg/L	1.9	A886655	1.1	<1.0	1.0	<1.0	1.0	A886655
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	7.7 (1)	A889489	8.2 (1)	9.1 (1)	0.50	14 (1)	0.50	A889489
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	A887630	<1.0	<1.0	1.0	<1.0	1.0	A887630
Alkalinity (Total as CaCO3)	mg/L	1.8	A887630	4.2	1.2	1.0	30	1.0	A887630
Bicarbonate (HCO3)	mg/L	2.2	A887630	5.1	1.5	1.0	36	1.0	A887630
Carbonate (CO3)	mg/L	<1.0	A887630	<1.0	<1.0	1.0	<1.0	1.0	A887630
Hydroxide (OH)	mg/L	<1.0	A887630	<1.0	<1.0	1.0	<1.0	1.0	A887630
Sulphate (SO4)	mg/L	200	A887210	190	200	5.0	3.2	1.0	A887210
Physical Properties									
Turbidity	NTU	31 (2)	A886223	28 (2)	31 (2)	0.20	0.70	0.10	A886223

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BMC340		
Sampling Date		2023/02/14 14:40		
COC Number		687170-03-01		
	UNITS	**SC-1 Lab-Dup**	**RDL**	**QC Batch**
Misc. Inorganics				
Total Organic Carbon (C)	mg/L	12	0.50	A889277
Physical Properties				
Turbidity	NTU	0.67	0.10	A886223

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.6°C
Package 2	4.9°C
Package 3	4.2°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A886175	Turbidity	2023/02/17			101	80 - 120	<0.10	NTU	9.2	20
A886223	Turbidity	2023/02/17			101	80 - 120	<0.10	NTU	4.1	20
A886531	Total Suspended Solids	2023/02/17	94	80 - 120	98	80 - 120	<1.0	mg/L	NC	20
A886655	Total Suspended Solids	2023/02/18	93	80 - 120	96	80 - 120	<1.0	mg/L	NC	20
A887126	Dissolved Barium (Ba)	2023/02/19	100	80 - 120	98	80 - 120	<0.010	mg/L		
A887126	Dissolved Boron (B)	2023/02/19	96	80 - 120	93	80 - 120	<0.020	mg/L		
A887126	Dissolved Calcium (Ca)	2023/02/19	91	80 - 120	94	80 - 120	<0.30	mg/L	3.8	20
A887126	Dissolved Iron (Fe)	2023/02/19	100	80 - 120	95	80 - 120	<0.060	mg/L	NC	20
A887126	Dissolved Lithium (Li)	2023/02/19	92	80 - 120	90	80 - 120	<0.020	mg/L		
A887126	Dissolved Magnesium (Mg)	2023/02/19	94	80 - 120	95	80 - 120	<0.20	mg/L	5.7	20
A887126	Dissolved Manganese (Mn)	2023/02/19	103	80 - 120	96	80 - 120	<0.0040	mg/L	NC	20
A887126	Dissolved Phosphorus (P)	2023/02/19	107	80 - 120	100	80 - 120	<0.10	mg/L		
A887126	Dissolved Potassium (K)	2023/02/19	101	80 - 120	96	80 - 120	<0.30	mg/L	2.2	20
A887126	Dissolved Silicon (Si)	2023/02/19	97	80 - 120	94	80 - 120	<0.50	mg/L		
A887126	Dissolved Sodium (Na)	2023/02/19	92	80 - 120	94	80 - 120	<0.50	mg/L	4.8	20
A887126	Dissolved Strontium (Sr)	2023/02/19	97	80 - 120	92	80 - 120	<0.020	mg/L		
A887126	Dissolved Sulphur (S)	2023/02/19	94	80 - 120	94	80 - 120	<0.20	mg/L		
A887128	Dissolved Barium (Ba)	2023/02/19	98	80 - 120	94	80 - 120	<0.010	mg/L	0.31	20
A887128	Dissolved Boron (B)	2023/02/19	96	80 - 120	90	80 - 120	<0.020	mg/L	NC	20
A887128	Dissolved Calcium (Ca)	2023/02/19	96	80 - 120	90	80 - 120	<0.30	mg/L	3.6	20
A887128	Dissolved Iron (Fe)	2023/02/19	107	80 - 120	93	80 - 120	<0.060	mg/L	2.7	20
A887128	Dissolved Lithium (Li)	2023/02/19	92	80 - 120	86	80 - 120	<0.020	mg/L	NC	20
A887128	Dissolved Magnesium (Mg)	2023/02/19	103	80 - 120	92	80 - 120	<0.20	mg/L	5.5	20
A887128	Dissolved Manganese (Mn)	2023/02/19	107	80 - 120	95	80 - 120	<0.0040	mg/L	2.7	20
A887128	Dissolved Phosphorus (P)	2023/02/19	113	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
A887128	Dissolved Potassium (K)	2023/02/19	98	80 - 120	92	80 - 120	<0.30	mg/L	3.5	20
A887128	Dissolved Silicon (Si)	2023/02/19	100	80 - 120	93	80 - 120	<0.50	mg/L	2.0	20
A887128	Dissolved Sodium (Na)	2023/02/19	97	80 - 120	88	80 - 120	<0.50	mg/L	3.5	20
A887128	Dissolved Strontium (Sr)	2023/02/19	91	80 - 120	89	80 - 120	<0.020	mg/L	0.61	20
A887128	Dissolved Sulphur (S)	2023/02/19	NC	80 - 120	95	80 - 120	<0.20	mg/L	2.3	20
A887210	Sulphate (SO4)	2023/02/19	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.88	20
A887212	Sulphate (SO4)	2023/02/19	NC	80 - 120	102	80 - 120	<1.0	mg/L	0.97	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A887630	Alkalinity (PP as CaCO3)	2023/02/21					<1.0	mg/L	NC	20
A887630	Alkalinity (Total as CaCO3)	2023/02/21			99	80 - 120	<1.0	mg/L	3.0	20
A887630	Bicarbonate (HCO3)	2023/02/21					<1.0	mg/L	3.0	20
A887630	Carbonate (CO3)	2023/02/21					<1.0	mg/L	NC	20
A887630	Hydroxide (OH)	2023/02/21					<1.0	mg/L	NC	20
A887640	pH	2023/02/21			100	97 - 103			1.1	N/A
A887707	Dissolved Aluminum (Al)	2023/02/21	96	80 - 120	93	80 - 120	<0.0030	mg/L	NC	20
A887707	Dissolved Antimony (Sb)	2023/02/21	106	80 - 120	102	80 - 120	<0.00060	mg/L	NC	20
A887707	Dissolved Arsenic (As)	2023/02/21	97	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
A887707	Dissolved Beryllium (Be)	2023/02/21	97	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
A887707	Dissolved Chromium (Cr)	2023/02/21	95	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
A887707	Dissolved Cobalt (Co)	2023/02/21	94	80 - 120	90	80 - 120	<0.00030	mg/L	NC	20
A887707	Dissolved Copper (Cu)	2023/02/21	NC	80 - 120	90	80 - 120	<0.0010	mg/L	2.5	20
A887707	Dissolved Lead (Pb)	2023/02/21	97	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
A887707	Dissolved Molybdenum (Mo)	2023/02/21	103	80 - 120	96	80 - 120	<0.00020	mg/L	3.7	20
A887707	Dissolved Nickel (Ni)	2023/02/21	91	80 - 120	90	80 - 120	<0.00050	mg/L	NC	20
A887707	Dissolved Selenium (Se)	2023/02/21	99	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
A887707	Dissolved Silver (Ag)	2023/02/21	96	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
A887707	Dissolved Thallium (Tl)	2023/02/21	96	80 - 120	94	80 - 120	<0.00020	mg/L	NC	20
A887707	Dissolved Tin (Sn)	2023/02/21	108	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
A887707	Dissolved Titanium (Ti)	2023/02/21	97	80 - 120	88	80 - 120	<0.0010	mg/L	NC	20
A887707	Dissolved Uranium (U)	2023/02/21	98	80 - 120	94	80 - 120	<0.00010	mg/L	7.8	20
A887707	Dissolved Vanadium (V)	2023/02/21	95	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
A887707	Dissolved Zinc (Zn)	2023/02/21	111	80 - 120	89	80 - 120	<0.0030	mg/L	NC	20
A887722	Dissolved Aluminum (Al)	2023/02/22	90	80 - 120	99	80 - 120	<0.0030	mg/L	16	20
A887722	Dissolved Antimony (Sb)	2023/02/22	109	80 - 120	108	80 - 120	<0.00060	mg/L	NC	20
A887722	Dissolved Arsenic (As)	2023/02/22	97	80 - 120	95	80 - 120	<0.00020	mg/L	14	20
A887722	Dissolved Beryllium (Be)	2023/02/22	97	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
A887722	Dissolved Chromium (Cr)	2023/02/22	95	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
A887722	Dissolved Cobalt (Co)	2023/02/22	94	80 - 120	94	80 - 120	<0.00030	mg/L	NC	20
A887722	Dissolved Copper (Cu)	2023/02/22	96	80 - 120	93	80 - 120	<0.0010	mg/L	3.1	20
A887722	Dissolved Lead (Pb)	2023/02/22	99	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A887722	Dissolved Molybdenum (Mo)	2023/02/22	104	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
A887722	Dissolved Nickel (Ni)	2023/02/22	93	80 - 120	91	80 - 120	<0.00050	mg/L	NC	20
A887722	Dissolved Selenium (Se)	2023/02/22	99	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A887722	Dissolved Silver (Ag)	2023/02/22	99	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
A887722	Dissolved Thallium (Tl)	2023/02/22	98	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A887722	Dissolved Tin (Sn)	2023/02/22	110	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
A887722	Dissolved Titanium (Ti)	2023/02/22	96	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
A887722	Dissolved Uranium (U)	2023/02/22	99	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
A887722	Dissolved Vanadium (V)	2023/02/22	95	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
A887722	Dissolved Zinc (Zn)	2023/02/22	99	80 - 120	93	80 - 120	<0.0030	mg/L	8.1	20
A887793	Sulphate (SO4)	2023/02/21	NC	80 - 120	104	80 - 120	<1.0	mg/L	2.2	20
A887796	Sulphate (SO4)	2023/02/21	112	80 - 120	104	80 - 120	<1.0	mg/L	1.2	20
A887926	Total Aluminum (Al)	2023/02/21	98	80 - 120	99	80 - 120	<0.0030	mg/L	20	20
A887926	Total Antimony (Sb)	2023/02/21	113	80 - 120	116	80 - 120	<0.00060	mg/L	NC	20
A887926	Total Arsenic (As)	2023/02/21	104	80 - 120	104	80 - 120	<0.00020	mg/L	17	20
A887926	Total Beryllium (Be)	2023/02/21	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
A887926	Total Chromium (Cr)	2023/02/21	100	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
A887926	Total Cobalt (Co)	2023/02/21	98	80 - 120	102	80 - 120	<0.00030	mg/L	NC	20
A887926	Total Copper (Cu)	2023/02/21	97	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A887926	Total Lead (Pb)	2023/02/21	103	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
A887926	Total Molybdenum (Mo)	2023/02/21	112	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
A887926	Total Nickel (Ni)	2023/02/21	96	80 - 120	101	80 - 120	<0.00050	mg/L	17	20
A887926	Total Selenium (Se)	2023/02/21	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
A887926	Total Silver (Ag)	2023/02/21	104	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
A887926	Total Thallium (Tl)	2023/02/21	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
A887926	Total Tin (Sn)	2023/02/21	116	80 - 120	114	80 - 120	<0.0010	mg/L	NC	20
A887926	Total Titanium (Ti)	2023/02/21	104	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
A887926	Total Uranium (U)	2023/02/21	106	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
A887926	Total Vanadium (V)	2023/02/21	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
A887926	Total Zinc (Zn)	2023/02/21	121 (1)	80 - 120	105	80 - 120	<0.0030	mg/L	19	20
A887928	Total Barium (Ba)	2023/02/21	105	80 - 120	108	80 - 120	<0.010	mg/L	0	20
A887928	Total Boron (B)	2023/02/21	104	80 - 120	106	80 - 120	<0.020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A887928	Total Calcium (Ca)	2023/02/21	99	80 - 120	100	80 - 120	<0.30	mg/L	0.50	20
A887928	Total Iron (Fe)	2023/02/21	NC	80 - 120	114	80 - 120	<0.060	mg/L	6.1	20
A887928	Total Lithium (Li)	2023/02/21	96	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
A887928	Total Magnesium (Mg)	2023/02/21	100	80 - 120	104	80 - 120	<0.20	mg/L	0.45	20
A887928	Total Manganese (Mn)	2023/02/21	105	80 - 120	107	80 - 120	<0.0040	mg/L	0.91	20
A887928	Total Phosphorus (P)	2023/02/21	105	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
A887928	Total Potassium (K)	2023/02/21	101	80 - 120	102	80 - 120	<0.30	mg/L	1.3	20
A887928	Total Silicon (Si)	2023/02/21	109	80 - 120	102	80 - 120	<0.50	mg/L	3.7	20
A887928	Total Sodium (Na)	2023/02/21	NC	80 - 120	105	80 - 120	<0.50	mg/L	0.26	20
A887928	Total Strontium (Sr)	2023/02/21	101	80 - 120	102	80 - 120	<0.020	mg/L	0.36	20
A887928	Total Sulphur (S)	2023/02/21	NC	80 - 120	102	80 - 120	<0.20	mg/L	0.53	20
A888011	Total Aluminum (Al)	2023/02/22	101	80 - 120	97	80 - 120	<0.0030	mg/L	2.2	20
A888011	Total Antimony (Sb)	2023/02/22	109	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
A888011	Total Arsenic (As)	2023/02/22	95	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
A888011	Total Beryllium (Be)	2023/02/22	103	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
A888011	Total Chromium (Cr)	2023/02/22	96	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
A888011	Total Cobalt (Co)	2023/02/22	97	80 - 120	96	80 - 120	<0.00030	mg/L	2.3	20
A888011	Total Copper (Cu)	2023/02/22	98	80 - 120	97	80 - 120	<0.0010	mg/L	2.1	20
A888011	Total Lead (Pb)	2023/02/22	107	80 - 120	107	80 - 120	<0.00020	mg/L	5.9	20
A888011	Total Molybdenum (Mo)	2023/02/22	108	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
A888011	Total Nickel (Ni)	2023/02/22	96	80 - 120	95	80 - 120	<0.00050	mg/L	8.1	20
A888011	Total Selenium (Se)	2023/02/22	94	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
A888011	Total Silver (Ag)	2023/02/22	106	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
A888011	Total Thallium (Tl)	2023/02/22	106	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
A888011	Total Tin (Sn)	2023/02/22	112	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20
A888011	Total Titanium (Ti)	2023/02/22	95	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
A888011	Total Uranium (U)	2023/02/22	107	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
A888011	Total Vanadium (V)	2023/02/22	97	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
A888011	Total Zinc (Zn)	2023/02/22	99	80 - 120	95	80 - 120	<0.0030	mg/L	3.6	20
A888012	Total Barium (Ba)	2023/02/22	107	80 - 120	108	80 - 120	<0.010	mg/L	1.5	20
A888012	Total Boron (B)	2023/02/22	105	80 - 120	105	80 - 120	<0.020	mg/L	NC	20
A888012	Total Calcium (Ca)	2023/02/22	98	80 - 120	98	80 - 120	<0.30	mg/L	2.8	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A888012	Total Iron (Fe)	2023/02/22	112	80 - 120	112	80 - 120	<0.060	mg/L	2.9	20
A888012	Total Lithium (Li)	2023/02/22	98	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
A888012	Total Magnesium (Mg)	2023/02/22	101	80 - 120	102	80 - 120	<0.20	mg/L	1.9	20
A888012	Total Manganese (Mn)	2023/02/22	106	80 - 120	107	80 - 120	<0.0040	mg/L	2.9	20
A888012	Total Phosphorus (P)	2023/02/22	103	80 - 120	104	80 - 120	<0.10	mg/L	NC	20
A888012	Total Potassium (K)	2023/02/22	99	80 - 120	99	80 - 120	<0.30	mg/L	2.6	20
A888012	Total Silicon (Si)	2023/02/22	101	80 - 120	102	80 - 120	<0.50	mg/L	3.3	20
A888012	Total Sodium (Na)	2023/02/22	102	80 - 120	102	80 - 120	<0.50	mg/L	2.9	20
A888012	Total Strontium (Sr)	2023/02/22	101	80 - 120	102	80 - 120	<0.020	mg/L	2.4	20
A888012	Total Sulphur (S)	2023/02/22	99	80 - 120	101	80 - 120	<0.20	mg/L	2.7	20
A888165	Alkalinity (PP as CaCO3)	2023/02/22					<1.0	mg/L	NC	20
A888165	Alkalinity (Total as CaCO3)	2023/02/22			95	80 - 120	<1.0	mg/L	4.6	20
A888165	Bicarbonate (HCO3)	2023/02/22					<1.0	mg/L	3.7	20
A888165	Carbonate (CO3)	2023/02/22					<1.0	mg/L	NC	20
A888165	Hydroxide (OH)	2023/02/22					<1.0	mg/L	NC	20
A888167	pH	2023/02/22			100	97 - 103			0.58	N/A
A888222	Alkalinity (PP as CaCO3)	2023/02/22					<1.0	mg/L	NC	20
A888222	Alkalinity (Total as CaCO3)	2023/02/22			98	80 - 120	<1.0	mg/L	0.33	20
A888222	Bicarbonate (HCO3)	2023/02/22					<1.0	mg/L	0.33	20
A888222	Carbonate (CO3)	2023/02/22					<1.0	mg/L	NC	20
A888222	Hydroxide (OH)	2023/02/22					<1.0	mg/L	NC	20
A888226	pH	2023/02/22			100	97 - 103			0.086	N/A
A889277	Total Organic Carbon (C)	2023/02/22	NC	80 - 120	112	80 - 120	<0.50	mg/L	1.3	20
A889489	Dissolved Organic Carbon (C)	2023/02/22	86	80 - 120	107	80 - 120	<0.50	mg/L	6.9	20
A890435	Dissolved Organic Carbon (C)	2023/02/23	NC	80 - 120	113	80 - 120	<0.50	mg/L	5.6	20
A890628	Total Organic Carbon (C)	2023/02/23	90	80 - 120	112	80 - 120	<0.50	mg/L	2.7	20
A891522	Dissolved Barium (Ba)	2023/02/24	104	80 - 120	109	80 - 120	<0.010	mg/L		
A891522	Dissolved Boron (B)	2023/02/24	92	80 - 120	102	80 - 120	<0.020	mg/L		
A891522	Dissolved Calcium (Ca)	2023/02/24	95	80 - 120	98	80 - 120	<0.30	mg/L	0.031	20
A891522	Dissolved Iron (Fe)	2023/02/24	82	80 - 120	103	80 - 120	<0.060	mg/L	7.0	20
A891522	Dissolved Lithium (Li)	2023/02/24	94	80 - 120	99	80 - 120	<0.020	mg/L		
A891522	Dissolved Magnesium (Mg)	2023/02/24	95	80 - 120	101	80 - 120	<0.20	mg/L	0.35	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A891522	Dissolved Manganese (Mn)	2023/02/24	86	80 - 120	105	80 - 120	<0.0040	mg/L	1.3	20
A891522	Dissolved Phosphorus (P)	2023/02/24	92	80 - 120	104	80 - 120	<0.10	mg/L		
A891522	Dissolved Potassium (K)	2023/02/24	97	80 - 120	99	80 - 120	<0.30	mg/L	0.20	20
A891522	Dissolved Silicon (Si)	2023/02/24	84	80 - 120	100	80 - 120	<0.50	mg/L		
A891522	Dissolved Sodium (Na)	2023/02/24	99	80 - 120	101	80 - 120	<0.50	mg/L	0.43	20
A891522	Dissolved Strontium (Sr)	2023/02/24	98	80 - 120	102	80 - 120	<0.020	mg/L		
A891522	Dissolved Sulphur (S)	2023/02/24	89	80 - 120	100	80 - 120	<0.20	mg/L		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS GROUP	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C311540	687170
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	865 WAVERLEY ST 3rd FLOOR WINNIPEG, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Project Name		C#687170-01-01	
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com	Site #			
				Sampled By	RED, JC		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH @ 25 °, Alkalinity @25C (pp, total), CO3,HCO3,OH	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-6 sfc	23/02/14	8:35	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
2		CL-6 btm		8:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
3		CL-5 sfc		9:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-5 btm		9:15		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-4 sfc		9:30		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-4 btm		9:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CL-8 sfc		9:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-8 btm		10:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		SW-100		9:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
10																			

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck	23/02/16	12:00	Amanda Brau	2023/02/16	11:58			ACTR	Yes / No
			Reem Phillipos	2023/02/17	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

see ACTR ICE-YES

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS GROUP	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C311540	687170
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	865 WAVERLEY ST. 3RD FLOOR WINNIPEG, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Project Name		C#687170-02-01	
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com	Site #			
				Sampled By	RED, JC		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (will be applied if Rush TAT is not specified) [X]

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: Time Required:

Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH @ 25 °, Alkalinity @25C (pp, total), CO3,HCO3,OH	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 sfc	23/02/14	10:10	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
2		CL-3 btm		10:20		N	N	X	X	X	X	X	X	X	X	X	X	4	
3		CL-7 sfc		10:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 btm		11:15		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-2 sfc		11:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-2 btm		12:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		SW-101		11:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		EB-1		13:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		EB-2		13:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		SW-102		13:45		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
	23/02/16	12:00	Alome Amanja Bear	2023/02/16	1158			ACTR	Yes / No
			Reem Phillipos	2023/02/17	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

See ACTR ICE - YES

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Page of

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS GROUP	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C311540	687170
Address	3rd Floor 865 Waverly St	Address	865 WAVERLEY ST. 3RD FLOOR WINNIPEG, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#687170-03-01	
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Site #			
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com	Sampled By	RED, JC		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH @ 25 °, Alkalinity @25C (pp, total), CO3,HCO3,OH	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SB-1	23/02/14	14:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
2		SB-2		14:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
3		CB-1		13:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-2		14:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		NB-1		12:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		NB-2		13:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CLD		12:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		SC-1		14:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Cyr	23/02/16	12:00	Amanda Bear	2023/02/16	1158			ACTR	Yes / No
			Reegan Phillipos	2023/02/17	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

See ACTR ICE - YES

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 694739-01-01, 694739-02-01, 694739-03-01

Report Date: 2023/05/27
Report #: R3341022
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C335298
Received: 2023/05/17, 12:50

Sample Matrix: Water
Samples Received: 29

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	28	N/A	2023/05/20	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/05/23		Auto Calc
Cadmium - low level CCME (Total) (1)	28	N/A	2023/05/24		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	16	N/A	2023/05/19	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	12	N/A	2023/05/21	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 3)	25	N/A	2023/05/24	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 3)	3	N/A	2023/05/25	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	28	N/A	2023/05/20		Auto Calc
Hardness Total (calculated as CaCO3) (1, 4)	28	N/A	2023/05/24	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 5)	16	N/A	2023/05/19	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 5)	12	N/A	2023/05/20	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	20	2023/05/21	2023/05/24	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	8	2023/05/24	2023/05/24	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 6)	12	N/A	2023/05/20	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 6)	16	N/A	2023/05/21	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	20	2023/05/21	2023/05/24	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	8	2023/05/24	2023/05/24	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 7)	28	N/A	2023/05/20	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (1, 8)	19	N/A	2023/05/23	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 8)	6	N/A	2023/05/24	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 8)	3	N/A	2023/05/25	AB SOP-00087	MMCW 119 1996 m
Rainbow Trout LC50 Multi-Concentration (2)	1	N/A	2023/05/21	EENVSOP-00160	EPS 1 RM13 2nd ed m
Total Suspended Solids (NFR) (1)	28	2023/05/19	2023/05/19	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/05/19	CAL SOP-00081	SM 23 2130 B m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 694739-01-01, 694739-02-01, 694739-03-01

Report Date: 2023/05/27
Report #: R3341022
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C335298
Received: 2023/05/17, 12:50
Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) This test was performed by Bureau Veritas Edmonton Environmental, 9331 - 48 St. , Edmonton, AB, T6B 2R4
(3) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(4) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(5) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(7) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(8) TOC present in the sample should be considered as non-purgeable TOC.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 694739-01-01, 694739-02-01, 694739-03-01

Report Date: 2023/05/27
Report #: R3341022
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C335298
Received: 2023/05/17, 12:50

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ160	BQQ161	BQQ162	BQQ163	BQQ164		
Sampling Date		2023/05/16 08:05	2023/05/16 08:10	2023/05/16 08:20	2023/05/16 08:25	2023/05/16 08:30		
COC Number		694739-01-01	694739-01-01	694739-01-01	694739-01-01	694739-01-01		
	UNITS	CL-6 SFC	CL-6 BTM	CL-5 SFC	CL-5 BTM	CL-4 SFC	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.048	0.040	0.092	0.11	0.10	0.020	A966032
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.026	0.029	0.030	0.022	0.028	0.0030	A968307
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	A968307
Dissolved Arsenic (As)	mg/L	0.00037	0.00038	0.00040	0.00028	0.00034	0.00020	A968307
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	0.010	<0.010	0.010	A968199
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968307
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A968199
Dissolved Calcium (Ca)	mg/L	10	10	11	16	13	0.30	A968199
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968307
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	A968307
Dissolved Copper (Cu)	mg/L	0.0060	0.0061	0.0083	0.0089	0.0088	0.0010	A968307
Dissolved Iron (Fe)	mg/L	0.12	0.12	0.15	0.39	0.14	0.060	A968199
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968307
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A968199
Dissolved Magnesium (Mg)	mg/L	2.9	3.0	3.0	3.9	3.2	0.20	A968199
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	0.0082	0.046	0.012	0.0040	A968199
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968307
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	A968307
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	A968199
Dissolved Potassium (K)	mg/L	1.5	1.5	1.5	1.9	1.6	0.30	A968199
Dissolved Selenium (Se)	mg/L	<0.00020	0.00024	0.00023	0.00038	<0.00020	0.00020	A968307
Dissolved Silicon (Si)	mg/L	0.89	0.90	1.0	1.3	1.0	0.50	A968199
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A968307
Dissolved Sodium (Na)	mg/L	2.0	2.0	2.0	2.3	2.0	0.50	A968199
Dissolved Strontium (Sr)	mg/L	0.024	0.024	0.023	0.029	0.024	0.020	A968199
Dissolved Sulphur (S)	mg/L	4.6	4.7	5.9	11	7.7	0.20	A968199
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968307
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968307
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968307
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A968307
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ160	BQQ161	BQQ162	BQQ163	BQQ164		
Sampling Date		2023/05/16 08:05	2023/05/16 08:10	2023/05/16 08:20	2023/05/16 08:25	2023/05/16 08:30		
COC Number		694739-01-01	694739-01-01	694739-01-01	694739-01-01	694739-01-01		
	UNITS	**CL-6 SFC**	**CL-6 BTM**	**CL-5 SFC**	**CL-5 BTM**	**CL-4 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968307
Dissolved Zinc (Zn)	mg/L	0.028	0.029	0.044	0.043	0.049	0.0030	A968307
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ165		BQQ166		BQQ167		BQQ168		
Sampling Date		2023/05/16 08:35		2023/05/16 08:45		2023/05/16 08:50		2023/05/16 08:55		
COC Number		694739-01-01		694739-01-01		694739-01-01		694739-01-01		
	UNITS	CL-4 BTM	QC Batch	CL-8 SFC	QC Batch	CL-8 BTM	QC Batch	CL-3 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.090	A966032	0.17	A966032	0.13	A966032	0.27	0.020	A966032
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.024	A968307	0.026	A968307	0.032	A967889	0.026	0.0030	A968307
Dissolved Antimony (Sb)	mg/L	<0.00060	A968307	<0.00060	A968307	<0.00060	A967889	<0.00060	0.00060	A968307
Dissolved Arsenic (As)	mg/L	0.00024	A968307	0.00029	A968307	0.00035	A967889	0.00027	0.00020	A968307
Dissolved Barium (Ba)	mg/L	<0.010	A968199	<0.010	A968199	<0.010	A967949	<0.010	0.010	A968199
Dissolved Beryllium (Be)	mg/L	<0.0010	A968307	<0.0010	A968307	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Boron (B)	mg/L	<0.020	A968199	<0.020	A968199	<0.020	A967949	<0.020	0.020	A968199
Dissolved Calcium (Ca)	mg/L	15	A968199	17	A968199	14	A967949	22	0.30	A968199
Dissolved Chromium (Cr)	mg/L	<0.0010	A968307	<0.0010	A968307	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Cobalt (Co)	mg/L	<0.00030	A968307	<0.00030	A968307	<0.00030	A967889	<0.00030	0.00030	A968307
Dissolved Copper (Cu)	mg/L	0.0079	A968307	0.010	A968307	0.010	A967889	0.013	0.0010	A968307
Dissolved Iron (Fe)	mg/L	0.30	A968199	0.17	A968199	0.17	A967949	0.22	0.060	A968199
Dissolved Lead (Pb)	mg/L	<0.00020	A968307	<0.00020	A968307	<0.00020	A967889	<0.00020	0.00020	A968307
Dissolved Lithium (Li)	mg/L	<0.020	A968199	<0.020	A968199	<0.020	A967949	<0.020	0.020	A968199
Dissolved Magnesium (Mg)	mg/L	3.6	A968199	3.7	A968199	3.5	A967949	4.4	0.20	A968199
Dissolved Manganese (Mn)	mg/L	0.027	A968199	0.031	A968199	0.018	A967949	0.056	0.0040	A968199
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A968936	<0.00020	A968307	<0.00020	A967889	0.00025	0.00020	A968307
Dissolved Nickel (Ni)	mg/L	<0.00050	A968307	<0.00050	A968307	0.00070	A967889	<0.00050	0.00050	A968307
Dissolved Phosphorus (P)	mg/L	<0.10	A968199	<0.10	A968199	<0.10	A967949	<0.10	0.10	A968199
Dissolved Potassium (K)	mg/L	1.8	A968199	1.8	A968199	1.6	A967949	2.0	0.30	A968199
Dissolved Selenium (Se)	mg/L	<0.00020	A968307	<0.00020	A968307	<0.00020	A967889	0.00024	0.00020	A968307
Dissolved Silicon (Si)	mg/L	1.2	A968199	1.1	A968199	1.2	A967949	1.1	0.50	A968199
Dissolved Silver (Ag)	mg/L	<0.00010	A968307	<0.00010	A968307	<0.00010	A967889	<0.00010	0.00010	A968307
Dissolved Sodium (Na)	mg/L	2.2	A968199	2.1	A968199	2.0	A967949	2.2	0.50	A968199
Dissolved Strontium (Sr)	mg/L	0.028	A968199	0.027	A968199	0.024	A967949	0.029	0.020	A968199
Dissolved Sulphur (S)	mg/L	9.3	A968199	13	A968199	9.0	A967949	18	0.20	A968199
Dissolved Thallium (Tl)	mg/L	<0.00020	A968307	<0.00020	A968307	<0.00020	A967889	<0.00020	0.00020	A968307
Dissolved Tin (Sn)	mg/L	<0.0010	A968307	<0.0010	A968307	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Titanium (Ti)	mg/L	<0.0010	A968307	<0.0010	A968307	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Uranium (U)	mg/L	<0.00010	A968307	<0.00010	A968307	<0.00010	A967889	<0.00010	0.00010	A968307

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ165		BQQ166		BQQ167		BQQ168		
Sampling Date		2023/05/16 08:35		2023/05/16 08:45		2023/05/16 08:50		2023/05/16 08:55		
COC Number		694739-01-01		694739-01-01		694739-01-01		694739-01-01		
	UNITS	**CL-4 BTM**	**QC Batch**	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**QC Batch**	**CL-3 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A968307	<0.0010	A968307	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Zinc (Zn)	mg/L	0.044	A968307	0.070	A968307	0.051	A967889	0.10	0.0030	A968307
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ169			BQQ169			BQQ170		
Sampling Date		2023/05/16 09:00			2023/05/16 09:00			2023/05/16 09:05		
COC Number		694739-01-01			694739-01-01			694739-02-01		
	UNITS	CL-3 BTM	RDL	QC Batch	CL-3 BTM Lab-Dup	RDL	QC Batch	CL-7 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.13	0.020	A966032				0.34	0.020	A966032
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.031	0.0030	A967889	0.032	0.0030	A967889	0.029	0.0030	A967889
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	A967889	<0.00060	0.00060	A967889	<0.00060	0.00060	A967889
Dissolved Arsenic (As)	mg/L	0.00036	0.00020	A967889	0.00035	0.00020	A967889	0.00030	0.00020	A967889
Dissolved Barium (Ba)	mg/L	<0.010	0.010	A967949				0.011	0.010	A967959
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889
Dissolved Boron (B)	mg/L	<0.020	0.020	A967949				<0.020	0.020	A967959
Dissolved Calcium (Ca)	mg/L	14	0.30	A967949				26	0.30	A967959
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	A967889	<0.00030	0.00030	A967889	0.00038	0.00030	A967889
Dissolved Copper (Cu)	mg/L	0.0079	0.0010	A967889	0.0083	0.0010	A967889	0.014	0.0010	A967889
Dissolved Iron (Fe)	mg/L	0.20	0.060	A967949				0.25	0.060	A967959
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889
Dissolved Lithium (Li)	mg/L	<0.020	0.020	A967949				<0.020	0.020	A967959
Dissolved Magnesium (Mg)	mg/L	3.5	0.20	A967949				5.0	0.20	A967959
Dissolved Manganese (Mn)	mg/L	0.017	0.0040	A967949				0.068	0.0040	A967959
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889
Dissolved Nickel (Ni)	mg/L	0.00054	0.00050	A967889	0.00059	0.00050	A967889	0.0010	0.00050	A967889
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	A967949				<0.10	0.10	A967959
Dissolved Potassium (K)	mg/L	1.6	0.30	A967949				2.2	0.30	A967959
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889
Dissolved Silicon (Si)	mg/L	1.2	0.50	A967949				1.3	0.50	A967959
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	A967889	<0.00010	0.00010	A967889	<0.00010	0.00010	A967889
Dissolved Sodium (Na)	mg/L	2.0	0.50	A967949				2.3	0.50	A967959
Dissolved Strontium (Sr)	mg/L	0.024	0.020	A967949				0.030	0.020	A967959
Dissolved Sulphur (S)	mg/L	8.8	0.20	A967949				22	0.20	A967959
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889	<0.00020	0.00020	A967889
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	A967889	<0.00010	0.00010	A967889	<0.00010	0.00010	A967889

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ169			BQQ169			BQQ170		
Sampling Date		2023/05/16 09:00			2023/05/16 09:00			2023/05/16 09:05		
COC Number		694739-01-01			694739-01-01			694739-02-01		
	UNITS	**CL-3 BTM**	**RDL**	**QC Batch**	**CL-3 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-7 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889	<0.0010	0.0010	A967889
Dissolved Zinc (Zn)	mg/L	0.049	0.0030	A967889	0.050	0.0030	A967889	0.12	0.0030	A967889

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ171		BQQ172			BQQ172		
Sampling Date		2023/05/16 09:10		2023/05/16 09:15			2023/05/16 09:15		
COC Number		694739-02-01		694739-02-01			694739-02-01		
	UNITS	CL-7 BTM	QC Batch	CL-2 SFC	RDL	QC Batch	CL-2 SFC Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.36	A966032	0.11	0.020	A966032			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.029	A967889	0.030	0.0030	A968307	0.033	0.0030	A968307
Dissolved Antimony (Sb)	mg/L	<0.00060	A967889	<0.00060	0.00060	A968307	<0.00060	0.00060	A968307
Dissolved Arsenic (As)	mg/L	0.00034	A967889	0.00034	0.00020	A968307	0.00026	0.00020	A968307
Dissolved Barium (Ba)	mg/L	0.010	A967949	<0.010	0.010	A968199			
Dissolved Beryllium (Be)	mg/L	<0.0010	A967889	<0.0010	0.0010	A968307	<0.0010	0.0010	A968307
Dissolved Boron (B)	mg/L	<0.020	A967949	<0.020	0.020	A968199			
Dissolved Calcium (Ca)	mg/L	25	A967949	12	0.30	A968199			
Dissolved Chromium (Cr)	mg/L	<0.0010	A967889	<0.0010	0.0010	A968307	<0.0010	0.0010	A968307
Dissolved Cobalt (Co)	mg/L	0.00038	A967889	<0.00030	0.00030	A968307	<0.00030	0.00030	A968307
Dissolved Copper (Cu)	mg/L	0.014	A967889	0.0075	0.0010	A968307	0.0084	0.0010	A968307
Dissolved Iron (Fe)	mg/L	0.25	A967949	0.15	0.060	A968199			
Dissolved Lead (Pb)	mg/L	<0.00020	A967889	<0.00020	0.00020	A968307	<0.00020	0.00020	A968307
Dissolved Lithium (Li)	mg/L	0.059	A967949	<0.020	0.020	A968199			
Dissolved Magnesium (Mg)	mg/L	4.9	A967949	3.1	0.20	A968199			
Dissolved Manganese (Mn)	mg/L	0.063	A967949	0.012	0.0040	A968199			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A967889	<0.00020	0.00020	A968307	<0.00020	0.00020	A968307
Dissolved Nickel (Ni)	mg/L	0.00097	A967889	<0.00050	0.00050	A968307	<0.00050	0.00050	A968307
Dissolved Phosphorus (P)	mg/L	<0.10	A967949	<0.10	0.10	A968199			
Dissolved Potassium (K)	mg/L	2.2	A967949	1.6	0.30	A968199			
Dissolved Selenium (Se)	mg/L	<0.00020	A967889	<0.00020	0.00020	A968307	<0.00020	0.00020	A968307
Dissolved Silicon (Si)	mg/L	1.3	A967949	1.0	0.50	A968199			
Dissolved Silver (Ag)	mg/L	<0.00010	A967889	<0.00010	0.00010	A968307	<0.00010	0.00010	A968307
Dissolved Sodium (Na)	mg/L	2.2	A967949	2.0	0.50	A968199			
Dissolved Strontium (Sr)	mg/L	0.030	A967949	0.024	0.020	A968199			
Dissolved Sulphur (S)	mg/L	21	A967949	7.8	0.20	A968199			
Dissolved Thallium (Tl)	mg/L	<0.00020	A967889	<0.00020	0.00020	A968307	<0.00020	0.00020	A968307
Dissolved Tin (Sn)	mg/L	<0.0010	A967889	<0.0010	0.0010	A968307	<0.0010	0.0010	A968307
Dissolved Titanium (Ti)	mg/L	<0.0010	A967889	<0.0010	0.0010	A968307	<0.0010	0.0010	A968307
Dissolved Uranium (U)	mg/L	<0.00010	A967889	<0.00010	0.00010	A968307	<0.00010	0.00010	A968307

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ171		BQQ172			BQQ172		
Sampling Date		2023/05/16 09:10		2023/05/16 09:15			2023/05/16 09:15		
COC Number		694739-02-01		694739-02-01			694739-02-01		
	UNITS	**CL-7 BTM**	**QC Batch**	**CL-2 SFC**	**RDL**	**QC Batch**	**CL-2 SFC Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A967889	<0.0010	0.0010	A968307	<0.0010	0.0010	A968307
Dissolved Zinc (Zn)	mg/L	0.12	A967889	0.046	0.0030	A968307	0.048	0.0030	A968307

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ173		BQQ174	BQQ175			BQQ175		
Sampling Date		2023/05/16 09:20		2023/05/16 10:40	2023/05/16 10:45			2023/05/16 10:45		
COC Number		694739-02-01		694739-02-01	694739-02-01			694739-02-01		
	UNITS	CL-2 BTM	QC Batch	SB-2	SB-1	RDL	QC Batch	SB-1 Lab-Dup	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.11	A966032	0.59	0.55	0.020	A966032			
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.021	A968307	0.024	0.023	0.0030	A967889			
Dissolved Antimony (Sb)	mg/L	<0.00060	A968307	<0.00060	<0.00060	0.00060	A967889			
Dissolved Arsenic (As)	mg/L	0.00031	A968307	0.00030	0.00030	0.00020	A967889			
Dissolved Barium (Ba)	mg/L	0.011	A968199	0.011	0.013	0.010	A967949	0.011	0.010	A967949
Dissolved Beryllium (Be)	mg/L	<0.0010	A968307	<0.0010	<0.0010	0.0010	A967889			
Dissolved Boron (B)	mg/L	<0.020	A968199	<0.020	<0.020	0.020	A967949	<0.020	0.020	A967949
Dissolved Calcium (Ca)	mg/L	19	A968199	33	33	0.30	A967949	33	0.30	A967949
Dissolved Chromium (Cr)	mg/L	<0.0010	A968307	<0.0010	<0.0010	0.0010	A967889			
Dissolved Cobalt (Co)	mg/L	<0.00030	A968307	0.00079	0.00073	0.00030	A967889			
Dissolved Copper (Cu)	mg/L	0.0066	A968307	0.020	0.017	0.0010	A967889			
Dissolved Iron (Fe)	mg/L	0.47	A968199	0.34	0.35	0.060	A967949	0.37	0.060	A967949
Dissolved Lead (Pb)	mg/L	<0.00020	A968307	<0.00020	<0.00020	0.00020	A967889			
Dissolved Lithium (Li)	mg/L	<0.020	A968199	<0.020	0.020	0.020	A967949	<0.020	0.020	A967949
Dissolved Magnesium (Mg)	mg/L	4.3	A968199	5.9	6.0	0.20	A967949	5.9	0.20	A967949
Dissolved Manganese (Mn)	mg/L	0.066	A968199	0.12	0.12	0.0040	A967949	0.11	0.0040	A967949
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A968307	<0.00020	<0.00020	0.00020	A967889			
Dissolved Nickel (Ni)	mg/L	<0.00050	A968307	0.0013	0.0014	0.00050	A967889			
Dissolved Phosphorus (P)	mg/L	<0.10	A968199	<0.10	<0.10	0.10	A967949	<0.10	0.10	A967949
Dissolved Potassium (K)	mg/L	2.1	A968199	2.7	2.7	0.30	A967949	2.7	0.30	A967949
Dissolved Selenium (Se)	mg/L	<0.00020	A968307	<0.00020	<0.00020	0.00020	A967889			
Dissolved Silicon (Si)	mg/L	1.3	A968199	1.5	1.6	0.50	A967949	1.5	0.50	A967949
Dissolved Silver (Ag)	mg/L	<0.00010	A968307	<0.00010	<0.00010	0.00010	A967889			
Dissolved Sodium (Na)	mg/L	2.4	A968199	2.4	2.4	0.50	A967949	2.4	0.50	A967949
Dissolved Strontium (Sr)	mg/L	0.031	A968199	0.034	0.035	0.020	A967949	0.034	0.020	A967949
Dissolved Sulphur (S)	mg/L	15	A968199	31	31	0.20	A967949	31	0.20	A967949
Dissolved Thallium (Tl)	mg/L	<0.00020	A968307	<0.00020	<0.00020	0.00020	A967889			
Dissolved Tin (Sn)	mg/L	<0.0010	A968307	<0.0010	<0.0010	0.0010	A967889			
Dissolved Titanium (Ti)	mg/L	<0.0010	A968307	<0.0010	<0.0010	0.0010	A967889			
Dissolved Uranium (U)	mg/L	<0.00010	A968307	<0.00010	<0.00010	0.00010	A967889			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ173		BQQ174	BQQ175			BQQ175		
Sampling Date		2023/05/16 09:20		2023/05/16 10:40	2023/05/16 10:45			2023/05/16 10:45		
COC Number		694739-02-01		694739-02-01	694739-02-01			694739-02-01		
	UNITS	**CL-2 BTM**	**QC Batch**	**SB-2**	**SB-1**	**RDL**	**QC Batch**	**SB-1 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A968307	<0.0010	<0.0010	0.0010	A967889			
Dissolved Zinc (Zn)	mg/L	0.048	A968307	0.19	0.18	0.0030	A967889			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ176		BQQ177		BQQ178		BQQ179		
Sampling Date		2023/05/16 10:50		2023/05/16 11:00		2023/05/16 11:05		2023/05/16 11:15		
COC Number		694739-02-01		694739-02-01		694739-02-01		694739-02-01		
	UNITS	CB-1	QC Batch	CB-2	QC Batch	EB-1	QC Batch	EB-2	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.65	A966032	0.74	A966115	1.2	A966116	1.0	0.020	A966116
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.025	A967889	0.023	A967889	0.024	A967889	0.027	0.0030	A968307
Dissolved Antimony (Sb)	mg/L	<0.00060	A967889	<0.00060	A967889	<0.00060	A967889	<0.00060	0.00060	A968307
Dissolved Arsenic (As)	mg/L	0.00025	A967889	0.00024	A967889	0.00022	A967889	0.00023	0.00020	A968307
Dissolved Barium (Ba)	mg/L	0.013	A967949	0.012	A967959	0.015	A967949	0.014	0.010	A968199
Dissolved Beryllium (Be)	mg/L	<0.0010	A967889	<0.0010	A967889	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Boron (B)	mg/L	<0.020	A967949	<0.020	A967959	<0.020	A967949	<0.020	0.020	A968199
Dissolved Calcium (Ca)	mg/L	39	A967949	40	A967959	51	A967949	49	0.30	A968199
Dissolved Chromium (Cr)	mg/L	<0.0010	A967889	<0.0010	A967889	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Cobalt (Co)	mg/L	0.0011	A967889	0.0012	A967889	0.0028	A967889	0.0026	0.00030	A968307
Dissolved Copper (Cu)	mg/L	0.018	A967889	0.021	A967889	0.023	A967889	0.019	0.0010	A968307
Dissolved Iron (Fe)	mg/L	0.41	A967949	0.36	A967959	0.41	A967949	0.54	0.060	A968199
Dissolved Lead (Pb)	mg/L	<0.00020	A967889	<0.00020	A967889	<0.00020	A967889	<0.00020	0.00020	A968307
Dissolved Lithium (Li)	mg/L	<0.020	A967949	<0.020	A972258	0.023	A967949	<0.020	0.020	A968199
Dissolved Magnesium (Mg)	mg/L	6.7	A967949	6.9	A967959	8.3	A967949	8.0	0.20	A968199
Dissolved Manganese (Mn)	mg/L	0.16	A967949	0.16	A967959	0.32	A967949	0.34	0.0040	A968199
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A967889	<0.00020	A967889	<0.00020	A967889	<0.00020	0.00020	A968307
Dissolved Nickel (Ni)	mg/L	0.0016	A967889	0.0017	A967889	0.0026	A967889	0.0024	0.00050	A968307
Dissolved Phosphorus (P)	mg/L	<0.10	A967949	<0.10	A967959	<0.10	A967949	<0.10	0.10	A968199
Dissolved Potassium (K)	mg/L	3.0	A967949	3.2	A967959	3.6	A967949	3.8	0.30	A968199
Dissolved Selenium (Se)	mg/L	<0.00020	A967889	<0.00020	A967889	<0.00020	A967889	0.00025	0.00020	A968307
Dissolved Silicon (Si)	mg/L	1.5	A967949	1.5	A967959	1.5	A967949	1.3	0.50	A968199
Dissolved Silver (Ag)	mg/L	<0.00010	A967889	<0.00010	A967889	<0.00010	A967889	<0.00010	0.00010	A968307
Dissolved Sodium (Na)	mg/L	2.6	A967949	2.6	A967959	3.0	A967949	3.1	0.50	A968199
Dissolved Strontium (Sr)	mg/L	0.038	A967949	0.038	A967959	0.045	A967949	0.048	0.020	A968199
Dissolved Sulphur (S)	mg/L	39	A967949	39	A967959	53	A967949	49	0.20	A968199
Dissolved Thallium (Tl)	mg/L	<0.00020	A967889	<0.00020	A967889	<0.00020	A967889	<0.00020	0.00020	A968307
Dissolved Tin (Sn)	mg/L	<0.0010	A967889	<0.0010	A967889	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Titanium (Ti)	mg/L	<0.0010	A967889	<0.0010	A967889	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Uranium (U)	mg/L	<0.00010	A967889	<0.00010	A967889	<0.00010	A967889	<0.00010	0.00010	A968307

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ176		BQQ177		BQQ178		BQQ179		
Sampling Date		2023/05/16 10:50		2023/05/16 11:00		2023/05/16 11:05		2023/05/16 11:15		
COC Number		694739-02-01		694739-02-01		694739-02-01		694739-02-01		
	UNITS	**CB-1**	**QC Batch**	**CB-2**	**QC Batch**	**EB-1**	**QC Batch**	**EB-2**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A967889	<0.0010	A967889	<0.0010	A967889	<0.0010	0.0010	A968307
Dissolved Zinc (Zn)	mg/L	0.21	A967889	0.23	A967889	0.36	A967889	0.33	0.0030	A968307
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ193		BQQ194	BQQ195	BQQ196	BQQ197		
Sampling Date		2023/05/16 11:25		2023/05/16 11:40	2023/05/16 11:45	2023/05/16 12:15	2023/05/16 17:00		
COC Number		694739-03-01		694739-03-01	694739-03-01	694739-03-01	694739-03-01		
	UNITS	NB-2	QC Batch	NB-1	CLD	SC-1	SW-100	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.74	A966116	0.79	0.78	0.11	0.12	0.020	A966116
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.025	A968307	0.028	0.025	0.028	0.030	0.0030	A967889
Dissolved Antimony (Sb)	mg/L	<0.00060	A968307	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	A967889
Dissolved Arsenic (As)	mg/L	0.00028	A968307	0.00030	0.00025	0.00040	0.00037	0.00020	A967889
Dissolved Barium (Ba)	mg/L	0.012	A968199	0.012	0.012	<0.010	<0.010	0.010	A967949
Dissolved Beryllium (Be)	mg/L	<0.0010	A968307	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Boron (B)	mg/L	<0.020	A968199	<0.020	<0.020	<0.020	<0.020	0.020	A967949
Dissolved Calcium (Ca)	mg/L	43	A968199	46	45	7.9	13	0.30	A967949
Dissolved Chromium (Cr)	mg/L	<0.0010	A968307	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Cobalt (Co)	mg/L	0.0012	A968307	0.0013	0.0012	<0.00030	<0.00030	0.00030	A967889
Dissolved Copper (Cu)	mg/L	0.021	A968307	0.022	0.021	0.0056	0.0083	0.0010	A967889
Dissolved Iron (Fe)	mg/L	0.42	A968199	0.44	0.36	0.14	0.16	0.060	A967949
Dissolved Lead (Pb)	mg/L	<0.00020	A968307	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Lithium (Li)	mg/L	<0.020	A968199	0.060	<0.020	<0.020	<0.020	0.020	A967949
Dissolved Magnesium (Mg)	mg/L	7.2	A968199	7.6	7.5	2.4	3.4	0.20	A967949
Dissolved Manganese (Mn)	mg/L	0.18	A968199	0.18	0.17	<0.0040	0.013	0.0040	A967949
Dissolved Molybdenum (Mo)	mg/L	0.00028	A968307	<0.00020	<0.00020	<0.00020	0.00040	0.00020	A967889
Dissolved Nickel (Ni)	mg/L	0.0011	A968307	0.0017	0.0016	<0.00050	0.00062	0.00050	A967889
Dissolved Phosphorus (P)	mg/L	<0.10	A968199	<0.10	<0.10	<0.10	<0.10	0.10	A967949
Dissolved Potassium (K)	mg/L	3.4	A968199	3.4	3.3	1.3	1.6	0.30	A967949
Dissolved Selenium (Se)	mg/L	<0.00020	A968307	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Silicon (Si)	mg/L	1.4	A968199	1.5	1.5	1.5	1.1	0.50	A967949
Dissolved Silver (Ag)	mg/L	<0.00010	A968307	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A967889
Dissolved Sodium (Na)	mg/L	2.8	A968199	2.7	2.7	1.5	1.9	0.50	A967949
Dissolved Strontium (Sr)	mg/L	0.043	A968199	0.041	0.041	<0.020	0.023	0.020	A967949
Dissolved Sulphur (S)	mg/L	43	A968199	45	45	1.4	8.1	0.20	A967949
Dissolved Thallium (Tl)	mg/L	<0.00020	A968307	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Tin (Sn)	mg/L	<0.0010	A968307	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Titanium (Ti)	mg/L	<0.0010	A968307	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Uranium (U)	mg/L	<0.00010	A968307	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A967889

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ193		BQQ194	BQQ195	BQQ196	BQQ197		
Sampling Date		2023/05/16 11:25		2023/05/16 11:40	2023/05/16 11:45	2023/05/16 12:15	2023/05/16 17:00		
COC Number		694739-03-01		694739-03-01	694739-03-01	694739-03-01	694739-03-01		
	UNITS	**NB-2**	**QC Batch**	**NB-1**	**CLD**	**SC-1**	**SW-100**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A968307	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Zinc (Zn)	mg/L	0.25	A968307	0.26	0.25	0.039	0.046	0.0030	A967889
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ198	BQQ199	BQQ201		
Sampling Date		2023/05/16 17:10	2023/05/16 17:30	2023/05/16		
COC Number		694739-03-01	694739-03-01	694739-03-01		
	UNITS	SW-101	SW-102	TRIP BLANK	RDL	QC Batch
Elements						
Dissolved Cadmium (Cd)	ug/L	0.56	0.11	<0.020	0.020	A966116
Lab Filtered Elements						
Dissolved Aluminum (Al)	mg/L	0.024	0.022	<0.0030	0.0030	A967889
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	A967889
Dissolved Arsenic (As)	mg/L	0.00027	0.00045	<0.00020	0.00020	A967889
Dissolved Barium (Ba)	mg/L	0.010	<0.010	<0.010	0.010	A967949
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	A967949
Dissolved Calcium (Ca)	mg/L	32	7.8	<0.30	0.30	A967949
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Cobalt (Co)	mg/L	0.00074	<0.00030	<0.00030	0.00030	A967889
Dissolved Copper (Cu)	mg/L	0.018	0.0070	<0.0010	0.0010	A967889
Dissolved Iron (Fe)	mg/L	0.30	0.14	<0.060	0.060	A967949
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Lithium (Li)	mg/L	0.055	<0.020	<0.020	0.020	A967949
Dissolved Magnesium (Mg)	mg/L	5.8	2.4	<0.20	0.20	A967949
Dissolved Manganese (Mn)	mg/L	0.12	0.0041	<0.0040	0.0040	A967949
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Nickel (Ni)	mg/L	0.0014	0.00053	<0.00050	0.00050	A967889
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	A967949
Dissolved Potassium (K)	mg/L	2.6	1.3	<0.30	0.30	A967949
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Silicon (Si)	mg/L	1.5	1.5	<0.50	0.50	A967949
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	A967889
Dissolved Sodium (Na)	mg/L	2.3	1.5	<0.50	0.50	A967949
Dissolved Strontium (Sr)	mg/L	0.034	<0.020	<0.020	0.020	A967949
Dissolved Sulphur (S)	mg/L	31	1.4	<0.20	0.20	A967949
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A967889
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	A967889

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BQQ198	BQQ199	BQQ201		
Sampling Date		2023/05/16 17:10	2023/05/16 17:30	2023/05/16		
COC Number		694739-03-01	694739-03-01	694739-03-01		
	UNITS	**SW-101**	**SW-102**	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A967889
Dissolved Zinc (Zn)	mg/L	0.18	0.038	<0.0030	0.0030	A967889
RDL = Reportable Detection Limit						

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ160	BQQ161	BQQ162	BQQ163	BQQ164	BQQ165		
Sampling Date		2023/05/16 08:05	2023/05/16 08:10	2023/05/16 08:20	2023/05/16 08:25	2023/05/16 08:30	2023/05/16 08:35		
COC Number		694739-01-01	694739-01-01	694739-01-01	694739-01-01	694739-01-01	694739-01-01		
	UNITS	CL-6 SFC	CL-6 BTM	CL-5 SFC	CL-5 BTM	CL-4 SFC	CL-4 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.079	0.074	0.13	0.11	0.15	0.12	0.020	A965672
Total Aluminum (Al)	mg/L	0.084	0.085	0.082	0.058	0.074	0.083	0.0030	A968503
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	A968503
Total Arsenic (As)	mg/L	0.00055	0.00057	0.00047	0.00042	0.00038	0.00050	0.00020	A968503
Total Barium (Ba)	mg/L	<0.010	<0.010	<0.010	0.011	<0.010	0.010	0.010	A968505
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968503
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A968505
Total Calcium (Ca)	mg/L	11	11	11	17	13	15	0.30	A968505
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968503
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	A968503
Total Copper (Cu)	mg/L	0.0063	0.0068	0.0091	0.0080	0.0098	0.0086	0.0010	A968503
Total Iron (Fe)	mg/L	0.33	0.34	0.35	1.1	0.38	0.71	0.060	A968505
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968503
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	A968505
Total Magnesium (Mg)	mg/L	3.0	3.1	2.8	3.8	3.2	3.6	0.20	A968505
Total Manganese (Mn)	mg/L	0.022	0.023	0.024	0.078	0.027	0.049	0.0040	A968505
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968503
Total Nickel (Ni)	mg/L	<0.00050	0.00079	0.00056	<0.00050	0.00068	0.00056	0.00050	A968503
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	A968505
Total Potassium (K)	mg/L	1.5	1.6	1.4	1.8	1.5	1.7	0.30	A968505
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968503
Total Silicon (Si)	mg/L	1.4	1.3	1.2	1.4	1.2	1.4	0.50	A968505
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A968503
Total Sodium (Na)	mg/L	1.8	1.9	1.7	2.1	1.8	2.0	0.50	A968505
Total Strontium (Sr)	mg/L	0.025	0.025	0.024	0.031	0.025	0.029	0.020	A968505
Total Sulphur (S)	mg/L	5.2	5.1	5.9	11	7.5	9.1	0.20	A968505
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	A968503
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968503
Total Titanium (Ti)	mg/L	0.0019	0.0024	0.0020	0.0012	0.0011	0.0015	0.0010	A968503
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	A968503
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	A968503
Total Zinc (Zn)	mg/L	0.034	0.035	0.054	0.050	0.061	0.096	0.0030	A968503

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ166	BQQ167		BQQ168		BQQ169		
Sampling Date		2023/05/16 08:45	2023/05/16 08:50		2023/05/16 08:55		2023/05/16 09:00		
COC Number		694739-01-01	694739-01-01		694739-01-01		694739-01-01		
	UNITS	CL-8 SFC	CL-8 BTM	QC Batch	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.27	0.17	A965672	0.37	A965672	0.17	0.020	A965672
Total Aluminum (Al)	mg/L	0.081	0.081	A968503	0.089	A969949	0.082	0.0030	A968503
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	A968503	<0.00060	A969949	<0.00060	0.00060	A968503
Total Arsenic (As)	mg/L	0.00038	0.00042	A968503	0.00036	A969949	0.00033	0.00020	A968503
Total Barium (Ba)	mg/L	<0.010	<0.010	A968505	<0.010	A969968	<0.010	0.010	A968505
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	A968503	<0.0010	A969949	<0.0010	0.0010	A968503
Total Boron (B)	mg/L	<0.020	<0.020	A968505	<0.020	A969968	<0.020	0.020	A968505
Total Calcium (Ca)	mg/L	17	13	A968505	21	A969968	15	0.30	A968505
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	A968503	<0.0010	A969949	<0.0010	0.0010	A968503
Total Cobalt (Co)	mg/L	0.00037	<0.00030	A968503	0.00053	A969949	<0.00030	0.00030	A968503
Total Copper (Cu)	mg/L	0.014	0.010	A968503	0.017	A969949	0.013	0.0010	A968503
Total Iron (Fe)	mg/L	0.57	0.41	A968505	0.82	A969968	0.54	0.060	A968505
Total Lead (Pb)	mg/L	<0.00020	<0.00020	A968503	<0.00020	A969949	<0.00020	0.00020	A968503
Total Lithium (Li)	mg/L	<0.020	<0.020	A968505	<0.020	A969968	<0.020	0.020	A968505
Total Magnesium (Mg)	mg/L	3.5	3.1	A968505	4.1	A969968	3.6	0.20	A968505
Total Manganese (Mn)	mg/L	0.045	0.029	A968505	0.067	A969968	0.036	0.0040	A968505
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	A968503	<0.00020	A969949	<0.00020	0.00020	A968503
Total Nickel (Ni)	mg/L	0.00082	0.00065	A968503	0.0012	A969949	0.00056	0.00050	A968503
Total Phosphorus (P)	mg/L	<0.10	<0.10	A968505	<0.10	A969968	<0.10	0.10	A968505
Total Potassium (K)	mg/L	1.7	1.6	A968505	2.0	A969968	1.7	0.30	A968505
Total Selenium (Se)	mg/L	<0.00020	<0.00020	A968503	<0.00020	A969949	<0.00020	0.00020	A968503
Total Silicon (Si)	mg/L	1.2	1.2	A968505	1.4	A969968	1.5	0.50	A968505
Total Silver (Ag)	mg/L	<0.00010	<0.00010	A968503	<0.00010	A969949	<0.00010	0.00010	A968503
Total Sodium (Na)	mg/L	1.9	1.8	A968505	2.0	A969968	2.0	0.50	A968505
Total Strontium (Sr)	mg/L	0.028	0.025	A968505	0.031	A969968	0.027	0.020	A968505
Total Sulphur (S)	mg/L	13	8.5	A968505	17	A969968	9.9	0.20	A968505
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	A968503	<0.00020	A969949	<0.00020	0.00020	A968503
Total Tin (Sn)	mg/L	<0.0010	<0.0010	A968503	<0.0010	A969949	<0.0010	0.0010	A968503
Total Titanium (Ti)	mg/L	0.0015	0.0023	A968503	0.0019	A969949	0.0026	0.0010	A968503
Total Uranium (U)	mg/L	<0.00010	<0.00010	A968503	<0.00010	A969949	<0.00010	0.00010	A968503
Total Vanadium (V)	mg/L	<0.0010	<0.0010	A968503	<0.0010	A969949	<0.0010	0.0010	A968503
Total Zinc (Zn)	mg/L	0.096	0.067	A968503	0.13	A969949	0.071	0.0030	A968503

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ170	BQQ171	BQQ172	BQQ173		BQQ174		
Sampling Date		2023/05/16 09:05	2023/05/16 09:10	2023/05/16 09:15	2023/05/16 09:20		2023/05/16 10:40		
COC Number		694739-02-01	694739-02-01	694739-02-01	694739-02-01		694739-02-01		
	UNITS	CL-7 SFC	CL-7 BTM	CL-2 SFC	CL-2 BTM	QC Batch	SB-2	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.42	0.38	0.13	0.14	A965672	0.67	0.020	A965672
Total Aluminum (Al)	mg/L	0.089	0.091	0.076	0.048	A968503	0.11	0.0030	A969970
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	A968503	<0.00060	0.00060	A969970
Total Arsenic (As)	mg/L	0.00028	0.00021	0.00035	0.00033	A968503	0.00029	0.00020	A969970
Total Barium (Ba)	mg/L	<0.010	<0.010	<0.010	0.011	A968505	0.011	0.010	A969973
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A968503	<0.0010	0.0010	A969970
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	A968505	<0.020	0.020	A969973
Total Calcium (Ca)	mg/L	24	22	13	19	A968505	32	0.30	A969973
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A968503	<0.0010	0.0010	A969970
Total Cobalt (Co)	mg/L	0.00060	0.00058	<0.00030	<0.00030	A968503	0.0011	0.00030	A969970
Total Copper (Cu)	mg/L	0.019	0.018	0.0098	0.0075	A968503	0.027	0.0010	A969970
Total Iron (Fe)	mg/L	0.87	0.79	0.34	0.94	A968505	1.3	0.060	A969973
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A968503	<0.00020	0.00020	A969970
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	A968505	<0.020	0.020	A969973
Total Magnesium (Mg)	mg/L	4.5	4.2	3.0	3.9	A968505	5.6	0.20	A969973
Total Manganese (Mn)	mg/L	0.074	0.066	0.022	0.085	A968505	0.13	0.0040	A969973
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A968503	<0.00020	0.00020	A969970
Total Nickel (Ni)	mg/L	0.0010	0.0010	0.00062	0.00056	A968503	0.0021	0.00050	A969970
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	A968505	<0.10	0.10	A969973
Total Potassium (K)	mg/L	2.1	2.0	1.5	1.9	A968505	2.7	0.30	A969973
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A968503	<0.00020	0.00020	A969970
Total Silicon (Si)	mg/L	1.3	1.2	1.1	1.3	A968505	1.5	0.50	A969973
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	A968503	<0.00010	0.00010	A969970
Total Sodium (Na)	mg/L	2.0	1.9	1.8	2.0	A968505	2.3	0.50	A969973
Total Strontium (Sr)	mg/L	0.032	0.031	0.024	0.031	A968505	0.038	0.020	A969973
Total Sulphur (S)	mg/L	20	19	7.3	14	A968505	27	0.20	A969973
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A968503	<0.00020	0.00020	A969970
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A968503	<0.0010	0.0010	A969970
Total Titanium (Ti)	mg/L	0.0014	0.0022	0.0018	0.0011	A968503	0.0024	0.0010	A969970
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	A968503	<0.00010	0.00010	A969970
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A968503	<0.0010	0.0010	A969970
Total Zinc (Zn)	mg/L	0.15	0.13	0.057	0.056	A968503	0.21	0.0030	A969970

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ175		BQQ176		BQQ177	BQQ178		
Sampling Date		2023/05/16 10:45		2023/05/16 10:50		2023/05/16 11:00	2023/05/16 11:05		
COC Number		694739-02-01		694739-02-01		694739-02-01	694739-02-01		
	UNITS	SB-1	QC Batch	CB-1	QC Batch	CB-2	EB-1	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.73	A965672	0.80	A965672	0.82	1.3	0.020	A965672
Total Aluminum (Al)	mg/L	0.10	A969949	0.12	A969970	0.11	0.17	0.0030	A969949
Total Antimony (Sb)	mg/L	<0.00060	A969949	<0.00060	A969970	<0.00060	<0.00060	0.00060	A969949
Total Arsenic (As)	mg/L	0.00027	A969949	0.00029	A969970	0.00032	0.00027	0.00020	A969949
Total Barium (Ba)	mg/L	0.011	A969968	0.012	A969973	0.012	0.013	0.010	A969968
Total Beryllium (Be)	mg/L	<0.0010	A969949	<0.0010	A969970	<0.0010	<0.0010	0.0010	A969949
Total Boron (B)	mg/L	<0.020	A969968	<0.020	A969973	<0.020	<0.020	0.020	A969968
Total Calcium (Ca)	mg/L	31	A969968	40	A969973	38	48	0.30	A969968
Total Chromium (Cr)	mg/L	<0.0010	A969949	<0.0010	A969970	<0.0010	<0.0010	0.0010	A969949
Total Cobalt (Co)	mg/L	0.0010	A969949	0.0015	A969970	0.0014	0.0029	0.00030	A969949
Total Copper (Cu)	mg/L	0.026	A969949	0.031	A969970	0.031	0.044	0.0010	A969949
Total Iron (Fe)	mg/L	1.4	A969968	1.8	A969973	1.6	2.6	0.060	A969968
Total Lead (Pb)	mg/L	<0.00020	A969949	<0.00020	A969970	<0.00020	<0.00020	0.00020	A969949
Total Lithium (Li)	mg/L	<0.020	A969968	<0.020	A969973	<0.020	<0.020	0.020	A969968
Total Magnesium (Mg)	mg/L	5.2	A969968	6.6	A969973	6.2	7.6	0.20	A969968
Total Manganese (Mn)	mg/L	0.12	A969968	0.18	A969973	0.16	0.31	0.0040	A969968
Total Molybdenum (Mo)	mg/L	<0.00020	A969949	<0.00020	A969970	<0.00020	<0.00020	0.00020	A969949
Total Nickel (Ni)	mg/L	0.0014	A969949	0.0017	A969970	0.0018	0.0027	0.00050	A969949
Total Phosphorus (P)	mg/L	<0.10	A969968	<0.10	A969973	<0.10	<0.10	0.10	A969968
Total Potassium (K)	mg/L	2.6	A969968	3.2	A969973	3.0	3.5	0.30	A969968
Total Selenium (Se)	mg/L	<0.00020	A969949	<0.00020	A969970	<0.00020	0.00021	0.00020	A969949
Total Silicon (Si)	mg/L	1.6	A969968	1.9	A969973	1.5	1.6	0.50	A969968
Total Silver (Ag)	mg/L	<0.00010	A969949	<0.00010	A969970	<0.00010	<0.00010	0.00010	A969949
Total Sodium (Na)	mg/L	2.2	A969968	2.5	A969973	2.4	2.8	0.50	A969968
Total Strontium (Sr)	mg/L	0.038	A969968	0.043	A969973	0.043	0.051	0.020	A969968
Total Sulphur (S)	mg/L	28	A969968	40	A969973	36	51	0.20	A969968
Total Thallium (Tl)	mg/L	<0.00020	A969949	0.00025	A969970	<0.00020	<0.00020	0.00020	A969949
Total Tin (Sn)	mg/L	<0.0010	A969949	<0.0010	A969970	<0.0010	<0.0010	0.0010	A969949
Total Titanium (Ti)	mg/L	0.0035	A969949	0.0013	A969970	0.0018	0.0025	0.0010	A969949
Total Uranium (U)	mg/L	<0.00010	A969949	<0.00010	A969970	<0.00010	<0.00010	0.00010	A969949
Total Vanadium (V)	mg/L	<0.0010	A969949	<0.0010	A969970	<0.0010	<0.0010	0.0010	A969949
Total Zinc (Zn)	mg/L	0.23	A969949	0.25	A969970	0.28	0.40	0.0030	A969949

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ179	BQQ193		BQQ194	BQQ195		
Sampling Date		2023/05/16 11:15	2023/05/16 11:25		2023/05/16 11:40	2023/05/16 11:45		
COC Number		694739-02-01	694739-03-01		694739-03-01	694739-03-01		
	UNITS	EB-2	NB-2	QC Batch	NB-1	CLD	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	1.3	0.86	A965672	0.93	0.89	0.020	A966118
Total Aluminum (Al)	mg/L	0.17	0.11	A968503	0.12	0.12	0.0030	A968503
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	A968503	<0.00060	<0.00060	0.00060	A968503
Total Arsenic (As)	mg/L	0.00025	<0.00020	A968503	0.00030	0.00021	0.00020	A968503
Total Barium (Ba)	mg/L	0.014	0.012	A968505	0.012	0.012	0.010	A968505
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	A968503	<0.0010	<0.0010	0.0010	A968503
Total Boron (B)	mg/L	0.020	<0.020	A968505	<0.020	<0.020	0.020	A968505
Total Calcium (Ca)	mg/L	49	43	A968505	45	44	0.30	A968505
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	A968503	<0.0010	<0.0010	0.0010	A968503
Total Cobalt (Co)	mg/L	0.0031	0.0014	A968503	0.0015	0.0014	0.00030	A968503
Total Copper (Cu)	mg/L	0.039	0.034	A968503	0.035	0.036	0.0010	A968503
Total Iron (Fe)	mg/L	2.7	2.0	A968505	2.0	1.8	0.060	A968505
Total Lead (Pb)	mg/L	<0.00020	<0.00020	A968503	<0.00020	<0.00020	0.00020	A968503
Total Lithium (Li)	mg/L	<0.020	<0.020	A968505	<0.020	<0.020	0.020	A968505
Total Magnesium (Mg)	mg/L	7.6	6.9	A968505	7.2	6.9	0.20	A968505
Total Manganese (Mn)	mg/L	0.34	0.19	A968505	0.19	0.17	0.0040	A968505
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	A968503	<0.00020	<0.00020	0.00020	A968503
Total Nickel (Ni)	mg/L	0.0030	0.0018	A968503	0.0018	0.0018	0.00050	A968503
Total Phosphorus (P)	mg/L	<0.10	<0.10	A968505	<0.10	<0.10	0.10	A968505
Total Potassium (K)	mg/L	3.5	3.3	A968505	3.4	3.3	0.30	A968505
Total Selenium (Se)	mg/L	0.00020	0.00021	A968503	<0.00020	<0.00020	0.00020	A968503
Total Silicon (Si)	mg/L	1.6	1.6	A968505	1.6	1.7	0.50	A968505
Total Silver (Ag)	mg/L	<0.00010	<0.00010	A968503	<0.00010	<0.00010	0.00010	A968503
Total Sodium (Na)	mg/L	2.8	2.5	A968505	2.6	2.6	0.50	A968505
Total Strontium (Sr)	mg/L	0.052	0.046	A968505	0.048	0.047	0.020	A968505
Total Sulphur (S)	mg/L	50	43	A968505	44	45	0.20	A968505
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	A968503	<0.00020	<0.00020	0.00020	A968503
Total Tin (Sn)	mg/L	<0.0010	<0.0010	A968503	<0.0010	<0.0010	0.0010	A968503
Total Titanium (Ti)	mg/L	0.0022	0.0022	A968503	0.0018	0.0026	0.0010	A968503
Total Uranium (U)	mg/L	<0.00010	<0.00010	A968503	<0.00010	<0.00010	0.00010	A968503
Total Vanadium (V)	mg/L	<0.0010	<0.0010	A968503	<0.0010	<0.0010	0.0010	A968503
Total Zinc (Zn)	mg/L	0.40	0.29	A968503	0.30	0.31	0.0030	A968503

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ195			BQQ196		BQQ197	BQQ198		
Sampling Date		2023/05/16 11:45			2023/05/16 12:15		2023/05/16 17:00	2023/05/16 17:10		
COC Number		694739-03-01			694739-03-01		694739-03-01	694739-03-01		
	UNITS	CLD Lab-Dup	RDL	QC Batch	SC-1	QC Batch	SW-100	SW-101	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L				0.15	A966118	0.15	0.69	0.020	A966118
Total Aluminum (Al)	mg/L	0.12	0.0030	A968503	0.090	A968503	0.073	0.099	0.0030	A969949
Total Antimony (Sb)	mg/L	<0.00060	0.00060	A968503	<0.00060	A968503	<0.00060	<0.00060	0.00060	A969949
Total Arsenic (As)	mg/L	0.00031	0.00020	A968503	0.00038	A968503	0.00034	0.00039	0.00020	A969949
Total Barium (Ba)	mg/L	0.012	0.010	A968505	<0.010	A968505	<0.010	0.011	0.010	A969968
Total Beryllium (Be)	mg/L	<0.0010	0.0010	A968503	<0.0010	A968503	<0.0010	<0.0010	0.0010	A969949
Total Boron (B)	mg/L	<0.020	0.020	A968505	<0.020	A968505	<0.020	<0.020	0.020	A969968
Total Calcium (Ca)	mg/L	44	0.30	A968505	7.3	A968505	12	30	0.30	A969968
Total Chromium (Cr)	mg/L	<0.0010	0.0010	A968503	<0.0010	A968503	<0.0010	<0.0010	0.0010	A969949
Total Cobalt (Co)	mg/L	0.0013	0.00030	A968503	<0.00030	A968503	<0.00030	0.0010	0.00030	A969949
Total Copper (Cu)	mg/L	0.034	0.0010	A968503	0.0067	A968503	0.0098	0.026	0.0010	A969949
Total Iron (Fe)	mg/L	1.9	0.060	A968505	0.32	A968505	0.37	1.3	0.060	A969968
Total Lead (Pb)	mg/L	<0.00020	0.00020	A968503	<0.00020	A968503	<0.00020	<0.00020	0.00020	A969949
Total Lithium (Li)	mg/L	<0.020	0.020	A968505	<0.020	A968505	<0.020	<0.020	0.020	A969968
Total Magnesium (Mg)	mg/L	7.0	0.20	A968505	2.2	A968505	3.0	5.1	0.20	A969968
Total Manganese (Mn)	mg/L	0.17	0.0040	A968505	0.023	A968505	0.026	0.13	0.0040	A969968
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	A968503	<0.00020	A968503	<0.00020	<0.00020	0.00020	A969949
Total Nickel (Ni)	mg/L	0.0017	0.00050	A968503	0.00058	A968503	0.00079	0.0016	0.00050	A969949
Total Phosphorus (P)	mg/L	<0.10	0.10	A968505	<0.10	A968505	<0.10	<0.10	0.10	A969968
Total Potassium (K)	mg/L	3.3	0.30	A968505	1.1	A968505	1.5	2.5	0.30	A969968
Total Selenium (Se)	mg/L	<0.00020	0.00020	A968503	<0.00020	A968503	<0.00020	<0.00020	0.00020	A969949
Total Silicon (Si)	mg/L	1.6	0.50	A968505	1.7	A968505	1.1	1.6	0.50	A969968
Total Silver (Ag)	mg/L	<0.00010	0.00010	A968503	<0.00010	A968503	<0.00010	<0.00010	0.00010	A969949
Total Sodium (Na)	mg/L	2.6	0.50	A968505	1.3	A968505	1.8	2.3	0.50	A969968
Total Strontium (Sr)	mg/L	0.046	0.020	A968505	<0.020	A968505	0.025	0.037	0.020	A969968
Total Sulphur (S)	mg/L	43	0.20	A968505	1.4	A968505	7.3	28	0.20	A969968
Total Thallium (Tl)	mg/L	<0.00020	0.00020	A968503	<0.00020	A968503	<0.00020	<0.00020	0.00020	A969949
Total Tin (Sn)	mg/L	<0.0010	0.0010	A968503	<0.0010	A968503	<0.0010	<0.0010	0.0010	A969949
Total Titanium (Ti)	mg/L	0.0028	0.0010	A968503	0.0034	A968503	0.0014	0.0024	0.0010	A969949
Total Uranium (U)	mg/L	<0.00010	0.00010	A968503	<0.00010	A968503	<0.00010	<0.00010	0.00010	A969949
Total Vanadium (V)	mg/L	<0.0010	0.0010	A968503	<0.0010	A968503	<0.0010	<0.0010	0.0010	A969949

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ195			BQQ196		BQQ197	BQQ198		
Sampling Date		2023/05/16 11:45			2023/05/16 12:15		2023/05/16 17:00	2023/05/16 17:10		
COC Number		694739-03-01			694739-03-01		694739-03-01	694739-03-01		
	UNITS	**CLD Lab-Dup**	**RDL**	**QC Batch**	**SC-1**	**QC Batch**	**SW-100**	**SW-101**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.29	0.0030	A968503	0.049	A968503	0.061	0.23	0.0030	A969949

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BQQ199	BQQ201		
Sampling Date		2023/05/16 17:30	2023/05/16		
COC Number		694739-03-01	694739-03-01		
	UNITS	SW-102	TRIP BLANK	RDL	QC Batch
Elements					
Total Cadmium (Cd)	ug/L	0.15	<0.020	0.020	A966118
Total Aluminum (Al)	mg/L	0.086	0.0047	0.0030	A968503
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	A968503
Total Arsenic (As)	mg/L	0.00044	<0.00020	0.00020	A968503
Total Barium (Ba)	mg/L	<0.010	<0.010	0.010	A968505
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	A968503
Total Boron (B)	mg/L	<0.020	<0.020	0.020	A968505
Total Calcium (Ca)	mg/L	7.6	<0.30	0.30	A968505
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	A968503
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	A968503
Total Copper (Cu)	mg/L	0.0066	<0.0010	0.0010	A968503
Total Iron (Fe)	mg/L	0.32	<0.060	0.060	A968505
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	A968503
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	A968505
Total Magnesium (Mg)	mg/L	2.3	<0.20	0.20	A968505
Total Manganese (Mn)	mg/L	0.023	<0.0040	0.0040	A968505
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	A968503
Total Nickel (Ni)	mg/L	0.00056	<0.00050	0.00050	A968503
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	A968505
Total Potassium (K)	mg/L	1.2	<0.30	0.30	A968505
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	A968503
Total Silicon (Si)	mg/L	1.6	<0.50	0.50	A968505
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	A968503
Total Sodium (Na)	mg/L	1.4	<0.50	0.50	A968505
Total Strontium (Sr)	mg/L	<0.020	<0.020	0.020	A968505
Total Sulphur (S)	mg/L	1.3	<0.20	0.20	A968505
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	A968503
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	A968503
Total Titanium (Ti)	mg/L	0.0030	<0.0010	0.0010	A968503
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	A968503
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	A968503
Total Zinc (Zn)	mg/L	0.049	<0.0030	0.0030	A968503
RDL = Reportable Detection Limit					

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ160			BQQ160			BQQ161		
Sampling Date		2023/05/16 08:05			2023/05/16 08:05			2023/05/16 08:10		
COC Number		694739-01-01			694739-01-01			694739-01-01		
	UNITS	CL-6 SFC	RDL	QC Batch	CL-6 SFC Lab-Dup	RDL	QC Batch	CL-6 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	38	0.50	A966069				38	0.50	A966069
Total Hardness (CaCO3)	mg/L	39.4	0.50	A965822				40.4	0.50	A965822
Misc. Inorganics										
pH	pH	6.52	N/A	A968189				6.49	N/A	A968189
Total Organic Carbon (C)	mg/L	12	0.50	A969443				11	0.50	A970581
Total Suspended Solids	mg/L	1.1	1.0	A966919	1.5	1.0	A966919	1.1	1.0	A966919
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	13	0.50	A970905				15	0.50	A970905
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A968170				<1.0	1.0	A968170
Alkalinity (Total as CaCO3)	mg/L	26	1.0	A968170				26	1.0	A968170
Bicarbonate (HCO3)	mg/L	32	1.0	A968170				32	1.0	A968170
Carbonate (CO3)	mg/L	<1.0	1.0	A968170				<1.0	1.0	A968170
Hydroxide (OH)	mg/L	<1.0	1.0	A968170				<1.0	1.0	A968170
Sulphate (SO4)	mg/L	15	1.0	A968510				15	1.0	A968510
Physical Properties										
Turbidity	NTU	2.5	0.10	A967357				2.8	0.10	A967357

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ162		BQQ163	BQQ164		BQQ165	BQQ166		
Sampling Date		2023/05/16 08:20		2023/05/16 08:25	2023/05/16 08:30		2023/05/16 08:35	2023/05/16 08:45		
COC Number		694739-01-01		694739-01-01	694739-01-01		694739-01-01	694739-01-01		
	UNITS	CL-5 SFC	QC Batch	CL-5 BTM	CL-4 SFC	QC Batch	CL-4 BTM	CL-8 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	40	A966069	57	45	A966069	52	58	0.50	A966069
Total Hardness (CaCO3)	mg/L	39.6	A965822	57.9	46.1	A965822	52.4	57.2	0.50	A965822
Misc. Inorganics										
pH	pH	6.51	A968189	6.43	6.49	A968189	6.44	6.42	N/A	A968189
Total Organic Carbon (C)	mg/L	11	A971873	10	11	A969443	10	10	0.50	A969443
Total Suspended Solids	mg/L	<1.0	A966919	<1.0	<1.0	A966919	<1.0	<1.0	1.0	A966919
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11	A972456	14	14	A970905	12	10	0.50	A970905
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	A968170	<1.0	<1.0	A968170	<1.0	<1.0	1.0	A968170
Alkalinity (Total as CaCO3)	mg/L	26	A968170	24	24	A968170	28	22	1.0	A968170
Bicarbonate (HCO3)	mg/L	31	A968170	30	30	A968170	34	26	1.0	A968170
Carbonate (CO3)	mg/L	<1.0	A968170	<1.0	<1.0	A968170	<1.0	<1.0	1.0	A968170
Hydroxide (OH)	mg/L	<1.0	A968170	<1.0	<1.0	A968170	<1.0	<1.0	1.0	A968170
Sulphate (SO4)	mg/L	20	A968510	36	26	A968510	31	41	1.0	A968510
Physical Properties										
Turbidity	NTU	2.9	A967357	10	3.3	A967357	5.4	5.2	0.10	A967080

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C335298
Report Date: 2023/05/27

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RCP

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ166			BQQ167		BQQ168		
Sampling Date		2023/05/16 08:45			2023/05/16 08:50		2023/05/16 08:55		
COC Number		694739-01-01			694739-01-01		694739-01-01		
	UNITS	CL-8 SFC Lab-Dup	RDL	QC Batch	CL-8 BTM	QC Batch	CL-3 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				50	A966069	73	0.50	A966069
Total Hardness (CaCO3)	mg/L				45.9	A965822	70.0	0.50	A965822
Misc. Inorganics									
pH	pH				6.68	A968034	6.39	N/A	A968189
Total Organic Carbon (C)	mg/L				9.9	A969443	9.6	0.50	A971873
Total Suspended Solids	mg/L				1.1	A966919	1.0	1.0	A966919
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	10	0.50	A970905	9.0	A970088	9.6	0.50	A972456
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	A968031	<1.0	1.0	A968170
Alkalinity (Total as CaCO3)	mg/L				22	A968031	20	1.0	A968170
Bicarbonate (HCO3)	mg/L				27	A968031	24	1.0	A968170
Carbonate (CO3)	mg/L				<1.0	A968031	<1.0	1.0	A968170
Hydroxide (OH)	mg/L				<1.0	A968031	<1.0	1.0	A968170
Sulphate (SO4)	mg/L				29	A968026	56	1.0	A968510
Physical Properties									
Turbidity	NTU				3.2	A967357	7.6	0.10	A967080

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C335298
Report Date: 2023/05/27

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RCP

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ169		BQQ170			BQQ170		
Sampling Date		2023/05/16 09:00		2023/05/16 09:05			2023/05/16 09:05		
COC Number		694739-01-01		694739-02-01			694739-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	RDL	QC Batch	CL-7 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	50	A966069	85	0.50	A966069			
Total Hardness (CaCO3)	mg/L	52.1	A965822	78.7	0.50	A965822			
Misc. Inorganics									
pH	pH	6.68	A968034	6.57	N/A	A968034			
Total Organic Carbon (C)	mg/L	11	A970581	9.0	0.50	A970581			
Total Suspended Solids	mg/L	<1.0	A966919	1.0	1.0	A966919			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.6	A970088	8.9	0.50	A970088			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	A968031	<1.0	1.0	A968031			
Alkalinity (Total as CaCO3)	mg/L	23	A968031	15	1.0	A968031			
Bicarbonate (HCO3)	mg/L	28	A968031	19	1.0	A968031			
Carbonate (CO3)	mg/L	<1.0	A968031	<1.0	1.0	A968031			
Hydroxide (OH)	mg/L	<1.0	A968031	<1.0	1.0	A968031			
Sulphate (SO4)	mg/L	29	A968026	66	1.0	A968030			
Physical Properties									
Turbidity	NTU	3.3	A967080	7.2	0.10	A967080	7.4	0.10	A967080

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ171			BQQ171			BQQ172		
Sampling Date		2023/05/16 09:10			2023/05/16 09:10			2023/05/16 09:15		
COC Number		694739-02-01			694739-02-01			694739-02-01		
	UNITS	CL-7 BTM	RDL	QC Batch	CL-7 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	82	0.50	A966069				44	0.50	A966069
Total Hardness (CaCO3)	mg/L	72.7	0.50	A965822				44.5	0.50	A965822
Misc. Inorganics										
pH	pH	6.59	N/A	A968034				6.47	N/A	A968189
Total Organic Carbon (C)	mg/L	10	0.50	A970581				10	0.50	A971873
Total Suspended Solids	mg/L	<1.0	1.0	A966919				1.1	1.0	A966919
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	10	0.50	A970088				9.7	0.50	A972456
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A968031				<1.0	1.0	A968170
Alkalinity (Total as CaCO3)	mg/L	16	1.0	A968031				25	1.0	A968170
Bicarbonate (HCO3)	mg/L	20	1.0	A968031				31	1.0	A968170
Carbonate (CO3)	mg/L	<1.0	1.0	A968031				<1.0	1.0	A968170
Hydroxide (OH)	mg/L	<1.0	1.0	A968031				<1.0	1.0	A968170
Sulphate (SO4)	mg/L	59	1.0	A967965				25	1.0	A968510
Physical Properties										
Turbidity	NTU	6.3	0.10	A967357	6.3	0.10	A967357	2.6	0.10	A967357

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C335298
Report Date: 2023/05/27

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RCP

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ173		BQQ174		BQQ175			BQQ175		
Sampling Date		2023/05/16 09:20		2023/05/16 10:40		2023/05/16 10:45			2023/05/16 10:45		
COC Number		694739-02-01		694739-02-01		694739-02-01			694739-02-01		
	UNITS	CL-2 BTM	QC Batch	SB-2	QC Batch	SB-1	RDL	QC Batch	SB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L	66	A966069	110	A966069	110	0.50	A966123			
Total Hardness (CaCO3)	mg/L	62.6	A965822	104	A965822	98.6	0.50	A965822			
Misc. Inorganics											
pH	pH	6.38	A968189	6.52	A968034	6.53	N/A	A968034			
Total Organic Carbon (C)	mg/L	10	A969443	10	A969443	7.9	0.50	A969443			
Total Suspended Solids	mg/L	<1.0	A966919	1.0	A966919	2.1	1.0	A967511	2.1	1.0	A967511
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	12	A970905	9.1	A970088	8.3	0.50	A970088			
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	A968170	<1.0	A968031	<1.0	1.0	A968031			
Alkalinity (Total as CaCO3)	mg/L	23	A968170	16	A968031	15	1.0	A968031			
Bicarbonate (HCO3)	mg/L	28	A968170	19	A968031	18	1.0	A968031			
Carbonate (CO3)	mg/L	<1.0	A968170	<1.0	A968031	<1.0	1.0	A968031			
Hydroxide (OH)	mg/L	<1.0	A968170	<1.0	A968031	<1.0	1.0	A968031			
Sulphate (SO4)	mg/L	46	A968510	81	A968026	87	1.0	A968026			
Physical Properties											
Turbidity	NTU	7.2	A967080	9.7	A967080	10	0.10	A967080			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ176			BQQ176			BQQ177		
Sampling Date		2023/05/16 10:50			2023/05/16 10:50			2023/05/16 11:00		
COC Number		694739-02-01			694739-02-01			694739-02-01		
	UNITS	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch	CB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	130	0.50	A966123				130	0.50	A966123
Total Hardness (CaCO3)	mg/L	127	0.50	A965822				120	0.50	A966125
Misc. Inorganics										
pH	pH	6.46	N/A	A968034				6.47	N/A	A968034
Total Organic Carbon (C)	mg/L	7.1	0.50	A969443	7.1	0.50	A969443	7.8	0.50	A969443
Total Suspended Solids	mg/L	1.7	1.0	A967511				1.5	1.0	A967511
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.8	0.50	A970088				7.8	0.50	A970088
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A968031				<1.0	1.0	A968031
Alkalinity (Total as CaCO3)	mg/L	13	1.0	A968031				13	1.0	A968031
Bicarbonate (HCO3)	mg/L	16	1.0	A968031				16	1.0	A968031
Carbonate (CO3)	mg/L	<1.0	1.0	A968031				<1.0	1.0	A968031
Hydroxide (OH)	mg/L	<1.0	1.0	A968031				<1.0	1.0	A968031
Sulphate (SO4)	mg/L	120	1.0	A968026				110	1.0	A967965
Physical Properties										
Turbidity	NTU	12	0.10	A967080				12	0.10	A967080

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C335298
Report Date: 2023/05/27

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RCP

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ178			BQQ179			BQQ179		
Sampling Date		2023/05/16 11:05			2023/05/16 11:15			2023/05/16 11:15		
COC Number		694739-02-01			694739-02-01			694739-02-01		
	UNITS	EB-1	RDL	QC Batch	EB-2	RDL	QC Batch	EB-2 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	160	0.50	A966123	160	0.50	A966123			
Total Hardness (CaCO3)	mg/L	152	0.50	A966127	154	0.50	A966127			
Misc. Inorganics										
pH	pH	6.31	N/A	A968034	6.07	N/A	A968189			
Total Organic Carbon (C)	mg/L	6.4	0.50	A969443	6.4	0.50	A970581			
Total Suspended Solids	mg/L	1.6	1.0	A967511	3.0	0.99	A967511			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.6	0.50	A970088	7.5	0.50	A970905			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A968031	<1.0	1.0	A968170			
Alkalinity (Total as CaCO3)	mg/L	7.0	1.0	A968031	7.5	1.0	A968170			
Bicarbonate (HCO3)	mg/L	8.6	1.0	A968031	9.1	1.0	A968170			
Carbonate (CO3)	mg/L	<1.0	1.0	A968031	<1.0	1.0	A968170			
Hydroxide (OH)	mg/L	<1.0	1.0	A968031	<1.0	1.0	A968170			
Sulphate (SO4)	mg/L	150	5.0	A968026	160	5.0	A968510	160	5.0	A968510
Physical Properties										
Turbidity	NTU	18	0.10	A967080	18	0.10	A967080			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C335298
Report Date: 2023/05/27

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RCP

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ193		BQQ194		BQQ195		BQQ196		
Sampling Date		2023/05/16 11:25		2023/05/16 11:40		2023/05/16 11:45		2023/05/16 12:15		
COC Number		694739-03-01		694739-03-01		694739-03-01		694739-03-01		
	UNITS	NB-2	QC Batch	NB-1	QC Batch	CLD	RDL	SC-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	140	A966123	150	A966123	140	0.50	30	0.50	A966123
Total Hardness (CaCO3)	mg/L	137	A966127	142	A966127	140	0.50	27.1	0.50	A966127
Misc. Inorganics										
pH	pH	6.20	A968189	6.42	A968034	6.42	N/A	6.72	N/A	A968034
Total Organic Carbon (C)	mg/L	6.3	A970581	7.4	A969443	6.6	0.50	12	0.50	A969443
Total Suspended Solids	mg/L	1.9	A966863	1.5	A966863	1.5	1.0	2.7	1.0	A966863
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.1	A970905	6.8	A970088	7.9	0.50	11	0.50	A970088
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	A968170	<1.0	A968031	<1.0	1.0	<1.0	1.0	A968031
Alkalinity (Total as CaCO3)	mg/L	13	A968170	11	A968031	12	1.0	25	1.0	A968031
Bicarbonate (HCO3)	mg/L	16	A968170	14	A968031	14	1.0	31	1.0	A968031
Carbonate (CO3)	mg/L	<1.0	A968170	<1.0	A968031	<1.0	1.0	<1.0	1.0	A968031
Hydroxide (OH)	mg/L	<1.0	A968170	<1.0	A968031	<1.0	1.0	<1.0	1.0	A968031
Sulphate (SO4)	mg/L	140	A968510	130	A968030	140	5.0	1.5	1.0	A968026
Physical Properties										
Turbidity	NTU	14	A967080	13	A967080	13	0.10	2.3	0.10	A967080

RDL = Reportable Detection Limit
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BQQ197		BQQ198		BQQ199	BQQ201		
Sampling Date		2023/05/16 17:00		2023/05/16 17:10		2023/05/16 17:30	2023/05/16		
COC Number		694739-03-01		694739-03-01		694739-03-01	694739-03-01		
	UNITS	SW-100	QC Batch	SW-101	QC Batch	SW-102	TRIP BLANK	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	47	A966123	100	A966123	30	<0.50	0.50	A966123
Total Hardness (CaCO3)	mg/L	43.5	A966127	96.2	A966127	28.3	<0.50	0.50	A966127
Misc. Inorganics									
pH	pH	6.68	A968034	6.56	A967809	6.76	4.82	N/A	A967809
Total Organic Carbon (C)	mg/L	11	A969443	9.1	A969443	12	<0.50	0.50	A969443
Total Suspended Solids	mg/L	1.7	A966863	1.4	A966863	2.5	<1.0	1.0	A967511
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	11	A970088	9.1	A970088	9.9	<0.50	0.50	A970088
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	A968031	<1.0	A967802	<1.0	<1.0	1.0	A967802
Alkalinity (Total as CaCO3)	mg/L	23	A968031	16	A967802	25	<1.0	1.0	A967802
Bicarbonate (HCO3)	mg/L	28	A968031	20	A967802	30	<1.0	1.0	A967802
Carbonate (CO3)	mg/L	<1.0	A968031	<1.0	A967802	<1.0	<1.0	1.0	A967802
Hydroxide (OH)	mg/L	<1.0	A968031	<1.0	A967802	<1.0	<1.0	1.0	A967802
Sulphate (SO4)	mg/L	25	A968026	79	A968026	1.6	<1.0	1.0	A968026
Physical Properties									
Turbidity	NTU	2.8	A967080	9.9	A967080	2.1	0.10	0.10	A967080

RDL = Reportable Detection Limit
N/A = Not Applicable

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TOXICOLOGY (WATER)

Bureau Veritas ID		BQQ200	
Sampling Date		2023/05/16 11:40	
COC Number		694739-03-01	
	UNITS	CAMP LAKE DISCHARGE	QC Batch
Rainbow Trout Bioassay			
LC50	% vol/vol	ATTACHED	A968527

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	5.6°C
Package 2	1.2°C
Package 3	1.7°C
Package 4	0.8°C
Package 5	5.9°C
Package 6	3.3°C

Sample BQQ165, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BQQ177, Elements by ICP-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A966863	Total Suspended Solids	2023/05/19	88	80 - 120	94	80 - 120	<1.0	mg/L	9.8	20
A966919	Total Suspended Solids	2023/05/19	91	80 - 120	94	80 - 120	<1.0	mg/L	NC	20
A967080	Turbidity	2023/05/19			103	80 - 120	<0.10	NTU	2.7	20
A967357	Turbidity	2023/05/19			104	80 - 120	<0.10	NTU	0.95	20
A967511	Total Suspended Solids	2023/05/19	87	80 - 120	100	80 - 120	<1.0	mg/L	3.2	20
A967802	Alkalinity (PP as CaCO3)	2023/05/20					<1.0	mg/L	NC	20
A967802	Alkalinity (Total as CaCO3)	2023/05/20			100	80 - 120	<1.0	mg/L	8.6	20
A967802	Bicarbonate (HCO3)	2023/05/20					<1.0	mg/L	8.6	20
A967802	Carbonate (CO3)	2023/05/20					<1.0	mg/L	NC	20
A967802	Hydroxide (OH)	2023/05/20					<1.0	mg/L	NC	20
A967809	pH	2023/05/20			100	97 - 103			1.4	N/A
A967889	Dissolved Aluminum (Al)	2023/05/21	94	80 - 120	105	80 - 120	<0.0030	mg/L	2.3	20
A967889	Dissolved Antimony (Sb)	2023/05/21	110	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
A967889	Dissolved Arsenic (As)	2023/05/21	92	80 - 120	96	80 - 120	<0.00020	mg/L	2.7	20
A967889	Dissolved Beryllium (Be)	2023/05/21	93	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
A967889	Dissolved Chromium (Cr)	2023/05/21	90	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
A967889	Dissolved Cobalt (Co)	2023/05/21	94	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20
A967889	Dissolved Copper (Cu)	2023/05/21	93	80 - 120	97	80 - 120	<0.0010	mg/L	4.5	20
A967889	Dissolved Lead (Pb)	2023/05/21	93	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A967889	Dissolved Molybdenum (Mo)	2023/05/21	96	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
A967889	Dissolved Nickel (Ni)	2023/05/21	91	80 - 120	97	80 - 120	<0.00050	mg/L	9.3	20
A967889	Dissolved Selenium (Se)	2023/05/21	94	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
A967889	Dissolved Silver (Ag)	2023/05/21	95	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
A967889	Dissolved Thallium (Tl)	2023/05/21	95	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A967889	Dissolved Tin (Sn)	2023/05/21	99	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
A967889	Dissolved Titanium (Ti)	2023/05/21	94	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
A967889	Dissolved Uranium (U)	2023/05/21	93	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20
A967889	Dissolved Vanadium (V)	2023/05/21	96	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
A967889	Dissolved Zinc (Zn)	2023/05/21	95	80 - 120	95	80 - 120	<0.0030	mg/L	0.12	20
A967949	Dissolved Barium (Ba)	2023/05/19	98	80 - 120	97	80 - 120	<0.010	mg/L	14	20
A967949	Dissolved Boron (B)	2023/05/19	101	80 - 120	98	80 - 120	<0.020	mg/L	NC	20
A967949	Dissolved Calcium (Ca)	2023/05/19	99	80 - 120	98	80 - 120	<0.30	mg/L	0.89	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A967949	Dissolved Iron (Fe)	2023/05/19	102	80 - 120	99	80 - 120	<0.060	mg/L	5.8	20
A967949	Dissolved Lithium (Li)	2023/05/19	95	80 - 120	95	80 - 120	<0.020	mg/L	2.0	20
A967949	Dissolved Magnesium (Mg)	2023/05/19	104	80 - 120	101	80 - 120	<0.20	mg/L	1.1	20
A967949	Dissolved Manganese (Mn)	2023/05/19	101	80 - 120	98	80 - 120	<0.0040	mg/L	0.41	20
A967949	Dissolved Phosphorus (P)	2023/05/19	108	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
A967949	Dissolved Potassium (K)	2023/05/19	95	80 - 120	95	80 - 120	<0.30	mg/L	1.7	20
A967949	Dissolved Silicon (Si)	2023/05/19	99	80 - 120	99	80 - 120	<0.50	mg/L	3.5	20
A967949	Dissolved Sodium (Na)	2023/05/19	94	80 - 120	93	80 - 120	<0.50	mg/L	2.9	20
A967949	Dissolved Strontium (Sr)	2023/05/19	93	80 - 120	93	80 - 120	<0.020	mg/L	1.9	20
A967949	Dissolved Sulphur (S)	2023/05/19	99	80 - 120	100	80 - 120	<0.20	mg/L	0.0086	20
A967959	Dissolved Barium (Ba)	2023/05/19	102	80 - 120	97	80 - 120	<0.010	mg/L		
A967959	Dissolved Boron (B)	2023/05/19	105	80 - 120	98	80 - 120	<0.020	mg/L		
A967959	Dissolved Calcium (Ca)	2023/05/19	103	80 - 120	99	80 - 120	<0.30	mg/L	0.34	20
A967959	Dissolved Iron (Fe)	2023/05/19	105	80 - 120	99	80 - 120	<0.060	mg/L	3.9	20
A967959	Dissolved Lithium (Li)	2023/05/19	98	80 - 120	97	80 - 120	<0.020	mg/L		
A967959	Dissolved Magnesium (Mg)	2023/05/19	106	80 - 120	101	80 - 120	<0.20	mg/L	0.42	20
A967959	Dissolved Manganese (Mn)	2023/05/19	106	80 - 120	99	80 - 120	<0.0040	mg/L	3.2	20
A967959	Dissolved Phosphorus (P)	2023/05/19	111	80 - 120	104	80 - 120	<0.10	mg/L		
A967959	Dissolved Potassium (K)	2023/05/19	100	80 - 120	95	80 - 120	<0.30	mg/L	0.47	20
A967959	Dissolved Silicon (Si)	2023/05/19	103	80 - 120	99	80 - 120	<0.50	mg/L		
A967959	Dissolved Sodium (Na)	2023/05/19	96	80 - 120	94	80 - 120	<0.50	mg/L	0.30	20
A967959	Dissolved Strontium (Sr)	2023/05/19	96	80 - 120	93	80 - 120	<0.020	mg/L		
A967959	Dissolved Sulphur (S)	2023/05/19	NC	80 - 120	100	80 - 120	<0.20	mg/L		
A967965	Sulphate (SO4)	2023/05/19	95	80 - 120	94	80 - 120	<1.0	mg/L	0.086	20
A968026	Sulphate (SO4)	2023/05/19	93	80 - 120	100	80 - 120	<1.0	mg/L	1.3	20
A968030	Sulphate (SO4)	2023/05/19	88	80 - 120	100	80 - 120	<1.0	mg/L	1.6	20
A968031	Alkalinity (PP as CaCO3)	2023/05/20					<1.0	mg/L	NC	20
A968031	Alkalinity (Total as CaCO3)	2023/05/20			94	80 - 120	<1.0	mg/L	1.6	20
A968031	Bicarbonate (HCO3)	2023/05/20					<1.0	mg/L	1.6	20
A968031	Carbonate (CO3)	2023/05/20					<1.0	mg/L	NC	20
A968031	Hydroxide (OH)	2023/05/20					<1.0	mg/L	NC	20
A968034	pH	2023/05/20			100	97 - 103			0.46	N/A

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A968170	Alkalinity (PP as CaCO3)	2023/05/20					<1.0	mg/L	NC	20
A968170	Alkalinity (Total as CaCO3)	2023/05/20			100	80 - 120	<1.0	mg/L	3.7	20
A968170	Bicarbonate (HCO3)	2023/05/20					<1.0	mg/L	3.7	20
A968170	Carbonate (CO3)	2023/05/20					<1.0	mg/L	NC	20
A968170	Hydroxide (OH)	2023/05/20					<1.0	mg/L	NC	20
A968189	pH	2023/05/20			100	97 - 103			0.85	N/A
A968199	Dissolved Barium (Ba)	2023/05/20	99	80 - 120	102	80 - 120	<0.010	mg/L		
A968199	Dissolved Boron (B)	2023/05/20	96	80 - 120	96	80 - 120	<0.020	mg/L		
A968199	Dissolved Calcium (Ca)	2023/05/20	96	80 - 120	99	80 - 120	<0.30	mg/L	3.1	20
A968199	Dissolved Iron (Fe)	2023/05/20	98	80 - 120	103	80 - 120	<0.060	mg/L	NC	20
A968199	Dissolved Lithium (Li)	2023/05/20	96	80 - 120	100	80 - 120	<0.020	mg/L		
A968199	Dissolved Magnesium (Mg)	2023/05/20	99	80 - 120	103	80 - 120	<0.20	mg/L	2.9	20
A968199	Dissolved Manganese (Mn)	2023/05/20	99	80 - 120	103	80 - 120	<0.0040	mg/L	6.6	20
A968199	Dissolved Phosphorus (P)	2023/05/20	100	80 - 120	101	80 - 120	<0.10	mg/L		
A968199	Dissolved Potassium (K)	2023/05/20	100	80 - 120	103	80 - 120	<0.30	mg/L	4.2	20
A968199	Dissolved Silicon (Si)	2023/05/20	93	80 - 120	98	80 - 120	<0.50	mg/L		
A968199	Dissolved Sodium (Na)	2023/05/20	94	80 - 120	102	80 - 120	<0.50	mg/L	2.6	20
A968199	Dissolved Strontium (Sr)	2023/05/20	94	80 - 120	98	80 - 120	<0.020	mg/L		
A968199	Dissolved Sulphur (S)	2023/05/20	NC	80 - 120	98	80 - 120	<0.20	mg/L		
A968307	Dissolved Aluminum (Al)	2023/05/20	103	80 - 120	97	80 - 120	<0.0030	mg/L	10	20
A968307	Dissolved Antimony (Sb)	2023/05/20	110	80 - 120	113	80 - 120	<0.00060	mg/L	NC	20
A968307	Dissolved Arsenic (As)	2023/05/20	92	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
A968307	Dissolved Beryllium (Be)	2023/05/20	95	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
A968307	Dissolved Chromium (Cr)	2023/05/20	94	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A968307	Dissolved Cobalt (Co)	2023/05/20	95	80 - 120	105	80 - 120	<0.00030	mg/L	NC	20
A968307	Dissolved Copper (Cu)	2023/05/20	97	80 - 120	105	80 - 120	<0.0010	mg/L	12	20
A968307	Dissolved Lead (Pb)	2023/05/20	93	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
A968307	Dissolved Molybdenum (Mo)	2023/05/20	95	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
A968307	Dissolved Nickel (Ni)	2023/05/20	94	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20
A968307	Dissolved Selenium (Se)	2023/05/20	106	80 - 120	114	80 - 120	<0.00020	mg/L	NC	20
A968307	Dissolved Silver (Ag)	2023/05/20	92	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
A968307	Dissolved Thallium (Tl)	2023/05/20	97	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A968307	Dissolved Tin (Sn)	2023/05/20	92	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
A968307	Dissolved Titanium (Ti)	2023/05/20	96	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
A968307	Dissolved Uranium (U)	2023/05/20	92	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
A968307	Dissolved Vanadium (V)	2023/05/20	97	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
A968307	Dissolved Zinc (Zn)	2023/05/20	100	80 - 120	101	80 - 120	<0.0030	mg/L	4.7	20
A968503	Total Aluminum (Al)	2023/05/24	113	80 - 120	109	80 - 120	<0.0030	mg/L	1.7	20
A968503	Total Antimony (Sb)	2023/05/24	120	80 - 120	119	80 - 120	<0.00060	mg/L	NC	20
A968503	Total Arsenic (As)	2023/05/24	108	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
A968503	Total Beryllium (Be)	2023/05/24	106	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
A968503	Total Chromium (Cr)	2023/05/24	109	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
A968503	Total Cobalt (Co)	2023/05/24	110	80 - 120	108	80 - 120	<0.00030	mg/L	7.8	20
A968503	Total Copper (Cu)	2023/05/24	110	80 - 120	108	80 - 120	<0.0010	mg/L	4.5	20
A968503	Total Lead (Pb)	2023/05/24	108	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
A968503	Total Molybdenum (Mo)	2023/05/24	109	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
A968503	Total Nickel (Ni)	2023/05/24	109	80 - 120	107	80 - 120	<0.00050	mg/L	3.4	20
A968503	Total Selenium (Se)	2023/05/24	115	80 - 120	115	80 - 120	<0.00020	mg/L	NC	20
A968503	Total Silver (Ag)	2023/05/24	106	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
A968503	Total Thallium (Tl)	2023/05/24	109	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
A968503	Total Tin (Sn)	2023/05/24	107	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
A968503	Total Titanium (Ti)	2023/05/24	106	80 - 120	105	80 - 120	<0.0010	mg/L	5.9	20
A968503	Total Uranium (U)	2023/05/24	108	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
A968503	Total Vanadium (V)	2023/05/24	110	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
A968503	Total Zinc (Zn)	2023/05/24	NC	80 - 120	110	80 - 120	<0.0030	mg/L	5.4	20
A968505	Total Barium (Ba)	2023/05/24	97	80 - 120	99	80 - 120	<0.010	mg/L	0.83	20
A968505	Total Boron (B)	2023/05/24	101	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
A968505	Total Calcium (Ca)	2023/05/24	NC	80 - 120	104	80 - 120	<0.30	mg/L	0.025	20
A968505	Total Iron (Fe)	2023/05/24	NC	80 - 120	116	80 - 120	<0.060	mg/L	2.8	20
A968505	Total Lithium (Li)	2023/05/24	98	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
A968505	Total Magnesium (Mg)	2023/05/24	100	80 - 120	102	80 - 120	<0.20	mg/L	0.95	20
A968505	Total Manganese (Mn)	2023/05/24	104	80 - 120	107	80 - 120	<0.0040	mg/L	2.4	20
A968505	Total Phosphorus (P)	2023/05/24	98	80 - 120	101	80 - 120	<0.10	mg/L	NC	20
A968505	Total Potassium (K)	2023/05/24	104	80 - 120	105	80 - 120	<0.30	mg/L	1.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A968505	Total Silicon (Si)	2023/05/24	100	80 - 120	105	80 - 120	<0.50	mg/L	4.6	20
A968505	Total Sodium (Na)	2023/05/24	100	80 - 120	101	80 - 120	<0.50	mg/L	0.35	20
A968505	Total Strontium (Sr)	2023/05/24	95	80 - 120	98	80 - 120	<0.020	mg/L	1.7	20
A968505	Total Sulphur (S)	2023/05/24	96	80 - 120	102	80 - 120	<0.20	mg/L	3.7	20
A968510	Sulphate (SO4)	2023/05/21	NC	80 - 120	95	80 - 120	<1.0	mg/L	0.92	20
A968936	Dissolved Molybdenum (Mo)	2023/05/23	105	80 - 120	97	80 - 120	<0.00020	mg/L	0.77	20
A969443	Total Organic Carbon (C)	2023/05/23	109	80 - 120	96	80 - 120	<0.50	mg/L	0.57	20
A969949	Total Aluminum (Al)	2023/05/24	NC	80 - 120	108	80 - 120	<0.0030	mg/L		
A969949	Total Antimony (Sb)	2023/05/24	117	80 - 120	120	80 - 120	<0.00060	mg/L	1.3	20
A969949	Total Arsenic (As)	2023/05/24	101	80 - 120	108	80 - 120	<0.00020	mg/L	0.79	20
A969949	Total Beryllium (Be)	2023/05/24	102	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
A969949	Total Chromium (Cr)	2023/05/24	101	80 - 120	107	80 - 120	<0.0010	mg/L	3.0	20
A969949	Total Cobalt (Co)	2023/05/24	101	80 - 120	109	80 - 120	<0.00030	mg/L	3.5	20
A969949	Total Copper (Cu)	2023/05/24	NC	80 - 120	109	80 - 120	<0.0010	mg/L	0.98	20
A969949	Total Lead (Pb)	2023/05/24	99	80 - 120	107	80 - 120	<0.00020	mg/L	2.9	20
A969949	Total Molybdenum (Mo)	2023/05/24	108	80 - 120	107	80 - 120	<0.00020	mg/L	4.5	20
A969949	Total Nickel (Ni)	2023/05/24	98	80 - 120	107	80 - 120	<0.00050	mg/L	0.43	20
A969949	Total Selenium (Se)	2023/05/24	103	80 - 120	115	80 - 120	<0.00020	mg/L	2.9	20
A969949	Total Silver (Ag)	2023/05/24	102	80 - 120	106	80 - 120	<0.00010	mg/L	14	20
A969949	Total Thallium (Tl)	2023/05/24	101	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
A969949	Total Tin (Sn)	2023/05/24	107	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
A969949	Total Titanium (Ti)	2023/05/24	100	80 - 120	110	80 - 120	<0.0010	mg/L	4.7	20
A969949	Total Uranium (U)	2023/05/24	103	80 - 120	105	80 - 120	<0.00010	mg/L		
A969949	Total Vanadium (V)	2023/05/24	105	80 - 120	109	80 - 120	<0.0010	mg/L	0.92	20
A969949	Total Zinc (Zn)	2023/05/24	NC	80 - 120	111	80 - 120	<0.0030	mg/L	1.9	20
A969968	Total Barium (Ba)	2023/05/24	93	80 - 120	95	80 - 120	<0.010	mg/L		
A969968	Total Boron (B)	2023/05/24	94	80 - 120	98	80 - 120	<0.020	mg/L	3.5	20
A969968	Total Calcium (Ca)	2023/05/24	94	80 - 120	99	80 - 120	<0.30	mg/L		
A969968	Total Iron (Fe)	2023/05/24	NC	80 - 120	113	80 - 120	<0.060	mg/L	4.0	20
A969968	Total Lithium (Li)	2023/05/24	91	80 - 120	94	80 - 120	<0.020	mg/L		
A969968	Total Magnesium (Mg)	2023/05/24	93	80 - 120	96	80 - 120	<0.20	mg/L		
A969968	Total Manganese (Mn)	2023/05/24	96	80 - 120	105	80 - 120	<0.0040	mg/L	5.3	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A969968	Total Phosphorus (P)	2023/05/24	91	80 - 120	98	80 - 120	<0.10	mg/L		
A969968	Total Potassium (K)	2023/05/24	98	80 - 120	101	80 - 120	<0.30	mg/L		
A969968	Total Silicon (Si)	2023/05/24	93	80 - 120	102	80 - 120	<0.50	mg/L		
A969968	Total Sodium (Na)	2023/05/24	93	80 - 120	96	80 - 120	<0.50	mg/L		
A969968	Total Strontium (Sr)	2023/05/24	91	80 - 120	93	80 - 120	<0.020	mg/L		
A969968	Total Sulphur (S)	2023/05/24	90	80 - 120	100	80 - 120	<0.20	mg/L		
A969970	Total Aluminum (Al)	2023/05/24	129 (1)	80 - 120	125 (1)	80 - 120	<0.0030	mg/L	11	20
A969970	Total Antimony (Sb)	2023/05/24	118	80 - 120	111	80 - 120	<0.00060	mg/L	NC	20
A969970	Total Arsenic (As)	2023/05/24	101	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
A969970	Total Beryllium (Be)	2023/05/24	108	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
A969970	Total Chromium (Cr)	2023/05/24	110	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
A969970	Total Cobalt (Co)	2023/05/24	111	80 - 120	103	80 - 120	<0.00030	mg/L	NC	20
A969970	Total Copper (Cu)	2023/05/24	110	80 - 120	103	80 - 120	<0.0010	mg/L	7.0	20
A969970	Total Lead (Pb)	2023/05/24	109	80 - 120	103	80 - 120	<0.00020	mg/L	5.7	20
A969970	Total Molybdenum (Mo)	2023/05/24	111	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
A969970	Total Nickel (Ni)	2023/05/24	109	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
A969970	Total Selenium (Se)	2023/05/24	102	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A969970	Total Silver (Ag)	2023/05/24	108	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
A969970	Total Thallium (Tl)	2023/05/24	110	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
A969970	Total Tin (Sn)	2023/05/24	111	80 - 120	103	80 - 120	<0.0010	mg/L	11	20
A969970	Total Titanium (Ti)	2023/05/24	114	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A969970	Total Uranium (U)	2023/05/24	108	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
A969970	Total Vanadium (V)	2023/05/24	110	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
A969970	Total Zinc (Zn)	2023/05/24	NC	80 - 120	96	80 - 120	<0.0030	mg/L	13	20
A969973	Total Barium (Ba)	2023/05/24	96	80 - 120	95	80 - 120	<0.010	mg/L	NC	20
A969973	Total Boron (B)	2023/05/24	102	80 - 120	100	80 - 120	<0.020	mg/L	0.63	20
A969973	Total Calcium (Ca)	2023/05/24	97	80 - 120	100	80 - 120	<0.30	mg/L	0.33	20
A969973	Total Iron (Fe)	2023/05/24	NC	80 - 120	109	80 - 120	<0.060	mg/L	4.6	20
A969973	Total Lithium (Li)	2023/05/24	97	80 - 120	95	80 - 120	<0.020	mg/L	1.8	20
A969973	Total Magnesium (Mg)	2023/05/24	98	80 - 120	97	80 - 120	<0.20	mg/L	0.74	20
A969973	Total Manganese (Mn)	2023/05/24	105	80 - 120	102	80 - 120	<0.0040	mg/L	NC	20
A969973	Total Phosphorus (P)	2023/05/24	105	80 - 120	102	80 - 120	<0.10	mg/L	4.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A969973	Total Potassium (K)	2023/05/24	103	80 - 120	101	80 - 120	<0.30	mg/L	1.8	20
A969973	Total Silicon (Si)	2023/05/24	109	80 - 120	105	80 - 120	<0.50	mg/L	2.3	20
A969973	Total Sodium (Na)	2023/05/24	99	80 - 120	97	80 - 120	<0.50	mg/L	0.64	20
A969973	Total Strontium (Sr)	2023/05/24	94	80 - 120	93	80 - 120	<0.020	mg/L	0.48	20
A969973	Total Sulphur (S)	2023/05/24	109	80 - 120	103	80 - 120	<0.20	mg/L	1.9	20
A970088	Dissolved Organic Carbon (C)	2023/05/24	103	80 - 120	106	80 - 120	<0.50	mg/L	13	20
A970581	Total Organic Carbon (C)	2023/05/24	NC	80 - 120	102	80 - 120	<0.50	mg/L	3.8	20
A970905	Dissolved Organic Carbon (C)	2023/05/24	NC	80 - 120	95	80 - 120	<0.50	mg/L	2.8	20
A971873	Total Organic Carbon (C)	2023/05/25	84	80 - 120	101	80 - 120	<0.50	mg/L	13	20
A972258	Dissolved Lithium (Li)	2023/05/25	93	80 - 120	91	80 - 120	<0.020	mg/L		
A972456	Dissolved Organic Carbon (C)	2023/05/25	94	80 - 120	103	80 - 120	<0.50	mg/L	19	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

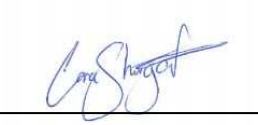
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

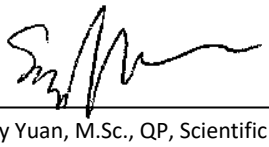
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Cara Shurgot, Analyst 2



Sandy Yuan, M.Sc., QP, Scientific Specialist



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins / Monika Niemczyk	P.O. #		C335298	694739
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	865 Waverley St. 3rd Floor Winnipeg, MB, R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Project Name		C#694739-01-01	
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RCP, BP		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH @25°C	Alkalinity @25C (pp, total), CO3,HCO3,OH	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	# of Bottles	Comments
1		CL-6 sfc	23/05/16	8:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC ASAP
2		CL-6 btm		8:10		N	N	X	X	X	X	X	X	X	X	X	X	4	to meet hold times
3		CL-5 sfc		8:20		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-5 btm		8:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-4 sfc		8:30		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-4 btm		8:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CL-8 sfc		8:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-8 btm		8:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		CL-3 sfc		8:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-3 btm		9:00		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Pirella / Perrella	23/05/17	12:30	Ashton Paitt AR	2023/05/17	12:50			ACTR	Yes / No
			ATRAVER OIL	2023/05/18	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

mcol – see ACTR

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins, Monika Niemczyk	P.O. #		C335298	694739
Address	3rd Floor 865 Waverly St	Address	865 Waverley St. 3rd Floor Winnipeg, MB, R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4	Phone	204-896-1209 Fax:	Project Name		C#694739-01-02	
Phone	(204) 896-1209 Fax:	Email	Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com			Sampled By	RCP, BP		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	Carbon (DOC) -Lab Filtered	Rainbow Trout LC50 Multi-Concentration	# of Bottles	Comments
1		CL-6 sfc	23/05/16	8:05	SW	N	N	X		4	Analyze turbidity & DOC ASAP
2		CL-6 btm		8:10		N	N	X		4	to meet hold times
3		CL-5 sfc		8:20		N	N	X		4	
4		CL-5 btm		8:25		N	N	X		4	
5		CL-4 sfc		8:30		N	N	X		4	
6		CL-4 btm		8:35		N	N	X		4	
7		CL-8 sfc		8:45		N	N	X		4	
8		CL-8 btm		8:50		N	N	X		4	
9		CL-3 sfc		8:55		N	N	X		4	
10		CL-3 btm		9:00		N	N	X		4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Perrella	23/05/17	12:30	Ashton Routt AR	2023/05/17	12:50	
			AJRAUER GTILL	2023/05/18	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (ºC) on Receipt: ACTR | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

mcal - See ACTR

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins / Monika Niemczyk	P.O. #		C335298	694739
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	865 Waverley St. 3rd Floor Winnipeg MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Project Name		C#694739-02-01	
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH @25°C	Alkalinity @25C (pp, total), CO3,HCO3,OH	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	# of Bottles	Comments
1		CL-7 sfc	23/05/16	9:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC ASAP
2		CL-7 btm		9:10		N	N	X	X	X	X	X	X	X	X	X	X	4	to meet hold times
3		CL-2 sfc		9:15		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-2 btm		9:20		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SB-2		10:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SB-1		10:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CB-1		10:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CB-2		11:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		EB-1		11:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		EB-2		11:15		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Perrella / Rachel Perrella	23/05/17	12:30	Ayton Raitt KAR	2023/05/17	12:50			ACTR	
			AJRAUSR GILL	2023/05/18	08:30				Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Mcal - See ACTR

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:

Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St
Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information

Company Name: KGS Group
Contact Name: Ed Collins / Monika Niemczyk
Address: 865 Waverley St. 3rd Floor
Winnipeg MB R3T 5T4
Phone: 204-896-1209 Fax:
Email: Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com

Project Information

Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By:

Laboratory Use Only

Bureau Veritas Job #: C335298
Bottle Order #: 694739
Chain Of Custody Record: C#694739-02-02
Project Manager:

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	Carbon (DOC) - Lab Filtered	Rainbow Trout LC50 Multi-Concentration	# of Bottles	Comments
1		CL-7 sfc	23/05/16	9:05	SW			X		4	Analyze turbidity and DOC ASAP
2		CL-7 btm		9:10				X		4	to meet hold times
3		CL-2 sfc		9:15				X		4	
4		CL-2 btm		9:20				X		4	
5		SB-2		10:40				X		4	
6		SB-1		10:45				X		4	
7		CB-1		10:50				X		4	
8		CB-2		11:00				X		4	
9		EB-1		11:05				X		4	
10		EB-2		11:15				X		4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time
Rachel Tuckin	23/05/17	12:30	Ashton Raith AR	2023/05/17	12:50
			AJRAVER CRILL	2023/05/18	08:30

jars used and not submitted:

Lab Use Only

Time Sensitive:
Temperature (ºC) on Receipt: ACTR
Custody Seal Intact on Cooler? Yes No

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* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Mcel - Leo ACTR

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C335298	694739
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	865 Waverley St. 3rd Floor Winnipeg, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Project Name		C#694739-03-01	
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH @25°C	Alkalinity @25C (pp. total), CO3,HCO3,OH	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	# of Bottles	Comments
1		NB-2	23/05/16	11:25	SW			X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC ASAP to meet hold times
2		NB-1		11:40				X	X	X	X	X	X	X	X	X	X	4	
3		CLD		11:45				X	X	X	X	X	X	X	X	X	X	4	
4		SC-1		12:15				X	X	X	X	X	X	X	X	X	X	4	
5		SW-100		17:00				X	X	X	X	X	X	X	X	X	X	4	
6		SW-101		17:10				X	X	X	X	X	X	X	X	X	X	4	
7		SW-102		17:30				X	X	X	X	X	X	X	X	X	X	4	
8		Camp Lake Discharge		11:40														2	
9		Trip Blank			BLANK			X	X	X	X	X	X	X	X	X	X	4	
10																			

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ (call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Perella / Rachel Perella	23/05/17	12:30	Anton Rault AR	2023/05/17	12:50	
			AJRAVER OTZH	2023/05/18	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (ºC) on Receipt AcTR | Custody Seal Intact on Cooler? ☐ Yes ☐ No

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White: Bureau Veritas Yellow: Client

Meat - See AcTR

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins / Monika Niemczyk	P.O. #		C335298	694739
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	865 Waverley St. 3rd Floor Winnipeg, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	204-896-1209 Fax:	Project Name		C#694739-03-02	
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	Carbon (DOC) -Lab Filtered	Rainbow Trout LC50 Multi-Concentration	# of Bottles	Comments
1		NB-2	23/05/16	11:25	SW			X		4	Analyze turbidity and DOC ASAP
2		NB-1	↓	11:40	↓			X		4	to meet hold times
3		CLD		11:45				X		4	
4		SC-1		12:15				X		4	
5		SW-100		17:00				X		4	
6		SW-101		17:10				X		4	
7		SW-102		17:30				X		4	
8		Camp Lake Discharge		11:40					X	2	
9		Trip Blank						X		4	
10											

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Perella / Rachel Perella	23/05/17	12:30	Ashton Rault KNZ	2023/05/17	17:50	
			ATRAVER GVIL	2023/05/18	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt: IACTR | Custody Seal Intact on Cooler? ☐ Yes ☐ No

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White: Bureau Veritas Yellow: Client

Mcal - See ACTR

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 695439-03-01, 695439-01-01, 695439-02-01

Report Date: 2023/06/09
Report #: R3348081
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C339659
Received: 2023/06/02, 09:00

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	3	N/A	2023/06/07	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	5	N/A	2023/06/08	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH	20	N/A	2023/06/09	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/06/05		Auto Calc
Cadmium - low level CCME (Total) (1)	28	N/A	2023/06/08		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	28	N/A	2023/06/06	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	24	N/A	2023/06/07	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	4	N/A	2023/06/09	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	27	N/A	2023/06/05		Auto Calc
Hardness (1)	1	N/A	2023/06/07		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	11	N/A	2023/06/07	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	17	N/A	2023/06/08	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	18	N/A	2023/06/04	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	9	N/A	2023/06/05	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	1	N/A	2023/06/06	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	11	2023/06/07	2023/06/07	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	17	2023/06/08	2023/06/08	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	28	N/A	2023/06/04	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	9	2023/06/07	2023/06/07	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	2	2023/06/07	2023/06/08	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	17	2023/06/08	2023/06/08	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	3	N/A	2023/06/07	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (1, 6)	5	N/A	2023/06/08	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (6)	20	N/A	2023/06/09	BBY6SOP-00026	SM 24 4500-H+ B m

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 695439-03-01, 695439-01-01, 695439-02-01

Report Date: 2023/06/09
Report #: R3348081
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C339659
Received: 2023/06/02, 09:00

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon (Total Organic) (1, 7)	24	N/A	2023/06/08	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	4	N/A	2023/06/09	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	28	2023/06/05	2023/06/05	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	27	N/A	2023/06/02	CAL SOP-00081	SM 23 2130 B m
Turbidity (1)	1	N/A	2023/06/06	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
3rd Floor
865 Waverly St
Winnipeg, MB
Canada R3T 5T4

Your C.O.C. #: 695439-03-01, 695439-01-01, 695439-02-01

Report Date: 2023/06/09
Report #: R3348081
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C339659

Received: 2023/06/02, 09:00

used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Alberta Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP067		BRP068		BRP069		
Sampling Date		2023/05/30 12:00		2023/05/30 09:50		2023/05/30 09:45		
COC Number		695439-01-01		695439-01-01		695439-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.18	A981175	0.54	A981175	0.50	0.020	A981175
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.020	A983123	0.019	A982622	0.021	0.0030	A983123
Dissolved Antimony (Sb)	mg/L	<0.00060	A983123	<0.00060	A982622	<0.00060	0.00060	A983123
Dissolved Arsenic (As)	mg/L	0.00029	A983123	0.00023	A982622	0.00021	0.00020	A983123
Dissolved Barium (Ba)	mg/L	<0.010	A983497	0.012	A982984	0.012	0.010	A982984
Dissolved Beryllium (Be)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A983123
Dissolved Boron (B)	mg/L	<0.020	A983497	<0.020	A982984	<0.020	0.020	A982984
Dissolved Calcium (Ca)	mg/L	7.1	A983497	37	A982984	37	0.30	A982984
Dissolved Chromium (Cr)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A983123
Dissolved Cobalt (Co)	mg/L	<0.00030	A983123	0.00038	A982622	0.00037	0.00030	A983123
Dissolved Copper (Cu)	mg/L	0.0093	A983123	0.018	A982622	0.016	0.0010	A983123
Dissolved Iron (Fe)	mg/L	0.12	A983497	1.1	A982984	1.1	0.060	A982984
Dissolved Lead (Pb)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A983123
Dissolved Lithium (Li)	mg/L	<0.020	A983497	<0.020	A982984	<0.020	0.020	A982984
Dissolved Magnesium (Mg)	mg/L	2.2	A983497	6.6	A982984	6.7	0.20	A982984
Dissolved Manganese (Mn)	mg/L	0.0066	A983497	0.13	A982984	0.12	0.0040	A982984
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A983123
Dissolved Nickel (Ni)	mg/L	<0.00050	A983123	0.0015	A982622	0.0012	0.00050	A983123
Dissolved Phosphorus (P)	mg/L	<0.10	A983497	<0.10	A982984	<0.10	0.10	A982984
Dissolved Potassium (K)	mg/L	1.2	A983497	3.2	A982984	3.2	0.30	A982984
Dissolved Selenium (Se)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A983123
Dissolved Silicon (Si)	mg/L	1.2	A983497	1.3	A982984	1.3	0.50	A982984
Dissolved Silver (Ag)	mg/L	<0.00010	A983123	<0.00010	A982622	<0.00010	0.00010	A983123
Dissolved Sodium (Na)	mg/L	1.4	A983497	2.5	A982984	2.6	0.50	A982984
Dissolved Strontium (Sr)	mg/L	<0.020	A983497	0.045	A982984	0.045	0.020	A982984
Dissolved Sulphur (S)	mg/L	1.3	A983497	35	A982984	32	0.20	A982984
Dissolved Thallium (Tl)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A983123
Dissolved Tin (Sn)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A983123
Dissolved Titanium (Ti)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A983123
Dissolved Uranium (U)	mg/L	<0.00010	A983123	<0.00010	A982622	<0.00010	0.00010	A983123

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP067		BRP068		BRP069		
Sampling Date		2023/05/30 12:00		2023/05/30 09:50		2023/05/30 09:45		
COC Number		695439-01-01		695439-01-01		695439-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**QC Batch**	**SB-2**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A983123
Dissolved Zinc (Zn)	mg/L	0.059	A983123	0.18	A982622	0.16	0.0030	A983123
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP069			BRP070		BRP071		
Sampling Date		2023/05/30 09:45			2023/05/30 09:55		2023/05/30 10:00		
COC Number		695439-01-01			695439-01-01		695439-01-01		
	UNITS	SB-2 Lab-Dup	RDL	QC Batch	CB-1	QC Batch	CB-2	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.55	A981175	0.58	0.020	A981175
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.019	0.0030	A983123	0.020	A982622	0.021	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	A983123	<0.00060	A982622	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L	0.00020	0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Barium (Ba)	mg/L				0.011	A983056	0.012	0.010	A982984
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L				<0.020	A983056	<0.020	0.020	A982984
Dissolved Calcium (Ca)	mg/L				36	A983056	39	0.30	A982984
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	0.00034	0.00030	A983123	0.00038	A982622	0.00050	0.00030	A982622
Dissolved Copper (Cu)	mg/L	0.015	0.0010	A983123	0.016	A982622	0.016	0.0010	A982622
Dissolved Iron (Fe)	mg/L				0.85	A983056	1.0	0.060	A982984
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L				<0.020	A983056	<0.020	0.020	A982984
Dissolved Magnesium (Mg)	mg/L				6.3	A983056	6.8	0.20	A982984
Dissolved Manganese (Mn)	mg/L				0.11	A983056	0.13	0.0040	A982984
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	0.0013	0.00050	A983123	0.0016	A982622	0.0016	0.00050	A982622
Dissolved Phosphorus (P)	mg/L				<0.10	A983056	<0.10	0.10	A982984
Dissolved Potassium (K)	mg/L				3.0	A983056	3.4	0.30	A982984
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L				1.2	A983056	1.2	0.50	A982984
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	A983123	<0.00010	A982622	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L				2.4	A983056	2.6	0.50	A982984
Dissolved Strontium (Sr)	mg/L				0.039	A983056	0.047	0.020	A982984
Dissolved Sulphur (S)	mg/L				35	A983056	35	0.20	A982984
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	A983123	<0.00010	A982622	<0.00010	0.00010	A982622

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP069			BRP070		BRP071		
Sampling Date		2023/05/30 09:45			2023/05/30 09:55		2023/05/30 10:00		
COC Number		695439-01-01			695439-01-01		695439-01-01		
	UNITS	**SB-2 Lab-Dup**	**RDL**	**QC Batch**	**CB-1**	**QC Batch**	**CB-2**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	0.16	0.0030	A983123	0.20	A982622	0.20	0.0030	A982622

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP072		BRP073			BRP073		
Sampling Date		2023/05/30 10:05		2023/05/30 10:10			2023/05/30 10:10		
COC Number		695439-01-01		695439-01-01			695439-01-01		
	UNITS	EB-1	QC Batch	EB-2	RDL	QC Batch	EB-2 Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.84	A981175	0.78	0.020	A981175			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.015	A982622	0.016	0.0030	A982622			
Dissolved Antimony (Sb)	mg/L	<0.00060	A982622	<0.00060	0.00060	A982622			
Dissolved Arsenic (As)	mg/L	<0.00020	A982622	<0.00020	0.00020	A982622			
Dissolved Barium (Ba)	mg/L	0.013	A983056	0.016	0.010	A983552	0.013	0.010	A983552
Dissolved Beryllium (Be)	mg/L	<0.0010	A982622	<0.0010	0.0010	A982622			
Dissolved Boron (B)	mg/L	<0.020	A983056	<0.020	0.020	A983552	<0.020	0.020	A983552
Dissolved Calcium (Ca)	mg/L	45	A983056	45	0.30	A983552	43	0.30	A983552
Dissolved Chromium (Cr)	mg/L	<0.0010	A982622	<0.0010	0.0010	A982622			
Dissolved Cobalt (Co)	mg/L	0.0016	A982622	0.0015	0.00030	A982622			
Dissolved Copper (Cu)	mg/L	0.014	A982622	0.014	0.0010	A982622			
Dissolved Iron (Fe)	mg/L	0.49	A983056	0.59	0.060	A983552	0.55	0.060	A983552
Dissolved Lead (Pb)	mg/L	<0.00020	A982622	<0.00020	0.00020	A982622			
Dissolved Lithium (Li)	mg/L	<0.020	A983056	<0.020	0.020	A983552	<0.020	0.020	A983552
Dissolved Magnesium (Mg)	mg/L	7.5	A983056	7.5	0.20	A983552	7.2	0.20	A983552
Dissolved Manganese (Mn)	mg/L	0.20	A983056	0.23	0.0040	A983552	0.21	0.0040	A983552
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A982622	<0.00020	0.00020	A982622			
Dissolved Nickel (Ni)	mg/L	0.0021	A982622	0.0020	0.00050	A982622			
Dissolved Phosphorus (P)	mg/L	<0.10	A983056	<0.10	0.10	A983552	<0.10	0.10	A983552
Dissolved Potassium (K)	mg/L	3.5	A983056	3.6	0.30	A983552	3.4	0.30	A983552
Dissolved Selenium (Se)	mg/L	<0.00020	A982622	<0.00020	0.00020	A982622			
Dissolved Silicon (Si)	mg/L	1.1	A983056	1.2	0.50	A983552	1.2	0.50	A983552
Dissolved Silver (Ag)	mg/L	<0.00010	A982622	<0.00010	0.00010	A982622			
Dissolved Sodium (Na)	mg/L	2.7	A983056	2.8	0.50	A983552	2.6	0.50	A983552
Dissolved Strontium (Sr)	mg/L	0.046	A983056	0.046	0.020	A983552	0.044	0.020	A983552
Dissolved Sulphur (S)	mg/L	44	A983056	45	0.20	A983552	48	0.20	A983552
Dissolved Thallium (Tl)	mg/L	<0.00020	A982622	<0.00020	0.00020	A982622			
Dissolved Tin (Sn)	mg/L	<0.0010	A982622	<0.0010	0.0010	A982622			
Dissolved Titanium (Ti)	mg/L	<0.0010	A982622	<0.0010	0.0010	A982622			
Dissolved Uranium (U)	mg/L	<0.00010	A982622	<0.00010	0.00010	A982622			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP072		BRP073			BRP073		
Sampling Date		2023/05/30 10:05		2023/05/30 10:10			2023/05/30 10:10		
COC Number		695439-01-01		695439-01-01			695439-01-01		
	UNITS	**EB-1**	**QC Batch**	**EB-2**	**RDL**	**QC Batch**	**EB-2 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A982622	<0.0010	0.0010	A982622			
Dissolved Zinc (Zn)	mg/L	0.26	A982622	0.26	0.0030	A982622			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP074		BRP075		BRP076		BRP077		
Sampling Date		2023/05/30 11:05		2023/05/30 11:00		2023/05/30 11:15		2023/05/30 09:05		
COC Number		695439-01-01		695439-01-01		695439-01-01		695439-02-01		
	UNITS	NB-1	QC Batch	NB-2	QC Batch	CLD	QC Batch	CL-3 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.50	A981175	0.50	A981175	0.64	A981175	0.13	0.020	A981175
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.015	A983123	0.016	A983123	0.019	A982622	0.021	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	A983123	<0.00060	A983123	<0.00060	A982622	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L	<0.00020	A983123	<0.00020	A983123	<0.00020	A982622	0.00037	0.00020	A982622
Dissolved Barium (Ba)	mg/L	0.012	A983497	0.013	A982984	0.014	A982984	<0.010	0.010	A983056
Dissolved Beryllium (Be)	mg/L	<0.0010	A983123	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	A983497	<0.020	A982984	<0.020	A982984	<0.020	0.020	A983056
Dissolved Calcium (Ca)	mg/L	42	A983497	45	A982984	47	A982984	15	0.30	A983056
Dissolved Chromium (Cr)	mg/L	<0.0010	A983123	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	0.00064	A983123	0.00047	A983123	0.00068	A982622	<0.00030	0.00030	A982622
Dissolved Copper (Cu)	mg/L	0.014	A983123	0.014	A983123	0.017	A982622	0.0092	0.0010	A982622
Dissolved Iron (Fe)	mg/L	1.2	A983497	1.1	A982984	1.2	A982984	0.22	0.060	A983056
Dissolved Lead (Pb)	mg/L	<0.00020	A983123	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	A983497	<0.020	A982984	<0.020	A982984	<0.020	0.020	A983056
Dissolved Magnesium (Mg)	mg/L	7.0	A983497	7.8	A982984	8.1	A982984	3.4	0.20	A983056
Dissolved Manganese (Mn)	mg/L	0.15	A983497	0.16	A982984	0.18	A982984	0.0065	0.0040	A983056
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A983123	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	0.0011	A983123	0.0013	A983123	0.0016	A982622	0.00080	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	A983497	<0.10	A982984	<0.10	A982984	<0.10	0.10	A983056
Dissolved Potassium (K)	mg/L	3.4	A983497	3.7	A982984	3.8	A982984	1.7	0.30	A983056
Dissolved Selenium (Se)	mg/L	<0.00020	A983123	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	1.2	A983497	1.3	A982984	1.3	A982984	0.92	0.50	A983056
Dissolved Silver (Ag)	mg/L	<0.00010	A983123	<0.00010	A983123	<0.00010	A982622	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	2.6	A983497	2.7	A982984	2.9	A982984	1.8	0.50	A983056
Dissolved Strontium (Sr)	mg/L	0.042	A983497	0.050	A982984	0.053	A982984	0.026	0.020	A983056
Dissolved Sulphur (S)	mg/L	39	A983497	41	A982984	42	A982984	9.8	0.20	A983056
Dissolved Thallium (Tl)	mg/L	<0.00020	A983123	<0.00020	A983123	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	A983123	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	A983123	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	A983123	<0.00010	A983123	<0.00010	A982622	<0.00010	0.00010	A982622

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP074		BRP075		BRP076		BRP077		
Sampling Date		2023/05/30 11:05		2023/05/30 11:00		2023/05/30 11:15		2023/05/30 09:05		
COC Number		695439-01-01		695439-01-01		695439-01-01		695439-02-01		
	UNITS	NB-1	QC Batch	NB-2	QC Batch	CLD	QC Batch	CL-3 SFC	RDL	QC Batch
Dissolved Vanadium (V)	mg/L	<0.0010	A983123	<0.0010	A983123	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	0.17	A983123	0.16	A983123	0.22	A982622	0.053	0.0030	A982622
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP078		BRP079		BRP080		
Sampling Date		2023/05/30 09:10		2023/05/30 09:15		2023/05/30 09:20		
COC Number		695439-02-01		695439-02-01		695439-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.25	A981175	0.11	A981175	0.34	0.020	A981175
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.021	A982622	0.022	A982622	0.020	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	A982622	<0.00060	A982622	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L	0.00032	A982622	0.00035	A982622	0.00026	0.00020	A982622
Dissolved Barium (Ba)	mg/L	0.011	A982984	<0.010	A983497	0.013	0.010	A982984
Dissolved Beryllium (Be)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	A982984	<0.020	A983497	<0.020	0.020	A982984
Dissolved Calcium (Ca)	mg/L	23	A982984	15	A983497	29	0.30	A982984
Dissolved Chromium (Cr)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	<0.00030	A982622	<0.00030	A982622	<0.00030	0.00030	A982622
Dissolved Copper (Cu)	mg/L	0.012	A982622	0.0076	A982622	0.011	0.0010	A982622
Dissolved Iron (Fe)	mg/L	0.54	A982984	0.21	A983497	0.77	0.060	A982984
Dissolved Lead (Pb)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	A982984	<0.020	A983497	<0.020	0.020	A982984
Dissolved Magnesium (Mg)	mg/L	4.9	A982984	3.5	A983497	5.8	0.20	A982984
Dissolved Manganese (Mn)	mg/L	0.041	A982984	0.0040	A983497	0.078	0.0040	A982984
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	0.00085	A982622	0.00059	A982622	0.0010	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	A982984	<0.10	A983497	<0.10	0.10	A982984
Dissolved Potassium (K)	mg/L	2.3	A982984	1.8	A983497	2.7	0.30	A982984
Dissolved Selenium (Se)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	1.1	A982984	0.93	A983497	1.2	0.50	A982984
Dissolved Silver (Ag)	mg/L	<0.00010	A982622	<0.00010	A982622	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	2.2	A982984	2.0	A983497	2.4	0.50	A982984
Dissolved Strontium (Sr)	mg/L	0.035	A982984	0.027	A983497	0.040	0.020	A982984
Dissolved Sulphur (S)	mg/L	18	A982984	8.7	A983497	23	0.20	A982984
Dissolved Thallium (Tl)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	A982622	<0.00010	A982622	<0.00010	0.00010	A982622
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP078		BRP079		BRP080		
Sampling Date		2023/05/30 09:10		2023/05/30 09:15		2023/05/30 09:20		
COC Number		695439-02-01		695439-02-01		695439-02-01		
	UNITS	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	0.11	A982622	0.047	A982622	0.12	0.0030	A982622
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP080			BRP081		BRP082		
Sampling Date		2023/05/30 09:20			2023/05/30 08:50		2023/05/30 09:00		
COC Number		695439-02-01			695439-02-01		695439-02-01		
	UNITS	CL-7 BTM Lab-Dup	RDL	QC Batch	CL-8 SFC	QC Batch	CL-8 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.11	A981811	0.16	0.020	A981811
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L				0.016	A983123	0.021	0.0030	A982622
Dissolved Antimony (Sb)	mg/L				<0.00060	A983123	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L				0.00033	A983123	0.00032	0.00020	A982622
Dissolved Barium (Ba)	mg/L	0.012	0.010	A982984	<0.010	A983497	<0.010	0.010	A982984
Dissolved Beryllium (Be)	mg/L				<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	0.020	A982984	<0.020	A983497	<0.020	0.020	A982984
Dissolved Calcium (Ca)	mg/L	29	0.30	A982984	14	A983497	16	0.30	A982984
Dissolved Chromium (Cr)	mg/L				<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L				<0.00030	A983123	<0.00030	0.00030	A982622
Dissolved Copper (Cu)	mg/L				0.0079	A983123	0.010	0.0010	A982622
Dissolved Iron (Fe)	mg/L	0.75	0.060	A982984	0.25	A983497	0.34	0.060	A982984
Dissolved Lead (Pb)	mg/L				<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	0.020	A982984	<0.020	A983497	<0.020	0.020	A982984
Dissolved Magnesium (Mg)	mg/L	5.6	0.20	A982984	3.4	A983497	3.8	0.20	A982984
Dissolved Manganese (Mn)	mg/L	0.074	0.0040	A982984	0.0057	A983497	0.012	0.0040	A982984
Dissolved Molybdenum (Mo)	mg/L				<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L				<0.00050	A983123	0.00067	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	A982984	<0.10	A983497	<0.10	0.10	A982984
Dissolved Potassium (K)	mg/L	2.7	0.30	A982984	1.7	A983497	1.8	0.30	A982984
Dissolved Selenium (Se)	mg/L				<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	1.2	0.50	A982984	0.94	A983497	0.97	0.50	A982984
Dissolved Silver (Ag)	mg/L				<0.00010	A983123	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	2.4	0.50	A982984	1.9	A983497	1.9	0.50	A982984
Dissolved Strontium (Sr)	mg/L	0.039	0.020	A982984	0.026	A983497	0.030	0.020	A982984
Dissolved Sulphur (S)	mg/L	24	0.20	A982984	9.1	A983497	11	0.20	A982984
Dissolved Thallium (Tl)	mg/L				<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L				<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L				<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L				<0.00010	A983123	<0.00010	0.00010	A982622

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP080			BRP081		BRP082		
Sampling Date		2023/05/30 09:20			2023/05/30 08:50		2023/05/30 09:00		
COC Number		695439-02-01			695439-02-01		695439-02-01		
	UNITS	**CL-7 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L				<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L				0.039	A983123	0.061	0.0030	A982622

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP083		BRP084	BRP085			BRP085		
Sampling Date		2023/05/30 09:25		2023/05/30 09:30	2023/05/30 08:40			2023/05/30 08:40		
COC Number		695439-02-01		695439-02-01	695439-02-01			695439-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	CL-4 SFC	RDL	QC Batch	CL-4 SFC Lab-Dup	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.098	A981811	0.096	0.097	0.020	A981811			
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.019	A983123	0.021	0.019	0.0030	A982622	0.019	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	A983123	<0.00060	<0.00060	0.00060	A982622	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L	0.00029	A983123	0.00044	0.00030	0.00020	A982622	0.00030	0.00020	A982622
Dissolved Barium (Ba)	mg/L	<0.010	A982984	<0.010	<0.010	0.010	A983056			
Dissolved Beryllium (Be)	mg/L	<0.0010	A983123	<0.0010	<0.0010	0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	A982984	<0.020	<0.020	0.020	A983056			
Dissolved Calcium (Ca)	mg/L	16	A982984	13	14	0.30	A983056			
Dissolved Chromium (Cr)	mg/L	<0.0010	A983123	<0.0010	<0.0010	0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	<0.00030	A983123	<0.00030	<0.00030	0.00030	A982622	<0.00030	0.00030	A982622
Dissolved Copper (Cu)	mg/L	0.0082	A983123	0.0089	0.0076	0.0010	A982622	0.0082	0.0010	A982622
Dissolved Iron (Fe)	mg/L	0.24	A982984	0.19	0.19	0.060	A983056			
Dissolved Lead (Pb)	mg/L	<0.00020	A983123	<0.00020	<0.00020	0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	A982984	<0.020	<0.020	0.020	A983056			
Dissolved Magnesium (Mg)	mg/L	3.9	A982984	3.1	3.4	0.20	A983056			
Dissolved Manganese (Mn)	mg/L	0.0054	A982984	0.0044	<0.0040	0.0040	A983056			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A983123	<0.00020	<0.00020	0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	0.00063	A983123	0.00057	0.00069	0.00050	A982622	0.00065	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	A982984	<0.10	<0.10	0.10	A983056			
Dissolved Potassium (K)	mg/L	1.8	A982984	1.5	1.7	0.30	A983056			
Dissolved Selenium (Se)	mg/L	<0.00020	A983123	<0.00020	<0.00020	0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	1.0	A982984	0.96	0.91	0.50	A983056			
Dissolved Silver (Ag)	mg/L	<0.00010	A983123	<0.00010	<0.00010	0.00010	A982622	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	2.1	A982984	1.8	1.9	0.50	A983056			
Dissolved Strontium (Sr)	mg/L	0.029	A982984	0.025	0.026	0.020	A983056			
Dissolved Sulphur (S)	mg/L	8.8	A982984	7.5	8.8	0.20	A983056			
Dissolved Thallium (Tl)	mg/L	<0.00020	A983123	<0.00020	<0.00020	0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	A983123	<0.0010	<0.0010	0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	A983123	<0.0010	<0.0010	0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	A983123	<0.00010	<0.00010	0.00010	A982622	<0.00010	0.00010	A982622

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP083		BRP084	BRP085			BRP085		
Sampling Date		2023/05/30 09:25		2023/05/30 09:30	2023/05/30 08:40			2023/05/30 08:40		
COC Number		695439-02-01		695439-02-01	695439-02-01			695439-02-01		
	UNITS	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**CL-4 SFC**	**RDL**	**QC Batch**	**CL-4 SFC Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A983123	<0.0010	<0.0010	0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	0.039	A983123	0.042	0.048	0.0030	A982622	0.046	0.0030	A982622

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP086		BRP087		BRP088		BRP089		
Sampling Date		2023/05/30 08:45		2023/05/30 08:25		2023/05/30 08:30		2023/05/30 08:15		
COC Number		695439-02-01		695439-03-01		695439-03-01		695439-03-01		
	UNITS	CL-4 BTM	QC Batch	CL-5 SFC	QC Batch	CL-5 BTM	QC Batch	CL-6 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.043	A981811	0.087	A981811	0.036	A981811	0.060	0.020	A981811
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.017	A982622	0.019	A982622	0.012	A983123	0.020	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	A982622	<0.00060	A982622	<0.00060	A983123	0.00080	0.00060	A982622
Dissolved Arsenic (As)	mg/L	0.00047	A982622	0.00034	A982622	0.00033	A983123	0.00033	0.00020	A982622
Dissolved Barium (Ba)	mg/L	<0.010	A983056	<0.010	A983552	<0.010	A983497	<0.010	0.010	A982984
Dissolved Beryllium (Be)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	A983056	<0.020	A983552	<0.020	A983497	<0.020	0.020	A982984
Dissolved Calcium (Ca)	mg/L	11	A983056	13	A983552	11	A983497	12	0.30	A982984
Dissolved Chromium (Cr)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	<0.00030	A982622	<0.00030	A982622	<0.00030	A983123	<0.00030	0.00030	A982622
Dissolved Copper (Cu)	mg/L	0.0060	A982622	0.0072	A982622	0.0056	A983123	0.0074	0.0010	A982622
Dissolved Iron (Fe)	mg/L	0.26	A983056	0.17	A983552	0.12	A983497	0.12	0.060	A982984
Dissolved Lead (Pb)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	A983056	<0.020	A983552	<0.020	A983497	<0.020	0.020	A982984
Dissolved Magnesium (Mg)	mg/L	2.9	A983056	3.2	A983552	3.1	A983497	3.4	0.20	A982984
Dissolved Manganese (Mn)	mg/L	0.016	A983056	<0.0040	A983552	<0.0040	A983497	<0.0040	0.0040	A982984
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	0.00050	A982622	0.00052	A982622	<0.00050	A983123	0.00068	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	A983056	<0.10	A983552	<0.10	A983497	<0.10	0.10	A982984
Dissolved Potassium (K)	mg/L	1.4	A983056	1.7	A983552	1.6	A983497	1.7	0.30	A982984
Dissolved Selenium (Se)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	0.80	A983056	0.92	A983552	0.70	A983497	0.80	0.50	A982984
Dissolved Silver (Ag)	mg/L	<0.00010	A982622	<0.00010	A982622	<0.00010	A983123	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	1.8	A983056	1.9	A983552	2.0	A983497	2.0	0.50	A982984
Dissolved Strontium (Sr)	mg/L	0.024	A983056	0.024	A983552	0.026	A983497	0.028	0.020	A982984
Dissolved Sulphur (S)	mg/L	5.0	A983056	7.3	A983552	4.5	A983497	5.8	0.20	A982984
Dissolved Thallium (Tl)	mg/L	<0.00020	A982622	<0.00020	A982622	<0.00020	A983123	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	A982622	<0.00010	A982622	<0.00010	A983123	<0.00010	0.00010	A982622

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP086		BRP087		BRP088		BRP089		
Sampling Date		2023/05/30 08:45		2023/05/30 08:25		2023/05/30 08:30		2023/05/30 08:15		
COC Number		695439-02-01		695439-03-01		695439-03-01		695439-03-01		
	UNITS	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**QC Batch**	**CL-5 BTM**	**QC Batch**	**CL-6 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	A982622	<0.0010	A982622	<0.0010	A983123	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	0.019	A982622	0.042	A982622	0.018	A983123	0.027	0.0030	A982622
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP090		BRP091		BRP092		BRP093		
Sampling Date		2023/05/30 08:20		2023/05/30		2023/05/30		2023/05/30		
COC Number		695439-03-01		695439-03-01		695439-03-01		695439-03-01		
	UNITS	CL-6 BTM	QC Batch	SW-103	QC Batch	SW-104	QC Batch	SW-105	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.033	A981811	0.11	A981175	0.54	A981175	0.66	0.020	A981175
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.011	A983123	0.021	A982622	0.018	A982622	0.019	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	A983123	<0.00060	A982622	<0.00060	A982622	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L	0.00036	A983123	0.00034	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Barium (Ba)	mg/L	<0.010	A985688	0.012	A983552	0.011	A983056	0.012	0.010	A983552
Dissolved Beryllium (Be)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	A985688	<0.020	A983552	<0.020	A983056	<0.020	0.020	A983552
Dissolved Calcium (Ca)	mg/L	11	A985688	14	A983552	38	A983056	43	0.30	A983552
Dissolved Chromium (Cr)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	<0.00030	A983123	<0.00030	A982622	0.00034	A982622	0.00077	0.00030	A982622
Dissolved Copper (Cu)	mg/L	0.0056	A983123	0.0078	A982622	0.015	A982622	0.016	0.0010	A982622
Dissolved Iron (Fe)	mg/L	0.064	A985688	0.25	A983552	0.91	A983056	1.2	0.060	A983552
Dissolved Lead (Pb)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	A985688	<0.020	A983552	<0.020	A983056	<0.020	0.020	A983552
Dissolved Magnesium (Mg)	mg/L	3.2	A985688	3.4	A983552	6.4	A983056	7.7	0.20	A983552
Dissolved Manganese (Mn)	mg/L	<0.0040	A985688	0.0045	A983552	0.11	A983056	0.16	0.0040	A983552
Dissolved Molybdenum (Mo)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	<0.00050	A983123	0.00060	A982622	0.0014	A982622	0.0017	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	A985688	<0.10	A983552	<0.10	A983056	<0.10	0.10	A983552
Dissolved Potassium (K)	mg/L	1.5	A985688	1.8	A983552	3.1	A983056	3.5	0.30	A983552
Dissolved Selenium (Se)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	0.92	A985688	0.94	A983552	1.2	A983056	1.2	0.50	A983552
Dissolved Silver (Ag)	mg/L	<0.00010	A983123	<0.00010	A982622	<0.00010	A982622	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	1.9	A985688	1.9	A983552	2.5	A983056	2.6	0.50	A983552
Dissolved Strontium (Sr)	mg/L	0.027	A985688	0.026	A983552	0.040	A983056	0.042	0.020	A983552
Dissolved Sulphur (S)	mg/L	6.3	A985688	9.2	A983552	34	A983056	43	0.20	A983552
Dissolved Thallium (Tl)	mg/L	<0.00020	A983123	<0.00020	A982622	<0.00020	A982622	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	A983123	<0.00010	A982622	<0.00010	A982622	<0.00010	0.00010	A982622

RDL = Reportable Detection Limit

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP090		BRP091		BRP092		BRP093		
Sampling Date		2023/05/30 08:20		2023/05/30		2023/05/30		2023/05/30		
COC Number		695439-03-01		695439-03-01		695439-03-01		695439-03-01		
	UNITS	CL-6 BTM	QC Batch	SW-103	QC Batch	SW-104	QC Batch	SW-105	RDL	QC Batch
Dissolved Vanadium (V)	mg/L	<0.0010	A983123	<0.0010	A982622	<0.0010	A982622	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	0.016	A983123	0.050	A982622	0.19	A982622	0.22	0.0030	A982622
RDL = Reportable Detection Limit										

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP094		
Sampling Date		2023/05/30		
COC Number		695439-03-01		
	UNITS	TRIP BLANK	RDL	QC Batch
Elements				
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	A981175
Lab Filtered Elements				
Dissolved Aluminum (Al)	mg/L	<0.0030	0.0030	A982622
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	A982622
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	A982622
Dissolved Barium (Ba)	mg/L	<0.010	0.010	A983056
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	A982622
Dissolved Boron (B)	mg/L	<0.020	0.020	A983056
Dissolved Calcium (Ca)	mg/L	<0.30	0.30	A983056
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	A982622
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	A982622
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	A982622
Dissolved Iron (Fe)	mg/L	<0.060	0.060	A983056
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	A982622
Dissolved Lithium (Li)	mg/L	<0.020	0.020	A983056
Dissolved Magnesium (Mg)	mg/L	<0.20	0.20	A983056
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	A983056
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	A982622
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	A982622
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	A983056
Dissolved Potassium (K)	mg/L	<0.30	0.30	A983056
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	A982622
Dissolved Silicon (Si)	mg/L	<0.50	0.50	A983056
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	A982622
Dissolved Sodium (Na)	mg/L	<0.50	0.50	A983056
Dissolved Strontium (Sr)	mg/L	<0.020	0.020	A983056
Dissolved Sulphur (S)	mg/L	<0.20	0.20	A983056
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	A982622
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	A982622
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	A982622
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	A982622
RDL = Reportable Detection Limit				

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BRP094		
Sampling Date		2023/05/30		
COC Number		695439-03-01		
	UNITS	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	A982622
Dissolved Zinc (Zn)	mg/L	<0.0030	0.0030	A982622
RDL = Reportable Detection Limit				

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP067		BRP068		BRP069		BRP070		
Sampling Date		2023/05/30 12:00		2023/05/30 09:50		2023/05/30 09:45		2023/05/30 09:55		
COC Number		695439-01-01		695439-01-01		695439-01-01		695439-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	QC Batch	CB-1	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.19	A981176	0.57	A981176	0.63	A981176	0.65	0.020	A981176
Total Aluminum (Al)	mg/L	0.056	A987626	0.094	A986248	0.073	A987626	0.086	0.0030	A986248
Total Antimony (Sb)	mg/L	0.0011	A987626	<0.00060	A986248	<0.00060	A987626	0.00093	0.00060	A986248
Total Arsenic (As)	mg/L	0.00036	A987626	0.00030	A986248	0.00027	A987626	0.00027	0.00020	A986248
Total Barium (Ba)	mg/L	<0.010	A987631	0.012	A986253	0.012	A987631	0.012	0.010	A986253
Total Beryllium (Be)	mg/L	<0.0010	A987626	<0.0010	A986248	<0.0010	A987626	<0.0010	0.0010	A986248
Total Boron (B)	mg/L	<0.020	A987631	<0.020	A986253	<0.020	A987631	<0.020	0.020	A986253
Total Calcium (Ca)	mg/L	7.5	A987631	37	A986253	36	A987631	40	0.30	A986253
Total Chromium (Cr)	mg/L	<0.0010	A987626	<0.0010	A986248	<0.0010	A987626	<0.0010	0.0010	A986248
Total Cobalt (Co)	mg/L	<0.00030	A987626	0.00085	A986248	0.00081	A987626	0.00091	0.00030	A986248
Total Copper (Cu)	mg/L	0.0074	A987626	0.020	A986248	0.023	A987626	0.021	0.0010	A986248
Total Iron (Fe)	mg/L	0.20	A987631	2.7	A986253	2.7	A987631	2.9	0.060	A986253
Total Lead (Pb)	mg/L	<0.00020	A987626	<0.00020	A986248	<0.00020	A987626	<0.00020	0.00020	A986248
Total Lithium (Li)	mg/L	<0.020	A987631	<0.020	A986253	<0.020	A987631	<0.020	0.020	A986253
Total Magnesium (Mg)	mg/L	2.4	A987631	6.4	A986253	6.6	A987631	6.9	0.20	A986253
Total Manganese (Mn)	mg/L	0.016	A987631	0.16	A986253	0.15	A987631	0.17	0.0040	A986253
Total Molybdenum (Mo)	mg/L	<0.00020	A987626	<0.00020	A986248	<0.00020	A987626	<0.00020	0.00020	A986248
Total Nickel (Ni)	mg/L	<0.00050	A987626	0.0014	A986248	0.0016	A987626	0.0014	0.00050	A986248
Total Phosphorus (P)	mg/L	<0.10	A987631	<0.10	A986253	<0.10	A987631	<0.10	0.10	A986253
Total Potassium (K)	mg/L	1.1	A987631	3.1	A986253	2.9	A987631	3.4	0.30	A986253
Total Selenium (Se)	mg/L	<0.00020	A987626	<0.00020	A986248	<0.00020	A987626	<0.00020	0.00020	A986248
Total Silicon (Si)	mg/L	1.5	A987631	1.6	A986253	1.5	A987631	1.5	0.50	A986253
Total Silver (Ag)	mg/L	<0.00010	A987626	<0.00010	A986248	<0.00010	A987626	<0.00010	0.00010	A986248
Total Sodium (Na)	mg/L	1.4	A987631	2.5	A986253	2.3	A987631	2.7	0.50	A986253
Total Strontium (Sr)	mg/L	<0.020	A987631	0.039	A986253	0.039	A987631	0.041	0.020	A986253
Total Sulphur (S)	mg/L	1.3	A987631	31	A986253	33	A987631	34	0.20	A986253
Total Thallium (Tl)	mg/L	<0.00020	A987626	<0.00020	A986248	<0.00020	A987626	<0.00020	0.00020	A986248
Total Tin (Sn)	mg/L	<0.0010	A987626	<0.0010	A986248	<0.0010	A987626	<0.0010	0.0010	A986248
Total Titanium (Ti)	mg/L	0.0028	A987626	0.0017	A986248	0.0025	A987626	0.0013	0.0010	A986248
Total Uranium (U)	mg/L	<0.00010	A987626	<0.00010	A986248	<0.00010	A987626	<0.00010	0.00010	A986248
Total Vanadium (V)	mg/L	<0.0010	A987626	<0.0010	A986248	<0.0010	A987626	<0.0010	0.0010	A986248

RDL = Reportable Detection Limit

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP067		BRP068		BRP069		BRP070		
Sampling Date		2023/05/30 12:00		2023/05/30 09:50		2023/05/30 09:45		2023/05/30 09:55		
COC Number		695439-01-01		695439-01-01		695439-01-01		695439-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	QC Batch	CB-1	RDL	QC Batch
Total Zinc (Zn)	mg/L	0.056	A987626	0.16	A986248	0.19	A987626	0.17	0.0030	A986248
RDL = Reportable Detection Limit										

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP071	BRP072		BRP073	BRP074		
Sampling Date		2023/05/30 10:00	2023/05/30 10:05		2023/05/30 10:10	2023/05/30 11:05		
COC Number		695439-01-01	695439-01-01		695439-01-01	695439-01-01		
	UNITS	CB-2	EB-1	QC Batch	EB-2	NB-1	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.68	1.0	A981176	0.96	0.70	0.020	A981176
Total Aluminum (Al)	mg/L	0.073	0.10	A987626	0.12	0.086	0.0030	A986248
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	A987626	<0.00060	0.00062	0.00060	A986248
Total Arsenic (As)	mg/L	0.00023	0.00028	A987626	0.00026	0.00028	0.00020	A986248
Total Barium (Ba)	mg/L	0.012	0.014	A987631	0.015	0.013	0.010	A986253
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	A987626	<0.0010	<0.0010	0.0010	A986248
Total Boron (B)	mg/L	<0.020	<0.020	A987631	0.021	<0.020	0.020	A986253
Total Calcium (Ca)	mg/L	39	49	A987631	49	44	0.30	A986253
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	A987626	<0.0010	<0.0010	0.0010	A986248
Total Cobalt (Co)	mg/L	0.00093	0.0017	A987626	0.0018	0.0010	0.00030	A986248
Total Copper (Cu)	mg/L	0.024	0.029	A987626	0.026	0.023	0.0010	A986248
Total Iron (Fe)	mg/L	2.7	3.1	A987631	2.9	3.2	0.060	A986253
Total Lead (Pb)	mg/L	<0.00020	<0.00020	A987626	<0.00020	<0.00020	0.00020	A986248
Total Lithium (Li)	mg/L	<0.020	<0.020	A987631	<0.020	<0.020	0.020	A986253
Total Magnesium (Mg)	mg/L	6.9	8.5	A987631	8.2	7.5	0.20	A986253
Total Manganese (Mn)	mg/L	0.15	0.25	A987631	0.26	0.19	0.0040	A986253
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	A987626	<0.00020	<0.00020	0.00020	A986248
Total Nickel (Ni)	mg/L	0.0014	0.0025	A987626	0.0022	0.0015	0.00050	A986248
Total Phosphorus (P)	mg/L	<0.10	<0.10	A987631	<0.10	<0.10	0.10	A986253
Total Potassium (K)	mg/L	3.1	3.7	A987631	3.8	3.5	0.30	A986253
Total Selenium (Se)	mg/L	<0.00020	<0.00020	A987626	<0.00020	<0.00020	0.00020	A986248
Total Silicon (Si)	mg/L	1.4	1.6	A987631	1.5	1.5	0.50	A986253
Total Silver (Ag)	mg/L	<0.00010	<0.00010	A987626	<0.00010	<0.00010	0.00010	A986248
Total Sodium (Na)	mg/L	2.4	2.8	A987631	3.0	2.7	0.50	A986253
Total Strontium (Sr)	mg/L	0.041	0.048	A987631	0.049	0.044	0.020	A986253
Total Sulphur (S)	mg/L	36	50	A987631	44	38	0.20	A986253
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	A987626	<0.00020	<0.00020	0.00020	A986248
Total Tin (Sn)	mg/L	<0.0010	<0.0010	A987626	<0.0010	<0.0010	0.0010	A986248
Total Titanium (Ti)	mg/L	0.0017	0.0023	A987626	0.0016	0.0016	0.0010	A986248
Total Uranium (U)	mg/L	<0.00010	<0.00010	A987626	<0.00010	<0.00010	0.00010	A986248
Total Vanadium (V)	mg/L	<0.0010	<0.0010	A987626	<0.0010	<0.0010	0.0010	A986248

RDL = Reportable Detection Limit

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP071	BRP072		BRP073	BRP074		
Sampling Date		2023/05/30 10:00	2023/05/30 10:05		2023/05/30 10:10	2023/05/30 11:05		
COC Number		695439-01-01	695439-01-01		695439-01-01	695439-01-01		
	UNITS	**CB-2**	**EB-1**	**QC Batch**	**EB-2**	**NB-1**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.21	0.30	A987626	0.25	0.20	0.0030	A986248
RDL = Reportable Detection Limit								

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP075			BRP075			BRP076		
Sampling Date		2023/05/30 11:00			2023/05/30 11:00			2023/05/30 11:15		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	NB-2	RDL	QC Batch	NB-2 Lab-Dup	RDL	QC Batch	CLD	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.63	0.020	A981176				0.82	0.020	A981176
Total Aluminum (Al)	mg/L	0.079	0.0030	A987618	0.080	0.0030	A987618	0.089	0.0030	A987626
Total Antimony (Sb)	mg/L	<0.00060	0.00060	A987618	<0.00060	0.00060	A987618	<0.00060	0.00060	A987626
Total Arsenic (As)	mg/L	<0.00020	0.00020	A987618	0.00021	0.00020	A987618	0.00033	0.00020	A987626
Total Barium (Ba)	mg/L	0.012	0.010	A987623	0.012	0.010	A987623	0.013	0.010	A987631
Total Beryllium (Be)	mg/L	<0.0010	0.0010	A987618	<0.0010	0.0010	A987618	<0.0010	0.0010	A987626
Total Boron (B)	mg/L	0.020	0.020	A987623	0.022	0.020	A987623	<0.020	0.020	A987631
Total Calcium (Ca)	mg/L	43	0.30	A987623	43	0.30	A987623	46	0.30	A987631
Total Chromium (Cr)	mg/L	<0.0010	0.0010	A987618	<0.0010	0.0010	A987618	<0.0010	0.0010	A987626
Total Cobalt (Co)	mg/L	0.00092	0.00030	A987618	0.00087	0.00030	A987618	0.0012	0.00030	A987626
Total Copper (Cu)	mg/L	0.023	0.0010	A987618	0.023	0.0010	A987618	0.028	0.0010	A987626
Total Iron (Fe)	mg/L	3.4	0.060	A987623	3.4	0.060	A987623	3.9	0.060	A987631
Total Lead (Pb)	mg/L	<0.00020	0.00020	A987618	<0.00020	0.00020	A987618	<0.00020	0.00020	A987626
Total Lithium (Li)	mg/L	<0.020	0.020	A987623	<0.020	0.020	A987623	<0.020	0.020	A987631
Total Magnesium (Mg)	mg/L	7.6	0.20	A987623	7.7	0.20	A987623	8.2	0.20	A987631
Total Manganese (Mn)	mg/L	0.19	0.0040	A987623	0.19	0.0040	A987623	0.20	0.0040	A987631
Total Molybdenum (Mo)	mg/L	0.00026	0.00020	A987618	<0.00020	0.00020	A987618	<0.00020	0.00020	A987626
Total Nickel (Ni)	mg/L	0.0014	0.00050	A987618	0.0014	0.00050	A987618	0.0017	0.00050	A987626
Total Phosphorus (P)	mg/L	<0.10	0.10	A987623	<0.10	0.10	A987623	<0.10	0.10	A987631
Total Potassium (K)	mg/L	3.4	0.30	A987623	3.4	0.30	A987623	3.5	0.30	A987631
Total Selenium (Se)	mg/L	<0.00020	0.00020	A987618	<0.00020	0.00020	A987618	<0.00020	0.00020	A987626
Total Silicon (Si)	mg/L	1.7	0.50	A987623	1.6	0.50	A987623	1.6	0.50	A987631
Total Silver (Ag)	mg/L	<0.00010	0.00010	A987618	<0.00010	0.00010	A987618	<0.00010	0.00010	A987626
Total Sodium (Na)	mg/L	2.6	0.50	A987623	2.6	0.50	A987623	2.6	0.50	A987631
Total Strontium (Sr)	mg/L	0.042	0.020	A987623	0.043	0.020	A987623	0.046	0.020	A987631
Total Sulphur (S)	mg/L	44	0.20	A987623	44	0.20	A987623	47	0.20	A987631
Total Thallium (Tl)	mg/L	<0.00020	0.00020	A987618	<0.00020	0.00020	A987618	<0.00020	0.00020	A987626
Total Tin (Sn)	mg/L	<0.0010	0.0010	A987618	<0.0010	0.0010	A987618	<0.0010	0.0010	A987626
Total Titanium (Ti)	mg/L	0.0012	0.0010	A987618	0.0013	0.0010	A987618	0.0025	0.0010	A987626
Total Uranium (U)	mg/L	<0.00010	0.00010	A987618	<0.00010	0.00010	A987618	<0.00010	0.00010	A987626
Total Vanadium (V)	mg/L	<0.0010	0.0010	A987618	<0.0010	0.0010	A987618	<0.0010	0.0010	A987626

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP075			BRP075			BRP076		
Sampling Date		2023/05/30 11:00			2023/05/30 11:00			2023/05/30 11:15		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	**NB-2**	**RDL**	**QC Batch**	**NB-2 Lab-Dup**	**RDL**	**QC Batch**	**CLD**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.19	0.0030	A987618	0.18	0.0030	A987618	0.24	0.0030	A987626

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP077	BRP078	BRP079		BRP080		
Sampling Date		2023/05/30 09:05	2023/05/30 09:10	2023/05/30 09:15		2023/05/30 09:20		
COC Number		695439-02-01	695439-02-01	695439-02-01		695439-02-01		
	UNITS	CL-3 SFC	CL-3 BTM	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.15	0.28	0.15	A981176	0.43	0.020	A981176
Total Aluminum (Al)	mg/L	0.074	0.075	0.070	A986248	0.074	0.0030	A987626
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.0017	A986248	<0.00060	0.00060	A987626
Total Arsenic (As)	mg/L	0.00035	0.00033	0.00035	A986248	0.00040	0.00020	A987626
Total Barium (Ba)	mg/L	0.010	0.011	0.010	A986253	0.011	0.010	A987631
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	A986248	<0.0010	0.0010	A987626
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	A986253	<0.020	0.020	A987631
Total Calcium (Ca)	mg/L	17	23	16	A986253	30	0.30	A987631
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	A986248	<0.0010	0.0010	A987626
Total Cobalt (Co)	mg/L	<0.00030	0.00032	<0.00030	A986248	0.00049	0.00030	A987626
Total Copper (Cu)	mg/L	0.0082	0.012	0.0079	A986248	0.018	0.0010	A987626
Total Iron (Fe)	mg/L	0.61	1.3	0.50	A986253	2.0	0.060	A987631
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	A986248	<0.00020	0.00020	A987626
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	A986253	<0.020	0.020	A987631
Total Magnesium (Mg)	mg/L	3.9	4.6	3.7	A986253	6.1	0.20	A987631
Total Manganese (Mn)	mg/L	0.034	0.071	0.029	A986253	0.11	0.0040	A987631
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	A986248	<0.00020	0.00020	A987626
Total Nickel (Ni)	mg/L	0.00075	0.0010	0.00070	A986248	0.0011	0.00050	A987626
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	A986253	<0.10	0.10	A987631
Total Potassium (K)	mg/L	1.8	2.1	1.8	A986253	2.7	0.30	A987631
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	A986248	<0.00020	0.00020	A987626
Total Silicon (Si)	mg/L	1.2	1.3	1.2	A986253	1.5	0.50	A987631
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	A986248	<0.00010	0.00010	A987626
Total Sodium (Na)	mg/L	2.1	2.2	2.1	A986253	2.4	0.50	A987631
Total Strontium (Sr)	mg/L	0.028	0.031	0.028	A986253	0.035	0.020	A987631
Total Sulphur (S)	mg/L	9.8	17	9.1	A986253	27	0.20	A987631
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	A986248	<0.00020	0.00020	A987626
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	A986248	<0.0010	0.0010	A987626
Total Titanium (Ti)	mg/L	0.0024	0.0017	0.0014	A986248	0.0021	0.0010	A987626
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	A986248	<0.00010	0.00010	A987626
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	A986248	<0.0010	0.0010	A987626

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP077	BRP078	BRP079		BRP080		
Sampling Date		2023/05/30 09:05	2023/05/30 09:10	2023/05/30 09:15		2023/05/30 09:20		
COC Number		695439-02-01	695439-02-01	695439-02-01		695439-02-01		
	UNITS	**CL-3 SFC**	**CL-3 BTM**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.047	0.081	0.045	A986248	0.14	0.0030	A987626
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP081			BRP081			BRP082		
Sampling Date		2023/05/30 08:50			2023/05/30 08:50			2023/05/30 09:00		
COC Number		695439-02-01			695439-02-01			695439-02-01		
	UNITS	CL-8 SFC	RDL	QC Batch	CL-8 SFC Lab-Dup	RDL	QC Batch	CL-8 BTM	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.13	0.020	A981176				0.22	0.020	A981176
Total Aluminum (Al)	mg/L	0.078	0.0030	A986248	0.064	0.0030	A986248	0.058	0.0030	A987626
Total Antimony (Sb)	mg/L	<0.00060	0.00060	A986248	<0.00060	0.00060	A986248	<0.00060	0.00060	A987626
Total Arsenic (As)	mg/L	0.00043	0.00020	A986248	0.00035	0.00020	A986248	0.00036	0.00020	A987626
Total Barium (Ba)	mg/L	0.010	0.010	A986253	0.010	0.010	A986253	0.010	0.010	A987631
Total Beryllium (Be)	mg/L	<0.0010	0.0010	A986248	<0.0010	0.0010	A986248	<0.0010	0.0010	A987626
Total Boron (B)	mg/L	<0.020	0.020	A986253	<0.020	0.020	A986253	<0.020	0.020	A987631
Total Calcium (Ca)	mg/L	16	0.30	A986253	15	0.30	A986253	17	0.30	A987631
Total Chromium (Cr)	mg/L	<0.0010	0.0010	A986248	<0.0010	0.0010	A986248	<0.0010	0.0010	A987626
Total Cobalt (Co)	mg/L	<0.00030	0.00030	A986248	<0.00030	0.00030	A986248	<0.00030	0.00030	A987626
Total Copper (Cu)	mg/L	0.0080	0.0010	A986248	0.0077	0.0010	A986248	0.0098	0.0010	A987626
Total Iron (Fe)	mg/L	0.53	0.060	A986253	0.49	0.060	A986253	0.77	0.060	A987631
Total Lead (Pb)	mg/L	<0.00020	0.00020	A986248	<0.00020	0.00020	A986248	<0.00020	0.00020	A987626
Total Lithium (Li)	mg/L	<0.020	0.020	A986253	<0.020	0.020	A986253	<0.020	0.020	A987631
Total Magnesium (Mg)	mg/L	3.6	0.20	A986253	3.6	0.20	A986253	4.0	0.20	A987631
Total Manganese (Mn)	mg/L	0.030	0.0040	A986253	0.028	0.0040	A986253	0.041	0.0040	A987631
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	A986248	<0.00020	0.00020	A986248	<0.00020	0.00020	A987626
Total Nickel (Ni)	mg/L	0.00072	0.00050	A986248	0.00069	0.00050	A986248	0.00064	0.00050	A987626
Total Phosphorus (P)	mg/L	<0.10	0.10	A986253	<0.10	0.10	A986253	<0.10	0.10	A987631
Total Potassium (K)	mg/L	1.8	0.30	A986253	1.7	0.30	A986253	1.8	0.30	A987631
Total Selenium (Se)	mg/L	<0.00020	0.00020	A986248	<0.00020	0.00020	A986248	<0.00020	0.00020	A987626
Total Silicon (Si)	mg/L	1.2	0.50	A986253	1.1	0.50	A986253	1.3	0.50	A987631
Total Silver (Ag)	mg/L	<0.00010	0.00010	A986248	<0.00010	0.00010	A986248	<0.00010	0.00010	A987626
Total Sodium (Na)	mg/L	2.0	0.50	A986253	2.0	0.50	A986253	1.9	0.50	A987631
Total Strontium (Sr)	mg/L	0.027	0.020	A986253	0.027	0.020	A986253	0.028	0.020	A987631
Total Sulphur (S)	mg/L	9.1	0.20	A986253	8.6	0.20	A986253	12	0.20	A987631
Total Thallium (Tl)	mg/L	<0.00020	0.00020	A986248	<0.00020	0.00020	A986248	<0.00020	0.00020	A987626
Total Tin (Sn)	mg/L	<0.0010	0.0010	A986248	<0.0010	0.0010	A986248	<0.0010	0.0010	A987626
Total Titanium (Ti)	mg/L	0.0014	0.0010	A986248	0.0018	0.0010	A986248	0.0017	0.0010	A987626
Total Uranium (U)	mg/L	<0.00010	0.00010	A986248	<0.00010	0.00010	A986248	<0.00010	0.00010	A987626
Total Vanadium (V)	mg/L	<0.0010	0.0010	A986248	<0.0010	0.0010	A986248	<0.0010	0.0010	A987626

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP081			BRP081			BRP082		
Sampling Date		2023/05/30 08:50			2023/05/30 08:50			2023/05/30 09:00		
COC Number		695439-02-01			695439-02-01			695439-02-01		
	UNITS	**CL-8 SFC**	**RDL**	**QC Batch**	**CL-8 SFC Lab-Dup**	**RDL**	**QC Batch**	**CL-8 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.043	0.0030	A986248	0.042	0.0030	A986248	0.065	0.0030	A987626

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP083		BRP084	BRP085		BRP086		
Sampling Date		2023/05/30 09:25		2023/05/30 09:30	2023/05/30 08:40		2023/05/30 08:45		
COC Number		695439-02-01		695439-02-01	695439-02-01		695439-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	CL-4 SFC	QC Batch	CL-4 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.13	A981176	0.13	0.16	A981176	0.055	0.020	A981812
Total Aluminum (Al)	mg/L	0.059	A986248	0.065	0.053	A987626	0.084	0.0030	A986248
Total Antimony (Sb)	mg/L	<0.00060	A986248	0.00062	<0.00060	A987626	<0.00060	0.00060	A986248
Total Arsenic (As)	mg/L	0.00037	A986248	0.00043	0.00046	A987626	0.00042	0.00020	A986248
Total Barium (Ba)	mg/L	0.010	A986253	0.010	<0.010	A987631	0.011	0.010	A986253
Total Beryllium (Be)	mg/L	<0.0010	A986248	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248
Total Boron (B)	mg/L	<0.020	A986253	<0.020	<0.020	A987631	<0.020	0.020	A986253
Total Calcium (Ca)	mg/L	15	A986253	14	15	A987631	11	0.30	A986253
Total Chromium (Cr)	mg/L	<0.0010	A986248	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248
Total Cobalt (Co)	mg/L	<0.00030	A986248	<0.00030	<0.00030	A987626	<0.00030	0.00030	A986248
Total Copper (Cu)	mg/L	0.0073	A986248	0.0079	0.0087	A987626	0.0046	0.0010	A986248
Total Iron (Fe)	mg/L	0.44	A986253	0.59	0.53	A987631	1.0	0.060	A986253
Total Lead (Pb)	mg/L	<0.00020	A986248	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Lithium (Li)	mg/L	<0.020	A986253	<0.020	<0.020	A987631	<0.020	0.020	A986253
Total Magnesium (Mg)	mg/L	3.7	A986253	3.7	3.8	A987631	3.0	0.20	A986253
Total Manganese (Mn)	mg/L	0.026	A986253	0.033	0.028	A987631	0.055	0.0040	A986253
Total Molybdenum (Mo)	mg/L	<0.00020	A986248	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Nickel (Ni)	mg/L	0.00057	A986248	<0.00050	0.00057	A987626	0.00053	0.00050	A986248
Total Phosphorus (P)	mg/L	<0.10	A986253	<0.10	<0.10	A987631	<0.10	0.10	A986253
Total Potassium (K)	mg/L	1.7	A986253	1.7	1.7	A987631	1.5	0.30	A986253
Total Selenium (Se)	mg/L	<0.00020	A986248	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Silicon (Si)	mg/L	1.2	A986253	1.4	1.3	A987631	1.1	0.50	A986253
Total Silver (Ag)	mg/L	<0.00010	A986248	<0.00010	<0.00010	A987626	<0.00010	0.00010	A986248
Total Sodium (Na)	mg/L	2.0	A986253	2.0	1.9	A987631	1.9	0.50	A986253
Total Strontium (Sr)	mg/L	0.027	A986253	0.026	0.026	A987631	0.025	0.020	A986253
Total Sulphur (S)	mg/L	8.5	A986253	8.5	10	A987631	4.7	0.20	A986253
Total Thallium (Tl)	mg/L	<0.00020	A986248	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Tin (Sn)	mg/L	<0.0010	A986248	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248
Total Titanium (Ti)	mg/L	<0.0010	A986248	0.0018	0.0011	A987626	0.0020	0.0010	A986248
Total Uranium (U)	mg/L	<0.00010	A986248	<0.00010	<0.00010	A987626	<0.00010	0.00010	A986248
Total Vanadium (V)	mg/L	<0.0010	A986248	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP083		BRP084	BRP085		BRP086		
Sampling Date		2023/05/30 09:25		2023/05/30 09:30	2023/05/30 08:40		2023/05/30 08:45		
COC Number		695439-02-01		695439-02-01	695439-02-01		695439-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	CL-4 SFC	QC Batch	CL-4 BTM	RDL	QC Batch
Total Zinc (Zn)	mg/L	0.037	A986248	0.046	0.056	A987626	0.017	0.0030	A986248
RDL = Reportable Detection Limit									

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP087	BRP088	BRP089	BRP090		BRP091		
Sampling Date		2023/05/30 08:25	2023/05/30 08:30	2023/05/30 08:15	2023/05/30 08:20		2023/05/30		
COC Number		695439-03-01	695439-03-01	695439-03-01	695439-03-01		695439-03-01		
	UNITS	CL-5 SFC	CL-5 BTM	CL-6 SFC	CL-6 BTM	QC Batch	SW-103	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.12	0.061	0.069	0.089	A981813	0.14	0.020	A981176
Total Aluminum (Al)	mg/L	0.055	0.058	0.053	0.18	A987626	0.064	0.0030	A986248
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	A987626	<0.00060	0.00060	A986248
Total Arsenic (As)	mg/L	0.00042	0.00057	0.00048	0.00047	A987626	0.00031	0.00020	A986248
Total Barium (Ba)	mg/L	<0.010	<0.010	<0.010	0.011	A987631	0.010	0.010	A986253
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	A987631	<0.020	0.020	A986253
Total Calcium (Ca)	mg/L	14	11	12	11	A987631	16	0.30	A986253
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	A987626	<0.00030	0.00030	A986248
Total Copper (Cu)	mg/L	0.0078	0.0052	0.0058	0.0069	A987626	0.0078	0.0010	A986248
Total Iron (Fe)	mg/L	0.41	0.42	0.28	0.59	A987631	0.51	0.060	A986253
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	A987631	<0.020	0.020	A986253
Total Magnesium (Mg)	mg/L	3.6	3.4	3.4	3.2	A987631	3.7	0.20	A986253
Total Manganese (Mn)	mg/L	0.022	0.026	0.016	0.029	A987631	0.029	0.0040	A986253
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Nickel (Ni)	mg/L	0.00065	<0.00050	<0.00050	0.00056	A987626	0.00068	0.00050	A986248
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	A987631	<0.10	0.10	A986253
Total Potassium (K)	mg/L	1.6	1.5	1.5	1.4	A987631	1.7	0.30	A986253
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Silicon (Si)	mg/L	1.3	1.1	1.0	1.2	A987631	1.2	0.50	A986253
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	A987626	<0.00010	0.00010	A986248
Total Sodium (Na)	mg/L	1.9	1.9	1.9	1.8	A987631	2.0	0.50	A986253
Total Strontium (Sr)	mg/L	0.025	0.025	0.025	0.025	A987631	0.027	0.020	A986253
Total Sulphur (S)	mg/L	8.0	5.6	6.0	4.9	A987631	8.8	0.20	A986253
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	A987626	<0.00020	0.00020	A986248
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248
Total Titanium (Ti)	mg/L	0.0015	0.0020	0.0019	0.0076	A987626	0.0014	0.0010	A986248
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	A987626	<0.00010	0.00010	A986248
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	A987626	<0.0010	0.0010	A986248

RDL = Reportable Detection Limit

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP087	BRP088	BRP089	BRP090		BRP091		
Sampling Date		2023/05/30 08:25	2023/05/30 08:30	2023/05/30 08:15	2023/05/30 08:20		2023/05/30		
COC Number		695439-03-01	695439-03-01	695439-03-01	695439-03-01		695439-03-01		
	UNITS	**CL-5 SFC**	**CL-5 BTM**	**CL-6 SFC**	**CL-6 BTM**	**QC Batch**	**SW-103**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.046	0.025	0.029	0.034	A987626	0.043	0.0030	A986248
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP092	BRP093	BRP094			BRP094		
Sampling Date		2023/05/30	2023/05/30	2023/05/30			2023/05/30		
COC Number		695439-03-01	695439-03-01	695439-03-01			695439-03-01		
	UNITS	SW-104	SW-105	TRIP BLANK	RDL	QC Batch	TRIP BLANK Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.70	0.80	<0.020	0.020	A981176			
Total Aluminum (Al)	mg/L	0.073	0.086	<0.0030	0.0030	A987626	<0.0030	0.0030	A987626
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	A987626	<0.00060	0.00060	A987626
Total Arsenic (As)	mg/L	0.00027	0.00030	<0.00020	0.00020	A987626	<0.00020	0.00020	A987626
Total Barium (Ba)	mg/L	0.012	0.013	<0.010	0.010	A987631	<0.010	0.010	A987631
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A987626	<0.0010	0.0010	A987626
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	A987631	<0.020	0.020	A987631
Total Calcium (Ca)	mg/L	40	46	<0.30	0.30	A987631	<0.30	0.30	A987631
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A987626	<0.0010	0.0010	A987626
Total Cobalt (Co)	mg/L	0.0010	0.0011	<0.00030	0.00030	A987626	<0.00030	0.00030	A987626
Total Copper (Cu)	mg/L	0.024	0.028	<0.0010	0.0010	A987626	<0.0010	0.0010	A987626
Total Iron (Fe)	mg/L	2.9	3.6	<0.060	0.060	A987631	<0.060	0.060	A987631
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A987626	<0.00020	0.00020	A987626
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	A987631	<0.020	0.020	A987631
Total Magnesium (Mg)	mg/L	7.2	8.2	<0.20	0.20	A987631	<0.20	0.20	A987631
Total Manganese (Mn)	mg/L	0.16	0.19	<0.0040	0.0040	A987631	<0.0040	0.0040	A987631
Total Molybdenum (Mo)	mg/L	0.00043	<0.00020	<0.00020	0.00020	A987626	<0.00020	0.00020	A987626
Total Nickel (Ni)	mg/L	0.0015	0.0016	<0.00050	0.00050	A987626	<0.00050	0.00050	A987626
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	A987631	<0.10	0.10	A987631
Total Potassium (K)	mg/L	3.3	3.5	<0.30	0.30	A987631	<0.30	0.30	A987631
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A987626	<0.00020	0.00020	A987626
Total Silicon (Si)	mg/L	1.6	1.5	<0.50	0.50	A987631	<0.50	0.50	A987631
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	A987626	<0.00010	0.00010	A987626
Total Sodium (Na)	mg/L	2.5	2.6	<0.50	0.50	A987631	<0.50	0.50	A987631
Total Strontium (Sr)	mg/L	0.040	0.046	<0.020	0.020	A987631	<0.020	0.020	A987631
Total Sulphur (S)	mg/L	37	44	<0.20	0.20	A987631	<0.20	0.20	A987631
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	A987626	<0.00020	0.00020	A987626
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A987626	<0.0010	0.0010	A987626
Total Titanium (Ti)	mg/L	0.0016	0.0020	<0.0010	0.0010	A987626	<0.0010	0.0010	A987626
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	A987626	<0.00010	0.00010	A987626
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	A987626	<0.0010	0.0010	A987626

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BRP092	BRP093	BRP094			BRP094		
Sampling Date		2023/05/30	2023/05/30	2023/05/30			2023/05/30		
COC Number		695439-03-01	695439-03-01	695439-03-01			695439-03-01		
	UNITS	**SW-104**	**SW-105**	**TRIP BLANK**	**RDL**	**QC Batch**	**TRIP BLANK Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.21	0.24	<0.0030	0.0030	A987626	<0.0030	0.0030	A987626

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C339659
Report Date: 2023/06/09

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP067			BRP067			BRP068		
Sampling Date		2023/05/30 12:00			2023/05/30 12:00			2023/05/30 09:50		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	27	0.50	A981774				120	0.50	A981774
Total Hardness (CaCO3)	mg/L	28.5	0.50	A981508				118	0.50	A981508
Misc. Inorganics										
pH	pH	6.50	N/A	A984421				6.72	N/A	A983996
Total Organic Carbon (C)	mg/L	11	0.50	A989869	12	0.50	A989869	8.9	0.50	A983607
Total Suspended Solids	mg/L	1.9	0.97	A983746				2.9	1.0	A983746
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.6	0.50	A989867	10	0.50	A989867	9.3	0.50	A983695
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A984418				<1.0	1.0	A983993
Alkalinity (Total as CaCO3)	mg/L	26	1.0	A984418				17	1.0	A983993
Bicarbonate (HCO3)	mg/L	31	1.0	A984418				21	1.0	A983993
Carbonate (CO3)	mg/L	<1.0	1.0	A984418				<1.0	1.0	A983993
Hydroxide (OH)	mg/L	<1.0	1.0	A984418				<1.0	1.0	A983993
Sulphate (SO4)	mg/L	2.9	1.0	A982446				120	1.0	A982448
Physical Properties										
Turbidity	NTU	1.6	0.10	A981866	1.6	0.10	A981866	13	0.10	A981866

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP069			BRP070			BRP070		
Sampling Date		2023/05/30 09:45			2023/05/30 09:55			2023/05/30 09:55		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	SB-2	RDL	QC Batch	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	120	0.50	A981774	120	0.50	A981774			
Total Hardness (CaCO3)	mg/L	117	0.50	A981508	129	0.50	A981508			
Misc. Inorganics										
pH	pH	6.42	N/A	A984355	6.62	N/A	A983996			
Total Organic Carbon (C)	mg/L	8.7	0.50	A989869	6.6	0.50	A983607	7.7	0.50	A983607
Total Suspended Solids	mg/L	2.5	1.0	A983746	3.9	0.99	A983746			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.4	0.50	A989867	8.5	0.50	A983689			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A984351	<1.0	1.0	A983993			
Alkalinity (Total as CaCO3)	mg/L	13	1.0	A984351	13	1.0	A983993			
Bicarbonate (HCO3)	mg/L	16	1.0	A984351	16	1.0	A983993			
Carbonate (CO3)	mg/L	<1.0	1.0	A984351	<1.0	1.0	A983993			
Hydroxide (OH)	mg/L	<1.0	1.0	A984351	<1.0	1.0	A983993			
Sulphate (SO4)	mg/L	110	1.0	A982448	120	1.0	A982448			
Physical Properties										
Turbidity	NTU	13	0.10	A981866	18	0.10	A981866			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP071			BRP072			BRP073		
Sampling Date		2023/05/30 10:00			2023/05/30 10:05			2023/05/30 10:10		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	CB-2	RDL	QC Batch	EB-1	RDL	QC Batch	EB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	130	0.50	A981774	140	0.50	A981774	140	0.50	A981774
Total Hardness (CaCO3)	mg/L	126	0.50	A981818	156	0.50	A981818	157	0.50	A981818
Misc. Inorganics										
pH	pH	6.70	N/A	A983996	6.34	N/A	A983996	6.51	N/A	A983996
Total Organic Carbon (C)	mg/L	7.1	0.50	A983607	8.1	0.50	A983607	5.7	0.50	A983611
Total Suspended Solids	mg/L	3.7	1.0	A983746	2.7	0.99	A983746	3.3	1.0	A983746
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.8	0.50	A983689	6.4	0.50	A983689	6.8	0.50	A983689
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A983993	<1.0	1.0	A983993	<1.0	1.0	A983993
Alkalinity (Total as CaCO3)	mg/L	13	1.0	A983993	9.3	1.0	A983993	9.1	1.0	A983993
Bicarbonate (HCO3)	mg/L	15	1.0	A983993	11	1.0	A983993	11	1.0	A983993
Carbonate (CO3)	mg/L	<1.0	1.0	A983993	<1.0	1.0	A983993	<1.0	1.0	A983993
Hydroxide (OH)	mg/L	<1.0	1.0	A983993	<1.0	1.0	A983993	<1.0	1.0	A983993
Sulphate (SO4)	mg/L	120	1.0	A982448	150	5.0	A982446	150	5.0	A982446
Physical Properties										
Turbidity	NTU	13	0.10	A981866	16	0.10	A981866	16	0.10	A981866

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C339659
Report Date: 2023/06/09

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP074			BRP074			BRP075		
Sampling Date		2023/05/30 11:05			2023/05/30 11:05			2023/05/30 11:00		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	NB-1	RDL	QC Batch	NB-1 Lab-Dup	RDL	QC Batch	NB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	130	0.50	A981774				140	0.50	A981774
Total Hardness (CaCO3)	mg/L	142	0.50	A981818				139	0.50	A981818
Misc. Inorganics										
pH	pH	6.58	N/A	A983996				6.59	N/A	A983996
Total Organic Carbon (C)	mg/L	8.4	0.50	A983611	8.0	0.50	A983611	7.8	0.50	A983611
Total Suspended Solids	mg/L	1.8	1.0	A983746				5.1	0.99	A983746
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.1	0.50	A983695				8.1	0.50	A983695
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A983993				<1.0	1.0	A983993
Alkalinity (Total as CaCO3)	mg/L	12	1.0	A983993				11	1.0	A983993
Bicarbonate (HCO3)	mg/L	14	1.0	A983993				13	1.0	A983993
Carbonate (CO3)	mg/L	<1.0	1.0	A983993				<1.0	1.0	A983993
Hydroxide (OH)	mg/L	<1.0	1.0	A983993				<1.0	1.0	A983993
Sulphate (SO4)	mg/L	140	5.0	A982446				130	2.0	A982448
Physical Properties										
Turbidity	NTU	14	0.10	A981866				18	0.10	A981866

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C339659
Report Date: 2023/06/09

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP075			BRP076			BRP076		
Sampling Date		2023/05/30 11:00			2023/05/30 11:15			2023/05/30 11:15		
COC Number		695439-01-01			695439-01-01			695439-01-01		
	UNITS	NB-2 Lab-Dup	RDL	QC Batch	CLD	RDL	QC Batch	CLD Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				150	0.50	A981774			
Total Hardness (CaCO3)	mg/L				149	0.50	A981818			
Misc. Inorganics										
pH	pH				6.57	N/A	A983996			
Total Organic Carbon (C)	mg/L				6.4	0.50	A983611			
Total Suspended Solids	mg/L				2.8	0.99	A983746			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				7.6	0.50	A983695	7.6	0.50	A983695
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	A983993			
Alkalinity (Total as CaCO3)	mg/L				11	1.0	A983993			
Bicarbonate (HCO3)	mg/L				13	1.0	A983993			
Carbonate (CO3)	mg/L				<1.0	1.0	A983993			
Hydroxide (OH)	mg/L				<1.0	1.0	A983993			
Sulphate (SO4)	mg/L	140	2.0	A982448	130	5.0	A982448			
Physical Properties										
Turbidity	NTU				17	0.10	A981866			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP077		BRP078			BRP078		
Sampling Date		2023/05/30 09:05		2023/05/30 09:10			2023/05/30 09:10		
COC Number		695439-02-01		695439-02-01			695439-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch	CL-3 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	51	A981774	78	0.50	A981774			
Total Hardness (CaCO3)	mg/L	57.2	A981818	76.8	0.50	A981818			
Misc. Inorganics									
pH	pH	7.07	A983996	6.91	N/A	A983996			
Total Organic Carbon (C)	mg/L	8.7	A983611	8.4	0.50	A983611			
Total Suspended Solids	mg/L	<1.0	A983746	3.3	1.0	A983746			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.9	A983689	9.3	0.50	A983689	10	0.50	A983689
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	A983993	<1.0	1.0	A983993			
Alkalinity (Total as CaCO3)	mg/L	26	A983993	23	1.0	A983993			
Bicarbonate (HCO3)	mg/L	31	A983993	28	1.0	A983993			
Carbonate (CO3)	mg/L	<1.0	A983993	<1.0	1.0	A983993			
Hydroxide (OH)	mg/L	<1.0	A983993	<1.0	1.0	A983993			
Sulphate (SO4)	mg/L	37	A982446	65	1.0	A982448			
Physical Properties									
Turbidity	NTU	4.1	A981866	6.8	0.10	A981866			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP079		BRP080			BRP080		
Sampling Date		2023/05/30 09:15		2023/05/30 09:20			2023/05/30 09:20		
COC Number		695439-02-01		695439-02-01			695439-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch	CL-7 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	51	A981774	97	0.50	A981774			
Total Hardness (CaCO3)	mg/L	54.5	A981818	101	0.50	A981818			
Misc. Inorganics									
pH	pH	6.41	A984363	6.33	N/A	A984421			
Total Organic Carbon (C)	mg/L	10	A983611	9.2	0.50	A983607			
Total Suspended Solids	mg/L	<1.0	A983746	2.6	1.0	A983806	2.3	1.0	A983806
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	11	A983689	10	0.50	A983689			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	A984360	<1.0	1.0	A984418			
Alkalinity (Total as CaCO3)	mg/L	26	A984360	20	1.0	A984418			
Bicarbonate (HCO3)	mg/L	31	A984360	24	1.0	A984418			
Carbonate (CO3)	mg/L	<1.0	A984360	<1.0	1.0	A984418			
Hydroxide (OH)	mg/L	<1.0	A984360	<1.0	1.0	A984418			
Sulphate (SO4)	mg/L	34	A982446	84	1.0	A982446			
Physical Properties									
Turbidity	NTU	3.4	A981866	9.7	0.10	A981866			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C339659
Report Date: 2023/06/09

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP081		BRP082		BRP083		BRP084		
Sampling Date		2023/05/30 08:50		2023/05/30 09:00		2023/05/30 09:25		2023/05/30 09:30		
COC Number		695439-02-01		695439-02-01		695439-02-01		695439-02-01		
	UNITS	CL-8 SFC	QC Batch	CL-8 BTM	QC Batch	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	50	A981774	56	A981774	55	A981774	45	0.50	A981774
Total Hardness (CaCO3)	mg/L	53.7	A981818	58.8	A981818	52.8	A981818	50.8	0.50	A981818
Misc. Inorganics										
pH	pH	6.60	A984355	6.59	A984355	7.07	A983996	6.99	N/A	A983996
Total Organic Carbon (C)	mg/L	8.3	A983607	11	A983607	11	A989869	7.8	0.50	A983607
Total Suspended Solids	mg/L	<1.0	A983806	<1.0	A983806	<1.0	A983806	1.3	1.0	A983806
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11	A983695	9.7	A983695	10	A989867	10	0.50	A983689
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	A984351	<1.0	A984351	<1.0	A983993	<1.0	1.0	A983993
Alkalinity (Total as CaCO3)	mg/L	24	A984351	22	A984351	26	A983993	25	1.0	A983993
Bicarbonate (HCO3)	mg/L	29	A984351	27	A984351	32	A983993	30	1.0	A983993
Carbonate (CO3)	mg/L	<1.0	A984351	<1.0	A984351	<1.0	A983993	<1.0	1.0	A983993
Hydroxide (OH)	mg/L	<1.0	A984351	<1.0	A984351	<1.0	A983993	<1.0	1.0	A983993
Sulphate (SO4)	mg/L	34	A982446	43	A982448	32	A982446	28	1.0	A982446
Physical Properties										
Turbidity	NTU	3.5	A981866	5.4	A981866	3.1	A981866	4.8	0.10	A981866

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP085		BRP086			BRP086		
Sampling Date		2023/05/30 08:40		2023/05/30 08:45			2023/05/30 08:45		
COC Number		695439-02-01		695439-02-01			695439-02-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	RDL	QC Batch	CL-4 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	49	A981774	38	0.50	A981774			
Total Hardness (CaCO3)	mg/L	53.6	A981818	40.1	0.50	A981818			
Misc. Inorganics									
pH	pH	6.96	A983996	7.10	N/A	A983996			
Total Organic Carbon (C)	mg/L	10	A983607	11	0.50	A983607			
Total Suspended Solids	mg/L	4.9	A983806	3.1	1.0	A983806			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	11	A983689	10	0.50	A983689			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	A983993	<1.0	1.0	A983993			
Alkalinity (Total as CaCO3)	mg/L	24	A983993	28	1.0	A983993			
Bicarbonate (HCO3)	mg/L	29	A983993	34	1.0	A983993			
Carbonate (CO3)	mg/L	<1.0	A983993	<1.0	1.0	A983993			
Hydroxide (OH)	mg/L	<1.0	A983993	<1.0	1.0	A983993			
Sulphate (SO4)	mg/L	34	A982448	18	1.0	A982446			
Physical Properties									
Turbidity	NTU	17	A981866	14	0.10	A982161	14	0.10	A982161

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C339659
Report Date: 2023/06/09

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP087		BRP088		BRP089		BRP090		
Sampling Date		2023/05/30 08:25		2023/05/30 08:30		2023/05/30 08:15		2023/05/30 08:20		
COC Number		695439-03-01		695439-03-01		695439-03-01		695439-03-01		
	UNITS	CL-5 SFC	QC Batch	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	44	A981817	41	A981817	44	A981817	40	0.50	A981817
Total Hardness (CaCO3)	mg/L	48.7	A981818	42.8	A981818	43.6	A981818	39.6	0.50	A981818
Misc. Inorganics										
pH	pH	7.04	A983996	6.47	A984363	7.02	A983996	7.04	N/A	A983996
Total Organic Carbon (C)	mg/L	9.2	A983607	8.1	A983607	11	A989869	9.6	0.50	A983611
Total Suspended Solids	mg/L	<1.0	A983806	1.9	A983806	<1.0	A983806	10	1.0	A983806
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12	A983689	11	A983695	12	A989867	12	0.50	A983695
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	A983993	<1.0	A984360	<1.0	A983993	<1.0	1.0	A983993
Alkalinity (Total as CaCO3)	mg/L	27	A983993	27	A984360	28	A983993	28	1.0	A983993
Bicarbonate (HCO3)	mg/L	33	A983993	33	A984360	34	A983993	34	1.0	A983993
Carbonate (CO3)	mg/L	<1.0	A983993	<1.0	A984360	<1.0	A983993	<1.0	1.0	A983993
Hydroxide (OH)	mg/L	<1.0	A983993	<1.0	A984360	<1.0	A983993	<1.0	1.0	A983993
Sulphate (SO4)	mg/L	27	A982446	17	A982446	20	A982448	16	1.0	A982448
Physical Properties										
Turbidity	NTU	9.9	A982161	3.8	A982161	3.3	A982161	7.4	0.10	A982161

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

Bureau Veritas Job #: C339659
Report Date: 2023/06/09

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP090			BRP091	BRP092		BRP093		
Sampling Date		2023/05/30 08:20			2023/05/30	2023/05/30		2023/05/30		
COC Number		695439-03-01			695439-03-01	695439-03-01		695439-03-01		
	UNITS	CL-6 BTM Lab-Dup	RDL	QC Batch	SW-103	SW-104	RDL	SW-105	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				50	120	0.50	140	0.50	A981774
Total Hardness (CaCO3)	mg/L				54.0	128	0.50	149	0.50	A981508
Misc. Inorganics										
pH	pH	7.09	N/A	A983996	6.97	6.61	N/A	6.56	N/A	A983996
Total Organic Carbon (C)	mg/L				10	9.2	0.50	7.0	0.50	A983607
Total Suspended Solids	mg/L				1.0	5.0	1.0	3.3	1.0	A983806
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				9.6	7.6	0.50	7.2	0.50	A983689
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A983993	<1.0	<1.0	1.0	<1.0	1.0	A983993
Alkalinity (Total as CaCO3)	mg/L	28	1.0	A983993	26	14	1.0	11	1.0	A983993
Bicarbonate (HCO3)	mg/L	35	1.0	A983993	31	17	1.0	13	1.0	A983993
Carbonate (CO3)	mg/L	<1.0	1.0	A983993	<1.0	<1.0	1.0	<1.0	1.0	A983993
Hydroxide (OH)	mg/L	<1.0	1.0	A983993	<1.0	<1.0	1.0	<1.0	1.0	A983993
Sulphate (SO4)	mg/L				35	120	1.0	140	5.0	A982446
Physical Properties										
Turbidity	NTU				3.6	25	0.10	19	0.10	A982161

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BRP094			BRP094		
Sampling Date		2023/05/30			2023/05/30		
COC Number		695439-03-01			695439-03-01		
	UNITS	TRIP BLANK	RDL	QC Batch	TRIP BLANK Lab-Dup	RDL	QC Batch
Calculated Parameters							
Hardness (CaCO3)	mg/L	<0.50	0.50	A981774			
Total Hardness (CaCO3)	mg/L	<0.50	0.50	A981508			
Misc. Inorganics							
pH	pH	4.92	N/A	A984363			
Total Organic Carbon (C)	mg/L	<0.50	0.50	A983607			
Total Suspended Solids	mg/L	<1.0	1.0	A983806			
Lab Filtered Inorganics							
Dissolved Organic Carbon (C)	mg/L	<0.50	0.50	A983689			
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	A984360			
Alkalinity (Total as CaCO3)	mg/L	<1.0	1.0	A984360			
Bicarbonate (HCO3)	mg/L	<1.0	1.0	A984360			
Carbonate (CO3)	mg/L	<1.0	1.0	A984360			
Hydroxide (OH)	mg/L	<1.0	1.0	A984360			
Sulphate (SO4)	mg/L	<1.0	1.0	A982446			
Physical Properties							
Turbidity	NTU	<0.10 (1)	0.10	A985749	<0.10	0.10	A985749

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample was originally processed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.7°C
Package 2	8.0°C
Package 3	7.3°C
Package 4	7.7°C

Sample BRP094 [TRIP BLANK] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Results relate only to the items tested.

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A981866	Turbidity	2023/06/02			104	80 - 120	<0.10	NTU	3.1	20
A982161	Turbidity	2023/06/02			103	80 - 120	<0.10	NTU	5.8	20
A982446	Sulphate (SO4)	2023/06/06	118	80 - 120	112	80 - 120	<1.0	mg/L	5.6	20
A982448	Sulphate (SO4)	2023/06/06	NC	80 - 120	104	80 - 120	<1.0	mg/L	3.1	20
A982622	Dissolved Aluminum (Al)	2023/06/04	112	80 - 120	108	80 - 120	<0.0030	mg/L	2.0	20
A982622	Dissolved Antimony (Sb)	2023/06/04	116	80 - 120	117	80 - 120	<0.00060	mg/L	NC	20
A982622	Dissolved Arsenic (As)	2023/06/04	105	80 - 120	104	80 - 120	<0.00020	mg/L	0.91	20
A982622	Dissolved Beryllium (Be)	2023/06/04	102	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
A982622	Dissolved Chromium (Cr)	2023/06/04	100	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
A982622	Dissolved Cobalt (Co)	2023/06/04	101	80 - 120	102	80 - 120	<0.00030	mg/L	NC	20
A982622	Dissolved Copper (Cu)	2023/06/04	99	80 - 120	100	80 - 120	<0.0010	mg/L	7.4	20
A982622	Dissolved Lead (Pb)	2023/06/04	99	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
A982622	Dissolved Molybdenum (Mo)	2023/06/04	103	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
A982622	Dissolved Nickel (Ni)	2023/06/04	100	80 - 120	101	80 - 120	<0.00050	mg/L	6.3	20
A982622	Dissolved Selenium (Se)	2023/06/04	109	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
A982622	Dissolved Silver (Ag)	2023/06/04	100	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
A982622	Dissolved Thallium (Tl)	2023/06/04	100	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
A982622	Dissolved Tin (Sn)	2023/06/04	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A982622	Dissolved Titanium (Ti)	2023/06/04	104	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
A982622	Dissolved Uranium (U)	2023/06/04	103	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
A982622	Dissolved Vanadium (V)	2023/06/04	102	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A982622	Dissolved Zinc (Zn)	2023/06/04	108	80 - 120	106	80 - 120	<0.0030	mg/L	4.1	20
A982984	Dissolved Barium (Ba)	2023/06/04	99	80 - 120	97	80 - 120	<0.010	mg/L	11	20
A982984	Dissolved Boron (B)	2023/06/04	101	80 - 120	98	80 - 120	<0.020	mg/L	NC	20
A982984	Dissolved Calcium (Ca)	2023/06/04	95	80 - 120	93	80 - 120	<0.30	mg/L	1.5	20
A982984	Dissolved Iron (Fe)	2023/06/04	107	80 - 120	99	80 - 120	<0.060	mg/L	3.0	20
A982984	Dissolved Lithium (Li)	2023/06/04	95	80 - 120	91	80 - 120	<0.020	mg/L	NC	20
A982984	Dissolved Magnesium (Mg)	2023/06/04	102	80 - 120	98	80 - 120	<0.20	mg/L	2.4	20
A982984	Dissolved Manganese (Mn)	2023/06/04	108	80 - 120	99	80 - 120	<0.0040	mg/L	4.5	20
A982984	Dissolved Phosphorus (P)	2023/06/04	100	80 - 120	96	80 - 120	<0.10	mg/L	NC	20
A982984	Dissolved Potassium (K)	2023/06/04	101	80 - 120	97	80 - 120	<0.30	mg/L	0.33	20
A982984	Dissolved Silicon (Si)	2023/06/04	98	80 - 120	97	80 - 120	<0.50	mg/L	0.34	20

Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A982984	Dissolved Sodium (Na)	2023/06/04	98	80 - 120	94	80 - 120	<0.50	mg/L	1.2	20
A982984	Dissolved Strontium (Sr)	2023/06/04	95	80 - 120	94	80 - 120	<0.020	mg/L	2.5	20
A982984	Dissolved Sulphur (S)	2023/06/04	104	80 - 120	96	80 - 120	<0.20	mg/L	3.6	20
A983056	Dissolved Barium (Ba)	2023/06/04	86	80 - 120	99	80 - 120	<0.010	mg/L		
A983056	Dissolved Boron (B)	2023/06/04	105	80 - 120	98	80 - 120	<0.020	mg/L		
A983056	Dissolved Calcium (Ca)	2023/06/05	NC	80 - 120	95	80 - 120	<0.30	mg/L	4.7	20
A983056	Dissolved Iron (Fe)	2023/06/05	110	80 - 120	97	80 - 120	<0.060	mg/L	NC	20
A983056	Dissolved Lithium (Li)	2023/06/04	105	80 - 120	93	80 - 120	<0.020	mg/L		
A983056	Dissolved Magnesium (Mg)	2023/06/05	NC	80 - 120	100	80 - 120	<0.20	mg/L	4.2	20
A983056	Dissolved Manganese (Mn)	2023/06/05	109	80 - 120	99	80 - 120	<0.0040	mg/L	NC	20
A983056	Dissolved Phosphorus (P)	2023/06/04	106	80 - 120	97	80 - 120	<0.10	mg/L		
A983056	Dissolved Potassium (K)	2023/06/05	NC	80 - 120	95	80 - 120	<0.30	mg/L	4.0	20
A983056	Dissolved Silicon (Si)	2023/06/04	100	80 - 120	95	80 - 120	<0.50	mg/L		
A983056	Dissolved Sodium (Na)	2023/06/05	NC	80 - 120	91	80 - 120	<0.50	mg/L	4.3	20
A983056	Dissolved Strontium (Sr)	2023/06/04	NC	80 - 120	97	80 - 120	<0.020	mg/L		
A983056	Dissolved Sulphur (S)	2023/06/04	NC	80 - 120	99	80 - 120	<0.20	mg/L		
A983123	Dissolved Aluminum (Al)	2023/06/04	86	80 - 120	103	80 - 120	<0.0030	mg/L	5.8	20
A983123	Dissolved Antimony (Sb)	2023/06/04	99	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
A983123	Dissolved Arsenic (As)	2023/06/04	89	80 - 120	95	80 - 120	<0.00020	mg/L	1.8	20
A983123	Dissolved Beryllium (Be)	2023/06/04	87	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
A983123	Dissolved Chromium (Cr)	2023/06/04	89	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
A983123	Dissolved Cobalt (Co)	2023/06/04	88	80 - 120	97	80 - 120	<0.00030	mg/L	7.5	20
A983123	Dissolved Copper (Cu)	2023/06/04	84	80 - 120	95	80 - 120	<0.0010	mg/L	7.9	20
A983123	Dissolved Lead (Pb)	2023/06/04	86	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A983123	Dissolved Molybdenum (Mo)	2023/06/04	90	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
A983123	Dissolved Nickel (Ni)	2023/06/04	86	80 - 120	96	80 - 120	<0.00050	mg/L	9.1	20
A983123	Dissolved Selenium (Se)	2023/06/04	90	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
A983123	Dissolved Silver (Ag)	2023/06/04	87	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20
A983123	Dissolved Thallium (Tl)	2023/06/04	88	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
A983123	Dissolved Tin (Sn)	2023/06/04	89	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
A983123	Dissolved Titanium (Ti)	2023/06/04	91	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
A983123	Dissolved Uranium (U)	2023/06/04	89	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A983123	Dissolved Vanadium (V)	2023/06/04	91	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
A983123	Dissolved Zinc (Zn)	2023/06/04	85	80 - 120	94	80 - 120	<0.0030	mg/L	4.8	20
A983497	Dissolved Barium (Ba)	2023/06/05	92	80 - 120	101	80 - 120	<0.010	mg/L		
A983497	Dissolved Boron (B)	2023/06/05	91	80 - 120	97	80 - 120	<0.020	mg/L		
A983497	Dissolved Calcium (Ca)	2023/06/05	NC	80 - 120	97	80 - 120	<0.30	mg/L	2.2	20
A983497	Dissolved Iron (Fe)	2023/06/05	113	80 - 120	104	80 - 120	<0.060	mg/L	NC	20
A983497	Dissolved Lithium (Li)	2023/06/05	89	80 - 120	95	80 - 120	<0.020	mg/L		
A983497	Dissolved Magnesium (Mg)	2023/06/05	NC	80 - 120	101	80 - 120	<0.20	mg/L	2.7	20
A983497	Dissolved Manganese (Mn)	2023/06/05	109	80 - 120	101	80 - 120	<0.0040	mg/L	0.35	20
A983497	Dissolved Phosphorus (P)	2023/06/05	110	80 - 120	103	80 - 120	<0.10	mg/L		
A983497	Dissolved Potassium (K)	2023/06/05	96	80 - 120	98	80 - 120	<0.30	mg/L	2.4	20
A983497	Dissolved Silicon (Si)	2023/06/05	99	80 - 120	96	80 - 120	<0.50	mg/L		
A983497	Dissolved Sodium (Na)	2023/06/05	NC	80 - 120	93	80 - 120	<0.50	mg/L	1.1	20
A983497	Dissolved Strontium (Sr)	2023/06/05			95	80 - 120	<0.020	mg/L		
A983497	Dissolved Sulphur (S)	2023/06/05	101	80 - 120	98	80 - 120	<0.20	mg/L		
A983552	Dissolved Barium (Ba)	2023/06/05	101	80 - 120	102	80 - 120	<0.010	mg/L	17	20
A983552	Dissolved Boron (B)	2023/06/05	99	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
A983552	Dissolved Calcium (Ca)	2023/06/05	96	80 - 120	96	80 - 120	<0.30	mg/L	5.4	20
A983552	Dissolved Iron (Fe)	2023/06/05	106	80 - 120	105	80 - 120	<0.060	mg/L	6.5	20
A983552	Dissolved Lithium (Li)	2023/06/05	91	80 - 120	93	80 - 120	<0.020	mg/L	NC	20
A983552	Dissolved Magnesium (Mg)	2023/06/05	101	80 - 120	101	80 - 120	<0.20	mg/L	4.5	20
A983552	Dissolved Manganese (Mn)	2023/06/05	102	80 - 120	101	80 - 120	<0.0040	mg/L	9.3	20
A983552	Dissolved Phosphorus (P)	2023/06/05	104	80 - 120	103	80 - 120	<0.10	mg/L	NC	20
A983552	Dissolved Potassium (K)	2023/06/05	97	80 - 120	97	80 - 120	<0.30	mg/L	6.4	20
A983552	Dissolved Silicon (Si)	2023/06/05	94	80 - 120	97	80 - 120	<0.50	mg/L	3.5	20
A983552	Dissolved Sodium (Na)	2023/06/05	91	80 - 120	92	80 - 120	<0.50	mg/L	4.9	20
A983552	Dissolved Strontium (Sr)	2023/06/05	97	80 - 120	95	80 - 120	<0.020	mg/L	5.7	20
A983552	Dissolved Sulphur (S)	2023/06/05	101	80 - 120	98	80 - 120	<0.20	mg/L	6.2	20
A983607	Total Organic Carbon (C)	2023/06/08	99	80 - 120	101	80 - 120	<0.50	mg/L	15	20
A983611	Total Organic Carbon (C)	2023/06/08	85	80 - 120	103	80 - 120	<0.50	mg/L	5.1	20
A983689	Dissolved Organic Carbon (C)	2023/06/07	103	80 - 120	102	80 - 120	<0.50	mg/L	8.1	20
A983695	Dissolved Organic Carbon (C)	2023/06/07	111	80 - 120	102	80 - 120	<0.50	mg/L	0.039	20

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A983746	Total Suspended Solids	2023/06/05	103	80 - 120	100	80 - 120	<1.0	mg/L	18	20
A983806	Total Suspended Solids	2023/06/05	103	80 - 120	101	80 - 120	<1.0	mg/L	14	20
A983993	Alkalinity (PP as CaCO3)	2023/06/09					<1.0	mg/L	NC	20
A983993	Alkalinity (Total as CaCO3)	2023/06/09			101	80 - 120	<1.0	mg/L	1.3	20
A983993	Bicarbonate (HCO3)	2023/06/09					<1.0	mg/L	1.3	20
A983993	Carbonate (CO3)	2023/06/09					<1.0	mg/L	NC	20
A983993	Hydroxide (OH)	2023/06/09					<1.0	mg/L	NC	20
A983996	pH	2023/06/09			100	97 - 103			0.65	N/A
A984351	Alkalinity (PP as CaCO3)	2023/06/08					<1.0	mg/L	NC	20
A984351	Alkalinity (Total as CaCO3)	2023/06/08			102	80 - 120	<1.0	mg/L	9.0	20
A984351	Bicarbonate (HCO3)	2023/06/08					<1.0	mg/L	9.0	20
A984351	Carbonate (CO3)	2023/06/08					<1.0	mg/L	NC	20
A984351	Hydroxide (OH)	2023/06/08					<1.0	mg/L	NC	20
A984355	pH	2023/06/08			100	97 - 103			0.54	N/A
A984360	Alkalinity (PP as CaCO3)	2023/06/07					<1.0	mg/L	NC	20
A984360	Alkalinity (Total as CaCO3)	2023/06/07			97	80 - 120	<1.0	mg/L	0.67	20
A984360	Bicarbonate (HCO3)	2023/06/07					<1.0	mg/L	0.67	20
A984360	Carbonate (CO3)	2023/06/07					<1.0	mg/L	NC	20
A984360	Hydroxide (OH)	2023/06/07					<1.0	mg/L	NC	20
A984363	pH	2023/06/07			100	97 - 103			0.34	N/A
A984418	Alkalinity (PP as CaCO3)	2023/06/08					<1.0	mg/L	NC	20
A984418	Alkalinity (Total as CaCO3)	2023/06/08			101	80 - 120	<1.0	mg/L	0.13	20
A984418	Bicarbonate (HCO3)	2023/06/08					<1.0	mg/L	2.0	20
A984418	Carbonate (CO3)	2023/06/08					<1.0	mg/L	NC	20
A984418	Hydroxide (OH)	2023/06/08					<1.0	mg/L	NC	20
A984421	pH	2023/06/08			100	97 - 103			0.11	N/A
A985688	Dissolved Barium (Ba)	2023/06/06	98	80 - 120	97	80 - 120	<0.010	mg/L		
A985688	Dissolved Boron (B)	2023/06/06	93	80 - 120	92	80 - 120	<0.020	mg/L		
A985688	Dissolved Calcium (Ca)	2023/06/06	96	80 - 120	95	80 - 120	<0.30	mg/L	0.58	20
A985688	Dissolved Iron (Fe)	2023/06/06	98	80 - 120	100	80 - 120	<0.060	mg/L	NC	20
A985688	Dissolved Lithium (Li)	2023/06/06	96	80 - 120	93	80 - 120	<0.020	mg/L		
A985688	Dissolved Magnesium (Mg)	2023/06/06	103	80 - 120	98	80 - 120	<0.20	mg/L	1.6	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A985688	Dissolved Manganese (Mn)	2023/06/06	99	80 - 120	100	80 - 120	<0.0040	mg/L	NC	20
A985688	Dissolved Phosphorus (P)	2023/06/06	96	80 - 120	95	80 - 120	<0.10	mg/L		
A985688	Dissolved Potassium (K)	2023/06/06	103	80 - 120	98	80 - 120	<0.30	mg/L	0.52	20
A985688	Dissolved Silicon (Si)	2023/06/06	91	80 - 120	94	80 - 120	<0.50	mg/L		
A985688	Dissolved Sodium (Na)	2023/06/06	98	80 - 120	94	80 - 120	<0.50	mg/L	0.75	20
A985688	Dissolved Strontium (Sr)	2023/06/06	96	80 - 120	95	80 - 120	<0.020	mg/L		
A985688	Dissolved Sulphur (S)	2023/06/06	91	80 - 120	94	80 - 120	<0.20	mg/L		
A985749	Turbidity	2023/06/06			103	80 - 120	<0.10	NTU	NC	20
A986248	Total Aluminum (Al)	2023/06/07	114	80 - 120	110	80 - 120	<0.0030	mg/L	19	20
A986248	Total Antimony (Sb)	2023/06/07	107	80 - 120	107	80 - 120	<0.00060	mg/L	NC	20
A986248	Total Arsenic (As)	2023/06/07	83	80 - 120	85	80 - 120	<0.00020	mg/L	NC	20
A986248	Total Beryllium (Be)	2023/06/07	99	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
A986248	Total Chromium (Cr)	2023/06/07	88	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
A986248	Total Cobalt (Co)	2023/06/07	88	80 - 120	89	80 - 120	<0.00030	mg/L	NC	20
A986248	Total Copper (Cu)	2023/06/07	87	80 - 120	89	80 - 120	<0.0010	mg/L	4.2	20
A986248	Total Lead (Pb)	2023/06/07	99	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
A986248	Total Molybdenum (Mo)	2023/06/07	100	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
A986248	Total Nickel (Ni)	2023/06/07	87	80 - 120	88	80 - 120	<0.00050	mg/L	4.6	20
A986248	Total Selenium (Se)	2023/06/07	85	80 - 120	86	80 - 120	<0.00020	mg/L	NC	20
A986248	Total Silver (Ag)	2023/06/07	97	80 - 120	97	80 - 120	<0.00010	mg/L	NC	20
A986248	Total Thallium (Tl)	2023/06/07	99	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
A986248	Total Tin (Sn)	2023/06/07	99	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
A986248	Total Titanium (Ti)	2023/06/07	89	80 - 120	88	80 - 120	<0.0010	mg/L	NC	20
A986248	Total Uranium (U)	2023/06/07	99	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
A986248	Total Vanadium (V)	2023/06/07	89	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
A986248	Total Zinc (Zn)	2023/06/07	83	80 - 120	82	80 - 120	<0.0030	mg/L	2.2	20
A986253	Total Barium (Ba)	2023/06/07	109	80 - 120	104	80 - 120	<0.010	mg/L	1.3	20
A986253	Total Boron (B)	2023/06/07	100	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
A986253	Total Calcium (Ca)	2023/06/07	107	80 - 120	102	80 - 120	<0.30	mg/L	2.3	20
A986253	Total Iron (Fe)	2023/06/07	106	80 - 120	104	80 - 120	<0.060	mg/L	7.7	20
A986253	Total Lithium (Li)	2023/06/07	106	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
A986253	Total Magnesium (Mg)	2023/06/07	112	80 - 120	107	80 - 120	<0.20	mg/L	2.4	20

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A986253	Total Manganese (Mn)	2023/06/07	110	80 - 120	109	80 - 120	<0.0040	mg/L	7.2	20
A986253	Total Phosphorus (P)	2023/06/07	105	80 - 120	103	80 - 120	<0.10	mg/L	NC	20
A986253	Total Potassium (K)	2023/06/07	109	80 - 120	104	80 - 120	<0.30	mg/L	2.7	20
A986253	Total Silicon (Si)	2023/06/07	100	80 - 120	99	80 - 120	<0.50	mg/L	8.2	20
A986253	Total Sodium (Na)	2023/06/07	104	80 - 120	100	80 - 120	<0.50	mg/L	3.6	20
A986253	Total Strontium (Sr)	2023/06/07	105	80 - 120	101	80 - 120	<0.020	mg/L	1.2	20
A986253	Total Sulphur (S)	2023/06/07	93	80 - 120	92	80 - 120	<0.20	mg/L	6.2	20
A987618	Total Aluminum (Al)	2023/06/08	93	80 - 120	96	80 - 120	<0.0030	mg/L	1.4	20
A987618	Total Antimony (Sb)	2023/06/08	98	80 - 120	98	80 - 120	<0.00060	mg/L	NC	20
A987618	Total Arsenic (As)	2023/06/08	83	80 - 120	86	80 - 120	<0.00020	mg/L	5.6	20
A987618	Total Beryllium (Be)	2023/06/08	92	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
A987618	Total Chromium (Cr)	2023/06/08	92	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
A987618	Total Cobalt (Co)	2023/06/08	92	80 - 120	93	80 - 120	<0.00030	mg/L	5.7	20
A987618	Total Copper (Cu)	2023/06/08	93	80 - 120	93	80 - 120	<0.0010	mg/L	1.6	20
A987618	Total Lead (Pb)	2023/06/08	95	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
A987618	Total Molybdenum (Mo)	2023/06/08	96	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
A987618	Total Nickel (Ni)	2023/06/08	90	80 - 120	92	80 - 120	<0.00050	mg/L	0.22	20
A987618	Total Selenium (Se)	2023/06/08	84	80 - 120	85	80 - 120	<0.00020	mg/L	NC	20
A987618	Total Silver (Ag)	2023/06/08	94	80 - 120	93	80 - 120	<0.00010	mg/L	NC	20
A987618	Total Thallium (Tl)	2023/06/08	96	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
A987618	Total Tin (Sn)	2023/06/08	98	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
A987618	Total Titanium (Ti)	2023/06/08	94	80 - 120	92	80 - 120	<0.0010	mg/L	7.9	20
A987618	Total Uranium (U)	2023/06/08	95	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
A987618	Total Vanadium (V)	2023/06/08	92	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
A987618	Total Zinc (Zn)	2023/06/08	86	80 - 120	87	80 - 120	<0.0030	mg/L	3.6	20
A987623	Total Barium (Ba)	2023/06/08	99	80 - 120	100	80 - 120	<0.010	mg/L	0.50	20
A987623	Total Boron (B)	2023/06/08	98	80 - 120	98	80 - 120	<0.020	mg/L	6.9	20
A987623	Total Calcium (Ca)	2023/06/08	NC	80 - 120	102	80 - 120	<0.30	mg/L	0.84	20
A987623	Total Iron (Fe)	2023/06/08	NC	80 - 120	108	80 - 120	<0.060	mg/L	0.37	20
A987623	Total Lithium (Li)	2023/06/08	94	80 - 120	94	80 - 120	<0.020	mg/L	NC	20
A987623	Total Magnesium (Mg)	2023/06/08	NC	80 - 120	112	80 - 120	<0.20	mg/L	1.8	20
A987623	Total Manganese (Mn)	2023/06/08	108	80 - 120	106	80 - 120	<0.0040	mg/L	0.24	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A987623	Total Phosphorus (P)	2023/06/08	107	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
A987623	Total Potassium (K)	2023/06/08	104	80 - 120	103	80 - 120	<0.30	mg/L	0.74	20
A987623	Total Silicon (Si)	2023/06/08	106	80 - 120	107	80 - 120	<0.50	mg/L	2.2	20
A987623	Total Sodium (Na)	2023/06/08	NC	80 - 120	96	80 - 120	<0.50	mg/L	0.43	20
A987623	Total Strontium (Sr)	2023/06/08	98	80 - 120	98	80 - 120	<0.020	mg/L	2.4	20
A987623	Total Sulphur (S)	2023/06/08	NC	80 - 120	102	80 - 120	<0.20	mg/L	0.023	20
A987626	Total Aluminum (Al)	2023/06/08	104	80 - 120	100	80 - 120	<0.0030	mg/L	NC	20
A987626	Total Antimony (Sb)	2023/06/08	116	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
A987626	Total Arsenic (As)	2023/06/08	95	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
A987626	Total Beryllium (Be)	2023/06/08	106	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
A987626	Total Chromium (Cr)	2023/06/08	99	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
A987626	Total Cobalt (Co)	2023/06/08	100	80 - 120	97	80 - 120	<0.00030	mg/L	NC	20
A987626	Total Copper (Cu)	2023/06/08	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
A987626	Total Lead (Pb)	2023/06/08	111	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
A987626	Total Molybdenum (Mo)	2023/06/08	111	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
A987626	Total Nickel (Ni)	2023/06/08	99	80 - 120	94	80 - 120	<0.00050	mg/L	NC	20
A987626	Total Selenium (Se)	2023/06/08	100	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
A987626	Total Silver (Ag)	2023/06/08	108	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
A987626	Total Thallium (Tl)	2023/06/08	112	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
A987626	Total Tin (Sn)	2023/06/08	112	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A987626	Total Titanium (Ti)	2023/06/08	100	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
A987626	Total Uranium (U)	2023/06/08	110	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
A987626	Total Vanadium (V)	2023/06/08	100	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
A987626	Total Zinc (Zn)	2023/06/08	98	80 - 120	94	80 - 120	<0.0030	mg/L	NC	20
A987631	Total Barium (Ba)	2023/06/08	100	80 - 120	103	80 - 120	<0.010	mg/L	NC	20
A987631	Total Boron (B)	2023/06/08	100	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
A987631	Total Calcium (Ca)	2023/06/08	NC	80 - 120	103	80 - 120	<0.30	mg/L	NC	20
A987631	Total Iron (Fe)	2023/06/08	110	80 - 120	106	80 - 120	<0.060	mg/L	NC	20
A987631	Total Lithium (Li)	2023/06/08	95	80 - 120	95	80 - 120	<0.020	mg/L	NC	20
A987631	Total Magnesium (Mg)	2023/06/08	110	80 - 120	114	80 - 120	<0.20	mg/L	NC	20
A987631	Total Manganese (Mn)	2023/06/08	108	80 - 120	104	80 - 120	<0.0040	mg/L	NC	20
A987631	Total Phosphorus (P)	2023/06/08	107	80 - 120	104	80 - 120	<0.10	mg/L	NC	20

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A987631	Total Potassium (K)	2023/06/08	103	80 - 120	104	80 - 120	<0.30	mg/L	NC	20
A987631	Total Silicon (Si)	2023/06/08	106	80 - 120	106	80 - 120	<0.50	mg/L	NC	20
A987631	Total Sodium (Na)	2023/06/08	91	80 - 120	98	80 - 120	<0.50	mg/L	NC	20
A987631	Total Strontium (Sr)	2023/06/08	96	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
A987631	Total Sulphur (S)	2023/06/08	102	80 - 120	101	80 - 120	<0.20	mg/L	NC	20
A989867	Dissolved Organic Carbon (C)	2023/06/09	94	80 - 120	94	80 - 120	<0.50	mg/L	8.3	20
A989869	Total Organic Carbon (C)	2023/06/09	NC	80 - 120	101	80 - 120	<0.50	mg/L	2.7	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

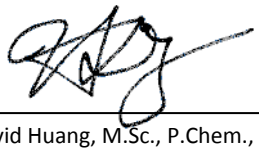
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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VALIDATION SIGNATURE PAGE

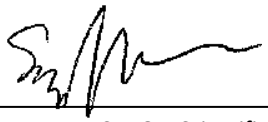
The analytical data and all QC contained in this report were reviewed and validated by:



David Huang, M.Sc., P.Chem., QP, Scientific Services Manager



Harry (Peng) Liang, Senior Analyst, B.Sc., QP



Sandy Yuan, M.Sc., QP, Scientific Specialist

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Bureau Veritas Burnaby: 4606 Canada Way V5G 1K5 Telephone(604) 734-7276 Fax(604) 731-2386

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0120 4/4

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C339859	695439
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#695439-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com mniemezyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site
				Sampled By	MJN, RED

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/05/30	12:00	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		SB-1		09:50		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		09:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		09:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		10:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		10:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		10:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		11:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		11:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CLD		11:15		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/06/01	18:15	STA TRANSPORTAGE	2023/06/02	09:00			See ACTR	Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C339059	695439
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#695439-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com MNiemezyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	MJN, RED		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

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Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
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Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/05/30	09:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-3 BTM		09:10		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-7 SFC		09:15		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		09:20		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		08:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		09:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		09:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		09:30		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		08:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		08:45		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/06/01	18:15	AJRAVER GILL	2023/06/02	09:00			See ACTK	Yes / No

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C339159	695439
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#695439-03-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com MMiemczyk@kgsgroup.com	Sampled By	MJN, RED		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

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Date Required: Time Required:
Rush Confirmation Number *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water? (Y/N)	Metals Field Filtered? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	08:25	23/05/30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-5 BTM	23/05/30	08:30		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-6 SFC	〃	08:15		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM	〃	08:20		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SW-103		AM		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SW-104		AM		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		SW-105		AM		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		Trip Blank		—	BLANK	N	N	X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/05/01	18:15	AJRAVER GILL	2023/06/07	09:00		☐	See ACTR	☐ Yes ☑ No

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Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696658-04-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/26
Report #: R3355354
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344132
Received: 2023/06/16, 08:45

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH	2	N/A	2023/06/22	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH	4	N/A	2023/06/23	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved	5	N/A	2023/06/22		Auto Calc
Cadmium - low level CCME - Dissolved	1	N/A	2023/06/23		Auto Calc
Cadmium - low level CCME (Total)	1	N/A	2023/06/22		Auto Calc
Cadmium - low level CCME (Total)	5	N/A	2023/06/23		Auto Calc
Chloride/Sulphate by Auto Colourimetry	6	N/A	2023/06/22	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1)	6	N/A	2023/06/23	AB SOP-00087	MMCW 119 1996 m
Hardness	6	N/A	2023/06/21		Auto Calc
Hardness Total (calculated as CaCO3) (2)	6	N/A	2023/06/22	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (3)	6	N/A	2023/06/20	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total	6	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (4)	5	N/A	2023/06/21	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (4)	1	N/A	2023/06/23	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	6	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (5)	2	N/A	2023/06/22	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (5)	4	N/A	2023/06/23	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (6)	6	N/A	2023/06/25	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR)	6	2023/06/20	2023/06/20	AB SOP-00061	SM 24 2540 D m
Turbidity	6	N/A	2023/06/16	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696658-04-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/26
Report #: R3355354
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344132
Received: 2023/06/16, 08:45

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(2) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(3) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(4) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(6) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173
==========
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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO190			BSO190			BSO191		
Sampling Date		2023/06/13 17:50			2023/06/13 17:50			2023/06/13 17:55		
COC Number		696658-04-01			696658-04-01			696658-04-01		
	UNITS	SC-3	RDL	QC Batch	SC-3 Lab-Dup	RDL	QC Batch	SC-2	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.77	0.020	A998015				0.28	0.020	A998015
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.034	0.0030	B002736				0.025	0.0030	B002753
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B002736				<0.00060	0.00060	B002753
Dissolved Arsenic (As)	mg/L	0.00039	0.00020	B002736				0.00036	0.00020	B002753
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B002295	<0.010	0.010	B002295	0.012	0.010	B003132
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B002736				<0.0010	0.0010	B002753
Dissolved Boron (B)	mg/L	<0.020	0.020	B002295	<0.020	0.020	B002295	<0.020	0.020	B003132
Dissolved Calcium (Ca)	mg/L	8.3	0.30	B002295	8.6	0.30	B002295	8.3	0.30	B003132
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B002736				<0.0010	0.0010	B002753
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B002736				<0.00030	0.00030	B002753
Dissolved Copper (Cu)	mg/L	0.023	0.0010	B002736				0.010	0.0010	B002753
Dissolved Iron (Fe)	mg/L	0.13	0.060	B002295	0.13	0.060	B002295	0.14	0.060	B003132
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B002736				<0.00020	0.00020	B002753
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B002295	<0.020	0.020	B002295	<0.020	0.020	B003132
Dissolved Magnesium (Mg)	mg/L	2.7	0.20	B002295	2.8	0.20	B002295	2.8	0.20	B003132
Dissolved Manganese (Mn)	mg/L	0.013	0.0040	B002295	0.014	0.0040	B002295	0.011	0.0040	B003132
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B002736				<0.00020	0.00020	B002753
Dissolved Nickel (Ni)	mg/L	0.00086	0.00050	B002736				<0.00050	0.00050	B002753
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B002295	<0.10	0.10	B002295	<0.10	0.10	B003132
Dissolved Potassium (K)	mg/L	1.5	0.30	B002295	1.4	0.30	B002295	1.5	0.30	B003132
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B002736				<0.00020	0.00020	B002753
Dissolved Silicon (Si)	mg/L	1.3	0.50	B002295	1.3	0.50	B002295	1.3	0.50	B003132
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B002736				<0.00010	0.00010	B002753
Dissolved Sodium (Na)	mg/L	1.5	0.50	B002295	1.6	0.50	B002295	1.6	0.50	B003132
Dissolved Strontium (Sr)	mg/L	0.021	0.020	B002295	0.021	0.020	B002295	0.024	0.020	B003132
Dissolved Sulphur (S)	mg/L	2.0	0.20	B002295	2.2	0.20	B002295	1.6	0.20	B003132
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B002736				<0.00020	0.00020	B002753
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B002736				<0.0010	0.0010	B002753
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B002736				<0.0010	0.0010	B002753
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B002736				<0.00010	0.00010	B002753

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO190			BSO190			BSO191		
Sampling Date		2023/06/13 17:50			2023/06/13 17:50			2023/06/13 17:55		
COC Number		696658-04-01			696658-04-01			696658-04-01		
	UNITS	**SC-3**	**RDL**	**QC Batch**	**SC-3 Lab-Dup**	**RDL**	**QC Batch**	**SC-2**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B002736				<0.0010	0.0010	B002753
Dissolved Zinc (Zn)	mg/L	0.22	0.0030	B002736				0.086	0.0030	B002753

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO192	BSO193	BSO194			BSO194		
Sampling Date		2023/06/13	2023/06/13 17:45	2023/06/13 18:10			2023/06/13 18:10		
COC Number		696658-04-01	696658-04-01	696658-04-01			696658-04-01		
	UNITS	SW-109	SC-4	SC-5	RDL	QC Batch	SC-5 Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.28	<0.020	<0.020	0.020	A998015			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.026	0.015	0.019	0.0030	B002753			
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	B002753			
Dissolved Arsenic (As)	mg/L	0.00038	0.00034	0.00048	0.00020	B002753			
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	0.010	B003132	<0.010	0.010	B003132
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B002753			
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	B003132	<0.020	0.020	B003132
Dissolved Calcium (Ca)	mg/L	8.1	7.8	7.8	0.30	B003132	7.6	0.30	B003132
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B002753			
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	0.00030	B002753			
Dissolved Copper (Cu)	mg/L	0.011	0.0012	0.0013	0.0010	B002753			
Dissolved Iron (Fe)	mg/L	0.12	0.091	0.11	0.060	B003132	0.10	0.060	B003132
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	0.00021	0.00020	B002753			
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	B003132	<0.020	0.020	B003132
Dissolved Magnesium (Mg)	mg/L	2.7	2.6	2.6	0.20	B003132	2.5	0.20	B003132
Dissolved Manganese (Mn)	mg/L	0.0088	<0.0040	<0.0040	0.0040	B003132	<0.0040	0.0040	B003132
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B002753			
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	B002753			
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	B003132	<0.10	0.10	B003132
Dissolved Potassium (K)	mg/L	1.3	1.3	1.3	0.30	B003132	1.2	0.30	B003132
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B002753			
Dissolved Silicon (Si)	mg/L	1.3	1.2	1.2	0.50	B003132	1.3	0.50	B003132
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B002753			
Dissolved Sodium (Na)	mg/L	1.5	1.5	1.5	0.50	B003132	1.4	0.50	B003132
Dissolved Strontium (Sr)	mg/L	0.021	0.020	<0.020	0.020	B003132	<0.020	0.020	B003132
Dissolved Sulphur (S)	mg/L	1.6	1.1	1.2	0.20	B003132	1.2	0.20	B003132
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B002753			
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B002753			
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B002753			
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B002753			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO192	BSO193	BSO194			BSO194		
Sampling Date		2023/06/13	2023/06/13 17:45	2023/06/13 18:10			2023/06/13 18:10		
COC Number		696658-04-01	696658-04-01	696658-04-01			696658-04-01		
	UNITS	**SW-109**	**SC-4**	**SC-5**	**RDL**	**QC Batch**	**SC-5 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B002753			
Dissolved Zinc (Zn)	mg/L	0.088	<0.0030	<0.0030	0.0030	B002753			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO195		
Sampling Date		2023/06/13 18:15		
COC Number		696658-04-01		
	UNITS	**SC-6**	**RDL**	**QC Batch**
Elements				
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	A998015
Lab Filtered Elements				
Dissolved Aluminum (Al)	mg/L	0.015	0.0030	B002753
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B002753
Dissolved Arsenic (As)	mg/L	0.00036	0.00020	B002753
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B003132
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B002753
Dissolved Boron (B)	mg/L	<0.020	0.020	B003132
Dissolved Calcium (Ca)	mg/L	7.8	0.30	B003132
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B002753
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B002753
Dissolved Copper (Cu)	mg/L	0.0011	0.0010	B002753
Dissolved Iron (Fe)	mg/L	0.088	0.060	B003132
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B002753
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B003132
Dissolved Magnesium (Mg)	mg/L	2.6	0.20	B003132
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B003132
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B002753
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B002753
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B003132
Dissolved Potassium (K)	mg/L	1.3	0.30	B003132
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B002753
Dissolved Silicon (Si)	mg/L	1.2	0.50	B003132
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B002753
Dissolved Sodium (Na)	mg/L	1.5	0.50	B003132
Dissolved Strontium (Sr)	mg/L	0.020	0.020	B003132
Dissolved Sulphur (S)	mg/L	1.1	0.20	B003132
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B002753
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B002753
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B002753
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B002753
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B002753
RDL = Reportable Detection Limit				

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO195		
Sampling Date		2023/06/13 18:15		
COC Number		696658-04-01		
	UNITS	**SC-6**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	<0.0030	0.0030	B002753
RDL = Reportable Detection Limit				

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO190		BSO191	BSO192	BSO193	BSO194		
Sampling Date		2023/06/13 17:50		2023/06/13 17:55	2023/06/13	2023/06/13 17:45	2023/06/13 18:10		
COC Number		696658-04-01		696658-04-01	696658-04-01	696658-04-01	696658-04-01		
	UNITS	SC-3	QC Batch	SC-2	SW-109	SC-4	SC-5	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	1.1	A997578	0.33	0.35	0.040	0.041	0.020	A997578
Total Aluminum (Al)	mg/L	0.15	B006013	0.075	0.070	0.17	0.077	0.0030	B006450
Total Antimony (Sb)	mg/L	<0.00060	B006013	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B006450
Total Arsenic (As)	mg/L	0.00043	B006013	0.00042	0.00054	0.00051	0.00045	0.00020	B006450
Total Barium (Ba)	mg/L	<0.010	B006017	<0.010	<0.010	<0.010	<0.010	0.010	B006480
Total Beryllium (Be)	mg/L	<0.0010	B006013	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B006450
Total Boron (B)	mg/L	<0.020	B006017	<0.020	<0.020	<0.020	<0.020	0.020	B006480
Total Calcium (Ca)	mg/L	7.8	B006017	7.7	7.7	7.4	7.5	0.30	B006480
Total Chromium (Cr)	mg/L	<0.0010	B006013	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B006450
Total Cobalt (Co)	mg/L	0.00041	B006013	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B006450
Total Copper (Cu)	mg/L	0.042	B006013	0.013	0.014	0.0027	0.0019	0.0010	B006450
Total Iron (Fe)	mg/L	0.39	B006017	0.23	0.23	0.40	0.26	0.060	B006480
Total Lead (Pb)	mg/L	0.00031	B006013	<0.00020	<0.00020	0.00021	<0.00020	0.00020	B006450
Total Lithium (Li)	mg/L	<0.020	B006017	<0.020	<0.020	<0.020	<0.020	0.020	B006480
Total Magnesium (Mg)	mg/L	2.5	B006017	2.5	2.5	2.4	2.5	0.20	B006480
Total Manganese (Mn)	mg/L	0.036	B006017	0.021	0.021	0.032	0.014	0.0040	B006480
Total Molybdenum (Mo)	mg/L	<0.00020	B006013	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B006450
Total Nickel (Ni)	mg/L	0.00083	B006013	0.00050	0.00076	0.00076	0.00069	0.00050	B006450
Total Phosphorus (P)	mg/L	<0.10	B006017	<0.10	<0.10	<0.10	<0.10	0.10	B006480
Total Potassium (K)	mg/L	1.2	B006017	1.3	1.2	1.3	1.2	0.30	B006480
Total Selenium (Se)	mg/L	<0.00020	B006013	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B006450
Total Silicon (Si)	mg/L	1.6	B006017	1.4	1.4	1.6	1.4	0.50	B006480
Total Silver (Ag)	mg/L	<0.00010	B006013	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B006450
Total Sodium (Na)	mg/L	1.5	B006017	1.5	1.5	1.4	1.5	0.50	B006480
Total Strontium (Sr)	mg/L	<0.020	B006017	0.020	0.020	<0.020	<0.020	0.020	B006480
Total Sulphur (S)	mg/L	2.0	B006017	1.6	1.6	1.1	1.1	0.20	B006480
Total Thallium (Tl)	mg/L	<0.00020	B006013	<0.00020	0.00053	<0.00020	<0.00020	0.00020	B006450
Total Tin (Sn)	mg/L	<0.0010	B006013	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B006450
Total Titanium (Ti)	mg/L	0.0063	B006013	0.0025	0.0023	0.0094	0.0032	0.0010	B006450
Total Uranium (U)	mg/L	0.00012	B006013	<0.00010	0.00010	<0.00010	<0.00010	0.00010	B006450
Total Vanadium (V)	mg/L	<0.0010	B006013	<0.0010	<0.0010	0.0011	<0.0010	0.0010	B006450
Total Zinc (Zn)	mg/L	0.24	B006013	0.10	0.099	0.0061	0.0048	0.0030	B006450

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO195		
Sampling Date		2023/06/13 18:15		
COC Number		696658-04-01		
	UNITS	SC-6	RDL	QC Batch
Elements				
Total Cadmium (Cd)	ug/L	0.044	0.020	A997578
Total Aluminum (Al)	mg/L	0.069	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	0.00053	0.00020	B006434
Total Barium (Ba)	mg/L	<0.010	0.010	B006446
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	<0.020	0.020	B006446
Total Calcium (Ca)	mg/L	7.6	0.30	B006446
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B006434
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B006434
Total Copper (Cu)	mg/L	0.0079	0.0010	B006434
Total Iron (Fe)	mg/L	0.18	0.060	B006446
Total Lead (Pb)	mg/L	<0.00020	0.00020	B006434
Total Lithium (Li)	mg/L	<0.020	0.020	B006446
Total Magnesium (Mg)	mg/L	2.4	0.20	B006446
Total Manganese (Mn)	mg/L	0.0073	0.0040	B006446
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B006434
Total Nickel (Ni)	mg/L	0.00071	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.10	0.10	B006446
Total Potassium (K)	mg/L	1.2	0.30	B006446
Total Selenium (Se)	mg/L	<0.00020	0.00020	B006434
Total Silicon (Si)	mg/L	1.4	0.50	B006446
Total Silver (Ag)	mg/L	<0.00010	0.00010	B006434
Total Sodium (Na)	mg/L	1.4	0.50	B006446
Total Strontium (Sr)	mg/L	<0.020	0.020	B006446
Total Sulphur (S)	mg/L	1.1	0.20	B006446
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B006434
Total Tin (Sn)	mg/L	<0.0010	0.0010	B006434
Total Titanium (Ti)	mg/L	0.0020	0.0010	B006434
Total Uranium (U)	mg/L	<0.00010	0.00010	B006434
Total Vanadium (V)	mg/L	<0.0010	0.0010	B006434
Total Zinc (Zn)	mg/L	0.0066	0.0030	B006434
RDL = Reportable Detection Limit				

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Bureau Veritas Job #: C344132
Report Date: 2023/06/26

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO190		BSO191		BSO192		BSO193		
Sampling Date		2023/06/13 17:50		2023/06/13 17:55		2023/06/13		2023/06/13 17:45		
COC Number		696658-04-01		696658-04-01		696658-04-01		696658-04-01		
	UNITS	SC-3	QC Batch	SC-2	QC Batch	SW-109	QC Batch	SC-4	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	32	A998055	32	A998055	31	A998055	30	0.50	A998055
Total Hardness (CaCO3)	mg/L	29.5	A997720	29.5	A997720	29.5	A997720	28.4	0.50	A997720
Misc. Inorganics										
pH	pH	6.98	B005143	6.98	B005143	7.00	B005143	6.83	N/A	B005203
Total Organic Carbon (C)	mg/L	14	B002351	11	B002351	13	B002351	15	0.50	B002351
Total Suspended Solids	mg/L	7.0	B002126	3.3	B002126	1.2	B002126	11	1.0	B002126
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11 (1)	B002416	15 (1)	B002421	12 (1)	B002421	11 (1)	0.50	B002421
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B005142	<1.0	B005142	<1.0	B005142	<1.0	1.0	B005196
Alkalinity (Total as CaCO3)	mg/L	23	B005142	25	B005142	26	B005142	28	1.0	B005196
Bicarbonate (HCO3)	mg/L	28	B005142	30	B005142	31	B005142	34	1.0	B005196
Carbonate (CO3)	mg/L	<1.0	B005142	<1.0	B005142	<1.0	B005142	<1.0	1.0	B005196
Hydroxide (OH)	mg/L	<1.0	B005142	<1.0	B005142	<1.0	B005142	<1.0	1.0	B005196
Sulphate (SO4)	mg/L	5.3	B005557	3.7	B005557	3.2	B005558	1.6	1.0	B005557
Physical Properties										
Turbidity	NTU	3.5	A998651	2.7	A998651	2.6	A998651	5.1	0.10	A998651

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Bureau Veritas Job #: C344132
Report Date: 2023/06/26

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO194		BSO195		
Sampling Date		2023/06/13 18:10		2023/06/13 18:15		
COC Number		696658-04-01		696658-04-01		
	UNITS	SC-5	QC Batch	SC-6	RDL	QC Batch
Calculated Parameters						
Hardness (CaCO3)	mg/L	30	A998055	30	0.50	A998055
Total Hardness (CaCO3)	mg/L	28.9	A997720	28.9	0.50	A997720
Misc. Inorganics						
pH	pH	6.69	B005203	7.01	N/A	B005143
Total Organic Carbon (C)	mg/L	14	B002351	11	0.50	B002351
Total Suspended Solids	mg/L	2.6	B002126	1.7	1.0	B002126
Lab Filtered Inorganics						
Dissolved Organic Carbon (C)	mg/L	9.4 (1)	B002421	11 (1)	0.50	B002416
Anions						
Alkalinity (PP as CaCO3)	mg/L	<1.0	B005196	<1.0	1.0	B005142
Alkalinity (Total as CaCO3)	mg/L	26	B005196	26	1.0	B005142
Bicarbonate (HCO3)	mg/L	32	B005196	32	1.0	B005142
Carbonate (CO3)	mg/L	<1.0	B005196	<1.0	1.0	B005142
Hydroxide (OH)	mg/L	<1.0	B005196	<1.0	1.0	B005142
Sulphate (SO4)	mg/L	1.3	B005557	<1.0	1.0	B005557
Physical Properties						
Turbidity	NTU	3.0	A998651	3.3	0.10	A998651

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.3°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A998651	Turbidity	2023/06/16			105	80 - 120	<0.10	NTU	7.8	20
B002126	Total Suspended Solids	2023/06/20	86	80 - 120	105	80 - 120	<1.0	mg/L	NC	20
B002295	Dissolved Barium (Ba)	2023/06/20	102	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
B002295	Dissolved Boron (B)	2023/06/20	95	80 - 120	94	80 - 120	<0.020	mg/L	NC	20
B002295	Dissolved Calcium (Ca)	2023/06/20	100	80 - 120	97	80 - 120	<0.30	mg/L	3.5	20
B002295	Dissolved Iron (Fe)	2023/06/20	98	80 - 120	94	80 - 120	<0.060	mg/L	3.1	20
B002295	Dissolved Lithium (Li)	2023/06/20	92	80 - 120	94	80 - 120	<0.020	mg/L	NC	20
B002295	Dissolved Magnesium (Mg)	2023/06/20	108	80 - 120	107	80 - 120	<0.20	mg/L	2.8	20
B002295	Dissolved Manganese (Mn)	2023/06/20	99	80 - 120	94	80 - 120	<0.0040	mg/L	4.5	20
B002295	Dissolved Phosphorus (P)	2023/06/20	113	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
B002295	Dissolved Potassium (K)	2023/06/20	103	80 - 120	102	80 - 120	<0.30	mg/L	3.3	20
B002295	Dissolved Silicon (Si)	2023/06/20	95	80 - 120	86	80 - 120	<0.50	mg/L	0.48	20
B002295	Dissolved Sodium (Na)	2023/06/20	98	80 - 120	97	80 - 120	<0.50	mg/L	4.3	20
B002295	Dissolved Strontium (Sr)	2023/06/20	101	80 - 120	100	80 - 120	<0.020	mg/L	1.1	20
B002295	Dissolved Sulphur (S)	2023/06/20	102	80 - 120	97	80 - 120	<0.20	mg/L	5.7	20
B002351	Total Organic Carbon (C)	2023/06/25	103	80 - 120	101	80 - 120	<0.50	mg/L	NC	20
B002416	Dissolved Organic Carbon (C)	2023/06/23	93	80 - 120	103	80 - 120	<0.50	mg/L	1.3	20
B002421	Dissolved Organic Carbon (C)	2023/06/23	NC	80 - 120	95	80 - 120	<0.50	mg/L	1.6	20
B002736	Dissolved Aluminum (Al)	2023/06/20	96	80 - 120	105	80 - 120	<0.0030	mg/L	NC	20
B002736	Dissolved Antimony (Sb)	2023/06/20	104	80 - 120	95	80 - 120	<0.00060	mg/L	NC	20
B002736	Dissolved Arsenic (As)	2023/06/20	85	80 - 120	80	80 - 120	<0.00020	mg/L	9.4	20
B002736	Dissolved Beryllium (Be)	2023/06/20	79 (1)	80 - 120	85	80 - 120	<0.0010	mg/L	NC	20
B002736	Dissolved Chromium (Cr)	2023/06/20	84	80 - 120	82	80 - 120	<0.0010	mg/L	NC	20
B002736	Dissolved Cobalt (Co)	2023/06/20	84	80 - 120	82	80 - 120	<0.00030	mg/L	NC	20
B002736	Dissolved Copper (Cu)	2023/06/20	83	80 - 120	80	80 - 120	<0.0010	mg/L	NC	20
B002736	Dissolved Lead (Pb)	2023/06/20	91	80 - 120	84	80 - 120	<0.00020	mg/L	NC	20
B002736	Dissolved Molybdenum (Mo)	2023/06/20	96	80 - 120	88	80 - 120	<0.00020	mg/L	8.0	20
B002736	Dissolved Nickel (Ni)	2023/06/20	83	80 - 120	82	80 - 120	<0.00050	mg/L	1.8	20
B002736	Dissolved Selenium (Se)	2023/06/20	88	80 - 120	80	80 - 120	<0.00020	mg/L	NC	20
B002736	Dissolved Silver (Ag)	2023/06/20	89	80 - 120	83	80 - 120	<0.00010	mg/L	NC	20
B002736	Dissolved Thallium (Tl)	2023/06/20	91	80 - 120	83	80 - 120	<0.00020	mg/L	NC	20
B002736	Dissolved Tin (Sn)	2023/06/20	97	80 - 120	88	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B002736	Dissolved Titanium (Ti)	2023/06/20	84	80 - 120	82	80 - 120	<0.0010	mg/L	NC	20
B002736	Dissolved Uranium (U)	2023/06/20	89	80 - 120	80	80 - 120	<0.00010	mg/L	2.3	20
B002736	Dissolved Vanadium (V)	2023/06/20	88	80 - 120	82	80 - 120	<0.0010	mg/L	NC	20
B002736	Dissolved Zinc (Zn)	2023/06/20	89	80 - 120	85	80 - 120	<0.0030	mg/L	NC	20
B002753	Dissolved Aluminum (Al)	2023/06/21	118	80 - 120	104	80 - 120	<0.0030	mg/L	NC	20
B002753	Dissolved Antimony (Sb)	2023/06/21	120	80 - 120	106	80 - 120	<0.00060	mg/L	NC	20
B002753	Dissolved Arsenic (As)	2023/06/21	96	80 - 120	99	80 - 120	<0.00020	mg/L	8.2	20
B002753	Dissolved Beryllium (Be)	2023/06/21	104	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B002753	Dissolved Chromium (Cr)	2023/06/21	97	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B002753	Dissolved Cobalt (Co)	2023/06/21	95	80 - 120	100	80 - 120	<0.00030	mg/L	NC	20
B002753	Dissolved Copper (Cu)	2023/06/21	93	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B002753	Dissolved Lead (Pb)	2023/06/21	97	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B002753	Dissolved Molybdenum (Mo)	2023/06/21	104	80 - 120	115	80 - 120	<0.00020	mg/L	15	20
B002753	Dissolved Nickel (Ni)	2023/06/21	89	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
B002753	Dissolved Selenium (Se)	2023/06/21	93	80 - 120	95	80 - 120	<0.00020	mg/L	12	20
B002753	Dissolved Silver (Ag)	2023/06/21	98	80 - 120	108	80 - 120	<0.00010	mg/L	NC	20
B002753	Dissolved Thallium (Tl)	2023/06/21	92	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B002753	Dissolved Tin (Sn)	2023/06/21	102	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20
B002753	Dissolved Titanium (Ti)	2023/06/21	105	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
B002753	Dissolved Uranium (U)	2023/06/21	94	80 - 120	106	80 - 120	<0.00010	mg/L	6.5	20
B002753	Dissolved Vanadium (V)	2023/06/21	100	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B002753	Dissolved Zinc (Zn)	2023/06/21	104	80 - 120	108	80 - 120	<0.0030	mg/L	NC	20
B003132	Dissolved Barium (Ba)	2023/06/20	104	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
B003132	Dissolved Boron (B)	2023/06/20	94	80 - 120	93	80 - 120	<0.020	mg/L	NC	20
B003132	Dissolved Calcium (Ca)	2023/06/20	98	80 - 120	97	80 - 120	<0.30	mg/L	2.6	20
B003132	Dissolved Iron (Fe)	2023/06/20	96	80 - 120	94	80 - 120	<0.060	mg/L	4.2	20
B003132	Dissolved Lithium (Li)	2023/06/20	90	80 - 120	90	80 - 120	<0.020	mg/L	NC	20
B003132	Dissolved Magnesium (Mg)	2023/06/20	107	80 - 120	105	80 - 120	<0.20	mg/L	3.0	20
B003132	Dissolved Manganese (Mn)	2023/06/20	98	80 - 120	94	80 - 120	<0.0040	mg/L	NC	20
B003132	Dissolved Phosphorus (P)	2023/06/20	112	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
B003132	Dissolved Potassium (K)	2023/06/20	102	80 - 120	102	80 - 120	<0.30	mg/L	8.6	20
B003132	Dissolved Silicon (Si)	2023/06/20	94	80 - 120	86	80 - 120	<0.50	mg/L	1.2	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B003132	Dissolved Sodium (Na)	2023/06/20	97	80 - 120	97	80 - 120	<0.50	mg/L	2.1	20
B003132	Dissolved Strontium (Sr)	2023/06/20	103	80 - 120	101	80 - 120	<0.020	mg/L	NC	20
B003132	Dissolved Sulphur (S)	2023/06/20	103	80 - 120	96	80 - 120	<0.20	mg/L	4.6	20
B005142	Alkalinity (PP as CaCO3)	2023/06/23					<1.0	mg/L	NC	20
B005142	Alkalinity (Total as CaCO3)	2023/06/23			97	80 - 120	<1.0	mg/L	0.90	20
B005142	Bicarbonate (HCO3)	2023/06/23					<1.0	mg/L	0.90	20
B005142	Carbonate (CO3)	2023/06/23					<1.0	mg/L	NC	20
B005142	Hydroxide (OH)	2023/06/23					<1.0	mg/L	NC	20
B005143	pH	2023/06/23			100	97 - 103			0.13	N/A
B005196	Alkalinity (PP as CaCO3)	2023/06/22					<1.0	mg/L	NC	20
B005196	Alkalinity (Total as CaCO3)	2023/06/22			96	80 - 120	<1.0	mg/L	4.1	20
B005196	Bicarbonate (HCO3)	2023/06/22					<1.0	mg/L	4.1	20
B005196	Carbonate (CO3)	2023/06/22					<1.0	mg/L	NC	20
B005196	Hydroxide (OH)	2023/06/22					<1.0	mg/L	NC	20
B005203	pH	2023/06/22			100	97 - 103			1.5	N/A
B005557	Sulphate (SO4)	2023/06/22	98	80 - 120	100	80 - 120	<1.0	mg/L	0.15	20
B005558	Sulphate (SO4)	2023/06/22	97	80 - 120	102	80 - 120	<1.0	mg/L	0.63	20
B006013	Total Aluminum (Al)	2023/06/22	NC	80 - 120	112	80 - 120	<0.0030	mg/L	2.6	20
B006013	Total Antimony (Sb)	2023/06/22	118	80 - 120	128 (1)	80 - 120	<0.00060	mg/L	NC	20
B006013	Total Arsenic (As)	2023/06/22	100	80 - 120	107	80 - 120	<0.00020	mg/L	8.2	20
B006013	Total Beryllium (Be)	2023/06/22	103	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006013	Total Chromium (Cr)	2023/06/22	102	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B006013	Total Cobalt (Co)	2023/06/22	102	80 - 120	110	80 - 120	<0.00030	mg/L	6.7	20
B006013	Total Copper (Cu)	2023/06/22	101	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B006013	Total Lead (Pb)	2023/06/22	105	80 - 120	111	80 - 120	<0.00020	mg/L	3.1	20
B006013	Total Molybdenum (Mo)	2023/06/22	109	80 - 120	114	80 - 120	<0.00020	mg/L	0.40	20
B006013	Total Nickel (Ni)	2023/06/22	105	80 - 120	109	80 - 120	<0.00050	mg/L	12	20
B006013	Total Selenium (Se)	2023/06/22	105	80 - 120	111	80 - 120	<0.00020	mg/L	0.30	20
B006013	Total Silver (Ag)	2023/06/22	105	80 - 120	111	80 - 120	<0.00010	mg/L	NC	20
B006013	Total Thallium (Tl)	2023/06/22	105	80 - 120	112	80 - 120	<0.00020	mg/L	9.3	20
B006013	Total Tin (Sn)	2023/06/22	107	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20
B006013	Total Titanium (Ti)	2023/06/22	104	80 - 120	110	80 - 120	<0.0010	mg/L	19	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006013	Total Uranium (U)	2023/06/22	104	80 - 120	110	80 - 120	<0.00010	mg/L	7.3	20
B006013	Total Vanadium (V)	2023/06/22	103	80 - 120	110	80 - 120	<0.0010	mg/L	5.4	20
B006013	Total Zinc (Zn)	2023/06/22	103	80 - 120	110	80 - 120	<0.0030	mg/L	11	20
B006017	Total Barium (Ba)	2023/06/22	99	80 - 120	93	80 - 120	<0.010	mg/L	1.6	20
B006017	Total Boron (B)	2023/06/22	103	80 - 120	97	80 - 120	<0.020	mg/L	3.9	20
B006017	Total Calcium (Ca)	2023/06/22	NC	80 - 120	92	80 - 120	<0.30	mg/L	1.1	20
B006017	Total Iron (Fe)	2023/06/22	NC	80 - 120	99	80 - 120	<0.060	mg/L	2.1	20
B006017	Total Lithium (Li)	2023/06/22	100	80 - 120	93	80 - 120	<0.020	mg/L	NC	20
B006017	Total Magnesium (Mg)	2023/06/22	102	80 - 120	93	80 - 120	<0.20	mg/L	0.58	20
B006017	Total Manganese (Mn)	2023/06/22	106	80 - 120	95	80 - 120	<0.0040	mg/L	0.96	20
B006017	Total Phosphorus (P)	2023/06/22	101	80 - 120	91	80 - 120	<0.10	mg/L	5.6	20
B006017	Total Potassium (K)	2023/06/22	105	80 - 120	96	80 - 120	<0.30	mg/L	0.49	20
B006017	Total Silicon (Si)	2023/06/22	NC	80 - 120	98	80 - 120	<0.50	mg/L	3.0	20
B006017	Total Sodium (Na)	2023/06/22	103	80 - 120	95	80 - 120	<0.50	mg/L	1.2	20
B006017	Total Strontium (Sr)	2023/06/22	95	80 - 120	90	80 - 120	<0.020	mg/L	0.39	20
B006017	Total Sulphur (S)	2023/06/22	100	80 - 120	89	80 - 120	<0.20	mg/L	1.5	20
B006434	Total Aluminum (Al)	2023/06/22	107	80 - 120	104	80 - 120	<0.0030	mg/L	10	20
B006434	Total Antimony (Sb)	2023/06/22	125 (1)	80 - 120	120	80 - 120	<0.00060	mg/L	NC	20
B006434	Total Arsenic (As)	2023/06/22	105	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Beryllium (Be)	2023/06/22	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Chromium (Cr)	2023/06/22	107	80 - 120	102	80 - 120	<0.0010	mg/L	12	20
B006434	Total Cobalt (Co)	2023/06/22	107	80 - 120	104	80 - 120	<0.00030	mg/L	9.1	20
B006434	Total Copper (Cu)	2023/06/22	106	80 - 120	102	80 - 120	<0.0010	mg/L	5.4	20
B006434	Total Lead (Pb)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	7.3	20
B006434	Total Molybdenum (Mo)	2023/06/22	111	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Nickel (Ni)	2023/06/22	105	80 - 120	103	80 - 120	<0.00050	mg/L	7.8	20
B006434	Total Selenium (Se)	2023/06/22	112	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Silver (Ag)	2023/06/22	109	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B006434	Total Thallium (Tl)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	20	20
B006434	Total Tin (Sn)	2023/06/22	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Titanium (Ti)	2023/06/22	108	80 - 120	104	80 - 120	<0.0010	mg/L	5.9	20
B006434	Total Uranium (U)	2023/06/22	109	80 - 120	103	80 - 120	<0.00010	mg/L	14	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006434	Total Vanadium (V)	2023/06/22	106	80 - 120	103	80 - 120	<0.0010	mg/L	8.1	20
B006434	Total Zinc (Zn)	2023/06/22	107	80 - 120	105	80 - 120	<0.0030	mg/L	3.7	20
B006446	Total Barium (Ba)	2023/06/22	101	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
B006446	Total Boron (B)	2023/06/22	102	80 - 120	102	80 - 120	<0.020	mg/L	12	20
B006446	Total Calcium (Ca)	2023/06/22	103	80 - 120	101	80 - 120	<0.30	mg/L	6.2	20
B006446	Total Iron (Fe)	2023/06/22	117	80 - 120	109	80 - 120	<0.060	mg/L	4.1	20
B006446	Total Lithium (Li)	2023/06/22	100	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006446	Total Magnesium (Mg)	2023/06/22	104	80 - 120	103	80 - 120	<0.20	mg/L	4.6	20
B006446	Total Manganese (Mn)	2023/06/22	104	80 - 120	104	80 - 120	<0.0040	mg/L	4.2	20
B006446	Total Phosphorus (P)	2023/06/22	99	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B006446	Total Potassium (K)	2023/06/22	105	80 - 120	104	80 - 120	<0.30	mg/L	6.8	20
B006446	Total Silicon (Si)	2023/06/22	111	80 - 120	106	80 - 120	<0.50	mg/L	5.7	20
B006446	Total Sodium (Na)	2023/06/22	NC	80 - 120	101	80 - 120	<0.50	mg/L	18	20
B006446	Total Strontium (Sr)	2023/06/22	98	80 - 120	98	80 - 120	<0.020	mg/L	12	20
B006446	Total Sulphur (S)	2023/06/22	101	80 - 120	99	80 - 120	<0.20	mg/L	5.0	20
B006450	Total Aluminum (Al)	2023/06/22	109	80 - 120	108	80 - 120	<0.0030	mg/L	7.0	20
B006450	Total Antimony (Sb)	2023/06/22	121 (1)	80 - 120	124 (1)	80 - 120	<0.00060	mg/L	NC	20
B006450	Total Arsenic (As)	2023/06/22	101	80 - 120	104	80 - 120	<0.00020	mg/L	14	20
B006450	Total Beryllium (Be)	2023/06/22	104	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Chromium (Cr)	2023/06/22	104	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Cobalt (Co)	2023/06/22	105	80 - 120	107	80 - 120	<0.00030	mg/L	NC	20
B006450	Total Copper (Cu)	2023/06/22	103	80 - 120	106	80 - 120	<0.0010	mg/L	0.28	20
B006450	Total Lead (Pb)	2023/06/22	107	80 - 120	108	80 - 120	<0.00020	mg/L	0.48	20
B006450	Total Molybdenum (Mo)	2023/06/22	111	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B006450	Total Nickel (Ni)	2023/06/22	104	80 - 120	106	80 - 120	<0.00050	mg/L	8.8	20
B006450	Total Selenium (Se)	2023/06/22	106	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B006450	Total Silver (Ag)	2023/06/22	107	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B006450	Total Thallium (Tl)	2023/06/22	108	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B006450	Total Tin (Sn)	2023/06/22	109	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Titanium (Ti)	2023/06/22	106	80 - 120	108	80 - 120	<0.0010	mg/L	10	20
B006450	Total Uranium (U)	2023/06/22	106	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
B006450	Total Vanadium (V)	2023/06/22	104	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006450	Total Zinc (Zn)	2023/06/22	104	80 - 120	108	80 - 120	<0.0030	mg/L	0.64	20
B006480	Total Barium (Ba)	2023/06/22	102	80 - 120	103	80 - 120	<0.010	mg/L	NC	20
B006480	Total Boron (B)	2023/06/22	102	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B006480	Total Calcium (Ca)	2023/06/22	101	80 - 120	103	80 - 120	<0.30	mg/L	0.11	20
B006480	Total Iron (Fe)	2023/06/22	109	80 - 120	113	80 - 120	<0.060	mg/L	0.60	20
B006480	Total Lithium (Li)	2023/06/22	102	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006480	Total Magnesium (Mg)	2023/06/22	104	80 - 120	106	80 - 120	<0.20	mg/L	1.1	20
B006480	Total Manganese (Mn)	2023/06/22	104	80 - 120	107	80 - 120	<0.0040	mg/L	0.94	20
B006480	Total Phosphorus (P)	2023/06/22	100	80 - 120	102	80 - 120	<0.10	mg/L	NC	20
B006480	Total Potassium (K)	2023/06/22	104	80 - 120	105	80 - 120	<0.30	mg/L	0.11	20
B006480	Total Silicon (Si)	2023/06/22	106	80 - 120	107	80 - 120	<0.50	mg/L	3.3	20
B006480	Total Sodium (Na)	2023/06/22	101	80 - 120	102	80 - 120	<0.50	mg/L	0.59	20
B006480	Total Strontium (Sr)	2023/06/22	98	80 - 120	100	80 - 120	<0.020	mg/L	0.37	20
B006480	Total Sulphur (S)	2023/06/22	99	80 - 120	100	80 - 120	<0.20	mg/L	0.18	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Sandy Yuan, M.Sc., QP, Scientific Specialist

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

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Page of

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C314132	696658
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#696658-04-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mmierzwa@kgsgroup.com	Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-3	23/06/13	17:50	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		SC-2		17:55		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times.
3		SW-109		PM		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		SC-4		17:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SC-5		18:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SC-6		18:15		N	N	X	X	X	X	X	X	X	X	X	X	4	
7																			
8																			
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / [illegible]	23/06/15	18:00	[illegible] JASON BIL	23 06 16	0845			0.0 1	Yes [ ] No [X]

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 696658-01-01, 696658-02-01, 696658-03-01

Report Date: 2023/06/26
Report #: R3355360
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344134
Received: 2023/06/16, 08:45

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH	8	N/A	2023/06/22	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH	20	N/A	2023/06/24	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved	23	N/A	2023/06/20		Auto Calc
Cadmium - low level CCME - Dissolved	5	N/A	2023/06/21		Auto Calc
Cadmium - low level CCME (Total)	16	N/A	2023/06/22		Auto Calc
Cadmium - low level CCME (Total)	12	N/A	2023/06/23		Auto Calc
Chloride/Sulphate by Auto Colourimetry	2	N/A	2023/06/20	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry	10	N/A	2023/06/21	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry	7	N/A	2023/06/22	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry	9	N/A	2023/06/23	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1)	28	N/A	2023/06/23	AB SOP-00087	MMCW 119 1996 m
Hardness	27	N/A	2023/06/20		Auto Calc
Hardness	1	N/A	2023/06/21		Auto Calc
Hardness Total (calculated as CaCO3) (2)	28	N/A	2023/06/22	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (3)	26	N/A	2023/06/19	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (3)	2	N/A	2023/06/20	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total	14	2023/06/21	2023/06/21	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total	14	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (4)	28	N/A	2023/06/19	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	14	2023/06/21	2023/06/22	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	13	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	1	2023/06/22	2023/06/23	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (5)	8	N/A	2023/06/22	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (5)	20	N/A	2023/06/24	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (6)	28	N/A	2023/06/25	AB SOP-00087	MMCW 119 1996 m

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 696658-01-01, 696658-02-01, 696658-03-01

Report Date: 2023/06/26
Report #: R3355360
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344134
Received: 2023/06/16, 08:45

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Suspended Solids (NFR)	28	2023/06/20	2023/06/20	AB SOP-00061	SM 24 2540 D m
Turbidity	27	N/A	2023/06/16	CAL SOP-00081	SM 23 2130 B m
Turbidity	1	N/A	2023/06/24	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(2) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(3) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(4) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are

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Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 696658-01-01, 696658-02-01, 696658-03-01

Report Date: 2023/06/26
Report #: R3355360
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344134
Received: 2023/06/16, 08:45

reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(6) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO206		BSO207		BSO208		BSO209		
Sampling Date		2023/06/13 17:30		2023/06/13 16:35		2023/06/13 16:30		2023/06/13 16:40		
COC Number		696658-01-01		696658-01-01		696658-01-01		696658-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**QC Batch**	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Elements										
Dissolved Cadmium (Cd)	ug/L	0.18	A998015	0.32	A998015	0.38	A998015	0.41	0.020	A998015
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.024	B000680	0.015	B000667	0.011	B000746	0.014	0.0030	B000680
Dissolved Antimony (Sb)	mg/L	<0.00060	B000680	<0.00060	B000667	<0.00060	B000746	<0.00060	0.00060	B000680
Dissolved Arsenic (As)	mg/L	0.00039	B000680	0.00035	B000667	0.00033	B000746	0.00028	0.00020	B000680
Dissolved Barium (Ba)	mg/L	<0.010	B001636	0.013	B001636	0.013	B001636	0.012	0.010	B000872
Dissolved Beryllium (Be)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000680
Dissolved Boron (B)	mg/L	0.024	B001636	<0.020	B001636	<0.020	B001636	<0.020	0.020	B000872
Dissolved Calcium (Ca)	mg/L	8.5	B001636	42	B001636	42	B001636	43	0.30	B000872
Dissolved Chromium (Cr)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000680
Dissolved Cobalt (Co)	mg/L	<0.00030	B000680	<0.00030	B000667	<0.00030	B000746	<0.00030	0.00030	B000680
Dissolved Copper (Cu)	mg/L	0.0079	B000680	0.012	B000667	0.011	B000746	0.012	0.0010	B000680
Dissolved Iron (Fe)	mg/L	0.12	B001636	0.46	B001636	0.28	B001636	0.51	0.060	B000872
Dissolved Lead (Pb)	mg/L	<0.00020	B000680	<0.00020	B000667	<0.00020	B000746	<0.00020	0.00020	B000680
Dissolved Lithium (Li)	mg/L	<0.020	B001636	<0.020	B001636	<0.020	B001636	<0.020	0.020	B000872
Dissolved Magnesium (Mg)	mg/L	2.5	B001636	6.9	B001636	6.9	B001636	7.4	0.20	B000872
Dissolved Manganese (Mn)	mg/L	0.0086	B001636	0.097	B001636	0.071	B001636	0.11	0.0040	B000872
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B000680	<0.00020	B000667	<0.00020	B000746	<0.00020	0.00020	B000680
Dissolved Nickel (Ni)	mg/L	0.00055	B000680	0.0014	B000667	0.0012	B000746	0.0014	0.00050	B000680
Dissolved Phosphorus (P)	mg/L	<0.10	B001636	<0.10	B001636	<0.10	B001636	<0.10	0.10	B000872
Dissolved Potassium (K)	mg/L	1.5	B001636	3.4	B001636	3.4	B001636	3.7	0.30	B000872
Dissolved Selenium (Se)	mg/L	<0.00020	B000680	<0.00020	B000667	0.00024	B000746	<0.00020	0.00020	B000680
Dissolved Silicon (Si)	mg/L	1.3	B001636	1.2	B001636	0.78	B001636	1.2	0.50	B000872
Dissolved Silver (Ag)	mg/L	<0.00010	B000680	<0.00010	B000667	<0.00010	B000746	<0.00010	0.00010	B000680
Dissolved Sodium (Na)	mg/L	1.8	B001636	2.8	B001636	2.7	B001636	3.0	0.50	B000872
Dissolved Strontium (Sr)	mg/L	0.021	B001636	0.043	B001636	0.043	B001636	0.050	0.020	B000872
Dissolved Sulphur (S)	mg/L	1.7	B001636	37	B001636	26	B001636	37	0.20	B000872
Dissolved Thallium (Tl)	mg/L	<0.00020	B000680	<0.00020	B000667	<0.00020	B000746	<0.00020	0.00020	B000680
Dissolved Tin (Sn)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000680
Dissolved Titanium (Ti)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000680
Dissolved Uranium (U)	mg/L	<0.00010	B000680	<0.00010	B000667	<0.00010	B000746	<0.00010	0.00010	B000680

RDL = Reportable Detection Limit

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO206		BSO207		BSO208		BSO209		
Sampling Date		2023/06/13 17:30		2023/06/13 16:35		2023/06/13 16:30		2023/06/13 16:40		
COC Number		696658-01-01		696658-01-01		696658-01-01		696658-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**QC Batch**	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B000680	0.0012	B000667	<0.0010	B000746	<0.0010	0.0010	B000680
Dissolved Zinc (Zn)	mg/L	0.060	B000680	0.12	B000667	0.13	B000746	0.13	0.0030	B000680
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO210		BSO211			BSO211		
Sampling Date		2023/06/13 16:45		2023/06/13 16:50			2023/06/13 16:50		
COC Number		696658-01-01		696658-01-01			696658-01-01		
	UNITS	CB-2	QC Batch	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.32	A998015	0.53	0.020	A998015			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.021	B000667	0.018	0.0030	B000680			
Dissolved Antimony (Sb)	mg/L	<0.00060	B000667	<0.00060	0.00060	B000680			
Dissolved Arsenic (As)	mg/L	0.00021	B000667	<0.00020	0.00020	B000680			
Dissolved Barium (Ba)	mg/L	0.012	B000872	0.018	0.010	B000872	0.012	0.010	B000872
Dissolved Beryllium (Be)	mg/L	<0.0010	B000667	<0.0010	0.0010	B000680			
Dissolved Boron (B)	mg/L	<0.020	B000872	0.027	0.020	B000872	<0.020	0.020	B000872
Dissolved Calcium (Ca)	mg/L	45	B000872	51	0.30	B000872	45	0.30	B000872
Dissolved Chromium (Cr)	mg/L	<0.0010	B000667	<0.0010	0.0010	B000680			
Dissolved Cobalt (Co)	mg/L	0.00031	B000667	0.00067	0.00030	B000680			
Dissolved Copper (Cu)	mg/L	0.011	B000667	0.013	0.0010	B000680			
Dissolved Iron (Fe)	mg/L	0.48	B000872	0.25	0.060	B000872	0.32	0.060	B000872
Dissolved Lead (Pb)	mg/L	<0.00020	B000667	<0.00020	0.00020	B000680			
Dissolved Lithium (Li)	mg/L	<0.020	B000872	<0.020	0.020	B000872	<0.020	0.020	B000872
Dissolved Magnesium (Mg)	mg/L	7.5	B000872	8.6	0.20	B000872	7.3	0.20	B000872
Dissolved Manganese (Mn)	mg/L	0.10	B000872	0.14	0.0040	B000872	0.12	0.0040	B000872
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B000667	<0.00020	0.00020	B000680			
Dissolved Nickel (Ni)	mg/L	0.0013	B000667	0.0015	0.00050	B000680			
Dissolved Phosphorus (P)	mg/L	<0.10	B000872	<0.10	0.10	B000872	<0.10	0.10	B000872
Dissolved Potassium (K)	mg/L	3.8	B000872	4.0	0.30	B000872	3.6	0.30	B000872
Dissolved Selenium (Se)	mg/L	0.00022	B000667	<0.00020	0.00020	B000680			
Dissolved Silicon (Si)	mg/L	1.1	B000872	1.0	0.50	B000872	0.89	0.50	B000872
Dissolved Silver (Ag)	mg/L	<0.00010	B000667	<0.00010	0.00010	B000680			
Dissolved Sodium (Na)	mg/L	3.0	B000872	3.1	0.50	B000872	3.0	0.50	B000872
Dissolved Strontium (Sr)	mg/L	0.051	B000872	0.078	0.020	B000872	0.053	0.020	B000872
Dissolved Sulphur (S)	mg/L	38	B000872	45	0.20	B000872	43	0.20	B000872
Dissolved Thallium (Tl)	mg/L	<0.00020	B000667	<0.00020	0.00020	B000680			
Dissolved Tin (Sn)	mg/L	<0.0010	B000667	<0.0010	0.0010	B000680			
Dissolved Titanium (Ti)	mg/L	<0.0010	B000667	<0.0010	0.0010	B000680			
Dissolved Uranium (U)	mg/L	<0.00010	B000667	<0.00010	0.00010	B000680			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO210		BSO211			BSO211		
Sampling Date		2023/06/13 16:45		2023/06/13 16:50			2023/06/13 16:50		
COC Number		696658-01-01		696658-01-01			696658-01-01		
	UNITS	**CB-2**	**QC Batch**	**EB-1**	**RDL**	**QC Batch**	**EB-1 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	0.0013	B000667	<0.0010	0.0010	B000680			
Dissolved Zinc (Zn)	mg/L	0.12	B000667	0.16	0.0030	B000680			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO212		BSO213		BSO214	BSO215		
Sampling Date		2023/06/13 16:55		2023/06/13 17:05		2023/06/13 17:00	2023/06/13 17:10		
COC Number		696658-01-01		696658-01-01		696658-01-01	696658-01-01		
	UNITS	EB-2	QC Batch	NB-1	QC Batch	NB-2	CLD	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.37	A998015	0.55	A998015	0.40	0.40	0.020	A998015
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.014	B000667	0.0086	B000987	0.011	0.011	0.0030	B000987
Dissolved Antimony (Sb)	mg/L	<0.00060	B000667	<0.00060	B000987	<0.00060	<0.00060	0.00060	B000987
Dissolved Arsenic (As)	mg/L	0.00043	B000667	<0.00020	B000987	0.00023	0.00021	0.00020	B000987
Dissolved Barium (Ba)	mg/L	0.012	B001636	0.015	B001636	0.012	0.012	0.010	B001648
Dissolved Beryllium (Be)	mg/L	<0.0010	B000667	<0.0010	B000987	<0.0010	<0.0010	0.0010	B000987
Dissolved Boron (B)	mg/L	<0.020	B001636	<0.020	B001636	<0.020	<0.020	0.020	B001648
Dissolved Calcium (Ca)	mg/L	49	B001636	53	B001636	47	49	0.30	B001648
Dissolved Chromium (Cr)	mg/L	<0.0010	B000667	<0.0010	B000987	<0.0010	<0.0010	0.0010	B000987
Dissolved Cobalt (Co)	mg/L	0.00037	B000667	0.00072	B000987	<0.00030	0.00036	0.00030	B000987
Dissolved Copper (Cu)	mg/L	0.013	B000667	0.011	B000987	0.013	0.013	0.0010	B000987
Dissolved Iron (Fe)	mg/L	0.48	B001636	0.19	B001636	0.43	0.47	0.060	B001648
Dissolved Lead (Pb)	mg/L	<0.00020	B000667	<0.00020	B000987	<0.00020	<0.00020	0.00020	B000987
Dissolved Lithium (Li)	mg/L	<0.020	B001636	<0.020	B001636	<0.020	<0.020	0.020	B001648
Dissolved Magnesium (Mg)	mg/L	7.9	B001636	8.3	B001636	7.5	7.8	0.20	B001648
Dissolved Manganese (Mn)	mg/L	0.12	B001636	0.13	B001636	0.11	0.11	0.0040	B001648
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B000667	<0.00020	B000987	<0.00020	<0.00020	0.00020	B000987
Dissolved Nickel (Ni)	mg/L	0.0013	B000667	0.0017	B000987	0.0013	0.0013	0.00050	B000987
Dissolved Phosphorus (P)	mg/L	<0.10	B001636	<0.10	B001636	<0.10	<0.10	0.10	B001648
Dissolved Potassium (K)	mg/L	3.7	B001636	4.0	B001636	3.6	3.8	0.30	B001648
Dissolved Selenium (Se)	mg/L	0.00041	B000667	<0.00020	B000987	<0.00020	<0.00020	0.00020	B000987
Dissolved Silicon (Si)	mg/L	1.2	B001636	0.90	B001636	1.1	1.2	0.50	B001648
Dissolved Silver (Ag)	mg/L	<0.00010	B000667	<0.00010	B000987	<0.00010	<0.00010	0.00010	B000987
Dissolved Sodium (Na)	mg/L	2.9	B001636	3.1	B001636	2.8	2.9	0.50	B001648
Dissolved Strontium (Sr)	mg/L	0.047	B001636	0.050	B001636	0.045	0.046	0.020	B001648
Dissolved Sulphur (S)	mg/L	47	B001636	43	B001636	45	47	0.20	B001648
Dissolved Thallium (Tl)	mg/L	<0.00020	B000667	<0.00020	B000987	<0.00020	<0.00020	0.00020	B000987
Dissolved Tin (Sn)	mg/L	<0.0010	B000667	<0.0010	B000987	<0.0010	<0.0010	0.0010	B000987
Dissolved Titanium (Ti)	mg/L	<0.0010	B000667	<0.0010	B000987	<0.0010	<0.0010	0.0010	B000987
Dissolved Uranium (U)	mg/L	<0.00010	B000667	<0.00010	B000987	<0.00010	<0.00010	0.00010	B000987

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO212		BSO213		BSO214	BSO215		
Sampling Date		2023/06/13 16:55		2023/06/13 17:05		2023/06/13 17:00	2023/06/13 17:10		
COC Number		696658-01-01		696658-01-01		696658-01-01	696658-01-01		
	UNITS	**EB-2**	**QC Batch**	**NB-1**	**QC Batch**	**NB-2**	**CLD**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B000667	<0.0010	B000987	<0.0010	<0.0010	0.0010	B000987
Dissolved Zinc (Zn)	mg/L	0.13	B000667	0.17	B000987	0.14	0.15	0.0030	B000987
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO216		BSO217		BSO218		BSO219		
Sampling Date		2023/06/13 15:45		2023/06/13 15:50		2023/06/13 15:55		2023/06/13 16:00		
COC Number		696658-02-01		696658-02-01		696658-02-01		696658-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.33	A998361	0.071	A998361	0.066	A998361	0.057	0.020	A998361
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.020	B000680	0.020	B000667	0.012	B000746	0.014	0.0030	B000987
Dissolved Antimony (Sb)	mg/L	<0.00060	B000680	<0.00060	B000667	<0.00060	B000746	<0.00060	0.00060	B000987
Dissolved Arsenic (As)	mg/L	0.00027	B000680	0.00029	B000667	0.00031	B000746	0.00031	0.00020	B000987
Dissolved Barium (Ba)	mg/L	0.012	B001636	0.010	B001636	0.011	B001636	0.010	0.010	B001648
Dissolved Beryllium (Be)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000987
Dissolved Boron (B)	mg/L	<0.020	B001636	<0.020	B001636	<0.020	B001636	<0.020	0.020	B001648
Dissolved Calcium (Ca)	mg/L	43	B001636	18	B001636	20	B001636	18	0.30	B001648
Dissolved Chromium (Cr)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000987
Dissolved Cobalt (Co)	mg/L	<0.00030	B000680	<0.00030	B000667	<0.00030	B000746	<0.00030	0.00030	B000987
Dissolved Copper (Cu)	mg/L	0.010	B000680	0.0069	B000667	0.0060	B000746	0.0084	0.0010	B000987
Dissolved Iron (Fe)	mg/L	0.44	B001636	0.14	B001636	0.17	B001636	0.12	0.060	B001648
Dissolved Lead (Pb)	mg/L	<0.00020	B000680	<0.00020	B000667	<0.00020	B000746	<0.00020	0.00020	B000987
Dissolved Lithium (Li)	mg/L	<0.020	B001636	<0.020	B001636	<0.020	B001636	<0.020	0.020	B001648
Dissolved Magnesium (Mg)	mg/L	7.2	B001636	3.9	B001636	4.3	B001636	4.0	0.20	B001648
Dissolved Manganese (Mn)	mg/L	0.074	B001636	<0.0040	B001636	0.0043	B001636	<0.0040	0.0040	B001648
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B000680	<0.00020	B000667	<0.00020	B000746	<0.00020	0.00020	B000987
Dissolved Nickel (Ni)	mg/L	0.0010	B000680	0.00069	B000667	0.00060	B000746	0.00051	0.00050	B000987
Dissolved Phosphorus (P)	mg/L	<0.10	B001636	<0.10	B001636	<0.10	B001636	<0.10	0.10	B001648
Dissolved Potassium (K)	mg/L	3.5	B001636	1.8	B001636	2.1	B001636	1.9	0.30	B001648
Dissolved Selenium (Se)	mg/L	<0.00020	B000680	0.00058	B000667	<0.00020	B000746	<0.00020	0.00020	B000987
Dissolved Silicon (Si)	mg/L	1.1	B001636	0.87	B001636	0.91	B001636	0.88	0.50	B001648
Dissolved Silver (Ag)	mg/L	<0.00010	B000680	<0.00010	B000667	<0.00010	B000746	<0.00010	0.00010	B000987
Dissolved Sodium (Na)	mg/L	2.8	B001636	2.2	B001636	2.4	B001636	2.1	0.50	B001648
Dissolved Strontium (Sr)	mg/L	0.044	B001636	0.030	B001636	0.031	B001636	0.029	0.020	B001648
Dissolved Sulphur (S)	mg/L	38	B001636	11	B001636	13	B001636	12	0.20	B001648
Dissolved Thallium (Tl)	mg/L	<0.00020	B000680	<0.00020	B000667	<0.00020	B000746	<0.00020	0.00020	B000987
Dissolved Tin (Sn)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000987
Dissolved Titanium (Ti)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000987
Dissolved Uranium (U)	mg/L	<0.00010	B000680	<0.00010	B000667	<0.00010	B000746	<0.00010	0.00010	B000987

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO216		BSO217		BSO218		BSO219		
Sampling Date		2023/06/13 15:45		2023/06/13 15:50		2023/06/13 15:55		2023/06/13 16:00		
COC Number		696658-02-01		696658-02-01		696658-02-01		696658-02-01		
	UNITS	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B000680	<0.0010	B000667	<0.0010	B000746	<0.0010	0.0010	B000987
Dissolved Zinc (Zn)	mg/L	0.10	B000680	0.036	B000667	0.035	B000746	0.033	0.0030	B000987
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO220	BSO221	BSO222		BSO223		
Sampling Date		2023/06/13 15:35	2023/06/13 15:40	2023/06/13 16:05		2023/06/13 16:10		
COC Number		696658-02-01	696658-02-01	696658-02-01		696658-02-01		
	UNITS	CL-8 SFC	CL-8 BTM	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.10	0.053	0.033	A998361	0.043	0.020	A998361
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.014	0.015	0.016	B000987	0.018	0.0030	B000987
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B000987	<0.00060	0.00060	B000987
Dissolved Arsenic (As)	mg/L	0.00028	0.00033	0.00032	B000987	0.00047	0.00020	B000987
Dissolved Barium (Ba)	mg/L	0.011	0.010	<0.010	B001648	0.010	0.010	B001636
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B000987	<0.0010	0.0010	B000987
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	B001648	<0.020	0.020	B001636
Dissolved Calcium (Ca)	mg/L	22	15	14	B001648	14	0.30	B001636
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B000987	<0.0010	0.0010	B000987
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B000987	<0.00030	0.00030	B000987
Dissolved Copper (Cu)	mg/L	0.0092	0.0082	0.0089	B000987	0.0089	0.0010	B000987
Dissolved Iron (Fe)	mg/L	0.16	0.091	0.092	B001648	0.16	0.060	B001636
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B000987	<0.00020	0.00020	B000987
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B001648	<0.020	0.020	B001636
Dissolved Magnesium (Mg)	mg/L	4.4	3.5	3.5	B001648	3.4	0.20	B001636
Dissolved Manganese (Mn)	mg/L	0.0061	<0.0040	<0.0040	B001648	<0.0040	0.0040	B001636
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B000987	<0.00020	0.00020	B000987
Dissolved Nickel (Ni)	mg/L	0.00058	0.00064	0.00051	B000987	<0.00050	0.00050	B000987
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B001648	<0.10	0.10	B001636
Dissolved Potassium (K)	mg/L	2.2	1.7	1.7	B001648	1.7	0.30	B001636
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B000987	<0.00020	0.00020	B000987
Dissolved Silicon (Si)	mg/L	0.92	0.85	0.78	B001648	1.0	0.50	B001636
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B000987	<0.00010	0.00010	B000987
Dissolved Sodium (Na)	mg/L	2.2	2.0	2.1	B001648	2.1	0.50	B001636
Dissolved Strontium (Sr)	mg/L	0.032	0.029	0.027	B001648	0.027	0.020	B001636
Dissolved Sulphur (S)	mg/L	16	8.0	7.5	B001648	7.6	0.20	B001636
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B000987	<0.00020	0.00020	B000987
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B000987	<0.0010	0.0010	B000987
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	B000987	<0.0010	0.0010	B000987
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B000987	<0.00010	0.00010	B000987

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO220	BSO221	BSO222		BSO223		
Sampling Date		2023/06/13 15:35	2023/06/13 15:40	2023/06/13 16:05		2023/06/13 16:10		
COC Number		696658-02-01	696658-02-01	696658-02-01		696658-02-01		
	UNITS	**CL-8 SFC**	**CL-8 BTM**	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B000987	<0.0010	0.0010	B000987
Dissolved Zinc (Zn)	mg/L	0.044	0.026	0.025	B000987	0.033	0.0030	B000987
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO224	BSO225	BSO226	BSO227		
Sampling Date		2023/06/13 15:25	2023/06/13 15:30	2023/06/13 15:15	2023/06/13 15:20		
COC Number		696658-02-01	696658-02-01	696658-03-01	696658-03-01		
	UNITS	CL-4 SFC	CL-4 BTM	CL-5 SFC	CL-5 BTM	RDL	QC Batch
Elements							
Dissolved Cadmium (Cd)	ug/L	0.044	0.023	0.033	0.026	0.020	A998361
Lab Filtered Elements							
Dissolved Aluminum (Al)	mg/L	0.016	0.013	0.017	0.013	0.0030	B000987
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B000987
Dissolved Arsenic (As)	mg/L	0.00030	0.00032	0.00036	0.00037	0.00020	B000987
Dissolved Barium (Ba)	mg/L	<0.010	0.010	<0.010	<0.010	0.010	B001648
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B000987
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	0.020	B001648
Dissolved Calcium (Ca)	mg/L	14	12	13	12	0.30	B001648
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B000987
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B000987
Dissolved Copper (Cu)	mg/L	0.0085	0.0061	0.0062	0.0053	0.0010	B000987
Dissolved Iron (Fe)	mg/L	0.087	0.14	0.072	0.11	0.060	B001648
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B000987
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	0.020	B001648
Dissolved Magnesium (Mg)	mg/L	3.5	3.3	3.3	3.2	0.20	B001648
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	<0.0040	<0.0040	0.0040	B001648
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B000987
Dissolved Nickel (Ni)	mg/L	0.00051	<0.00050	0.00059	<0.00050	0.00050	B000987
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	0.10	B001648
Dissolved Potassium (K)	mg/L	1.6	1.5	1.6	1.6	0.30	B001648
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B000987
Dissolved Silicon (Si)	mg/L	0.83	0.91	0.66	0.84	0.50	B001648
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B000987
Dissolved Sodium (Na)	mg/L	2.1	2.0	2.0	2.0	0.50	B001648
Dissolved Strontium (Sr)	mg/L	0.027	0.026	0.026	0.026	0.020	B001648
Dissolved Sulphur (S)	mg/L	7.6	5.9	5.7	5.0	0.20	B001648
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B000987
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B000987
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B000987
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B000987
RDL = Reportable Detection Limit							

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO224	BSO225	BSO226	BSO227		
Sampling Date		2023/06/13 15:25	2023/06/13 15:30	2023/06/13 15:15	2023/06/13 15:20		
COC Number		696658-02-01	696658-02-01	696658-03-01	696658-03-01		
	UNITS	**CL-4 SFC**	**CL-4 BTM**	**CL-5 SFC**	**CL-5 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B000987
Dissolved Zinc (Zn)	mg/L	0.026	0.021	0.026	0.019	0.0030	B000987
RDL = Reportable Detection Limit							

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO227			BSO228			BSO228		
Sampling Date		2023/06/13 15:20			2023/06/13 15:05			2023/06/13 15:05		
COC Number		696658-03-01			696658-03-01			696658-03-01		
	UNITS	CL-5 BTM Lab-Dup	RDL	QC Batch	CL-6 SFC	RDL	QC Batch	CL-6 SFC Lab-Dup	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L				0.035	0.020	A998361			
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.013	0.0030	B000987	0.014	0.0030	B000732			
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B000987	<0.00060	0.00060	B000732			
Dissolved Arsenic (As)	mg/L	0.00030	0.00020	B000987	0.00043	0.00020	B000732			
Dissolved Barium (Ba)	mg/L				0.011	0.010	B001636	0.010	0.010	B001636
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B000987	<0.0010	0.0010	B000732			
Dissolved Boron (B)	mg/L				<0.020	0.020	B001636	<0.020	0.020	B001636
Dissolved Calcium (Ca)	mg/L				13	0.30	B001636	12	0.30	B001636
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B000987	<0.0010	0.0010	B000732			
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B000987	<0.00030	0.00030	B000732			
Dissolved Copper (Cu)	mg/L	0.0050	0.0010	B000987	0.0045	0.0010	B000732			
Dissolved Iron (Fe)	mg/L				<0.060	0.060	B001636	0.062	0.060	B001636
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B000987	<0.00020	0.00020	B000732			
Dissolved Lithium (Li)	mg/L				<0.020	0.020	B001636	<0.020	0.020	B001636
Dissolved Magnesium (Mg)	mg/L				3.3	0.20	B001636	3.3	0.20	B001636
Dissolved Manganese (Mn)	mg/L				<0.0040	0.0040	B001636	<0.0040	0.0040	B001636
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B000987	<0.00020	0.00020	B000732			
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B000987	<0.00050	0.00050	B000732			
Dissolved Phosphorus (P)	mg/L				<0.10	0.10	B001636	<0.10	0.10	B001636
Dissolved Potassium (K)	mg/L				1.6	0.30	B001636	1.7	0.30	B001636
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B000987	<0.00020	0.00020	B000732			
Dissolved Silicon (Si)	mg/L				0.73	0.50	B001636	0.70	0.50	B001636
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B000987	<0.00010	0.00010	B000732			
Dissolved Sodium (Na)	mg/L				2.1	0.50	B001636	2.1	0.50	B001636
Dissolved Strontium (Sr)	mg/L				0.027	0.020	B001636	0.027	0.020	B001636
Dissolved Sulphur (S)	mg/L				6.0	0.20	B001636	5.9	0.20	B001636
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B000987	<0.00020	0.00020	B000732			
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B000987	<0.0010	0.0010	B000732			
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B000987	<0.0010	0.0010	B000732			
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B000987	<0.00010	0.00010	B000732			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO227			BSO228			BSO228		
Sampling Date		2023/06/13 15:20			2023/06/13 15:05			2023/06/13 15:05		
COC Number		696658-03-01			696658-03-01			696658-03-01		
	UNITS	**CL-5 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-6 SFC**	**RDL**	**QC Batch**	**CL-6 SFC Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B000987	<0.0010	0.0010	B000732			
Dissolved Zinc (Zn)	mg/L	0.018	0.0030	B000987	0.018	0.0030	B000732			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO229		BSO230	BSO231		BSO232		
Sampling Date		2023/06/13 15:10		2023/06/13	2023/06/13		2023/06/13		
COC Number		696658-03-01		696658-03-01	696658-03-01		696658-03-01		
	UNITS	CL-6 BTM	QC Batch	TRIP BLANK	SW-106	QC Batch	SW-107	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	A998361	<0.020	0.30	A998361	0.054	0.020	A998361
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0083	B000987	<0.0030	0.012	B000732	0.018	0.0030	B000987
Dissolved Antimony (Sb)	mg/L	<0.00060	B000987	<0.00060	<0.00060	B000732	<0.00060	0.00060	B000987
Dissolved Arsenic (As)	mg/L	0.00044	B000987	<0.00020	0.00026	B000732	0.00033	0.00020	B000987
Dissolved Barium (Ba)	mg/L	<0.010	B001648	<0.010	0.011	B001648	0.011	0.010	B002302
Dissolved Beryllium (Be)	mg/L	<0.0010	B000987	<0.0010	<0.0010	B000732	<0.0010	0.0010	B000987
Dissolved Boron (B)	mg/L	<0.020	B001648	<0.020	<0.020	B001648	<0.020	0.020	B002302
Dissolved Calcium (Ca)	mg/L	11	B001648	<0.30	39	B001648	14	0.30	B002302
Dissolved Chromium (Cr)	mg/L	<0.0010	B000987	<0.0010	<0.0010	B000732	<0.0010	0.0010	B000987
Dissolved Cobalt (Co)	mg/L	<0.00030	B000987	<0.00030	<0.00030	B000732	<0.00030	0.00030	B000987
Dissolved Copper (Cu)	mg/L	0.0050	B000987	<0.0010	0.0097	B000732	0.0073	0.0010	B000987
Dissolved Iron (Fe)	mg/L	<0.060	B001648	<0.060	0.36	B001648	0.16	0.060	B002302
Dissolved Lead (Pb)	mg/L	<0.00020	B000987	<0.00020	<0.00020	B000732	<0.00020	0.00020	B000987
Dissolved Lithium (Li)	mg/L	<0.020	B001648	<0.020	<0.020	B001648	<0.020	0.020	B002302
Dissolved Magnesium (Mg)	mg/L	3.1	B001648	<0.20	6.6	B001648	3.7	0.20	B002302
Dissolved Manganese (Mn)	mg/L	<0.0040	B001648	<0.0040	0.054	B001648	<0.0040	0.0040	B002302
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B000987	<0.00020	<0.00020	B000732	<0.00020	0.00020	B000987
Dissolved Nickel (Ni)	mg/L	<0.00050	B000987	<0.00050	0.0010	B000732	0.00057	0.00050	B000987
Dissolved Phosphorus (P)	mg/L	<0.10	B001648	<0.10	<0.10	B001648	<0.10	0.10	B002302
Dissolved Potassium (K)	mg/L	1.6	B001648	<0.30	3.1	B001648	1.8	0.30	B002302
Dissolved Selenium (Se)	mg/L	<0.00020	B000987	<0.00020	<0.00020	B000732	<0.00020	0.00020	B000987
Dissolved Silicon (Si)	mg/L	0.63	B001648	<0.50	1.1	B001648	1.0	0.50	B002302
Dissolved Silver (Ag)	mg/L	<0.00010	B000987	<0.00010	<0.00010	B000732	<0.00010	0.00010	B000987
Dissolved Sodium (Na)	mg/L	2.0	B001648	<0.50	2.6	B001648	2.1	0.50	B002302
Dissolved Strontium (Sr)	mg/L	0.026	B001648	<0.020	0.040	B001648	0.028	0.020	B002302
Dissolved Sulphur (S)	mg/L	4.4	B001648	0.24	35	B001648	7.3	0.20	B002302
Dissolved Thallium (Tl)	mg/L	<0.00020	B000987	<0.00020	<0.00020	B000732	<0.00020	0.00020	B000987
Dissolved Tin (Sn)	mg/L	<0.0010	B000987	<0.0010	<0.0010	B000732	<0.0010	0.0010	B000987
Dissolved Titanium (Ti)	mg/L	<0.0010	B000987	<0.0010	<0.0010	B000732	<0.0010	0.0010	B000987
Dissolved Uranium (U)	mg/L	<0.00010	B000987	<0.00010	<0.00010	B000732	<0.00010	0.00010	B000987

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO229		BSO230	BSO231		BSO232		
Sampling Date		2023/06/13 15:10		2023/06/13	2023/06/13		2023/06/13		
COC Number		696658-03-01		696658-03-01	696658-03-01		696658-03-01		
	UNITS	**CL-6 BTM**	**QC Batch**	**TRIP BLANK**	**SW-106**	**QC Batch**	**SW-107**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B000987	<0.0010	<0.0010	B000732	<0.0010	0.0010	B000987
Dissolved Zinc (Zn)	mg/L	0.015	B000987	<0.0030	0.099	B000732	0.031	0.0030	B000987
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO233		
Sampling Date		2023/06/13		
COC Number		696658-03-01		
	UNITS	SW-108	RDL	QC Batch
Elements				
Dissolved Cadmium (Cd)	ug/L	0.57	0.020	A998361
Lab Filtered Elements				
Dissolved Aluminum (Al)	mg/L	0.014	0.0030	B000987
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B000987
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B000987
Dissolved Barium (Ba)	mg/L	0.014	0.010	B001636
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B000987
Dissolved Boron (B)	mg/L	<0.020	0.020	B001636
Dissolved Calcium (Ca)	mg/L	52	0.30	B001636
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B000987
Dissolved Cobalt (Co)	mg/L	0.00064	0.00030	B000987
Dissolved Copper (Cu)	mg/L	0.013	0.0010	B000987
Dissolved Iron (Fe)	mg/L	0.31	0.060	B001636
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B000987
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B001636
Dissolved Magnesium (Mg)	mg/L	8.2	0.20	B001636
Dissolved Manganese (Mn)	mg/L	0.14	0.0040	B001636
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B000987
Dissolved Nickel (Ni)	mg/L	0.0021	0.00050	B000987
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B001636
Dissolved Potassium (K)	mg/L	3.9	0.30	B001636
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B000987
Dissolved Silicon (Si)	mg/L	1.0	0.50	B001636
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B000987
Dissolved Sodium (Na)	mg/L	3.2	0.50	B001636
Dissolved Strontium (Sr)	mg/L	0.050	0.020	B001636
Dissolved Sulphur (S)	mg/L	50	0.20	B001636
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B000987
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B000987
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B000987
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B000987
RDL = Reportable Detection Limit				

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BSO233		
Sampling Date		2023/06/13		
COC Number		696658-03-01		
	UNITS	**SW-108**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B000987
Dissolved Zinc (Zn)	mg/L	0.18	0.0030	B000987
RDL = Reportable Detection Limit				

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO206	BSO207	BSO208			BSO209		
Sampling Date		2023/06/13 17:30	2023/06/13 16:35	2023/06/13 16:30			2023/06/13 16:40		
COC Number		696658-01-01	696658-01-01	696658-01-01			696658-01-01		
	UNITS	SC-1	SB-1	SB-2	RDL	QC Batch	CB-1	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.21	0.52	0.53	0.020	A998316	0.57	0.020	A998316
Total Aluminum (Al)	mg/L	0.067	0.059	0.056	0.0040	B004701	0.061	0.0030	B006450
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	B004701	<0.00060	0.00060	B006450
Total Arsenic (As)	mg/L	0.00038	0.00025	0.00021	0.00020	B004701	0.00027	0.00020	B006450
Total Barium (Ba)	mg/L	<0.010	0.011	0.011	0.010	B004723	0.011	0.010	B006480
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	B004723	<0.020	0.020	B006480
Total Calcium (Ca)	mg/L	7.7	38	38	0.30	B004723	42	0.30	B006480
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Cobalt (Co)	mg/L	<0.00030	0.00044	0.00043	0.00030	B004701	0.00054	0.00030	B006450
Total Copper (Cu)	mg/L	0.0099	0.018	0.017	0.0010	B004701	0.019	0.0010	B006450
Total Iron (Fe)	mg/L	0.22	1.5	1.5	0.060	B004723	1.7	0.060	B006480
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	B004723	<0.020	0.020	B006480
Total Magnesium (Mg)	mg/L	2.5	6.5	6.6	0.20	B004723	7.0	0.20	B006480
Total Manganese (Mn)	mg/L	0.020	0.10	0.10	0.0040	B004723	0.11	0.0040	B006480
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Nickel (Ni)	mg/L	0.00066	0.0014	0.0014	0.00050	B004701	0.0015	0.00050	B006450
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	B004723	<0.10	0.10	B006480
Total Potassium (K)	mg/L	1.2	3.1	3.2	0.30	B004723	3.4	0.30	B006480
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Silicon (Si)	mg/L	1.4	1.3	1.3	0.50	B004723	1.3	0.50	B006480
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450
Total Sodium (Na)	mg/L	1.7	2.5	2.5	0.50	B004723	2.6	0.50	B006480
Total Strontium (Sr)	mg/L	<0.020	0.043	0.043	0.020	B004723	0.047	0.020	B006480
Total Sulphur (S)	mg/L	1.6	35	35	0.20	B004723	39	0.20	B006480
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Titanium (Ti)	mg/L	0.0029	0.0016	0.0015	0.0010	B004701	0.0012	0.0010	B006450
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450
Total Vanadium (V)	mg/L	<0.0014	<0.0014	<0.0014	0.0014	B004701	<0.0010	0.0010	B006450
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO206	BSO207	BSO208			BSO209		
Sampling Date		2023/06/13 17:30	2023/06/13 16:35	2023/06/13 16:30			2023/06/13 16:40		
COC Number		696658-01-01	696658-01-01	696658-01-01			696658-01-01		
	UNITS	**SC-1**	**SB-1**	**SB-2**	**RDL**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.069	0.16	0.16	0.0030	B004701	0.18	0.0030	B006450
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO210			BSO211			BSO212		
Sampling Date		2023/06/13 16:45			2023/06/13 16:50			2023/06/13 16:55		
COC Number		696658-01-01			696658-01-01			696658-01-01		
	UNITS	CB-2	RDL	QC Batch	EB-1	RDL	QC Batch	EB-2	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.58	0.020	A998316	0.72	0.020	A998316	0.63	0.020	A998316
Total Aluminum (Al)	mg/L	0.065	0.0030	B006450	0.073	0.0040	B004701	0.056	0.0030	B006450
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B006450	<0.00060	0.00060	B004701	<0.00060	0.00060	B006450
Total Arsenic (As)	mg/L	0.00032	0.00020	B006450	0.00027	0.00020	B004701	0.00031	0.00020	B006450
Total Barium (Ba)	mg/L	0.012	0.010	B006480	0.012	0.010	B004723	0.011	0.010	B006480
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B006450	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Boron (B)	mg/L	<0.020	0.020	B006480	<0.020	0.020	B004723	<0.020	0.020	B006480
Total Calcium (Ca)	mg/L	42	0.30	B006480	46	0.30	B004723	44	0.30	B006480
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B006450	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Cobalt (Co)	mg/L	0.00051	0.00030	B006450	0.00071	0.00030	B004701	0.00054	0.00030	B006450
Total Copper (Cu)	mg/L	0.018	0.0010	B006450	0.023	0.0010	B004701	0.019	0.0010	B006450
Total Iron (Fe)	mg/L	1.7	0.060	B006480	1.6	0.060	B004723	1.8	0.060	B006480
Total Lead (Pb)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Lithium (Li)	mg/L	<0.020	0.020	B006480	<0.020	0.020	B004723	<0.020	0.020	B006480
Total Magnesium (Mg)	mg/L	7.0	0.20	B006480	7.7	0.20	B004723	7.4	0.20	B006480
Total Manganese (Mn)	mg/L	0.11	0.0040	B006480	0.13	0.0040	B004723	0.12	0.0040	B006480
Total Molybdenum (Mo)	mg/L	0.00073	0.00020	B006450	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Nickel (Ni)	mg/L	0.0017	0.00050	B006450	0.0019	0.00050	B004701	0.0015	0.00050	B006450
Total Phosphorus (P)	mg/L	<0.10	0.10	B006480	<0.10	0.10	B004723	<0.10	0.10	B006480
Total Potassium (K)	mg/L	3.4	0.30	B006480	3.6	0.30	B004723	3.4	0.30	B006480
Total Selenium (Se)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701	0.00020	0.00020	B006450
Total Silicon (Si)	mg/L	1.2	0.50	B006480	1.1	0.50	B004723	1.3	0.50	B006480
Total Silver (Ag)	mg/L	<0.00010	0.00010	B006450	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450
Total Sodium (Na)	mg/L	2.6	0.50	B006480	2.8	0.50	B004723	2.6	0.50	B006480
Total Strontium (Sr)	mg/L	0.048	0.020	B006480	0.050	0.020	B004723	0.049	0.020	B006480
Total Sulphur (S)	mg/L	40	0.20	B006480	45	0.20	B004723	43	0.20	B006480
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701	0.00052	0.00020	B006450
Total Tin (Sn)	mg/L	<0.0010	0.0010	B006450	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Titanium (Ti)	mg/L	0.0019	0.0010	B006450	0.0015	0.0010	B004701	0.0016	0.0010	B006450
Total Uranium (U)	mg/L	<0.00010	0.00010	B006450	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450
Total Vanadium (V)	mg/L	<0.0010	0.0010	B006450	<0.0014	0.0014	B004701	<0.0010	0.0010	B006450

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO210			BSO211			BSO212		
Sampling Date		2023/06/13 16:45			2023/06/13 16:50			2023/06/13 16:55		
COC Number		696658-01-01			696658-01-01			696658-01-01		
	UNITS	**CB-2**	**RDL**	**QC Batch**	**EB-1**	**RDL**	**QC Batch**	**EB-2**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.17	0.0030	B006450	0.21	0.0030	B004701	0.18	0.0030	B006450
RDL = Reportable Detection Limit										

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO213	BSO214	BSO215			BSO216		
Sampling Date		2023/06/13 17:05	2023/06/13 17:00	2023/06/13 17:10			2023/06/13 15:45		
COC Number		696658-01-01	696658-01-01	696658-01-01			696658-02-01		
	UNITS	NB-1	NB-2	CLD	RDL	QC Batch	CL-3 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.85	0.60	0.58	0.020	A998316	0.45	0.020	A998316
Total Aluminum (Al)	mg/L	0.087	0.056	0.050	0.0040	B004701	0.045	0.0030	B006450
Total Antimony (Sb)	mg/L	0.00098	<0.00060	<0.00060	0.00060	B004701	<0.00060	0.00060	B006450
Total Arsenic (As)	mg/L	<0.00020	<0.00020	0.00022	0.00020	B004701	0.00031	0.00020	B006450
Total Barium (Ba)	mg/L	0.014	0.011	0.011	0.010	B004723	0.011	0.010	B006480
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	B004723	<0.020	0.020	B006480
Total Calcium (Ca)	mg/L	50	43	45	0.30	B004723	40	0.30	B006480
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Cobalt (Co)	mg/L	0.0010	0.00048	0.00050	0.00030	B004701	0.00031	0.00030	B006450
Total Copper (Cu)	mg/L	0.024	0.019	0.022	0.0010	B004701	0.015	0.0010	B006450
Total Iron (Fe)	mg/L	1.7	1.7	1.8	0.060	B004723	1.3	0.060	B006480
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	B004723	<0.020	0.020	B006480
Total Magnesium (Mg)	mg/L	8.2	7.1	7.5	0.20	B004723	6.9	0.20	B006480
Total Manganese (Mn)	mg/L	0.15	0.11	0.11	0.0040	B004723	0.081	0.0040	B006480
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00086	0.00020	B004701	<0.00020	0.00020	B006450
Total Nickel (Ni)	mg/L	0.0021	0.0014	0.0016	0.00050	B004701	0.0011	0.00050	B006450
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	B004723	<0.10	0.10	B006480
Total Potassium (K)	mg/L	3.9	3.4	3.6	0.30	B004723	3.2	0.30	B006480
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Silicon (Si)	mg/L	1.2	1.2	1.2	0.50	B004723	1.2	0.50	B006480
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450
Total Sodium (Na)	mg/L	3.0	2.6	2.7	0.50	B004723	2.6	0.50	B006480
Total Strontium (Sr)	mg/L	0.054	0.046	0.048	0.020	B004723	0.046	0.020	B006480
Total Sulphur (S)	mg/L	49	41	43	0.20	B004723	38	0.20	B006480
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Titanium (Ti)	mg/L	0.0019	0.0018	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450
Total Vanadium (V)	mg/L	<0.0014	<0.0014	<0.0014	0.0014	B004701	<0.0010	0.0010	B006450

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO213	BSO214	BSO215			BSO216		
Sampling Date		2023/06/13 17:05	2023/06/13 17:00	2023/06/13 17:10			2023/06/13 15:45		
COC Number		696658-01-01	696658-01-01	696658-01-01			696658-02-01		
	UNITS	**NB-1**	**NB-2**	**CLD**	**RDL**	**QC Batch**	**CL-3 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.23	0.17	0.17	0.0030	B004701	0.14	0.0030	B006450
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO217		BSO218		BSO219		
Sampling Date		2023/06/13 15:50		2023/06/13 15:55		2023/06/13 16:00		
COC Number		696658-02-01		696658-02-01		696658-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.15	A998316	0.17	A998316	0.16	0.020	A998316
Total Aluminum (Al)	mg/L	0.051	B006450	0.052	B006434	0.049	0.0030	B006450
Total Antimony (Sb)	mg/L	<0.00060	B006450	<0.00060	B006434	<0.00060	0.00060	B006450
Total Arsenic (As)	mg/L	0.00035	B006450	0.00036	B006434	0.00045	0.00020	B006450
Total Barium (Ba)	mg/L	<0.010	B006480	0.010	B006446	<0.010	0.010	B006480
Total Beryllium (Be)	mg/L	<0.0010	B006450	<0.0010	B006434	<0.0010	0.0010	B006450
Total Boron (B)	mg/L	<0.020	B006480	<0.020	B006446	<0.020	0.020	B006480
Total Calcium (Ca)	mg/L	16	B006480	19	B006446	16	0.30	B006480
Total Chromium (Cr)	mg/L	<0.0010	B006450	<0.0010	B006434	<0.0010	0.0010	B006450
Total Cobalt (Co)	mg/L	<0.00030	B006450	<0.00030	B006434	<0.00030	0.00030	B006450
Total Copper (Cu)	mg/L	0.0078	B006450	0.0085	B006434	0.0083	0.0010	B006450
Total Iron (Fe)	mg/L	0.39	B006480	0.49	B006446	0.39	0.060	B006480
Total Lead (Pb)	mg/L	<0.00020	B006450	<0.00020	B006434	<0.00020	0.00020	B006450
Total Lithium (Li)	mg/L	<0.020	B006480	<0.020	B006446	<0.020	0.020	B006480
Total Magnesium (Mg)	mg/L	3.7	B006480	4.2	B006446	3.5	0.20	B006480
Total Manganese (Mn)	mg/L	0.018	B006480	0.024	B006446	0.019	0.0040	B006480
Total Molybdenum (Mo)	mg/L	<0.00020	B006450	<0.00020	B006434	<0.00020	0.00020	B006450
Total Nickel (Ni)	mg/L	0.00089	B006450	0.00072	B006434	0.00074	0.00050	B006450
Total Phosphorus (P)	mg/L	<0.10	B006480	<0.10	B006446	<0.10	0.10	B006480
Total Potassium (K)	mg/L	1.7	B006480	2.0	B006446	1.7	0.30	B006480
Total Selenium (Se)	mg/L	<0.00020	B006450	<0.00020	B006434	<0.00020	0.00020	B006450
Total Silicon (Si)	mg/L	0.92	B006480	1.0	B006446	0.82	0.50	B006480
Total Silver (Ag)	mg/L	<0.00010	B006450	<0.00010	B006434	<0.00010	0.00010	B006450
Total Sodium (Na)	mg/L	2.0	B006480	2.1	B006446	1.9	0.50	B006480
Total Strontium (Sr)	mg/L	0.029	B006480	0.032	B006446	0.029	0.020	B006480
Total Sulphur (S)	mg/L	11	B006480	14	B006446	11	0.20	B006480
Total Thallium (Tl)	mg/L	<0.00020	B006450	<0.00020	B006434	<0.00020	0.00020	B006450
Total Tin (Sn)	mg/L	<0.0010	B006450	<0.0010	B006434	<0.0010	0.0010	B006450
Total Titanium (Ti)	mg/L	0.0019	B006450	0.0016	B006434	0.0015	0.0010	B006450
Total Uranium (U)	mg/L	<0.00010	B006450	<0.00010	B006434	<0.00010	0.00010	B006450
Total Vanadium (V)	mg/L	<0.0010	B006450	<0.0010	B006434	<0.0010	0.0010	B006450

RDL = Reportable Detection Limit

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO217		BSO218		BSO219		
Sampling Date		2023/06/13 15:50		2023/06/13 15:55		2023/06/13 16:00		
COC Number		696658-02-01		696658-02-01		696658-02-01		
	UNITS	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.046	B006450	0.054	B006434	0.048	0.0030	B006450
RDL = Reportable Detection Limit								

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO220			BSO221			BSO221		
Sampling Date		2023/06/13 15:35			2023/06/13 15:40			2023/06/13 15:40		
COC Number		696658-02-01			696658-02-01			696658-02-01		
	UNITS	CL-8 SFC	RDL	QC Batch	CL-8 BTM	RDL	QC Batch	CL-8 BTM Lab-Dup	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.17	0.020	A998316	0.16	0.020	A998316			
Total Aluminum (Al)	mg/L	0.050	0.0040	B004701	0.056	0.0030	B006450	0.060	0.0030	B006450
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B004701	<0.00060	0.00060	B006450	<0.00060	0.00060	B006450
Total Arsenic (As)	mg/L	0.00028	0.00020	B004701	0.00046	0.00020	B006450	0.00053	0.00020	B006450
Total Barium (Ba)	mg/L	0.010	0.010	B004723	<0.010	0.010	B006480	<0.010	0.010	B006480
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450	<0.0010	0.0010	B006450
Total Boron (B)	mg/L	<0.020	0.020	B004723	<0.020	0.020	B006480	<0.020	0.020	B006480
Total Calcium (Ca)	mg/L	20	0.30	B004723	13	0.30	B006480	13	0.30	B006480
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450	<0.0010	0.0010	B006450
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B004701	<0.00030	0.00030	B006450	<0.00030	0.00030	B006450
Total Copper (Cu)	mg/L	0.0092	0.0010	B004701	0.0070	0.0010	B006450	0.0071	0.0010	B006450
Total Iron (Fe)	mg/L	0.54	0.060	B004723	0.28	0.060	B006480	0.28	0.060	B006480
Total Lead (Pb)	mg/L	<0.00020	0.00020	B004701	0.00027	0.00020	B006450	0.00027	0.00020	B006450
Total Lithium (Li)	mg/L	<0.020	0.020	B004723	<0.020	0.020	B006480	<0.020	0.020	B006480
Total Magnesium (Mg)	mg/L	4.3	0.20	B004723	3.3	0.20	B006480	3.3	0.20	B006480
Total Manganese (Mn)	mg/L	0.030	0.0040	B004723	0.011	0.0040	B006480	0.011	0.0040	B006480
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450	<0.00020	0.00020	B006450
Total Nickel (Ni)	mg/L	0.00065	0.00050	B004701	0.00085	0.00050	B006450	0.00078	0.00050	B006450
Total Phosphorus (P)	mg/L	<0.10	0.10	B004723	<0.10	0.10	B006480	<0.10	0.10	B006480
Total Potassium (K)	mg/L	2.0	0.30	B004723	1.6	0.30	B006480	1.6	0.30	B006480
Total Selenium (Se)	mg/L	<0.00020	0.00020	B004701	<0.00020	0.00020	B006450	<0.00020	0.00020	B006450
Total Silicon (Si)	mg/L	1.0	0.50	B004723	0.92	0.50	B006480	0.89	0.50	B006480
Total Silver (Ag)	mg/L	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450	<0.00010	0.00010	B006450
Total Sodium (Na)	mg/L	2.1	0.50	B004723	1.9	0.50	B006480	1.9	0.50	B006480
Total Strontium (Sr)	mg/L	0.032	0.020	B004723	0.027	0.020	B006480	0.027	0.020	B006480
Total Sulphur (S)	mg/L	16	0.20	B004723	7.6	0.20	B006480	7.6	0.20	B006480
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B004701	0.00042	0.00020	B006450	0.00034	0.00020	B006450
Total Tin (Sn)	mg/L	<0.0010	0.0010	B004701	<0.0010	0.0010	B006450	<0.0010	0.0010	B006450
Total Titanium (Ti)	mg/L	0.0012	0.0010	B004701	0.0022	0.0010	B006450	0.0024	0.0010	B006450
Total Uranium (U)	mg/L	<0.00010	0.00010	B004701	<0.00010	0.00010	B006450	<0.00010	0.00010	B006450
Total Vanadium (V)	mg/L	<0.0014	0.0014	B004701	<0.0010	0.0010	B006450	<0.0010	0.0010	B006450

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO220			BSO221			BSO221		
Sampling Date		2023/06/13 15:35			2023/06/13 15:40			2023/06/13 15:40		
COC Number		696658-02-01			696658-02-01			696658-02-01		
	UNITS	CL-8 SFC	RDL	QC Batch	CL-8 BTM	RDL	QC Batch	CL-8 BTM Lab-Dup	RDL	QC Batch
Total Zinc (Zn)	mg/L	0.057	0.0030	B004701	0.033	0.0030	B006450	0.033	0.0030	B006450

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO222	BSO223			BSO224		
Sampling Date		2023/06/13 16:05	2023/06/13 16:10			2023/06/13 15:25		
COC Number		696658-02-01	696658-02-01			696658-02-01		
	UNITS	CL-2 SFC	CL-2 BTM	RDL	QC Batch	CL-4 SFC	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.090	0.095	0.020	A998316	0.099	0.030	A998316
Total Aluminum (Al)	mg/L	0.046	0.040	0.0040	B004701	0.050	0.0030	B006423
Total Antimony (Sb)	mg/L	0.00063	<0.00060	0.00060	B004701	<0.00060	0.00060	B006423
Total Arsenic (As)	mg/L	0.00046	0.00027	0.00020	B004701	0.00044	0.00020	B006423
Total Barium (Ba)	mg/L	0.010	<0.010	0.010	B004723	<0.010	0.010	B006431
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006423
Total Boron (B)	mg/L	<0.020	<0.020	0.020	B004723	<0.020	0.020	B006431
Total Calcium (Ca)	mg/L	14	13	0.30	B004723	13	0.30	B006431
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006423
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B004701	<0.00030	0.00030	B006423
Total Copper (Cu)	mg/L	0.0073	0.0075	0.0010	B004701	0.0067	0.0010	B006423
Total Iron (Fe)	mg/L	0.27	0.47	0.060	B004723	0.25	0.060	B006431
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006423
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B004723	<0.020	0.020	B006431
Total Magnesium (Mg)	mg/L	3.5	3.4	0.20	B004723	3.4	0.20	B006431
Total Manganese (Mn)	mg/L	0.010	0.019	0.0040	B004723	0.0099	0.0040	B006431
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006423
Total Nickel (Ni)	mg/L	0.00061	0.00078	0.00050	B004701	0.00066	0.00050	B006423
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B004723	<0.10	0.10	B006431
Total Potassium (K)	mg/L	1.7	1.6	0.30	B004723	1.6	0.30	B006431
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006423
Total Silicon (Si)	mg/L	0.96	1.0	0.50	B004723	0.94	0.50	B006431
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B004701	<0.00010	0.00010	B006423
Total Sodium (Na)	mg/L	2.0	1.9	0.50	B004723	1.9	0.50	B006431
Total Strontium (Sr)	mg/L	0.028	0.026	0.020	B004723	0.027	0.020	B006431
Total Sulphur (S)	mg/L	7.9	6.9	0.20	B004723	7.5	0.20	B006431
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	0.00020	B006423
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B004701	<0.0010	0.0010	B006423
Total Titanium (Ti)	mg/L	0.0018	<0.0010	0.0010	B004701	0.0022	0.0010	B006423
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B004701	<0.00010	0.00010	B006423
Total Vanadium (V)	mg/L	<0.0014	<0.0014	0.0014	B004701	<0.0010	0.0010	B006423

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO222	BSO223			BSO224		
Sampling Date		2023/06/13 16:05	2023/06/13 16:10			2023/06/13 15:25		
COC Number		696658-02-01	696658-02-01			696658-02-01		
	UNITS	**CL-2 SFC**	**CL-2 BTM**	**RDL**	**QC Batch**	**CL-4 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.034	0.035	0.0030	B004701	0.035	0.0030	B006423
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO225			BSO226		BSO227		
Sampling Date		2023/06/13 15:30			2023/06/13 15:15		2023/06/13 15:20		
COC Number		696658-02-01			696658-03-01		696658-03-01		
	UNITS	CL-4 BTM	RDL	QC Batch	CL-5 SFC	QC Batch	CL-5 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.081	0.020	A998316	0.10	A998316	0.10	0.020	A998316
Total Aluminum (Al)	mg/L	0.047	0.0040	B004701	0.063	B006450	0.055	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B004701	<0.00060	B006450	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	0.00037	0.00020	B004701	0.00053	B006450	0.00042	0.00020	B006434
Total Barium (Ba)	mg/L	0.010	0.010	B004723	<0.010	B006480	<0.010	0.010	B006446
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B004701	<0.0010	B006450	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	<0.020	0.020	B004723	<0.020	B006480	<0.020	0.020	B006446
Total Calcium (Ca)	mg/L	12	0.30	B004723	12	B006480	11	0.30	B006446
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B004701	<0.0010	B006450	<0.0010	0.0010	B006434
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B004701	<0.00030	B006450	<0.00030	0.00030	B006434
Total Copper (Cu)	mg/L	0.0058	0.0010	B004701	0.0065	B006450	0.0061	0.0010	B006434
Total Iron (Fe)	mg/L	0.63	0.060	B004723	0.25	B006480	0.59	0.060	B006446
Total Lead (Pb)	mg/L	<0.00020	0.00020	B004701	<0.00020	B006450	<0.00020	0.00020	B006434
Total Lithium (Li)	mg/L	<0.020	0.020	B004723	<0.020	B006480	<0.020	0.020	B006446
Total Magnesium (Mg)	mg/L	3.2	0.20	B004723	3.3	B006480	3.1	0.20	B006446
Total Manganese (Mn)	mg/L	0.026	0.0040	B004723	0.012	B006480	0.027	0.0040	B006446
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B004701	<0.00020	B006450	<0.00020	0.00020	B006434
Total Nickel (Ni)	mg/L	0.00059	0.00050	B004701	0.00052	B006450	0.00058	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.10	0.10	B004723	<0.10	B006480	<0.10	0.10	B006446
Total Potassium (K)	mg/L	1.6	0.30	B004723	1.5	B006480	1.5	0.30	B006446
Total Selenium (Se)	mg/L	<0.00020	0.00020	B004701	<0.00020	B006450	<0.00020	0.00020	B006434
Total Silicon (Si)	mg/L	0.96	0.50	B004723	0.87	B006480	0.89	0.50	B006446
Total Silver (Ag)	mg/L	<0.00010	0.00010	B004701	<0.00010	B006450	<0.00010	0.00010	B006434
Total Sodium (Na)	mg/L	2.0	0.50	B004723	1.9	B006480	1.9	0.50	B006446
Total Strontium (Sr)	mg/L	0.026	0.020	B004723	0.027	B006480	0.026	0.020	B006446
Total Sulphur (S)	mg/L	5.7	0.20	B004723	6.3	B006480	5.1	0.20	B006446
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B004701	<0.00020	B006450	<0.00020	0.00020	B006434
Total Tin (Sn)	mg/L	<0.0010	0.0010	B004701	<0.0010	B006450	<0.0010	0.0010	B006434
Total Titanium (Ti)	mg/L	<0.0010	0.0010	B004701	0.0036	B006450	0.0023	0.0010	B006434
Total Uranium (U)	mg/L	<0.00010	0.00010	B004701	<0.00010	B006450	<0.00010	0.00010	B006434
Total Vanadium (V)	mg/L	<0.0014	0.0014	B004701	<0.0010	B006450	<0.0010	0.0010	B006434

RDL = Reportable Detection Limit

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO225			BSO226		BSO227		
Sampling Date		2023/06/13 15:30			2023/06/13 15:15		2023/06/13 15:20		
COC Number		696658-02-01			696658-03-01		696658-03-01		
	UNITS	**CL-4 BTM**	**RDL**	**QC Batch**	**CL-5 SFC**	**QC Batch**	**CL-5 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.029	0.0030	B004701	0.033	B006450	0.029	0.0030	B006434
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO228	BSO229			BSO230	BSO231		
Sampling Date		2023/06/13 15:05	2023/06/13 15:10			2023/06/13	2023/06/13		
COC Number		696658-03-01	696658-03-01			696658-03-01	696658-03-01		
	UNITS	CL-6 SFC	CL-6 BTM	RDL	QC Batch	TRIP BLANK	SW-106	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.058	0.039	0.020	A998316	0.032	0.36	0.020	A998316
Total Aluminum (Al)	mg/L	0.054	0.068	0.0040	B004701	0.0036	0.047	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B004701	<0.00060	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	0.00034	0.00049	0.00020	B004701	<0.00020	0.00029	0.00020	B006434
Total Barium (Ba)	mg/L	0.010	0.010	0.010	B004723	<0.010	<0.010	0.010	B006446
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B004701	<0.0010	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	<0.020	<0.020	0.020	B004723	<0.020	<0.020	0.020	B006446
Total Calcium (Ca)	mg/L	12	10	0.30	B004723	<0.30	32	0.30	B006446
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B004701	<0.0010	<0.0010	0.0010	B006434
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B004701	<0.00030	0.00031	0.00030	B006434
Total Copper (Cu)	mg/L	0.0054	0.0043	0.0010	B004701	0.0024	0.013	0.0010	B006434
Total Iron (Fe)	mg/L	0.20	0.26	0.060	B004723	<0.060	1.0	0.060	B006446
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	<0.00020	0.00020	B006434
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B004723	<0.020	<0.020	0.020	B006446
Total Magnesium (Mg)	mg/L	3.3	3.1	0.20	B004723	<0.20	5.6	0.20	B006446
Total Manganese (Mn)	mg/L	0.0096	0.016	0.0040	B004723	<0.0040	0.065	0.0040	B006446
Total Molybdenum (Mo)	mg/L	0.00079	<0.00020	0.00020	B004701	<0.00020	<0.00020	0.00020	B006434
Total Nickel (Ni)	mg/L	0.00053	0.00056	0.00050	B004701	<0.00050	0.0011	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B004723	<0.10	<0.10	0.10	B006446
Total Potassium (K)	mg/L	1.6	1.5	0.30	B004723	<0.30	2.6	0.30	B006446
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	<0.00020	0.00020	B006434
Total Silicon (Si)	mg/L	0.79	0.77	0.50	B004723	<0.50	1.0	0.50	B006446
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B004701	<0.00010	<0.00010	0.00010	B006434
Total Sodium (Na)	mg/L	2.0	2.0	0.50	B004723	<0.50	2.2	0.50	B006446
Total Strontium (Sr)	mg/L	0.027	0.026	0.020	B004723	<0.020	0.040	0.020	B006446
Total Sulphur (S)	mg/L	5.8	4.4	0.20	B004723	<0.20	30	0.20	B006446
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B004701	<0.00020	<0.00020	0.00020	B006434
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B004701	<0.0010	<0.0010	0.0010	B006434
Total Titanium (Ti)	mg/L	0.0018	0.0019	0.0010	B004701	<0.0010	0.0014	0.0010	B006434
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B004701	<0.00010	<0.00010	0.00010	B006434
Total Vanadium (V)	mg/L	<0.0014	<0.0014	0.0014	B004701	<0.0010	<0.0010	0.0010	B006434

RDL = Reportable Detection Limit

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO228	BSO229			BSO230	BSO231		
Sampling Date		2023/06/13 15:05	2023/06/13 15:10			2023/06/13	2023/06/13		
COC Number		696658-03-01	696658-03-01			696658-03-01	696658-03-01		
	UNITS	CL-6 SFC	CL-6 BTM	RDL	QC Batch	TRIP BLANK	SW-106	RDL	QC Batch
Total Zinc (Zn)	mg/L	0.024	0.021	0.0030	B004701	<0.0030	0.11	0.0030	B006434
RDL = Reportable Detection Limit									

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO232			BSO233		
Sampling Date		2023/06/13			2023/06/13		
COC Number		696658-03-01			696658-03-01		
	UNITS	SW-107	RDL	QC Batch	SW-108	RDL	QC Batch
Elements							
Total Cadmium (Cd)	ug/L	0.097	0.020	A998316	0.72	0.020	A998316
Total Aluminum (Al)	mg/L	0.046	0.0030	B006450	0.071	0.0040	B004701
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B006450	<0.00060	0.00060	B004701
Total Arsenic (As)	mg/L	0.00038	0.00020	B006450	<0.00020	0.00020	B004701
Total Barium (Ba)	mg/L	<0.010	0.010	B006480	0.013	0.010	B004723
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B006450	<0.0010	0.0010	B004701
Total Boron (B)	mg/L	<0.020	0.020	B006480	<0.020	0.020	B004723
Total Calcium (Ca)	mg/L	13	0.30	B006480	48	0.30	B004723
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B006450	<0.0010	0.0010	B004701
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B006450	0.00083	0.00030	B004701
Total Copper (Cu)	mg/L	0.0070	0.0010	B006450	0.024	0.0010	B004701
Total Iron (Fe)	mg/L	0.49	0.060	B006480	1.7	0.060	B004723
Total Lead (Pb)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701
Total Lithium (Li)	mg/L	<0.020	0.020	B006480	<0.020	0.020	B004723
Total Magnesium (Mg)	mg/L	3.4	0.20	B006480	7.9	0.20	B004723
Total Manganese (Mn)	mg/L	0.019	0.0040	B006480	0.14	0.0040	B004723
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701
Total Nickel (Ni)	mg/L	0.00064	0.00050	B006450	0.0019	0.00050	B004701
Total Phosphorus (P)	mg/L	<0.10	0.10	B006480	<0.10	0.10	B004723
Total Potassium (K)	mg/L	1.6	0.30	B006480	3.8	0.30	B004723
Total Selenium (Se)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701
Total Silicon (Si)	mg/L	1.1	0.50	B006480	1.1	0.50	B004723
Total Silver (Ag)	mg/L	<0.00010	0.00010	B006450	<0.00010	0.00010	B004701
Total Sodium (Na)	mg/L	2.0	0.50	B006480	2.9	0.50	B004723
Total Strontium (Sr)	mg/L	0.028	0.020	B006480	0.051	0.020	B004723
Total Sulphur (S)	mg/L	7.1	0.20	B006480	47	0.20	B004723
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B006450	<0.00020	0.00020	B004701
Total Tin (Sn)	mg/L	<0.0010	0.0010	B006450	<0.0010	0.0010	B004701
Total Titanium (Ti)	mg/L	0.0012	0.0010	B006450	0.0015	0.0010	B004701
Total Uranium (U)	mg/L	<0.00010	0.00010	B006450	<0.00010	0.00010	B004701
Total Vanadium (V)	mg/L	<0.0010	0.0010	B006450	<0.0014	0.0014	B004701
RDL = Reportable Detection Limit							

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSO232			BSO233		
Sampling Date		2023/06/13			2023/06/13		
COC Number		696658-03-01			696658-03-01		
	UNITS	**SW-107**	**RDL**	**QC Batch**	**SW-108**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.039	0.0030	B006450	0.22	0.0030	B004701
RDL = Reportable Detection Limit							

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Report Date: 2023/06/26

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO206			BSO206			BSO207		
Sampling Date		2023/06/13 17:30			2023/06/13 17:30			2023/06/13 16:35		
COC Number		696658-01-01			696658-01-01			696658-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	32	0.50	A998363				130	0.50	A998363
Total Hardness (CaCO3)	mg/L	29.4	0.50	A997720				121	0.50	A997720
Misc. Inorganics										
pH	pH	7.02	N/A	B002498				6.69	N/A	B002498
Total Organic Carbon (C)	mg/L	12	0.50	B002360				8.5	0.50	B002360
Total Suspended Solids	mg/L	<1.0	1.0	B002126				1.2	1.0	B002126
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11 (1)	0.50	B002421				7.6 (1)	0.50	B002421
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B002496				<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L	24	1.0	B002496				13	1.0	B002496
Bicarbonate (HCO3)	mg/L	29	1.0	B002496				16	1.0	B002496
Carbonate (CO3)	mg/L	<1.0	1.0	B002496				<1.0	1.0	B002496
Hydroxide (OH)	mg/L	<1.0	1.0	B002496				<1.0	1.0	B002496
Sulphate (SO4)	mg/L	3.1	1.0	B004685	3.0	1.0	B004685	120	1.0	B002797
Physical Properties										
Turbidity	NTU	2.3	0.10	A998651				9.0	0.10	A998651

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Bureau Veritas Job #: C344134
Report Date: 2023/06/26

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO208		BSO209		BSO210			BSO210		
Sampling Date		2023/06/13 16:30		2023/06/13 16:40		2023/06/13 16:45			2023/06/13 16:45		
COC Number		696658-01-01		696658-01-01		696658-01-01			696658-01-01		
	UNITS	**SB-2**	**QC Batch**	**CB-1**	**QC Batch**	**CB-2**	**RDL**	**QC Batch**	**CB-2 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters											
Hardness (CaCO3)	mg/L	130	A998363	140	A998363	140	0.50	A998363			
Total Hardness (CaCO3)	mg/L	121	A997720	133	A997720	134	0.50	A997720			
Misc. Inorganics											
pH	pH	6.69	B002498	6.51	B005203	6.67	N/A	B002498			
Total Organic Carbon (C)	mg/L	9.3	B002360	9.2	B002360	9.1	0.50	B002360			
Total Suspended Solids	mg/L	1.9	B002126	1.8	B002126	2.3	1.0	B002129	2.2	1.0	B002129
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	6.9 (1)	B002511	7.1 (1)	B002421	7.7 (1)	0.50	B002511			
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	B002496	<1.0	B005196	<1.0	1.0	B002496			
Alkalinity (Total as CaCO3)	mg/L	14	B002496	13	B005196	12	1.0	B002496			
Bicarbonate (HCO3)	mg/L	17	B002496	16	B005196	15	1.0	B002496			
Carbonate (CO3)	mg/L	<1.0	B002496	<1.0	B005196	<1.0	1.0	B002496			
Hydroxide (OH)	mg/L	<1.0	B002496	<1.0	B005196	<1.0	1.0	B002496			
Sulphate (SO4)	mg/L	110 (2)	B002797	120 (2)	B002797	120 (2)	5.0	B002797			
Physical Properties											
Turbidity	NTU	8.2	A998651	7.6	A998651	8.0	0.10	A998651			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Detection limits raised due to matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO211			BSO211			BSO212		
Sampling Date		2023/06/13 16:50			2023/06/13 16:50			2023/06/13 16:55		
COC Number		696658-01-01			696658-01-01			696658-01-01		
	UNITS	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch	EB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	160	0.50	A998363				160	0.50	A998363
Total Hardness (CaCO3)	mg/L	147	0.50	A997720				141	0.50	A997720
Misc. Inorganics										
pH	pH	6.55	N/A	B002498				6.61	N/A	B002498
Total Organic Carbon (C)	mg/L	8.5	0.50	B002360				9.4	0.50	B002360
Total Suspended Solids	mg/L	1.8	1.0	B002129				1.5	1.0	B002129
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.5 (1)	0.50	B002511				7.1 (1)	0.50	B002511
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B002496				<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L	8.6	1.0	B002496				11	1.0	B002496
Bicarbonate (HCO3)	mg/L	11	1.0	B002496				13	1.0	B002496
Carbonate (CO3)	mg/L	<1.0	1.0	B002496				<1.0	1.0	B002496
Hydroxide (OH)	mg/L	<1.0	1.0	B002496				<1.0	1.0	B002496
Sulphate (SO4)	mg/L	150	5.0	B002797				140	5.0	B002797
Physical Properties										
Turbidity	NTU	8.7	0.10	A999237	8.5	0.10	A999237	12	0.10	A999237

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO213	BSO214	BSO215			BSO216		
Sampling Date		2023/06/13 17:05	2023/06/13 17:00	2023/06/13 17:10			2023/06/13 15:45		
COC Number		696658-01-01	696658-01-01	696658-01-01			696658-02-01		
	UNITS	**NB-1**	**NB-2**	**CLD**	**RDL**	**QC Batch**	**CL-3 SFC**	**RDL**	**QC Batch**
Calculated Parameters									
Hardness (CaCO3)	mg/L	170	150	150	0.50	A998363	140	0.50	A998363
Total Hardness (CaCO3)	mg/L	159	135	143	0.50	A997720	128	0.50	A997720
Misc. Inorganics									
pH	pH	6.53	6.62	6.60	N/A	B002498	6.70	N/A	B002498
Total Organic Carbon (C)	mg/L	8.5	9.7	9.5	0.50	B002360	8.9	0.50	B002360
Total Suspended Solids	mg/L	2.5	1.1	2.2	1.0	B002129	1.3	1.0	B002129
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	5.8 (1)	6.6 (1)	6.9 (1)	0.50	B002416	7.6 (1)	0.50	B002511
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	<1.0	<1.0	1.0	B002496	<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L	8.3	11	11	1.0	B002496	14	1.0	B002496
Bicarbonate (HCO3)	mg/L	10	14	13	1.0	B002496	17	1.0	B002496
Carbonate (CO3)	mg/L	<1.0	<1.0	<1.0	1.0	B002496	<1.0	1.0	B002496
Hydroxide (OH)	mg/L	<1.0	<1.0	<1.0	1.0	B002496	<1.0	1.0	B002496
Sulphate (SO4)	mg/L	150	130	140	5.0	B006449	120	1.0	B002797
Physical Properties									
Turbidity	NTU	9.8	11	9.4	0.10	A999237	8.2	0.10	A999237

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO217		BSO218		BSO219		
Sampling Date		2023/06/13 15:50		2023/06/13 15:55		2023/06/13 16:00		
COC Number		696658-02-01		696658-02-01		696658-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Calculated Parameters								
Hardness (CaCO3)	mg/L	61	A998363	68	A998363	62	0.50	A998363
Total Hardness (CaCO3)	mg/L	55.2	A997720	64.7	A997720	54.3	0.50	A997720
Misc. Inorganics								
pH	pH	6.96	B002498	6.94	B002498	6.93	N/A	B002498
Total Organic Carbon (C)	mg/L	14	B002351	12	B002351	10	0.50	B002360
Total Suspended Solids	mg/L	1.8	B002129	1.6	B002129	1.6	1.0	B002129
Lab Filtered Inorganics								
Dissolved Organic Carbon (C)	mg/L	8.0 (1)	B002421	8.2 (1)	B002511	9.0 (1)	0.50	B002416
Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	B002496	<1.0	B002496	<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L	23	B002496	21	B002496	23	1.0	B002496
Bicarbonate (HCO3)	mg/L	28	B002496	26	B002496	28	1.0	B002496
Carbonate (CO3)	mg/L	<1.0	B002496	<1.0	B002496	<1.0	1.0	B002496
Hydroxide (OH)	mg/L	<1.0	B002496	<1.0	B002496	<1.0	1.0	B002496
Sulphate (SO4)	mg/L	36	B002797	43	B002797	39	1.0	B006449
Physical Properties								
Turbidity	NTU	5.3	A999237	4.6	A999237	3.3	0.10	A999237

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Report Date: 2023/06/26

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO219			BSO220		BSO221		
Sampling Date		2023/06/13 16:00			2023/06/13 15:35		2023/06/13 15:40		
COC Number		696658-02-01			696658-02-01		696658-02-01		
	UNITS	CL-7 BTM Lab-Dup	RDL	QC Batch	CL-8 SFC	QC Batch	CL-8 BTM	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				74	A998363	51	0.50	A998363
Total Hardness (CaCO3)	mg/L				67.8	A998364	46.2	0.50	A998364
Misc. Inorganics									
pH	pH				6.89	B002498	6.97	N/A	B002498
Total Organic Carbon (C)	mg/L	9.9	0.50	B002360	9.2	B002360	12	0.50	B002351
Total Suspended Solids	mg/L				1.2	B002129	1.0	1.0	B002129
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L				8.5 (1)	B002416	8.3 (1)	0.50	B002416
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	B002496	<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L				21	B002496	23	1.0	B002496
Bicarbonate (HCO3)	mg/L				26	B002496	28	1.0	B002496
Carbonate (CO3)	mg/L				<1.0	B002496	<1.0	1.0	B002496
Hydroxide (OH)	mg/L				<1.0	B002496	<1.0	1.0	B002496
Sulphate (SO4)	mg/L				52	B006449	25	1.0	B001757
Physical Properties									
Turbidity	NTU				3.3	A999237	4.4	0.10	A999237

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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KGS Group
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Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO221			BSO222			BSO222		
Sampling Date		2023/06/13 15:40			2023/06/13 16:05			2023/06/13 16:05		
COC Number		696658-02-01			696658-02-01			696658-02-01		
	UNITS	CL-8 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	RDL	QC Batch	CL-2 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				50	0.50	A998363			
Total Hardness (CaCO3)	mg/L				48.4	0.50	A998364			
Misc. Inorganics										
pH	pH				6.85	N/A	B002498	6.95	N/A	B002498
Total Organic Carbon (C)	mg/L				11	0.50	B002365			
Total Suspended Solids	mg/L				<1.0	1.0	B002129			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.4	0.50	B002416	11 (1)	0.50	B002416			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B002496	<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L				23	1.0	B002496	24	1.0	B002496
Bicarbonate (HCO3)	mg/L				29	1.0	B002496	29	1.0	B002496
Carbonate (CO3)	mg/L				<1.0	1.0	B002496	<1.0	1.0	B002496
Hydroxide (OH)	mg/L				<1.0	1.0	B002496	<1.0	1.0	B002496
Sulphate (SO4)	mg/L	25	1.0	B001757	25	1.0	B006449			
Physical Properties										
Turbidity	NTU				3.4	0.10	A999237			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO223		BSO224	BSO225		BSO226		
Sampling Date		2023/06/13 16:10		2023/06/13 15:25	2023/06/13 15:30		2023/06/13 15:15		
COC Number		696658-02-01		696658-02-01	696658-02-01		696658-03-01		
	UNITS	CL-2 BTM	QC Batch	CL-4 SFC	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	48	A998363	49	44	A998363	46	0.50	A998363
Total Hardness (CaCO3)	mg/L	45.4	A998364	46.8	42.6	A998364	44.3	0.50	A998364
Misc. Inorganics									
pH	pH	6.89	B002498	7.00	6.93	B002498	7.01	N/A	B002498
Total Organic Carbon (C)	mg/L	10	B002365	10	9.9	B002365	12	0.50	B002360
Total Suspended Solids	mg/L	1.4	B002129	1.0	1.3	B002129	1.1	1.0	B002129
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.3 (1)	B002416	9.4 (1)	8.6 (1)	B002416	9.5 (1)	0.50	B002416
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B002496	<1.0	<1.0	B002496	<1.0	1.0	B002496
Alkalinity (Total as CaCO3)	mg/L	24	B002496	24	25	B002496	24	1.0	B002496
Bicarbonate (HCO3)	mg/L	30	B002496	30	31	B002496	29	1.0	B002496
Carbonate (CO3)	mg/L	<1.0	B002496	<1.0	<1.0	B002496	<1.0	1.0	B002496
Hydroxide (OH)	mg/L	<1.0	B002496	<1.0	<1.0	B002496	<1.0	1.0	B002496
Sulphate (SO4)	mg/L	23	B002785	24	18	B006449	20	1.0	B006449
Physical Properties									
Turbidity	NTU	6.1	A999237	5.2	6.9	A999237	7.4	0.10	A999237

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO227	BSO228	BSO229		BSO230		
Sampling Date		2023/06/13 15:20	2023/06/13 15:05	2023/06/13 15:10		2023/06/13		
COC Number		696658-03-01	696658-03-01	696658-03-01		696658-03-01		
	UNITS	**CL-5 BTM**	**CL-6 SFC**	**CL-6 BTM**	**QC Batch**	**TRIP BLANK**	**RDL**	**QC Batch**
Calculated Parameters								
Hardness (CaCO3)	mg/L	42	45	40	A998363	<0.50	0.50	A998363
Total Hardness (CaCO3)	mg/L	40.3	42.9	38.7	A998364	<0.50	0.50	A998364
Misc. Inorganics								
pH	pH	6.75	6.79	6.77	B005203	5.00	N/A	B005203
Total Organic Carbon (C)	mg/L	10	9.8	9.5	B002365	<0.50	0.50	B002365
Total Suspended Solids	mg/L	<1.0	<1.0	2.5	B002129	<1.0	1.0	B002135
Lab Filtered Inorganics								
Dissolved Organic Carbon (C)	mg/L	8.9 (1)	9.5 (1)	8.1 (1)	B002416	<0.50 (1)	0.50	B002416
Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	<1.0	<1.0	B005196	<1.0	1.0	B005196
Alkalinity (Total as CaCO3)	mg/L	30	27	30	B005196	<1.0	1.0	B005196
Bicarbonate (HCO3)	mg/L	37	33	36	B005196	<1.0	1.0	B005196
Carbonate (CO3)	mg/L	<1.0	<1.0	<1.0	B005196	<1.0	1.0	B005196
Hydroxide (OH)	mg/L	<1.0	<1.0	<1.0	B005196	<1.0	1.0	B005196
Sulphate (SO4)	mg/L	17	18	14	B006437	<1.0	1.0	B006437
Physical Properties								
Turbidity	NTU	7.2	4.1	6.6	A999237	<0.10	0.10	B009143

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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KGS Group
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Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO230			BSO231			BSO232		
Sampling Date		2023/06/13			2023/06/13			2023/06/13		
COC Number		696658-03-01			696658-03-01			696658-03-01		
	UNITS	TRIP BLANK Lab-Dup	RDL	QC Batch	SW-106	RDL	QC Batch	SW-107	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				120	0.50	A998363	50	0.50	A998363
Total Hardness (CaCO3)	mg/L				103	0.50	A998364	46.7	0.50	A998364
Misc. Inorganics										
pH	pH				6.45	N/A	B005203	6.73	N/A	B005203
Total Organic Carbon (C)	mg/L				8.4	0.50	B002365	10	0.50	B002351
Total Suspended Solids	mg/L	<1.0	1.0	B002135	2.3	0.99	B002135	<1.0	1.0	B002135
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				7.8 (1)	0.50	B002416	9.1 (1)	0.50	B002416
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B005196	<1.0	1.0	B005196
Alkalinity (Total as CaCO3)	mg/L				15	1.0	B005196	29	1.0	B005196
Bicarbonate (HCO3)	mg/L				19	1.0	B005196	35	1.0	B005196
Carbonate (CO3)	mg/L				<1.0	1.0	B005196	<1.0	1.0	B005196
Hydroxide (OH)	mg/L				<1.0	1.0	B005196	<1.0	1.0	B005196
Sulphate (SO4)	mg/L				100	1.0	B006437	24	1.0	B005558
Physical Properties										
Turbidity	NTU				4.4	0.10	A999239	5.4	0.10	A999239

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BSO233		
Sampling Date		2023/06/13		
COC Number		696658-03-01		
	UNITS	SW-108	RDL	QC Batch
Calculated Parameters				
Hardness (CaCO3)	mg/L	160	0.50	A998363
Total Hardness (CaCO3)	mg/L	151	0.50	A998364
Misc. Inorganics				
pH	pH	6.41	N/A	B005203
Total Organic Carbon (C)	mg/L	7.4	0.50	B002360
Total Suspended Solids	mg/L	2.2	1.0	B002135
Lab Filtered Inorganics				
Dissolved Organic Carbon (C)	mg/L	6.4 (1)	0.50	B002416
Anions				
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B005196
Alkalinity (Total as CaCO3)	mg/L	11	1.0	B005196
Bicarbonate (HCO3)	mg/L	13	1.0	B005196
Carbonate (CO3)	mg/L	<1.0	1.0	B005196
Hydroxide (OH)	mg/L	<1.0	1.0	B005196
Sulphate (SO4)	mg/L	150	5.0	B006437
Physical Properties				
Turbidity	NTU	8.3	0.10	A999239

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	-1.3°C
Package 2	0.7°C
Package 3	1.3°C
Package 4	1.0°C

Sample BSO230 [TRIP BLANK] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A998651	Turbidity	2023/06/16			105	80 - 120	<0.10	NTU	7.8	20
A999237	Turbidity	2023/06/16			103	80 - 120	<0.10	NTU	1.5	20
A999239	Turbidity	2023/06/16			104	80 - 120	<0.10	NTU	3.4	20
B000667	Dissolved Aluminum (Al)	2023/06/20	90	80 - 120	103	80 - 120	<0.0030	mg/L		
B000667	Dissolved Antimony (Sb)	2023/06/20	106	80 - 120	105	80 - 120	<0.00060	mg/L		
B000667	Dissolved Arsenic (As)	2023/06/20	94	80 - 120	87	80 - 120	<0.00020	mg/L		
B000667	Dissolved Beryllium (Be)	2023/06/20	89	80 - 120	94	80 - 120	<0.0010	mg/L		
B000667	Dissolved Chromium (Cr)	2023/06/20	98	80 - 120	96	80 - 120	<0.0010	mg/L		
B000667	Dissolved Cobalt (Co)	2023/06/20	94	80 - 120	97	80 - 120	<0.00030	mg/L		
B000667	Dissolved Copper (Cu)	2023/06/20	92	80 - 120	98	80 - 120	<0.0010	mg/L		
B000667	Dissolved Lead (Pb)	2023/06/20	85	80 - 120	90	80 - 120	<0.00020	mg/L		
B000667	Dissolved Molybdenum (Mo)	2023/06/20	102	80 - 120	90	80 - 120	<0.00020	mg/L		
B000667	Dissolved Nickel (Ni)	2023/06/20	94	80 - 120	94	80 - 120	<0.00050	mg/L		
B000667	Dissolved Selenium (Se)	2023/06/20	91	80 - 120	89	80 - 120	<0.00020	mg/L		
B000667	Dissolved Silver (Ag)	2023/06/20	86	80 - 120	88	80 - 120	<0.00010	mg/L		
B000667	Dissolved Thallium (Tl)	2023/06/20	87	80 - 120	91	80 - 120	<0.00020	mg/L		
B000667	Dissolved Tin (Sn)	2023/06/20	89	80 - 120	83	80 - 120	<0.0010	mg/L		
B000667	Dissolved Titanium (Ti)	2023/06/20	97	80 - 120	92	80 - 120	<0.0010	mg/L		
B000667	Dissolved Uranium (U)	2023/06/19	NC	80 - 120	86	80 - 120	<0.00010	mg/L	1.0	20
B000667	Dissolved Vanadium (V)	2023/06/20	102	80 - 120	94	80 - 120	<0.0010	mg/L		
B000667	Dissolved Zinc (Zn)	2023/06/20	86	80 - 120	87	80 - 120	<0.0030	mg/L		
B000680	Dissolved Aluminum (Al)	2023/06/19	89	80 - 120	114	80 - 120	<0.0030	mg/L	NC	20
B000680	Dissolved Antimony (Sb)	2023/06/19	95	80 - 120	100	80 - 120	<0.00060	mg/L	NC	20
B000680	Dissolved Arsenic (As)	2023/06/19	91	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
B000680	Dissolved Beryllium (Be)	2023/06/19	88	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
B000680	Dissolved Chromium (Cr)	2023/06/19	90	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B000680	Dissolved Cobalt (Co)	2023/06/19	92	80 - 120	97	80 - 120	<0.00030	mg/L	4.9	20
B000680	Dissolved Copper (Cu)	2023/06/19	89	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B000680	Dissolved Lead (Pb)	2023/06/19	88	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B000680	Dissolved Molybdenum (Mo)	2023/06/19	94	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B000680	Dissolved Nickel (Ni)	2023/06/19	89	80 - 120	96	80 - 120	<0.00050	mg/L	1.4	20
B000680	Dissolved Selenium (Se)	2023/06/19	93	80 - 120	94	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000680	Dissolved Silver (Ag)	2023/06/19	91	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20
B000680	Dissolved Thallium (Tl)	2023/06/19	89	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B000680	Dissolved Tin (Sn)	2023/06/19	94	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B000680	Dissolved Titanium (Ti)	2023/06/19	91	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B000680	Dissolved Uranium (U)	2023/06/19	85	80 - 120	92	80 - 120	<0.00010	mg/L	1.0	20
B000680	Dissolved Vanadium (V)	2023/06/19	91	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B000680	Dissolved Zinc (Zn)	2023/06/19	90	80 - 120	98	80 - 120	<0.0030	mg/L	NC	20
B000732	Dissolved Aluminum (Al)	2023/06/19	92	80 - 120	92	80 - 120	<0.0030	mg/L		
B000732	Dissolved Antimony (Sb)	2023/06/19	102	80 - 120	95	80 - 120	<0.00060	mg/L		
B000732	Dissolved Arsenic (As)	2023/06/19	96	80 - 120	92	80 - 120	<0.00020	mg/L		
B000732	Dissolved Beryllium (Be)	2023/06/19	91	80 - 120	84	80 - 120	<0.0010	mg/L		
B000732	Dissolved Chromium (Cr)	2023/06/19	96	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Cobalt (Co)	2023/06/19	93	80 - 120	95	80 - 120	<0.00030	mg/L		
B000732	Dissolved Copper (Cu)	2023/06/19	87	80 - 120	96	80 - 120	<0.0010	mg/L		
B000732	Dissolved Lead (Pb)	2023/06/19	87	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Molybdenum (Mo)	2023/06/19	106	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Nickel (Ni)	2023/06/19	89	80 - 120	93	80 - 120	<0.00050	mg/L		
B000732	Dissolved Selenium (Se)	2023/06/19	100	80 - 120	93	80 - 120	<0.00020	mg/L		
B000732	Dissolved Silver (Ag)	2023/06/19	90	80 - 120	94	80 - 120	<0.00010	mg/L		
B000732	Dissolved Thallium (Tl)	2023/06/19	85	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Tin (Sn)	2023/06/19	102	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Titanium (Ti)	2023/06/19	106	80 - 120	94	80 - 120	<0.0010	mg/L		
B000732	Dissolved Uranium (U)	2023/06/19	NC	80 - 120	90	80 - 120	<0.00010	mg/L	1.5	20
B000732	Dissolved Vanadium (V)	2023/06/19	102	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Zinc (Zn)	2023/06/19	90	80 - 120	96	80 - 120	<0.0030	mg/L		
B000746	Dissolved Aluminum (Al)	2023/06/19	92	80 - 120	91	80 - 120	<0.0030	mg/L	NC	20
B000746	Dissolved Antimony (Sb)	2023/06/19	106	80 - 120	112	80 - 120	<0.00060	mg/L	NC	20
B000746	Dissolved Arsenic (As)	2023/06/19	87	80 - 120	94	80 - 120	<0.00020	mg/L	4.8	20
B000746	Dissolved Beryllium (Be)	2023/06/19	90	80 - 120	86	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Chromium (Cr)	2023/06/19	91	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Cobalt (Co)	2023/06/19	90	80 - 120	99	80 - 120	<0.00030	mg/L	1.5	20
B000746	Dissolved Copper (Cu)	2023/06/19	88	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000746	Dissolved Lead (Pb)	2023/06/19	84	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B000746	Dissolved Molybdenum (Mo)	2023/06/19	91	80 - 120	97	80 - 120	<0.00020	mg/L	1.6	20
B000746	Dissolved Nickel (Ni)	2023/06/19	90	80 - 120	97	80 - 120	<0.00050	mg/L	7.4	20
B000746	Dissolved Selenium (Se)	2023/06/19	94	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B000746	Dissolved Silver (Ag)	2023/06/19	84	80 - 120	91	80 - 120	<0.00010	mg/L	NC	20
B000746	Dissolved Thallium (Tl)	2023/06/19	88	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
B000746	Dissolved Tin (Sn)	2023/06/19	83	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Titanium (Ti)	2023/06/19	87	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Uranium (U)	2023/06/19	82	80 - 120	90	80 - 120	<0.00010	mg/L	2.9	20
B000746	Dissolved Vanadium (V)	2023/06/19	95	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Zinc (Zn)	2023/06/19	83	80 - 120	94	80 - 120	<0.0030	mg/L	NC	20
B000872	Dissolved Barium (Ba)	2023/06/20	101	80 - 120	100	80 - 120	<0.010	mg/L	NC	20
B000872	Dissolved Boron (B)	2023/06/20	103	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B000872	Dissolved Calcium (Ca)	2023/06/20	97	80 - 120	97	80 - 120	<0.30	mg/L	12	20
B000872	Dissolved Iron (Fe)	2023/06/20	104	80 - 120	102	80 - 120	<0.060	mg/L	NC	20
B000872	Dissolved Lithium (Li)	2023/06/20	98	80 - 120	94	80 - 120	<0.020	mg/L	NC	20
B000872	Dissolved Magnesium (Mg)	2023/06/20	102	80 - 120	98	80 - 120	<0.20	mg/L	16	20
B000872	Dissolved Manganese (Mn)	2023/06/20	101	80 - 120	103	80 - 120	<0.0040	mg/L	13	20
B000872	Dissolved Phosphorus (P)	2023/06/20	100	80 - 120	98	80 - 120	<0.10	mg/L	NC	20
B000872	Dissolved Potassium (K)	2023/06/20	107	80 - 120	104	80 - 120	<0.30	mg/L	11	20
B000872	Dissolved Silicon (Si)	2023/06/20	96	80 - 120	99	80 - 120	<0.50	mg/L	14	20
B000872	Dissolved Sodium (Na)	2023/06/20	103	80 - 120	101	80 - 120	<0.50	mg/L	2.8	20
B000872	Dissolved Strontium (Sr)	2023/06/20	96	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B000872	Dissolved Sulphur (S)	2023/06/20	101	80 - 120	96	80 - 120	<0.20	mg/L	4.1	20
B000987	Dissolved Aluminum (Al)	2023/06/19	103	80 - 120	101	80 - 120	<0.0030	mg/L	1.2	20
B000987	Dissolved Antimony (Sb)	2023/06/19	122 (1)	80 - 120	121 (1)	80 - 120	<0.00060	mg/L	NC	20
B000987	Dissolved Arsenic (As)	2023/06/19	99	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B000987	Dissolved Beryllium (Be)	2023/06/19	102	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B000987	Dissolved Chromium (Cr)	2023/06/19	102	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B000987	Dissolved Cobalt (Co)	2023/06/19	101	80 - 120	106	80 - 120	<0.00030	mg/L	NC	20
B000987	Dissolved Copper (Cu)	2023/06/19	101	80 - 120	105	80 - 120	<0.0010	mg/L	7.3	20
B000987	Dissolved Lead (Pb)	2023/06/19	98	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000987	Dissolved Molybdenum (Mo)	2023/06/19	103	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B000987	Dissolved Nickel (Ni)	2023/06/19	98	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
B000987	Dissolved Selenium (Se)	2023/06/19	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B000987	Dissolved Silver (Ag)	2023/06/19	97	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20
B000987	Dissolved Thallium (Tl)	2023/06/19	99	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B000987	Dissolved Tin (Sn)	2023/06/19	95	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B000987	Dissolved Titanium (Ti)	2023/06/19	104	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B000987	Dissolved Uranium (U)	2023/06/19	94	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
B000987	Dissolved Vanadium (V)	2023/06/19	102	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B000987	Dissolved Zinc (Zn)	2023/06/19	108	80 - 120	102	80 - 120	<0.0030	mg/L	0.59	20
B001636	Dissolved Barium (Ba)	2023/06/19	103	80 - 120	103	80 - 120	<0.010	mg/L	10	20
B001636	Dissolved Boron (B)	2023/06/19	101	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B001636	Dissolved Calcium (Ca)	2023/06/19	99	80 - 120	100	80 - 120	<0.30	mg/L	0.96	20
B001636	Dissolved Iron (Fe)	2023/06/19	94	80 - 120	90	80 - 120	<0.060	mg/L	3.1	20
B001636	Dissolved Lithium (Li)	2023/06/19	90	80 - 120	93	80 - 120	<0.020	mg/L	NC	20
B001636	Dissolved Magnesium (Mg)	2023/06/19	101	80 - 120	100	80 - 120	<0.20	mg/L	0.34	20
B001636	Dissolved Manganese (Mn)	2023/06/19	100	80 - 120	96	80 - 120	<0.0040	mg/L	NC	20
B001636	Dissolved Phosphorus (P)	2023/06/19	104	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B001636	Dissolved Potassium (K)	2023/06/19	100	80 - 120	101	80 - 120	<0.30	mg/L	2.6	20
B001636	Dissolved Silicon (Si)	2023/06/19	96	80 - 120	94	80 - 120	<0.50	mg/L	3.1	20
B001636	Dissolved Sodium (Na)	2023/06/19	99	80 - 120	100	80 - 120	<0.50	mg/L	0.71	20
B001636	Dissolved Strontium (Sr)	2023/06/19	100	80 - 120	100	80 - 120	<0.020	mg/L	1.2	20
B001636	Dissolved Sulphur (S)	2023/06/19	101	80 - 120	93	80 - 120	<0.20	mg/L	0.085	20
B001648	Dissolved Barium (Ba)	2023/06/19	100	80 - 120	101	80 - 120	<0.010	mg/L		
B001648	Dissolved Boron (B)	2023/06/19	97	80 - 120	98	80 - 120	<0.020	mg/L		
B001648	Dissolved Calcium (Ca)	2023/06/19	NC	80 - 120	99	80 - 120	<0.30	mg/L	0.33	20
B001648	Dissolved Iron (Fe)	2023/06/19	88	80 - 120	89	80 - 120	<0.060	mg/L	NC	20
B001648	Dissolved Lithium (Li)	2023/06/19	91	80 - 120	92	80 - 120	<0.020	mg/L		
B001648	Dissolved Magnesium (Mg)	2023/06/19	100	80 - 120	99	80 - 120	<0.20	mg/L	0.61	20
B001648	Dissolved Manganese (Mn)	2023/06/19	92	80 - 120	96	80 - 120	<0.0040	mg/L	4.8	20
B001648	Dissolved Phosphorus (P)	2023/06/19	100	80 - 120	101	80 - 120	<0.10	mg/L		
B001648	Dissolved Potassium (K)	2023/06/19	99	80 - 120	100	80 - 120	<0.30	mg/L	1.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B001648	Dissolved Silicon (Si)	2023/06/19	85	80 - 120	95	80 - 120	<0.50	mg/L		
B001648	Dissolved Sodium (Na)	2023/06/19	97	80 - 120	98	80 - 120	<0.50	mg/L	0.34	20
B001648	Dissolved Strontium (Sr)	2023/06/19	97	80 - 120	98	80 - 120	<0.020	mg/L		
B001648	Dissolved Sulphur (S)	2023/06/19	94	80 - 120	95	80 - 120	<0.20	mg/L		
B001757	Sulphate (SO4)	2023/06/20	95	80 - 120	97	80 - 120	<1.0	mg/L	0.039	20
B002126	Total Suspended Solids	2023/06/20	86	80 - 120	105	80 - 120	<1.0	mg/L	NC	20
B002129	Total Suspended Solids	2023/06/20	82	80 - 120	98	80 - 120	<1.0	mg/L	5.9	20
B002135	Total Suspended Solids	2023/06/20	92	80 - 120	98	80 - 120	<1.0	mg/L	NC	20
B002302	Dissolved Barium (Ba)	2023/06/20	109	80 - 120	98	80 - 120	<0.010	mg/L		
B002302	Dissolved Boron (B)	2023/06/20	98	80 - 120	89	80 - 120	<0.020	mg/L		
B002302	Dissolved Calcium (Ca)	2023/06/20	NC	80 - 120	96	80 - 120	<0.30	mg/L	4.6	20
B002302	Dissolved Iron (Fe)	2023/06/20	103	80 - 120	91	80 - 120	<0.060	mg/L	NC	20
B002302	Dissolved Lithium (Li)	2023/06/20	98	80 - 120	92	80 - 120	<0.020	mg/L		
B002302	Dissolved Magnesium (Mg)	2023/06/20	104	80 - 120	105	80 - 120	<0.20	mg/L	4.2	20
B002302	Dissolved Manganese (Mn)	2023/06/20	105	80 - 120	91	80 - 120	<0.0040	mg/L	0.93	20
B002302	Dissolved Phosphorus (P)	2023/06/20	120	80 - 120	104	80 - 120	<0.10	mg/L		
B002302	Dissolved Potassium (K)	2023/06/20	109	80 - 120	100	80 - 120	<0.30	mg/L	7.1	20
B002302	Dissolved Silicon (Si)	2023/06/20	94	80 - 120	84	80 - 120	<0.50	mg/L		
B002302	Dissolved Sodium (Na)	2023/06/20	101	80 - 120	96	80 - 120	<0.50	mg/L	3.4	20
B002302	Dissolved Strontium (Sr)	2023/06/20	105	80 - 120	97	80 - 120	<0.020	mg/L		
B002302	Dissolved Sulphur (S)	2023/06/20	NC	80 - 120	94	80 - 120	0.24, RDL=0.20 (2)	mg/L		
B002351	Total Organic Carbon (C)	2023/06/25	103	80 - 120	101	80 - 120	<0.50	mg/L	NC	20
B002360	Total Organic Carbon (C)	2023/06/25	NC	80 - 120	111	80 - 120	<0.50	mg/L	0.66	20
B002365	Total Organic Carbon (C)	2023/06/25	NC	80 - 120	103	80 - 120	<0.50	mg/L	3.1	20
B002416	Dissolved Organic Carbon (C)	2023/06/23	93	80 - 120	103	80 - 120	<0.50	mg/L	1.3	20
B002421	Dissolved Organic Carbon (C)	2023/06/23	NC	80 - 120	95	80 - 120	<0.50	mg/L	1.6	20
B002496	Alkalinity (PP as CaCO3)	2023/06/24					<1.0	mg/L	NC	20
B002496	Alkalinity (Total as CaCO3)	2023/06/24			100	80 - 120	<1.0	mg/L	1.4	20
B002496	Bicarbonate (HCO3)	2023/06/24					<1.0	mg/L	1.4	20
B002496	Carbonate (CO3)	2023/06/24					<1.0	mg/L	NC	20
B002496	Hydroxide (OH)	2023/06/24					<1.0	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B002498	pH	2023/06/24			99	97 - 103			1.4	N/A
B002511	Dissolved Organic Carbon (C)	2023/06/23	87	80 - 120	97	80 - 120	<0.50	mg/L	NC	20
B002785	Sulphate (SO4)	2023/06/20	NC	80 - 120	96	80 - 120	<1.0	mg/L	3.4	20
B002797	Sulphate (SO4)	2023/06/21	NC	80 - 120	99	80 - 120	<1.0	mg/L	4.8	20
B004685	Sulphate (SO4)	2023/06/21	109	80 - 120	98	80 - 120	<1.0	mg/L	2.0	20
B004701	Total Aluminum (Al)	2023/06/22	105	80 - 120	103	80 - 120	<0.0040	mg/L	3.5	20
B004701	Total Antimony (Sb)	2023/06/22	126 (1)	80 - 120	126 (1)	80 - 120	<0.00060	mg/L	NC	20
B004701	Total Arsenic (As)	2023/06/22	103	80 - 120	104	80 - 120	<0.00020	mg/L	8.9	20
B004701	Total Beryllium (Be)	2023/06/22	94	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B004701	Total Chromium (Cr)	2023/06/22	99	80 - 120	101	80 - 120	<0.0010	mg/L	11	20
B004701	Total Cobalt (Co)	2023/06/22	100	80 - 120	101	80 - 120	<0.00030	mg/L	NC	20
B004701	Total Copper (Cu)	2023/06/22	95	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B004701	Total Lead (Pb)	2023/06/22	102	80 - 120	104	80 - 120	<0.00020	mg/L	3.3	20
B004701	Total Molybdenum (Mo)	2023/06/22	114	80 - 120	108	80 - 120	<0.00020	mg/L	8.6	20
B004701	Total Nickel (Ni)	2023/06/22	97	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
B004701	Total Selenium (Se)	2023/06/22	109	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B004701	Total Silver (Ag)	2023/06/22	102	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B004701	Total Thallium (Tl)	2023/06/22	99	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B004701	Total Tin (Sn)	2023/06/22	114	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B004701	Total Titanium (Ti)	2023/06/22	111	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B004701	Total Uranium (U)	2023/06/22	96	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20
B004701	Total Vanadium (V)	2023/06/22	102	80 - 120	102	80 - 120	<0.0014	mg/L	NC	20
B004701	Total Zinc (Zn)	2023/06/22	104	80 - 120	103	80 - 120	<0.0030	mg/L	3.4	20
B004723	Total Barium (Ba)	2023/06/21	97	80 - 120	100	80 - 120	<0.010	mg/L	1.9	20
B004723	Total Boron (B)	2023/06/21	101	80 - 120	104	80 - 120	<0.020	mg/L	4.3	20
B004723	Total Calcium (Ca)	2023/06/21	98	80 - 120	101	80 - 120	<0.30	mg/L	3.3	20
B004723	Total Iron (Fe)	2023/06/21	104	80 - 120	108	80 - 120	<0.060	mg/L	5.5	20
B004723	Total Lithium (Li)	2023/06/21	96	80 - 120	99	80 - 120	<0.020	mg/L	1.9	20
B004723	Total Magnesium (Mg)	2023/06/21	101	80 - 120	104	80 - 120	<0.20	mg/L	1.9	20
B004723	Total Manganese (Mn)	2023/06/21	101	80 - 120	104	80 - 120	<0.0040	mg/L	3.2	20
B004723	Total Phosphorus (P)	2023/06/21	100	80 - 120	103	80 - 120	<0.10	mg/L	NC	20
B004723	Total Potassium (K)	2023/06/21	104	80 - 120	106	80 - 120	<0.30	mg/L	1.7	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B004723	Total Silicon (Si)	2023/06/21	101	80 - 120	104	80 - 120	<0.50	mg/L	3.1	20
B004723	Total Sodium (Na)	2023/06/21	98	80 - 120	101	80 - 120	<0.50	mg/L	3.5	20
B004723	Total Strontium (Sr)	2023/06/21	93	80 - 120	96	80 - 120	<0.020	mg/L	3.5	20
B004723	Total Sulphur (S)	2023/06/21	95	80 - 120	98	80 - 120	<0.20	mg/L	3.2	20
B005196	Alkalinity (PP as CaCO3)	2023/06/22					<1.0	mg/L	NC	20
B005196	Alkalinity (Total as CaCO3)	2023/06/22			96	80 - 120	<1.0	mg/L	4.1	20
B005196	Bicarbonate (HCO3)	2023/06/22					<1.0	mg/L	4.1	20
B005196	Carbonate (CO3)	2023/06/22					<1.0	mg/L	NC	20
B005196	Hydroxide (OH)	2023/06/22					<1.0	mg/L	NC	20
B005203	pH	2023/06/22			100	97 - 103			1.5	N/A
B005558	Sulphate (SO4)	2023/06/22	97	80 - 120	102	80 - 120	<1.0	mg/L	0.63	20
B006423	Total Aluminum (Al)	2023/06/23	110	80 - 120	114	80 - 120	<0.0030	mg/L	12	20
B006423	Total Antimony (Sb)	2023/06/23	122 (1)	80 - 120	118	80 - 120	<0.00060	mg/L	NC	20
B006423	Total Arsenic (As)	2023/06/23	100	80 - 120	98	80 - 120	<0.00020	mg/L	19	20
B006423	Total Beryllium (Be)	2023/06/23	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Chromium (Cr)	2023/06/23	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Cobalt (Co)	2023/06/23	103	80 - 120	101	80 - 120	<0.00030	mg/L	NC	20
B006423	Total Copper (Cu)	2023/06/23	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Lead (Pb)	2023/06/23	107	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B006423	Total Molybdenum (Mo)	2023/06/23	110	80 - 120	107	80 - 120	<0.00020	mg/L	3.2	20
B006423	Total Nickel (Ni)	2023/06/23	102	80 - 120	100	80 - 120	<0.00050	mg/L	2.4	20
B006423	Total Selenium (Se)	2023/06/23	104	80 - 120	103	80 - 120	<0.00020	mg/L	2.9	20
B006423	Total Silver (Ag)	2023/06/23	107	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B006423	Total Thallium (Tl)	2023/06/23	108	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B006423	Total Tin (Sn)	2023/06/23	111	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Titanium (Ti)	2023/06/23	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Uranium (U)	2023/06/23	106	80 - 120	103	80 - 120	<0.00010	mg/L	1.3	20
B006423	Total Vanadium (V)	2023/06/23	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Zinc (Zn)	2023/06/23	103	80 - 120	102	80 - 120	<0.0030	mg/L	5.6	20
B006431	Total Barium (Ba)	2023/06/22	100	80 - 120	105	80 - 120	<0.010	mg/L	1.8	20
B006431	Total Boron (B)	2023/06/22	101	80 - 120	105	80 - 120	<0.020	mg/L	NC	20
B006431	Total Calcium (Ca)	2023/06/22	NC	80 - 120	104	80 - 120	<0.30	mg/L	1.9	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006431	Total Iron (Fe)	2023/06/22	NC	80 - 120	114	80 - 120	<0.060	mg/L	1.8	20
B006431	Total Lithium (Li)	2023/06/22	102	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B006431	Total Magnesium (Mg)	2023/06/22	104	80 - 120	108	80 - 120	<0.20	mg/L	2.1	20
B006431	Total Manganese (Mn)	2023/06/22	105	80 - 120	108	80 - 120	<0.0040	mg/L	NC	20
B006431	Total Phosphorus (P)	2023/06/22	100	80 - 120	104	80 - 120	<0.10	mg/L	NC	20
B006431	Total Potassium (K)	2023/06/22	102	80 - 120	107	80 - 120	<0.30	mg/L	2.6	20
B006431	Total Silicon (Si)	2023/06/22	104	80 - 120	110	80 - 120	<0.50	mg/L	0.32	20
B006431	Total Sodium (Na)	2023/06/22	100	80 - 120	104	80 - 120	<0.50	mg/L	2.7	20
B006431	Total Strontium (Sr)	2023/06/22	96	80 - 120	102	80 - 120	<0.020	mg/L	1.6	20
B006431	Total Sulphur (S)	2023/06/22	NC	80 - 120	103	80 - 120	<0.20	mg/L	1.7	20
B006434	Total Aluminum (Al)	2023/06/22	107	80 - 120	104	80 - 120	<0.0030	mg/L	10	20
B006434	Total Antimony (Sb)	2023/06/22	125 (1)	80 - 120	120	80 - 120	<0.00060	mg/L	NC	20
B006434	Total Arsenic (As)	2023/06/22	105	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Beryllium (Be)	2023/06/22	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Chromium (Cr)	2023/06/22	107	80 - 120	102	80 - 120	<0.0010	mg/L	12	20
B006434	Total Cobalt (Co)	2023/06/22	107	80 - 120	104	80 - 120	<0.00030	mg/L	9.1	20
B006434	Total Copper (Cu)	2023/06/22	106	80 - 120	102	80 - 120	<0.0010	mg/L	5.4	20
B006434	Total Lead (Pb)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	7.3	20
B006434	Total Molybdenum (Mo)	2023/06/22	111	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Nickel (Ni)	2023/06/22	105	80 - 120	103	80 - 120	<0.00050	mg/L	7.8	20
B006434	Total Selenium (Se)	2023/06/22	112	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Silver (Ag)	2023/06/22	109	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B006434	Total Thallium (Tl)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	20	20
B006434	Total Tin (Sn)	2023/06/22	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Titanium (Ti)	2023/06/22	108	80 - 120	104	80 - 120	<0.0010	mg/L	5.9	20
B006434	Total Uranium (U)	2023/06/22	109	80 - 120	103	80 - 120	<0.00010	mg/L	14	20
B006434	Total Vanadium (V)	2023/06/22	106	80 - 120	103	80 - 120	<0.0010	mg/L	8.1	20
B006434	Total Zinc (Zn)	2023/06/22	107	80 - 120	105	80 - 120	<0.0030	mg/L	3.7	20
B006437	Sulphate (SO4)	2023/06/22	97	80 - 120	101	80 - 120	<1.0	mg/L		
B006446	Total Barium (Ba)	2023/06/22	101	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
B006446	Total Boron (B)	2023/06/22	102	80 - 120	102	80 - 120	<0.020	mg/L	12	20
B006446	Total Calcium (Ca)	2023/06/22	103	80 - 120	101	80 - 120	<0.30	mg/L	6.2	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006446	Total Iron (Fe)	2023/06/22	117	80 - 120	109	80 - 120	<0.060	mg/L	4.1	20
B006446	Total Lithium (Li)	2023/06/22	100	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006446	Total Magnesium (Mg)	2023/06/22	104	80 - 120	103	80 - 120	<0.20	mg/L	4.6	20
B006446	Total Manganese (Mn)	2023/06/22	104	80 - 120	104	80 - 120	<0.0040	mg/L	4.2	20
B006446	Total Phosphorus (P)	2023/06/22	99	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B006446	Total Potassium (K)	2023/06/22	105	80 - 120	104	80 - 120	<0.30	mg/L	6.8	20
B006446	Total Silicon (Si)	2023/06/22	111	80 - 120	106	80 - 120	<0.50	mg/L	5.7	20
B006446	Total Sodium (Na)	2023/06/22	NC	80 - 120	101	80 - 120	<0.50	mg/L	18	20
B006446	Total Strontium (Sr)	2023/06/22	98	80 - 120	98	80 - 120	<0.020	mg/L	12	20
B006446	Total Sulphur (S)	2023/06/22	101	80 - 120	99	80 - 120	<0.20	mg/L	5.0	20
B006449	Sulphate (SO4)	2023/06/23	98	80 - 120	100	80 - 120	<1.0	mg/L	1.5	20
B006450	Total Aluminum (Al)	2023/06/22	109	80 - 120	108	80 - 120	<0.0030	mg/L	7.0	20
B006450	Total Antimony (Sb)	2023/06/22	121 (1)	80 - 120	124 (1)	80 - 120	<0.00060	mg/L	NC	20
B006450	Total Arsenic (As)	2023/06/22	101	80 - 120	104	80 - 120	<0.00020	mg/L	14	20
B006450	Total Beryllium (Be)	2023/06/22	104	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Chromium (Cr)	2023/06/22	104	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Cobalt (Co)	2023/06/22	105	80 - 120	107	80 - 120	<0.00030	mg/L	NC	20
B006450	Total Copper (Cu)	2023/06/22	103	80 - 120	106	80 - 120	<0.0010	mg/L	0.28	20
B006450	Total Lead (Pb)	2023/06/22	107	80 - 120	108	80 - 120	<0.00020	mg/L	0.48	20
B006450	Total Molybdenum (Mo)	2023/06/22	111	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B006450	Total Nickel (Ni)	2023/06/22	104	80 - 120	106	80 - 120	<0.00050	mg/L	8.8	20
B006450	Total Selenium (Se)	2023/06/22	106	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B006450	Total Silver (Ag)	2023/06/22	107	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B006450	Total Thallium (Tl)	2023/06/22	108	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B006450	Total Tin (Sn)	2023/06/22	109	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Titanium (Ti)	2023/06/22	106	80 - 120	108	80 - 120	<0.0010	mg/L	10	20
B006450	Total Uranium (U)	2023/06/22	106	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
B006450	Total Vanadium (V)	2023/06/22	104	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006450	Total Zinc (Zn)	2023/06/22	104	80 - 120	108	80 - 120	<0.0030	mg/L	0.64	20
B006480	Total Barium (Ba)	2023/06/22	102	80 - 120	103	80 - 120	<0.010	mg/L	NC	20
B006480	Total Boron (B)	2023/06/22	102	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B006480	Total Calcium (Ca)	2023/06/22	101	80 - 120	103	80 - 120	<0.30	mg/L	0.11	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006480	Total Iron (Fe)	2023/06/22	109	80 - 120	113	80 - 120	<0.060	mg/L	0.60	20
B006480	Total Lithium (Li)	2023/06/22	102	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006480	Total Magnesium (Mg)	2023/06/22	104	80 - 120	106	80 - 120	<0.20	mg/L	1.1	20
B006480	Total Manganese (Mn)	2023/06/22	104	80 - 120	107	80 - 120	<0.0040	mg/L	0.94	20
B006480	Total Phosphorus (P)	2023/06/22	100	80 - 120	102	80 - 120	<0.10	mg/L	NC	20
B006480	Total Potassium (K)	2023/06/22	104	80 - 120	105	80 - 120	<0.30	mg/L	0.11	20
B006480	Total Silicon (Si)	2023/06/22	106	80 - 120	107	80 - 120	<0.50	mg/L	3.3	20
B006480	Total Sodium (Na)	2023/06/22	101	80 - 120	102	80 - 120	<0.50	mg/L	0.59	20
B006480	Total Strontium (Sr)	2023/06/22	98	80 - 120	100	80 - 120	<0.020	mg/L	0.37	20
B006480	Total Sulphur (S)	2023/06/22	99	80 - 120	100	80 - 120	<0.20	mg/L	0.18	20
B009143	Turbidity	2023/06/24			105	80 - 120	<0.10	NTU	2.7	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Method blank above criteria. Data inspected. All data < RDL or greater than 10x Method Blank.

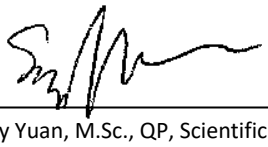
Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist

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993

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C344134	696658
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#696658-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mmiemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
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Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)* [ ]

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/06/13	17:30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		SB-1		16:35		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		16:30		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		16:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		16:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		16:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		16:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		17:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		17:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CLD		17:10		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/06/15	18:00	JASON BIL	230616	0845		[ ]	ACTR	[ ] Yes [ ] No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

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Bureau Veritas
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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C344134	696658
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#696658-02-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, Wmierzwik@kgsgroup.com	Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

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Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
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Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness,Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/06/13	15:45	SW			X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC ASAP to meet hold times.
2		CL-3 BTM		15:50				X	X	X	X	X	X	X	X	X	X	4	
3		CL-7 SFC		15:55				X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		16:00				X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		15:35				X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		15:40				X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		16:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		16:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		15:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		15:30		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/06/15	18:00	JASON BIL	23 06 16	0845		☐	ACTR	☐ Yes ☐ No

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Bureau Veritas
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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C344134	696658
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#696658-03-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mmierzynski@kgsgroup.com	Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

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Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/06/13	15:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-5 BTM		15:20		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times.
3		CL-6 SFC		15:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		15:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		TRIP BLANK		—		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SW-106		PM		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		SW-107		PM		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		SW-108	↓	PM	↓	N	N	X	X	X	X	X	X	X	X	X	X	4	↓
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/06/15	18:00	Jason Bil	23 06 16	0845			ACTR	Yes / No

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Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 697998-01-01, 697998-02-01, 697998-03-01

Report Date: 2023/07/06
Report #: R3360292
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C348539
Received: 2023/06/28, 12:25

Sample Matrix: Surface Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	28	N/A	2023/07/05	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/07/05		Auto Calc
Cadmium - low level CCME (Total) (1)	23	N/A	2023/07/05		Auto Calc
Cadmium - low level CCME (Total) (1)	5	N/A	2023/07/06		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	28	N/A	2023/07/05	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	28	N/A	2023/07/05	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	28	N/A	2023/07/06		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	3	N/A	2023/07/04	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	20	N/A	2023/07/05	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	5	N/A	2023/07/06	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	27	N/A	2023/07/05	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	1	N/A	2023/07/06	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/07/04	2023/07/04	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	20	2023/07/05	2023/07/05	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	5	2023/07/05	2023/07/06	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	28	N/A	2023/07/05	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	3	2023/07/04	2023/07/04	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	25	2023/07/05	2023/07/05	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	28	N/A	2023/07/05	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (1, 7)	28	N/A	2023/07/05	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	15	2023/07/04	2023/07/05	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	13	2023/07/04	2023/07/06	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/06/30	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 697998-01-01, 697998-02-01, 697998-03-01

Report Date: 2023/07/06
Report #: R3360292
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C348539
Received: 2023/06/28, 12:25

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 697998-01-01, 697998-02-01, 697998-03-01

Report Date: 2023/07/06
Report #: R3360292
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C348539
Received: 2023/06/28, 12:25

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO802	BTO803		BTO804			BTO804		
Sampling Date		2023/06/27 11:45	2023/06/27 09:40		2023/06/27 09:35			2023/06/27 09:35		
COC Number		697998-01-01	697998-01-01		697998-01-01			697998-01-01		
	UNITS	SC-1	SB-1	QC Batch	SB-2	RDL	QC Batch	SB-2 Lab-Dup	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.085	0.26	B014994	0.21	0.020	B014994			
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.020	0.010	B021521	0.011	0.0030	B021501	0.012	0.0030	B021501
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B021521	<0.00060	0.00060	B021501	<0.00060	0.00060	B021501
Dissolved Arsenic (As)	mg/L	0.00035	0.00033	B021521	0.00030	0.00020	B021501	0.00025	0.00020	B021501
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	B022090	<0.010	0.010	B022090			
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B021521	<0.0010	0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Boron (B)	mg/L	<0.020	<0.020	B022090	<0.020	0.020	B022090			
Dissolved Calcium (Ca)	mg/L	8.1	41	B022090	32	0.30	B022090			
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B021521	<0.0010	0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B021521	<0.00030	0.00030	B021501	<0.00030	0.00030	B021501
Dissolved Copper (Cu)	mg/L	0.0038	0.0078	B021521	0.0077	0.0010	B021501	0.0075	0.0010	B021501
Dissolved Iron (Fe)	mg/L	0.095	0.86	B022090	0.70	0.060	B022090			
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B021521	<0.00020	0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B022090	<0.020	0.020	B022090			
Dissolved Magnesium (Mg)	mg/L	2.7	7.1	B022090	5.9	0.20	B022090			
Dissolved Manganese (Mn)	mg/L	0.0040	0.051	B022090	0.020	0.0040	B022090			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B021521	<0.00020	0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00064	B021521	0.00086	0.00050	B021501	0.00079	0.00050	B021501
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B022090	<0.10	0.10	B022090			
Dissolved Potassium (K)	mg/L	1.3	3.5	B022090	2.8	0.30	B022090			
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B021521	<0.00020	0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Silicon (Si)	mg/L	1.2	1.0	B022090	1.1	0.50	B022090			
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B021521	<0.00010	0.00010	B021501	<0.00010	0.00010	B021501
Dissolved Sodium (Na)	mg/L	1.7	2.9	B022090	2.5	0.50	B022090			
Dissolved Strontium (Sr)	mg/L	<0.020	0.042	B022090	0.036	0.020	B022090			
Dissolved Sulphur (S)	mg/L	1.4	35	B022090	26	0.20	B022090			
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B021521	<0.00020	0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B021521	<0.0010	0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Titanium (Ti)	mg/L	0.0010	<0.0010	B021521	<0.0010	0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B021521	<0.00010	0.00010	B021501	<0.00010	0.00010	B021501

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO802	BTO803		BTO804			BTO804		
Sampling Date		2023/06/27 11:45	2023/06/27 09:40		2023/06/27 09:35			2023/06/27 09:35		
COC Number		697998-01-01	697998-01-01		697998-01-01			697998-01-01		
	UNITS	**SC-1**	**SB-1**	**QC Batch**	**SB-2**	**RDL**	**QC Batch**	**SB-2 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B021521	<0.0010	0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Zinc (Zn)	mg/L	0.029	0.083	B021521	0.071	0.0030	B021501	0.068	0.0030	B021501

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO805			BTO805			BTO806		
Sampling Date		2023/06/27 09:45			2023/06/27 09:45			2023/06/27 09:50		
COC Number		697998-01-01			697998-01-01			697998-01-01		
	UNITS	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch	CB-2	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.28	0.020	B014994				0.23	0.020	B014994
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.015	0.0030	B021521				0.013	0.0030	B021521
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B021521				<0.00060	0.00060	B021521
Dissolved Arsenic (As)	mg/L	0.00024	0.00020	B021521				0.00023	0.00020	B021521
Dissolved Barium (Ba)	mg/L	0.014	0.010	B022090	0.010	0.010	B022090	0.010	0.010	B022090
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B021521				<0.0010	0.0010	B021521
Dissolved Boron (B)	mg/L	0.025	0.020	B022090	<0.020	0.020	B022090	<0.020	0.020	B022090
Dissolved Calcium (Ca)	mg/L	41	0.30	B022090	41	0.30	B022090	42	0.30	B022090
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B021521				<0.0010	0.0010	B021521
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B021521				<0.00030	0.00030	B021521
Dissolved Copper (Cu)	mg/L	0.0090	0.0010	B021521				0.011	0.0010	B021521
Dissolved Iron (Fe)	mg/L	0.70 (1)	0.060	B022090	0.86 (2)	0.060	B022090	0.94	0.060	B022090
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B021521				<0.00020	0.00020	B021521
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B022090	<0.020	0.020	B022090	<0.020	0.020	B022090
Dissolved Magnesium (Mg)	mg/L	7.1	0.20	B022090	7.2	0.20	B022090	7.3	0.20	B022090
Dissolved Manganese (Mn)	mg/L	0.050	0.0040	B022090	0.050	0.0040	B022090	0.056	0.0040	B022090
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B021521				<0.00020	0.00020	B021521
Dissolved Nickel (Ni)	mg/L	0.00064	0.00050	B021521				<0.00050	0.00050	B021521
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B022090	<0.10	0.10	B022090	<0.10	0.10	B022090
Dissolved Potassium (K)	mg/L	3.6	0.30	B022090	3.4	0.30	B022090	3.6	0.30	B022090
Dissolved Selenium (Se)	mg/L	0.00020	0.00020	B021521				<0.00020	0.00020	B021521
Dissolved Silicon (Si)	mg/L	1.1	0.50	B022090	1.0	0.50	B022090	1.0	0.50	B022090
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B021521				<0.00010	0.00010	B021521
Dissolved Sodium (Na)	mg/L	2.8	0.50	B022090	2.8	0.50	B022090	2.9	0.50	B022090
Dissolved Strontium (Sr)	mg/L	0.042	0.020	B022090	0.042	0.020	B022090	0.043	0.020	B022090
Dissolved Sulphur (S)	mg/L	37	0.20	B022090	36	0.20	B022090	40	0.20	B022090
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B021521				<0.00020	0.00020	B021521

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Duplicate exceeds acceptance criteria due to sample matrix. Reanalysis yields similar results.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO805			BTO805			BTO806		
Sampling Date		2023/06/27 09:45			2023/06/27 09:45			2023/06/27 09:50		
COC Number		697998-01-01			697998-01-01			697998-01-01		
	UNITS	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch	CB-2	RDL	QC Batch
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B021521				<0.0010	0.0010	B021521
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B021521				<0.0010	0.0010	B021521
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B021521				<0.00010	0.00010	B021521
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B021521				<0.0010	0.0010	B021521
Dissolved Zinc (Zn)	mg/L	0.080	0.0030	B021521				0.080	0.0030	B021521

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO807	BTO808	BTO809	BTO810	BTO811	BTO813		
Sampling Date		2023/06/27 09:55	2023/06/27 10:00	2023/06/27 10:10	2023/06/27 10:05	2023/06/27 10:15	2023/06/27 08:50		
COC Number		697998-01-01	697998-01-01	697998-01-01	697998-01-01	697998-01-01	697998-02-01		
	UNITS	**EB-1**	**EB-2**	**NB-1**	**NB-2**	**CLD**	**CL-3 SFC**	**RDL**	**QC Batch**
Elements									
Dissolved Cadmium (Cd)	ug/L	0.41	0.42	0.31	0.32	0.32	0.15	0.020	B014994
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.013	0.011	0.012	0.011	0.0078	0.010	0.0030	B021521
Dissolved Antimony (Sb)	mg/L	0.0011	<0.00060	0.00061	<0.00060	<0.00060	<0.00060	0.00060	B021521
Dissolved Arsenic (As)	mg/L	0.00020	0.00032	<0.00020	0.00021	<0.00020	0.00029	0.00020	B021521
Dissolved Barium (Ba)	mg/L	0.012	0.012	0.011	0.010	0.010	<0.010	0.010	B022090
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B021521
Dissolved Boron (B)	mg/L	0.020	<0.020	<0.020	<0.020	0.021	<0.020	0.020	B022090
Dissolved Calcium (Ca)	mg/L	51	55	49	48	50	34	0.30	B022090
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B021521
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B021521
Dissolved Copper (Cu)	mg/L	0.0097	0.0088	0.0086	0.0071	0.0078	0.0061	0.0010	B021521
Dissolved Iron (Fe)	mg/L	0.65	0.45	0.89	0.80	0.74	0.45	0.060	B022090
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B021521
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B022090
Dissolved Magnesium (Mg)	mg/L	8.3	9.0	8.3	8.1	8.4	6.3	0.20	B022090
Dissolved Manganese (Mn)	mg/L	0.077	0.082	0.079	0.072	0.080	0.024	0.0040	B022090
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B021521
Dissolved Nickel (Ni)	mg/L	0.0012	0.0014	0.00085	0.00090	0.00076	<0.00050	0.00050	B021521
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B022090
Dissolved Potassium (K)	mg/L	4.1	4.3	3.9	3.8	3.9	3.0	0.30	B022090
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	0.00020	B021521
Dissolved Silicon (Si)	mg/L	0.80	0.80	0.97	0.97	0.99	0.87	0.50	B022090
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B021521
Dissolved Sodium (Na)	mg/L	3.2	3.3	3.0	3.0	3.0	2.6	0.50	B022090
Dissolved Strontium (Sr)	mg/L	0.049	0.051	0.047	0.046	0.047	0.038	0.020	B022090
Dissolved Sulphur (S)	mg/L	48	51	46	44	47	29	0.20	B022090
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B021521
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B021521
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B021521
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B021521

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO807	BTO808	BTO809	BTO810	BTO811	BTO813		
Sampling Date		2023/06/27 09:55	2023/06/27 10:00	2023/06/27 10:10	2023/06/27 10:05	2023/06/27 10:15	2023/06/27 08:50		
COC Number		697998-01-01	697998-01-01	697998-01-01	697998-01-01	697998-01-01	697998-02-01		
	UNITS	**EB-1**	**EB-2**	**NB-1**	**NB-2**	**CLD**	**CL-3 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B021521
Dissolved Zinc (Zn)	mg/L	0.11	0.14	0.093	0.082	0.091	0.052	0.0030	B021521
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO814		BTO815		BTO816		BTO817		
Sampling Date		2023/06/27 08:55		2023/06/27 09:00		2023/06/27 09:05		2023/06/27 08:40		
COC Number		697998-02-01		697998-02-01		697998-02-01		697998-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	QC Batch	CL-8 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.075	B014994	0.13	B016351	0.12	B016351	0.038	0.020	B016351
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.012	B021521	0.010	B021521	0.0094	B021521	0.012	0.0030	B021501
Dissolved Antimony (Sb)	mg/L	<0.00060	B021521	<0.00060	B021521	<0.00060	B021521	<0.00060	0.00060	B021501
Dissolved Arsenic (As)	mg/L	0.00028	B021521	<0.00020	B021521	0.00022	B021521	0.00033	0.00020	B021501
Dissolved Barium (Ba)	mg/L	<0.010	B022090	<0.010	B022090	<0.010	B022097	<0.010	0.010	B022097
Dissolved Beryllium (Be)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Boron (B)	mg/L	<0.020	B022090	<0.020	B022090	<0.020	B022097	<0.020	0.020	B022097
Dissolved Calcium (Ca)	mg/L	23	B022090	30	B022090	29	B022097	15	0.30	B022097
Dissolved Chromium (Cr)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Cobalt (Co)	mg/L	<0.00030	B021521	<0.00030	B021521	<0.00030	B021521	<0.00030	0.00030	B021501
Dissolved Copper (Cu)	mg/L	0.0056	B021521	0.0057	B021521	0.0057	B021521	0.0045	0.0010	B021501
Dissolved Iron (Fe)	mg/L	0.24	B022090	0.35	B022090	0.34	B022097	0.091	0.060	B022097
Dissolved Lead (Pb)	mg/L	<0.00020	B021521	<0.00020	B021521	<0.00020	B021521	<0.00020	0.00020	B021501
Dissolved Lithium (Li)	mg/L	<0.020	B022090	<0.020	B022090	0.021	B022097	0.022	0.020	B022097
Dissolved Magnesium (Mg)	mg/L	4.9	B022090	5.6	B022090	5.8	B022097	3.7	0.20	B022097
Dissolved Manganese (Mn)	mg/L	<0.0040	B022090	0.014	B022090	0.0096	B022097	<0.0040	0.0040	B022097
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B021521	<0.00020	B021521	<0.00020	B021521	<0.00020	0.00020	B021501
Dissolved Nickel (Ni)	mg/L	<0.00050	B021521	<0.00050	B021521	<0.00050	B021521	<0.00050	0.00050	B021501
Dissolved Phosphorus (P)	mg/L	<0.10	B022090	<0.10	B022090	<0.10	B022097	<0.10	0.10	B022097
Dissolved Potassium (K)	mg/L	2.3	B022090	2.6	B022090	2.8	B022097	1.8	0.30	B022097
Dissolved Selenium (Se)	mg/L	<0.00020	B021521	<0.00020	B021521	0.00023	B021521	<0.00020	0.00020	B021501
Dissolved Silicon (Si)	mg/L	0.82	B022090	0.81	B022090	0.87	B022097	0.77	0.50	B022097
Dissolved Silver (Ag)	mg/L	<0.00010	B021521	<0.00010	B021521	<0.00010	B021521	<0.00010	0.00010	B021501
Dissolved Sodium (Na)	mg/L	2.4	B022090	2.5	B022090	2.5	B022097	2.1	0.50	B022097
Dissolved Strontium (Sr)	mg/L	0.032	B022090	0.036	B022090	0.034	B022097	0.026	0.020	B022097
Dissolved Sulphur (S)	mg/L	17	B022090	24	B022090	24	B022097	8.5	0.20	B022097
Dissolved Thallium (Tl)	mg/L	<0.00020	B021521	<0.00020	B021521	<0.00020	B021521	<0.00020	0.00020	B021501
Dissolved Tin (Sn)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Titanium (Ti)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Uranium (U)	mg/L	<0.00010	B021521	<0.00010	B021521	<0.00010	B021521	<0.00010	0.00010	B021501
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO814		BTO815		BTO816		BTO817		
Sampling Date		2023/06/27 08:55		2023/06/27 09:00		2023/06/27 09:05		2023/06/27 08:40		
COC Number		697998-02-01		697998-02-01		697998-02-01		697998-02-01		
	UNITS	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Zinc (Zn)	mg/L	0.028	B021521	0.041	B021521	0.042	B021521	0.018	0.0030	B021501
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO818	BTO819		BTO820		BTO821		
Sampling Date		2023/06/27 08:45	2023/06/27 09:10		2023/06/27 09:15		2023/06/27 08:30		
COC Number		697998-02-01	697998-02-01		697998-02-01		697998-02-01		
	UNITS	CL-8 BTM	CL-2 SFC	QC Batch	CL-2 BTM	QC Batch	CL-4 SFC	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.042	0.040	B016351	0.040	B016351	0.031	0.020	B016351
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.012	0.013	B021501	0.014	B021501	0.012	0.0030	B021501
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B021501	<0.00060	B021501	<0.00060	0.00060	B021501
Dissolved Arsenic (As)	mg/L	0.00037	0.00037	B021501	0.00035	B021501	0.00033	0.00020	B021501
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	B022097	<0.010	B022097	<0.010	0.010	B022090
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B021501	<0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Boron (B)	mg/L	<0.020	<0.020	B022097	<0.020	B022097	<0.020	0.020	B022090
Dissolved Calcium (Ca)	mg/L	15	14	B022097	13	B022097	14	0.30	B022090
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B021501	<0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B021501	<0.00030	B021501	<0.00030	0.00030	B021501
Dissolved Copper (Cu)	mg/L	0.0048	0.0050	B021501	0.0046	B021501	0.0042	0.0010	B021501
Dissolved Iron (Fe)	mg/L	0.089	0.077	B022097	0.14	B022097	0.069	0.060	B022090
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B021501	<0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Lithium (Li)	mg/L	<0.020	0.022	B022097	<0.020	B022097	<0.020	0.020	B022090
Dissolved Magnesium (Mg)	mg/L	3.8	3.8	B022097	3.5	B022097	3.7	0.20	B022090
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	B022097	<0.0040	B022097	<0.0040	0.0040	B022090
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B021501	<0.00020	B022999	<0.00020	0.00020	B021501
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	B021501	<0.00050	B021501	<0.00050	0.00050	B021501
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B022097	<0.10	B022097	<0.10	0.10	B022090
Dissolved Potassium (K)	mg/L	1.8	1.8	B022097	1.7	B022097	1.8	0.30	B022090
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B021501	<0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Silicon (Si)	mg/L	0.75	0.78	B022097	0.96	B022097	0.73	0.50	B022090
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B021501	<0.00010	B021501	<0.00010	0.00010	B021501
Dissolved Sodium (Na)	mg/L	2.1	2.2	B022097	2.1	B022097	2.2	0.50	B022090
Dissolved Strontium (Sr)	mg/L	0.026	0.026	B022097	0.025	B022097	0.027	0.020	B022090
Dissolved Sulphur (S)	mg/L	8.6	8.1	B022097	6.9	B022097	7.2	0.20	B022090
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B021501	<0.00020	B021501	<0.00020	0.00020	B021501
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B021501	<0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B021501	<0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B021501	<0.00010	B021501	<0.00010	0.00010	B021501

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO818	BTO819		BTO820		BTO821		
Sampling Date		2023/06/27 08:45	2023/06/27 09:10		2023/06/27 09:15		2023/06/27 08:30		
COC Number		697998-02-01	697998-02-01		697998-02-01		697998-02-01		
	UNITS	**CL-8 BTM**	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**QC Batch**	**CL-4 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B021501	<0.0010	B021501	<0.0010	0.0010	B021501
Dissolved Zinc (Zn)	mg/L	0.019	0.018	B021501	0.019	B021501	0.014	0.0030	B021501
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO822			BTO822			BTO823		
Sampling Date		2023/06/27 08:35			2023/06/27 08:35			2023/06/27 08:20		
COC Number		697998-02-01			697998-02-01			697998-03-01		
	UNITS	CL-4 BTM	RDL	QC Batch	CL-4 BTM Lab-Dup	RDL	QC Batch	CL-5 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.051	0.020	B016351				0.026	0.020	B016351
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.024	0.0030	B021521	0.022	0.0030	B021521	0.013	0.0030	B021501
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B021521	<0.00060	0.00060	B021521	<0.00060	0.00060	B021501
Dissolved Arsenic (As)	mg/L	0.00044	0.00020	B021521	0.00026	0.00020	B021521	0.00034	0.00020	B021501
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B022097				<0.010	0.010	B022090
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B021521	<0.0010	0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Boron (B)	mg/L	<0.020	0.020	B022097				<0.020	0.020	B022090
Dissolved Calcium (Ca)	mg/L	12	0.30	B022097				13	0.30	B022090
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B021521	<0.0010	0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B021521	<0.00030	0.00030	B021521	<0.00030	0.00030	B021501
Dissolved Copper (Cu)	mg/L	0.0045	0.0010	B021521	0.0039	0.0010	B021521	0.0042	0.0010	B021501
Dissolved Iron (Fe)	mg/L	0.39	0.060	B022097				0.061	0.060	B022090
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B021521	<0.00020	0.00020	B021521	<0.00020	0.00020	B022999
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B022097				<0.020	0.020	B022090
Dissolved Magnesium (Mg)	mg/L	3.4	0.20	B022097				3.7	0.20	B022090
Dissolved Manganese (Mn)	mg/L	0.021	0.0040	B022097				<0.0040	0.0040	B022090
Dissolved Molybdenum (Mo)	mg/L	0.00021	0.00020	B021521	<0.00020	0.00020	B021521	<0.00020	0.00020	B021501
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B021521	<0.00050	0.00050	B021521	<0.00050	0.00050	B021501
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B022097				<0.10	0.10	B022090
Dissolved Potassium (K)	mg/L	1.7	0.30	B022097				1.8	0.30	B022090
Dissolved Selenium (Se)	mg/L	0.00021	0.00020	B021521	0.00020	0.00020	B021521	<0.00020	0.00020	B021501
Dissolved Silicon (Si)	mg/L	1.0	0.50	B022097				0.71	0.50	B022090
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B021521	<0.00010	0.00010	B021521	<0.00010	0.00010	B021501
Dissolved Sodium (Na)	mg/L	2.1	0.50	B022097				2.2	0.50	B022090
Dissolved Strontium (Sr)	mg/L	0.025	0.020	B022097				0.027	0.020	B022090
Dissolved Sulphur (S)	mg/L	5.5	0.20	B022097				6.4	0.20	B022090
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B021521	<0.00020	0.00020	B021521	<0.00020	0.00020	B021501
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B021521	<0.0010	0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B021521	<0.0010	0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B021521	<0.00010	0.00010	B021521	<0.00010	0.00010	B021501

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO822			BTO822			BTO823		
Sampling Date		2023/06/27 08:35			2023/06/27 08:35			2023/06/27 08:20		
COC Number		697998-02-01			697998-02-01			697998-03-01		
	UNITS	**CL-4 BTM**	**RDL**	**QC Batch**	**CL-4 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B021521	<0.0010	0.0010	B021521	<0.0010	0.0010	B021501
Dissolved Zinc (Zn)	mg/L	0.016	0.0030	B021521	0.014	0.0030	B021521	0.013	0.0030	B021501

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO824		BTO825		BTO826	BTO827		
Sampling Date		2023/06/27 08:25		2023/06/27 08:10		2023/06/27 08:15	2023/06/27		
COC Number		697998-03-01		697998-03-01		697998-03-01	697998-03-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	SW-110	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.027	B016351	<0.020	B016351	0.032	0.027	0.020	B016351
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.013	B021521	0.011	B021501	0.012	0.013	0.0030	B021521
Dissolved Antimony (Sb)	mg/L	<0.00060	B021521	<0.00060	B021501	0.0014	<0.00060	0.00060	B021521
Dissolved Arsenic (As)	mg/L	0.00039	B021521	0.00034	B021501	0.00062	0.00055	0.00020	B021521
Dissolved Barium (Ba)	mg/L	<0.010	B022090	<0.010	B022097	<0.010	<0.010	0.010	B022090
Dissolved Beryllium (Be)	mg/L	<0.0010	B021521	<0.0010	B021501	<0.0010	<0.0010	0.0010	B021521
Dissolved Boron (B)	mg/L	<0.020	B022090	<0.020	B022097	<0.020	<0.020	0.020	B022090
Dissolved Calcium (Ca)	mg/L	13	B022090	12	B022097	11	13	0.30	B022090
Dissolved Chromium (Cr)	mg/L	<0.0010	B021521	<0.0010	B021501	<0.0010	<0.0010	0.0010	B021521
Dissolved Cobalt (Co)	mg/L	<0.00030	B021521	<0.00030	B021501	<0.00030	<0.00030	0.00030	B021521
Dissolved Copper (Cu)	mg/L	0.0040	B021521	0.0034	B021501	0.0032	0.0038	0.0010	B021521
Dissolved Iron (Fe)	mg/L	0.12	B022090	<0.060	B022097	<0.060	0.066	0.060	B022090
Dissolved Lead (Pb)	mg/L	<0.00020	B021521	<0.00020	B021501	<0.00020	<0.00020	0.00020	B021521
Dissolved Lithium (Li)	mg/L	<0.020	B022090	0.026	B022097	<0.020	<0.020	0.020	B022090
Dissolved Magnesium (Mg)	mg/L	3.5	B022090	3.4	B022097	3.4	3.5	0.20	B022090
Dissolved Manganese (Mn)	mg/L	<0.0040	B022090	<0.0040	B022097	<0.0040	<0.0040	0.0040	B022090
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B021521	<0.00020	B021501	<0.00020	<0.00020	0.00020	B021521
Dissolved Nickel (Ni)	mg/L	<0.00050	B021521	<0.00050	B021501	<0.00050	<0.00050	0.00050	B021521
Dissolved Phosphorus (P)	mg/L	<0.10	B022090	<0.10	B022097	<0.10	<0.10	0.10	B022090
Dissolved Potassium (K)	mg/L	1.6	B022090	1.7	B022097	1.5	1.7	0.30	B022090
Dissolved Selenium (Se)	mg/L	<0.00020	B021521	<0.00020	B021501	<0.00020	<0.00020	0.00020	B021521
Dissolved Silicon (Si)	mg/L	0.86	B022090	0.63	B022097	0.75	0.67	0.50	B022090
Dissolved Silver (Ag)	mg/L	<0.00010	B021521	<0.00010	B021501	<0.00010	<0.00010	0.00010	B021521
Dissolved Sodium (Na)	mg/L	2.2	B022090	2.1	B022097	2.1	2.1	0.50	B022090
Dissolved Strontium (Sr)	mg/L	0.027	B022090	0.025	B022097	0.027	0.027	0.020	B022090
Dissolved Sulphur (S)	mg/L	5.6	B022090	5.5	B022097	4.6	6.4	0.20	B022090
Dissolved Thallium (Tl)	mg/L	<0.00020	B021521	<0.00020	B021501	<0.00020	<0.00020	0.00020	B021521
Dissolved Tin (Sn)	mg/L	<0.0010	B021521	<0.0010	B021501	<0.0010	<0.0010	0.0010	B021521
Dissolved Titanium (Ti)	mg/L	<0.0010	B021521	<0.0010	B021501	<0.0010	<0.0010	0.0010	B021521
Dissolved Uranium (U)	mg/L	<0.00010	B021521	<0.00010	B021501	<0.00010	<0.00010	0.00010	B021521
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO824		BTO825		BTO826	BTO827		
Sampling Date		2023/06/27 08:25		2023/06/27 08:10		2023/06/27 08:15	2023/06/27		
COC Number		697998-03-01		697998-03-01		697998-03-01	697998-03-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	SW-110	RDL	QC Batch
Dissolved Vanadium (V)	mg/L	<0.0010	B021521	<0.0010	B021501	<0.0010	<0.0010	0.0010	B021521
Dissolved Zinc (Zn)	mg/L	0.015	B021521	0.011	B021501	0.012	0.011	0.0030	B021521
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO828		BTO829		BTO830		
Sampling Date		2023/06/27		2023/06/27		2023/06/27		
COC Number		697998-03-01		697998-03-01		697998-03-01		
	UNITS	SW-111	QC Batch	SW-112	QC Batch	TRIP BLANK	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.12	B016351	0.29	B016351	<0.020	0.020	B016351
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.010	B021521	0.012	B021521	<0.0030	0.0030	B021521
Dissolved Antimony (Sb)	mg/L	<0.00060	B021521	<0.00060	B021521	<0.00060	0.00060	B022999
Dissolved Arsenic (As)	mg/L	0.00041	B021521	0.00030	B021521	<0.00020	0.00020	B021521
Dissolved Barium (Ba)	mg/L	<0.010	B022090	<0.010	B022097	<0.010	0.010	B022090
Dissolved Beryllium (Be)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021521
Dissolved Boron (B)	mg/L	<0.020	B022090	<0.020	B022097	<0.020	0.020	B022090
Dissolved Calcium (Ca)	mg/L	30	B022090	47	B022097	<0.30	0.30	B022090
Dissolved Chromium (Cr)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021521
Dissolved Cobalt (Co)	mg/L	<0.00030	B021521	<0.00030	B021521	<0.00030	0.00030	B021521
Dissolved Copper (Cu)	mg/L	0.0062	B021521	0.0080	B021521	<0.0010	0.0010	B021521
Dissolved Iron (Fe)	mg/L	0.35	B022090	0.76	B022097	<0.060	0.060	B022090
Dissolved Lead (Pb)	mg/L	<0.00020	B021521	<0.00020	B021521	<0.00020	0.00020	B021521
Dissolved Lithium (Li)	mg/L	<0.020	B022090	<0.020	B022097	<0.020	0.020	B022090
Dissolved Magnesium (Mg)	mg/L	5.8	B022090	7.9	B022097	<0.20	0.20	B022090
Dissolved Manganese (Mn)	mg/L	0.011	B022090	0.067	B022097	<0.0040	0.0040	B022090
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B021521	<0.00020	B021521	<0.00020	0.00020	B021521
Dissolved Nickel (Ni)	mg/L	<0.00050	B021521	0.00071	B021521	<0.00050	0.00050	B021521
Dissolved Phosphorus (P)	mg/L	<0.10	B022090	<0.10	B022097	<0.10	0.10	B022090
Dissolved Potassium (K)	mg/L	2.8	B022090	3.9	B022097	<0.30	0.30	B022090
Dissolved Selenium (Se)	mg/L	<0.00020	B021521	<0.00020	B021521	0.00021	0.00020	B021521
Dissolved Silicon (Si)	mg/L	0.85	B022090	0.98	B022097	<0.50	0.50	B022090
Dissolved Silver (Ag)	mg/L	<0.00010	B021521	<0.00010	B021521	<0.00010	0.00010	B021521
Dissolved Sodium (Na)	mg/L	2.6	B022090	2.9	B022097	<0.50	0.50	B022090
Dissolved Strontium (Sr)	mg/L	0.036	B022090	0.043	B022097	<0.020	0.020	B022090
Dissolved Sulphur (S)	mg/L	24	B022090	43	B022097	<0.20	0.20	B022090
Dissolved Thallium (Tl)	mg/L	<0.00020	B021521	<0.00020	B021521	<0.00020	0.00020	B021521
Dissolved Tin (Sn)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021521
Dissolved Titanium (Ti)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021521
Dissolved Uranium (U)	mg/L	<0.00010	B021521	<0.00010	B021521	<0.00010	0.00010	B021521
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BTO828		BTO829		BTO830		
Sampling Date		2023/06/27		2023/06/27		2023/06/27		
COC Number		697998-03-01		697998-03-01		697998-03-01		
	UNITS	**SW-111**	**QC Batch**	**SW-112**	**QC Batch**	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B021521	<0.0010	B021521	<0.0010	0.0010	B021521
Dissolved Zinc (Zn)	mg/L	0.045	B021521	0.088	B021521	<0.0030	0.0030	B021521
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO802		BTO803	BTO804	BTO805	BTO806		
Sampling Date		2023/06/27 11:45		2023/06/27 09:40	2023/06/27 09:35	2023/06/27 09:45	2023/06/27 09:50		
COC Number		697998-01-01		697998-01-01	697998-01-01	697998-01-01	697998-01-01		
	UNITS	SC-1	QC Batch	SB-1	SB-2	CB-1	CB-2	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.12	B014951	0.41	0.32	0.39	0.40	0.020	B014951
Total Aluminum (Al)	mg/L	0.078	B021035	0.056	0.059	0.20	0.094	0.0030	B020981
Total Antimony (Sb)	mg/L	<0.00060	B021035	<0.00060	<0.00060	<0.00060	0.00061	0.00060	B020981
Total Arsenic (As)	mg/L	0.00045	B021035	0.00029	0.00029	0.00030	0.00030	0.00020	B020981
Total Barium (Ba)	mg/L	<0.010	B021036	0.010	<0.010	0.011	0.010	0.010	B021032
Total Beryllium (Be)	mg/L	<0.0010	B021035	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B020981
Total Boron (B)	mg/L	<0.020	B021036	<0.020	<0.020	0.053	0.028	0.020	B021032
Total Calcium (Ca)	mg/L	8.0	B021036	39	30	38	39	0.30	B021032
Total Chromium (Cr)	mg/L	<0.0010	B021035	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B020981
Total Cobalt (Co)	mg/L	<0.00030	B021035	0.00035	<0.00030	0.00032	0.00035	0.00030	B020981
Total Copper (Cu)	mg/L	0.0055	B021035	0.013	0.011	0.013	0.013	0.0010	B020981
Total Iron (Fe)	mg/L	0.25	B021036	2.0	1.4	1.7	1.8	0.060	B021032
Total Lead (Pb)	mg/L	<0.00020	B021035	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Lithium (Li)	mg/L	<0.020	B021036	<0.020	<0.020	<0.020	<0.020	0.020	B021032
Total Magnesium (Mg)	mg/L	2.6	B021036	6.8	5.5	6.5	6.6	0.20	B021032
Total Manganese (Mn)	mg/L	0.023	B021036	0.082	0.062	0.075	0.077	0.0040	B021032
Total Molybdenum (Mo)	mg/L	<0.00020	B021035	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Nickel (Ni)	mg/L	0.00053	B021035	0.0011	0.0011	0.0011	0.0011	0.00050	B020981
Total Phosphorus (P)	mg/L	<0.10	B021036	<0.10	<0.10	<0.10	<0.10	0.10	B021032
Total Potassium (K)	mg/L	1.3	B021036	3.4	2.8	3.2	3.3	0.30	B021032
Total Selenium (Se)	mg/L	<0.00020	B021035	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Silicon (Si)	mg/L	1.4	B021036	1.3	1.3	1.2	1.2	0.50	B021032
Total Silver (Ag)	mg/L	<0.00010	B021035	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B020981
Total Sodium (Na)	mg/L	1.6	B021036	2.7	2.3	2.6	2.7	0.50	B021032
Total Strontium (Sr)	mg/L	0.021	B021036	0.040	0.034	0.047	0.042	0.020	B021032
Total Sulphur (S)	mg/L	1.4	B021036	37	26	35	36	0.20	B021032
Total Thallium (Tl)	mg/L	<0.00020	B021035	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Tin (Sn)	mg/L	<0.0010	B021035	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B020981
Total Titanium (Ti)	mg/L	0.0028	B021035	0.0017	0.0020	0.0021	0.0019	0.0010	B020981
Total Uranium (U)	mg/L	<0.00010	B021035	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B020981
Total Vanadium (V)	mg/L	<0.0010	B021035	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B020981

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO802		BTO803	BTO804	BTO805	BTO806		
Sampling Date		2023/06/27 11:45		2023/06/27 09:40	2023/06/27 09:35	2023/06/27 09:45	2023/06/27 09:50		
COC Number		697998-01-01		697998-01-01	697998-01-01	697998-01-01	697998-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**SB-2**	**CB-1**	**CB-2**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.035	B021035	0.12	0.098	0.12	0.12	0.0030	B020981
RDL = Reportable Detection Limit									

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO807		BTO808		BTO809		
Sampling Date		2023/06/27 09:55		2023/06/27 10:00		2023/06/27 10:10		
COC Number		697998-01-01		697998-01-01		697998-01-01		
	UNITS	EB-1	QC Batch	EB-2	QC Batch	NB-1	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.53	B014951	0.58	B014951	0.44	0.020	B014951
Total Aluminum (Al)	mg/L	0.078	B021035	0.071	B020981	0.053	0.0030	B021035
Total Antimony (Sb)	mg/L	<0.00060	B021035	<0.00060	B020981	<0.00060	0.00060	B021035
Total Arsenic (As)	mg/L	0.00032	B021035	0.00026	B020981	0.00026	0.00020	B021035
Total Barium (Ba)	mg/L	0.013	B021036	0.013	B021032	0.011	0.010	B021036
Total Beryllium (Be)	mg/L	<0.0010	B021035	<0.0010	B020981	<0.0010	0.0010	B021035
Total Boron (B)	mg/L	<0.020	B021036	<0.020	B021032	<0.020	0.020	B021036
Total Calcium (Ca)	mg/L	48	B021036	53	B021032	45	0.30	B021036
Total Chromium (Cr)	mg/L	<0.0010	B021035	<0.0010	B020981	<0.0010	0.0010	B021035
Total Cobalt (Co)	mg/L	0.00042	B021035	0.00049	B020981	0.00035	0.00030	B021035
Total Copper (Cu)	mg/L	0.016	B021035	0.016	B020981	0.014	0.0010	B021035
Total Iron (Fe)	mg/L	1.8	B021036	1.6	B021032	2.1	0.060	B021036
Total Lead (Pb)	mg/L	<0.00020	B021035	<0.00020	B020981	<0.00020	0.00020	B021035
Total Lithium (Li)	mg/L	<0.020	B021036	<0.020	B021032	<0.020	0.020	B021036
Total Magnesium (Mg)	mg/L	7.8	B021036	8.6	B021032	7.3	0.20	B021036
Total Manganese (Mn)	mg/L	0.089	B021036	0.093	B021032	0.090	0.0040	B021036
Total Molybdenum (Mo)	mg/L	<0.00020	B021035	<0.00020	B020981	<0.00020	0.00020	B021035
Total Nickel (Ni)	mg/L	0.0015	B021035	0.0015	B020981	0.0011	0.00050	B021035
Total Phosphorus (P)	mg/L	<0.10	B021036	<0.10	B021032	<0.10	0.10	B021036
Total Potassium (K)	mg/L	3.7	B021036	4.1	B021032	3.5	0.30	B021036
Total Selenium (Se)	mg/L	<0.00020	B021035	<0.00020	B020981	<0.00020	0.00020	B021035
Total Silicon (Si)	mg/L	1.0	B021036	1.0	B021032	1.1	0.50	B021036
Total Silver (Ag)	mg/L	<0.00010	B021035	<0.00010	B020981	<0.00010	0.00010	B021035
Total Sodium (Na)	mg/L	2.9	B021036	3.2	B021032	2.7	0.50	B021036
Total Strontium (Sr)	mg/L	0.053	B021036	0.049	B021032	0.050	0.020	B021036
Total Sulphur (S)	mg/L	47	B021036	53	B021032	42	0.20	B021036
Total Thallium (Tl)	mg/L	<0.00020	B021035	<0.00020	B020981	<0.00020	0.00020	B021035
Total Tin (Sn)	mg/L	<0.0010	B021035	<0.0010	B020981	<0.0010	0.0010	B021035
Total Titanium (Ti)	mg/L	0.0021	B021035	0.0022	B020981	0.0014	0.0010	B021035
Total Uranium (U)	mg/L	<0.00010	B021035	<0.00010	B020981	<0.00010	0.00010	B021035
Total Vanadium (V)	mg/L	<0.0010	B021035	<0.0010	B020981	<0.0010	0.0010	B021035

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO807		BTO808		BTO809		
Sampling Date		2023/06/27 09:55		2023/06/27 10:00		2023/06/27 10:10		
COC Number		697998-01-01		697998-01-01		697998-01-01		
	UNITS	**EB-1**	**QC Batch**	**EB-2**	**QC Batch**	**NB-1**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.13	B021035	0.16	B020981	0.12	0.0030	B021035
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO809			BTO810	BTO811	BTO813		
Sampling Date		2023/06/27 10:10			2023/06/27 10:05	2023/06/27 10:15	2023/06/27 08:50		
COC Number		697998-01-01			697998-01-01	697998-01-01	697998-02-01		
	UNITS	NB-1 Lab-Dup	RDL	QC Batch	NB-2	CLD	CL-3 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L				0.43	0.44	0.27	0.020	B016352
Total Aluminum (Al)	mg/L	0.051	0.0030	B021035	0.053	0.052	0.070	0.0030	B020981
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B021035	<0.00060	<0.00060	0.00094	0.00060	B020981
Total Arsenic (As)	mg/L	0.00025	0.00020	B021035	0.00025	0.00026	0.00029	0.00020	B020981
Total Barium (Ba)	mg/L	0.011	0.010	B021036	0.011	0.011	0.010	0.010	B021032
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B021035	<0.0010	<0.0010	<0.0010	0.0010	B020981
Total Boron (B)	mg/L	<0.020	0.020	B021036	<0.020	<0.020	0.021	0.020	B021032
Total Calcium (Ca)	mg/L	45	0.30	B021036	46	49	33	0.30	B021032
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B021035	<0.0010	<0.0010	<0.0010	0.0010	B020981
Total Cobalt (Co)	mg/L	0.00033	0.00030	B021035	0.00034	0.00036	<0.00030	0.00030	B020981
Total Copper (Cu)	mg/L	0.014	0.0010	B021035	0.014	0.015	0.010	0.0010	B020981
Total Iron (Fe)	mg/L	2.2	0.060	B021036	2.0	2.0	1.2	0.060	B021032
Total Lead (Pb)	mg/L	<0.00020	0.00020	B021035	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Lithium (Li)	mg/L	<0.020	0.020	B021036	<0.020	<0.020	<0.020	0.020	B021032
Total Magnesium (Mg)	mg/L	7.3	0.20	B021036	7.6	8.2	6.0	0.20	B021032
Total Manganese (Mn)	mg/L	0.091	0.0040	B021036	0.089	0.091	0.053	0.0040	B021032
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B021035	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Nickel (Ni)	mg/L	0.0015	0.00050	B021035	0.0013	0.0014	0.0010	0.00050	B020981
Total Phosphorus (P)	mg/L	<0.10	0.10	B021036	<0.10	<0.10	<0.10	0.10	B021032
Total Potassium (K)	mg/L	3.5	0.30	B021036	3.5	3.7	2.9	0.30	B021032
Total Selenium (Se)	mg/L	<0.00020	0.00020	B021035	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Silicon (Si)	mg/L	1.1	0.50	B021036	1.2	1.2	1.1	0.50	B021032
Total Silver (Ag)	mg/L	<0.00010	0.00010	B021035	<0.00010	<0.00010	<0.00010	0.00010	B020981
Total Sodium (Na)	mg/L	2.7	0.50	B021036	2.8	2.9	2.5	0.50	B021032
Total Strontium (Sr)	mg/L	0.048	0.020	B021036	0.044	0.046	0.038	0.020	B021032
Total Sulphur (S)	mg/L	43	0.20	B021036	45	48	30	0.20	B021032
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B021035	<0.00020	<0.00020	<0.00020	0.00020	B020981
Total Tin (Sn)	mg/L	<0.0010	0.0010	B021035	<0.0010	<0.0010	<0.0010	0.0010	B020981
Total Titanium (Ti)	mg/L	0.0017	0.0010	B021035	0.0016	0.0013	0.0018	0.0010	B020981
Total Uranium (U)	mg/L	<0.00010	0.00010	B021035	<0.00010	<0.00010	<0.00010	0.00010	B020981
Total Vanadium (V)	mg/L	<0.0010	0.0010	B021035	<0.0010	<0.0010	<0.0010	0.0010	B020981

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO809			BTO810	BTO811	BTO813		
Sampling Date		2023/06/27 10:10			2023/06/27 10:05	2023/06/27 10:15	2023/06/27 08:50		
COC Number		697998-01-01			697998-01-01	697998-01-01	697998-02-01		
	UNITS	**NB-1 Lab-Dup**	**RDL**	**QC Batch**	**NB-2**	**CLD**	**CL-3 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.11	0.0030	B021035	0.13	0.13	0.085	0.0030	B020981

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO814		BTO815		BTO816		BTO817		
Sampling Date		2023/06/27 08:55		2023/06/27 09:00		2023/06/27 09:05		2023/06/27 08:40		
COC Number		697998-02-01		697998-02-01		697998-02-01		697998-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	QC Batch	CL-8 SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.15	B016352	0.22	B016352	0.22	B016352	0.066	0.020	B016352
Total Aluminum (Al)	mg/L	0.055	B020981	0.048	B020285	0.051	B021052	0.066	0.0030	B021035
Total Antimony (Sb)	mg/L	<0.00060	B020981	0.0012	B020285	<0.00060	B021052	<0.00060	0.00060	B021035
Total Arsenic (As)	mg/L	0.00043	B020981	0.00040	B020285	0.00032	B021052	0.00041	0.00020	B021035
Total Barium (Ba)	mg/L	<0.010	B021032	<0.010	B020286	<0.010	B021087	<0.010	0.010	B021036
Total Beryllium (Be)	mg/L	<0.0010	B020981	<0.0010	B020285	<0.0010	B021052	<0.0010	0.0010	B021035
Total Boron (B)	mg/L	<0.020	B021032	<0.020	B020286	0.024	B021087	<0.020	0.020	B021036
Total Calcium (Ca)	mg/L	22	B021032	25	B020286	28	B021087	14	0.30	B021036
Total Chromium (Cr)	mg/L	<0.0010	B020981	<0.0010	B020285	<0.0010	B021052	<0.0010	0.0010	B021035
Total Cobalt (Co)	mg/L	<0.00030	B020981	<0.00030	B020285	<0.00030	B021052	<0.00030	0.00030	B021035
Total Copper (Cu)	mg/L	0.0079	B020981	0.0092	B020285	0.0092	B021052	0.0055	0.0010	B021035
Total Iron (Fe)	mg/L	0.60	B021032	0.85	B020286	0.96	B021087	0.34	0.060	B021036
Total Lead (Pb)	mg/L	<0.00020	B020981	<0.00020	B020285	<0.00020	B021052	<0.00020	0.00020	B021035
Total Lithium (Li)	mg/L	<0.020	B021032	<0.020	B020286	<0.020	B021087	<0.020	0.020	B021036
Total Magnesium (Mg)	mg/L	4.5	B021032	5.1	B020286	5.3	B021087	3.5	0.20	B021036
Total Manganese (Mn)	mg/L	0.026	B021032	0.038	B020286	0.043	B021087	0.013	0.0040	B021036
Total Molybdenum (Mo)	mg/L	0.00055	B020981	<0.00020	B020285	<0.00020	B021052	<0.00020	0.00020	B021035
Total Nickel (Ni)	mg/L	0.00074	B020981	0.00089	B020285	0.00087	B021052	0.00063	0.00050	B021035
Total Phosphorus (P)	mg/L	<0.10	B021032	<0.10	B020286	<0.10	B021087	<0.10	0.10	B021036
Total Potassium (K)	mg/L	2.1	B021032	2.3	B020286	2.6	B021087	1.6	0.30	B021036
Total Selenium (Se)	mg/L	<0.00020	B020981	<0.00020	B020285	<0.00020	B021052	<0.00020	0.00020	B021035
Total Silicon (Si)	mg/L	1.0	B021032	0.95	B020286	1.1	B021087	0.93	0.50	B021036
Total Silver (Ag)	mg/L	<0.00010	B020981	<0.00010	B020285	<0.00010	B021052	<0.00010	0.00010	B021035
Total Sodium (Na)	mg/L	2.3	B021032	2.1	B020286	2.4	B021087	2.0	0.50	B021036
Total Strontium (Sr)	mg/L	0.031	B021032	0.032	B020286	0.035	B021087	0.029	0.020	B021036
Total Sulphur (S)	mg/L	16	B021032	24	B020286	25	B021087	8.4	0.20	B021036
Total Thallium (Tl)	mg/L	<0.00020	B020981	<0.00020	B020285	<0.00020	B021052	<0.00020	0.00020	B021035
Total Tin (Sn)	mg/L	<0.0010	B020981	<0.0010	B020285	<0.0010	B021052	<0.0010	0.0010	B021035
Total Titanium (Ti)	mg/L	0.0022	B020981	0.0017	B020285	0.0015	B021052	0.0024	0.0010	B021035
Total Uranium (U)	mg/L	<0.00010	B020981	<0.00010	B020285	<0.00010	B021052	<0.00010	0.00010	B021035
Total Vanadium (V)	mg/L	<0.0010	B020981	<0.0010	B020285	<0.0010	B021052	<0.0010	0.0010	B021035

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO814		BTO815		BTO816		BTO817		
Sampling Date		2023/06/27 08:55		2023/06/27 09:00		2023/06/27 09:05		2023/06/27 08:40		
COC Number		697998-02-01		697998-02-01		697998-02-01		697998-02-01		
	UNITS	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.049	B020981	0.071	B020285	0.072	B021052	0.024	0.0030	B021035
RDL = Reportable Detection Limit										

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO818			BTO818			BTO819		
Sampling Date		2023/06/27 08:45			2023/06/27 08:45			2023/06/27 09:10		
COC Number		697998-02-01			697998-02-01			697998-02-01		
	UNITS	CL-8 BTM	RDL	QC Batch	CL-8 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.076	0.020	B016352				0.069	0.020	B016352
Total Aluminum (Al)	mg/L	0.060	0.0030	B021052	0.066	0.0030	B021052	0.053	0.0030	B021052
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B021052	<0.00060	0.00060	B021052	<0.00060	0.00060	B021052
Total Arsenic (As)	mg/L	0.00040	0.00020	B021052	0.00045	0.00020	B021052	0.00041	0.00020	B021052
Total Barium (Ba)	mg/L	<0.010	0.010	B021087	<0.010	0.010	B021087	<0.010	0.010	B021087
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B021052	<0.0010	0.0010	B021052	<0.0010	0.0010	B021052
Total Boron (B)	mg/L	<0.020	0.020	B021087	<0.020	0.020	B021087	<0.020	0.020	B021087
Total Calcium (Ca)	mg/L	14	0.30	B021087	15	0.30	B021087	14	0.30	B021087
Total Chromium (Cr)	mg/L	<0.0010 (1)	0.0010	B021052	0.0044 (2)	0.0010	B021052	<0.0010	0.0010	B021052
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B021052	<0.00030	0.00030	B021052	<0.00030	0.00030	B021052
Total Copper (Cu)	mg/L	0.0060	0.0010	B021052	0.0067	0.0010	B021052	0.0063	0.0010	B021052
Total Iron (Fe)	mg/L	0.32	0.060	B021087	0.35	0.060	B021087	0.24	0.060	B021087
Total Lead (Pb)	mg/L	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052
Total Lithium (Li)	mg/L	<0.020	0.020	B021087	<0.020	0.020	B021087	<0.020	0.020	B021087
Total Magnesium (Mg)	mg/L	3.6	0.20	B021087	3.8	0.20	B021087	3.5	0.20	B021087
Total Manganese (Mn)	mg/L	0.013	0.0040	B021087	0.014	0.0040	B021087	0.0094	0.0040	B021087
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052
Total Nickel (Ni)	mg/L	0.00066	0.00050	B021052	0.0013	0.00050	B021052	0.00055	0.00050	B021052
Total Phosphorus (P)	mg/L	<0.10	0.10	B021087	<0.10	0.10	B021087	<0.10	0.10	B021087
Total Potassium (K)	mg/L	1.7	0.30	B021087	1.9	0.30	B021087	1.6	0.30	B021087
Total Selenium (Se)	mg/L	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052
Total Silicon (Si)	mg/L	1.0	0.50	B021087	1.1	0.50	B021087	0.97	0.50	B021087
Total Silver (Ag)	mg/L	<0.00010	0.00010	B021052	<0.00010	0.00010	B021052	<0.00010	0.00010	B021052
Total Sodium (Na)	mg/L	2.1	0.50	B021087	2.2	0.50	B021087	2.0	0.50	B021087
Total Strontium (Sr)	mg/L	0.027	0.020	B021087	0.028	0.020	B021087	0.027	0.020	B021087
Total Sulphur (S)	mg/L	9.0	0.20	B021087	9.2	0.20	B021087	8.2	0.20	B021087
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052	<0.00020	0.00020	B021052
Total Tin (Sn)	mg/L	<0.0010	0.0010	B021052	<0.0010	0.0010	B021052	<0.0010	0.0010	B021052

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Duplicate exceeds acceptance criteria due to sample non homogeneity. Reanalysis yields similar results.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO818			BTO818			BTO819		
Sampling Date		2023/06/27 08:45			2023/06/27 08:45			2023/06/27 09:10		
COC Number		697998-02-01			697998-02-01			697998-02-01		
	UNITS	**CL-8 BTM**	**RDL**	**QC Batch**	**CL-8 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-2 SFC**	**RDL**	**QC Batch**
Total Titanium (Ti)	mg/L	0.0027	0.0010	B021052	0.0023	0.0010	B021052	0.0018	0.0010	B021052
Total Uranium (U)	mg/L	<0.00010	0.00010	B021052	<0.00010	0.00010	B021052	<0.00010	0.00010	B021052
Total Vanadium (V)	mg/L	<0.0010	0.0010	B021052	<0.0010	0.0010	B021052	<0.0010	0.0010	B021052
Total Zinc (Zn)	mg/L	0.029	0.0030	B021052	0.032	0.0030	B021052	0.028	0.0030	B021052

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO820	BTO821	BTO822		BTO823		
Sampling Date		2023/06/27 09:15	2023/06/27 08:30	2023/06/27 08:35		2023/06/27 08:20		
COC Number		697998-02-01	697998-02-01	697998-02-01		697998-03-01		
	UNITS	CL-2 BTM	CL-4 SFC	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.072	0.054	0.069	B016352	0.053	0.020	B016352
Total Aluminum (Al)	mg/L	0.062	0.19	0.080	B020981	0.059	0.0030	B020285
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B020981	<0.00060	0.00060	B020285
Total Arsenic (As)	mg/L	0.00044	0.00042	0.00046	B020981	0.00048	0.00020	B020285
Total Barium (Ba)	mg/L	<0.010	<0.010	<0.010	B021032	<0.010	0.010	B020286
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285
Total Boron (B)	mg/L	<0.020	0.041	<0.020	B021032	<0.020	0.020	B020286
Total Calcium (Ca)	mg/L	13	13	12	B021032	12	0.30	B020286
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B020981	<0.00030	0.00030	B020285
Total Copper (Cu)	mg/L	0.0061	0.0057	0.0060	B020981	0.0054	0.0010	B020285
Total Iron (Fe)	mg/L	0.41	0.20	1.1	B021032	0.21	0.060	B020286
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B021032	<0.020	0.020	B020286
Total Magnesium (Mg)	mg/L	3.4	3.3	3.2	B021032	3.3	0.20	B020286
Total Manganese (Mn)	mg/L	0.017	0.0089	0.058	B021032	0.0086	0.0040	B020286
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Nickel (Ni)	mg/L	0.00061	0.00060	0.00054	B020981	0.00065	0.00050	B020285
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B021032	<0.10	0.10	B020286
Total Potassium (K)	mg/L	1.7	1.6	1.5	B021032	1.5	0.30	B020286
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Silicon (Si)	mg/L	1.1	0.92	1.3	B021032	0.87	0.50	B020286
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B020981	<0.00010	0.00010	B020285
Total Sodium (Na)	mg/L	2.1	2.0	2.0	B021032	1.9	0.50	B020286
Total Strontium (Sr)	mg/L	0.026	0.032	0.025	B021032	0.025	0.020	B020286
Total Sulphur (S)	mg/L	6.7	6.6	5.5	B021032	6.5	0.20	B020286
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285
Total Titanium (Ti)	mg/L	0.0022	0.0032	0.0025	B020981	0.0027	0.0010	B020285
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B020981	<0.00010	0.00010	B020285
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO820	BTO821	BTO822		BTO823		
Sampling Date		2023/06/27 09:15	2023/06/27 08:30	2023/06/27 08:35		2023/06/27 08:20		
COC Number		697998-02-01	697998-02-01	697998-02-01		697998-03-01		
	UNITS	**CL-2 BTM**	**CL-4 SFC**	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.030	0.026	0.026	B020981	0.023	0.0030	B020285
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO824	BTO825	BTO826	BTO827		BTO828		
Sampling Date		2023/06/27 08:25	2023/06/27 08:10	2023/06/27 08:15	2023/06/27		2023/06/27		
COC Number		697998-03-01	697998-03-01	697998-03-01	697998-03-01		697998-03-01		
	UNITS	CL-5 BTM	CL-6 SFC	CL-6 BTM	SW-110	QC Batch	SW-111	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.066	0.041	0.047	0.050	B016352	0.23	0.020	B016352
Total Aluminum (Al)	mg/L	0.068	0.065	0.072	0.079	B020981	0.052	0.0030	B020285
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	B020981	<0.00060	0.00060	B020285
Total Arsenic (As)	mg/L	0.00050	0.00040	0.00049	0.00046	B020981	0.00039	0.00020	B020285
Total Barium (Ba)	mg/L	<0.010	<0.010	<0.010	<0.010	B021032	0.010	0.010	B020286
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285
Total Boron (B)	mg/L	<0.020	<0.020	0.021	<0.020	B021032	<0.020	0.020	B020286
Total Calcium (Ca)	mg/L	12	12	11	13	B021032	27	0.30	B020286
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	B020981	<0.00030	0.00030	B020285
Total Copper (Cu)	mg/L	0.0059	0.0047	0.0047	0.0063	B020981	0.010	0.0010	B020285
Total Iron (Fe)	mg/L	0.41	0.16	0.17	0.21	B021032	0.93	0.060	B020286
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	B021032	<0.020	0.020	B020286
Total Magnesium (Mg)	mg/L	3.4	3.3	3.1	3.4	B021032	5.4	0.20	B020286
Total Manganese (Mn)	mg/L	0.021	0.0088	0.015	0.0097	B021032	0.041	0.0040	B020286
Total Molybdenum (Mo)	mg/L	0.00045	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Nickel (Ni)	mg/L	0.00058	0.00061	0.00078	0.00093	B020981	0.00083	0.00050	B020285
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	B021032	<0.10	0.10	B020286
Total Potassium (K)	mg/L	1.7	1.5	1.5	1.6	B021032	2.4	0.30	B020286
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Silicon (Si)	mg/L	1.2	0.85	1.7	0.97	B021032	1.0	0.50	B020286
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	B020981	<0.00010	0.00010	B020285
Total Sodium (Na)	mg/L	2.2	2.0	2.0	2.1	B021032	2.2	0.50	B020286
Total Strontium (Sr)	mg/L	0.027	0.026	0.025	0.027	B021032	0.034	0.020	B020286
Total Sulphur (S)	mg/L	5.7	5.4	4.3	6.5	B021032	25	0.20	B020286
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B020981	<0.00020	0.00020	B020285
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285
Total Titanium (Ti)	mg/L	0.0024	0.0028	0.0030	0.0027	B020981	0.0019	0.0010	B020285
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	B020981	<0.00010	0.00010	B020285
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B020981	<0.0010	0.0010	B020285

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO824	BTO825	BTO826	BTO827		BTO828		
Sampling Date		2023/06/27 08:25	2023/06/27 08:10	2023/06/27 08:15	2023/06/27		2023/06/27		
COC Number		697998-03-01	697998-03-01	697998-03-01	697998-03-01		697998-03-01		
	UNITS	**CL-5 BTM**	**CL-6 SFC**	**CL-6 BTM**	**SW-110**	**QC Batch**	**SW-111**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.026	0.018	0.022	0.024	B020981	0.075	0.0030	B020285
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO829			BTO829			BTO830		
Sampling Date		2023/06/27			2023/06/27			2023/06/27		
COC Number		697998-03-01			697998-03-01			697998-03-01		
	UNITS	SW-112	RDL	QC Batch	SW-112 Lab-Dup	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.42	0.020	B016352				<0.020	0.020	B016352
Total Aluminum (Al)	mg/L	0.070	0.0030	B020981	0.072	0.0030	B020981	0.0046	0.0030	B021035
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B020981	<0.00060	0.00060	B020981	<0.00060	0.00060	B021035
Total Arsenic (As)	mg/L	0.00026	0.00020	B020981	0.00026	0.00020	B020981	<0.00020	0.00020	B021035
Total Barium (Ba)	mg/L	0.010	0.010	B021032	0.011	0.010	B021032	<0.010	0.010	B021036
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B020981	<0.0010	0.0010	B020981	<0.0010	0.0010	B021035
Total Boron (B)	mg/L	0.021	0.020	B021032	0.022	0.020	B021032	<0.020	0.020	B021036
Total Calcium (Ca)	mg/L	45	0.30	B021032	46	0.30	B021032	<0.30	0.30	B021036
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B020981	<0.0010	0.0010	B020981	<0.0010	0.0010	B021035
Total Cobalt (Co)	mg/L	0.00034	0.00030	B020981	0.00038	0.00030	B020981	<0.00030	0.00030	B021035
Total Copper (Cu)	mg/L	0.015	0.0010	B020981	0.015	0.0010	B020981	<0.0010	0.0010	B021035
Total Iron (Fe)	mg/L	2.0	0.060	B021032	2.0	0.060	B021032	0.060	0.060	B021036
Total Lead (Pb)	mg/L	<0.00020	0.00020	B020981	<0.00020	0.00020	B020981	<0.00020	0.00020	B021035
Total Lithium (Li)	mg/L	<0.020	0.020	B021032	<0.020	0.020	B021032	<0.020	0.020	B021036
Total Magnesium (Mg)	mg/L	7.6	0.20	B021032	7.6	0.20	B021032	<0.20	0.20	B021036
Total Manganese (Mn)	mg/L	0.087	0.0040	B021032	0.086	0.0040	B021032	<0.0040	0.0040	B021036
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B020981	<0.00020	0.00020	B020981	<0.00020	0.00020	B021035
Total Nickel (Ni)	mg/L	0.0018	0.00050	B020981	0.0013	0.00050	B020981	<0.00050	0.00050	B021035
Total Phosphorus (P)	mg/L	<0.10	0.10	B021032	<0.10	0.10	B021032	<0.10	0.10	B021036
Total Potassium (K)	mg/L	3.5	0.30	B021032	3.5	0.30	B021032	<0.30	0.30	B021036
Total Selenium (Se)	mg/L	<0.00020	0.00020	B020981	<0.00020	0.00020	B020981	<0.00020	0.00020	B021035
Total Silicon (Si)	mg/L	1.2	0.50	B021032	1.2	0.50	B021032	<0.50	0.50	B021036
Total Silver (Ag)	mg/L	<0.00010	0.00010	B020981	<0.00010	0.00010	B020981	<0.00010	0.00010	B021035
Total Sodium (Na)	mg/L	2.8	0.50	B021032	2.9	0.50	B021032	<0.50	0.50	B021036
Total Strontium (Sr)	mg/L	0.044	0.020	B021032	0.045	0.020	B021032	<0.020	0.020	B021036
Total Sulphur (S)	mg/L	44	0.20	B021032	44	0.20	B021032	<0.20	0.20	B021036
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B020981	<0.00020	0.00020	B020981	<0.00020	0.00020	B021035
Total Tin (Sn)	mg/L	<0.0010	0.0010	B020981	<0.0010	0.0010	B020981	<0.0010	0.0010	B021035
Total Titanium (Ti)	mg/L	0.0016	0.0010	B020981	0.0016	0.0010	B020981	<0.0010	0.0010	B021035
Total Uranium (U)	mg/L	<0.00010	0.00010	B020981	<0.00010	0.00010	B020981	<0.00010	0.00010	B021035
Total Vanadium (V)	mg/L	<0.0010	0.0010	B020981	<0.0010	0.0010	B020981	<0.0010	0.0010	B021035

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BTO829			BTO829			BTO830		
Sampling Date		2023/06/27			2023/06/27			2023/06/27		
COC Number		697998-03-01			697998-03-01			697998-03-01		
	UNITS	**SW-112**	**RDL**	**QC Batch**	**SW-112 Lab-Dup**	**RDL**	**QC Batch**	**TRIP BLANK**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.13	0.0030	B020981	0.14	0.0030	B020981	<0.0030	0.0030	B021035

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO802			BTO803			BTO804		
Sampling Date		2023/06/27 11:45			2023/06/27 09:40			2023/06/27 09:35		
COC Number		697998-01-01			697998-01-01			697998-01-01		
	UNITS	**SC-1**	**RDL**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**	**SB-2**	**RDL**	**QC Batch**
Calculated Parameters										
Hardness (CaCO3)	mg/L	31	0.50	B016131	130	0.50	B016131	100	0.50	B016131
Total Hardness (CaCO3)	mg/L	30.7	0.50	B016133	125	0.50	B016133	96.7	0.50	B016133
Misc. Inorganics										
pH	pH	6.65	N/A	B020883	6.35	N/A	B020881	6.46	N/A	B020883
Total Organic Carbon (C)	mg/L	12	0.50	B021387	8.7	0.50	B021380	9.5	0.50	B021387
Total Suspended Solids	mg/L	3.3	0.99	B019909	2.8	0.97	B019909	3.5	0.96	B019909
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11 (1)	0.50	B021240	7.4 (1)	0.50	B021240	9.0 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020882	<1.0	1.0	B020880	<1.0	1.0	B020882
Alkalinity (Total as CaCO3)	mg/L	26	1.0	B020882	13	1.0	B020880	16	1.0	B020882
Bicarbonate (HCO3)	mg/L	31	1.0	B020882	16	1.0	B020880	19	1.0	B020882
Carbonate (CO3)	mg/L	<1.0	1.0	B020882	<1.0	1.0	B020880	<1.0	1.0	B020882
Hydroxide (OH)	mg/L	<1.0	1.0	B020882	<1.0	1.0	B020880	<1.0	1.0	B020882
Sulphate (SO4)	mg/L	2.9	1.0	B021242	110	1.0	B021242	82	1.0	B021246
Physical Properties										
Turbidity	NTU	0.37	0.10	B017218	7.0	0.10	B017218	6.0	0.10	B017218

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO805			BTO805			BTO806		
Sampling Date		2023/06/27 09:45			2023/06/27 09:45			2023/06/27 09:50		
COC Number		697998-01-01			697998-01-01			697998-01-01		
	UNITS	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch	CB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	130	0.50	B016131				130	0.50	B016131
Total Hardness (CaCO3)	mg/L	121	0.50	B016133				124	0.50	B016133
Misc. Inorganics										
pH	pH	6.37	N/A	B020883				6.32	N/A	B020881
Total Organic Carbon (C)	mg/L	8.4	0.50	B021387	8.6	0.50	B021387	8.4	0.50	B021380
Total Suspended Solids	mg/L	2.5	0.97	B019909				1.1	0.97	B019909
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.2 (1)	0.50	B021245				8.0 (1)	0.50	B021240
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020882				<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L	13	1.0	B020882				14	1.0	B020880
Bicarbonate (HCO3)	mg/L	16	1.0	B020882				17	1.0	B020880
Carbonate (CO3)	mg/L	<1.0	1.0	B020882				<1.0	1.0	B020880
Hydroxide (OH)	mg/L	<1.0	1.0	B020882				<1.0	1.0	B020880
Sulphate (SO4)	mg/L	110	1.0	B021246				120	1.0	B021242
Physical Properties										
Turbidity	NTU	6.1	0.10	B017218				6.8	0.10	B017218

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO807			BTO808			BTO809		
Sampling Date		2023/06/27 09:55			2023/06/27 10:00			2023/06/27 10:10		
COC Number		697998-01-01			697998-01-01			697998-01-01		
	UNITS	EB-1	RDL	QC Batch	EB-2	RDL	QC Batch	NB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	160	0.50	B016322	170	0.50	B016322	160	0.50	B016322
Total Hardness (CaCO3)	mg/L	152	0.50	B016133	168	0.50	B016133	142	0.50	B016133
Misc. Inorganics										
pH	pH	6.20	N/A	B020881	6.31	N/A	B020881	6.16	N/A	B020881
Total Organic Carbon (C)	mg/L	7.4	0.50	B021387	7.4	0.50	B021387	7.8	0.50	B021380
Total Suspended Solids	mg/L	2.7	0.96	B019909	2.1	0.97	B019909	2.9	0.96	B019909
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.3 (1)	0.50	B021245	6.8 (1)	0.50	B021240	7.4 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L	10	1.0	B020880	9.3	1.0	B020880	11	1.0	B020880
Bicarbonate (HCO3)	mg/L	12	1.0	B020880	11	1.0	B020880	14	1.0	B020880
Carbonate (CO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020880
Hydroxide (OH)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020880
Sulphate (SO4)	mg/L	140	5.0	B021246	150	5.0	B021242	130	5.0	B021246
Physical Properties										
Turbidity	NTU	6.7	0.10	B017218	6.7	0.10	B017218	7.8	0.10	B017218

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO809			BTO810			BTO810		
Sampling Date		2023/06/27 10:10			2023/06/27 10:05			2023/06/27 10:05		
COC Number		697998-01-01			697998-01-01			697998-01-01		
	UNITS	NB-1 Lab-Dup	RDL	QC Batch	NB-2	RDL	QC Batch	NB-2 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				150	0.50	B016322			
Total Hardness (CaCO3)	mg/L				145	0.50	B016133			
Misc. Inorganics										
pH	pH	6.21	N/A	B020881	6.28	N/A	B020881			
Total Organic Carbon (C)	mg/L				7.9	0.50	B021380			
Total Suspended Solids	mg/L				2.6	1.0	B019909			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				7.4 (1)	0.50	B021245			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880			
Alkalinity (Total as CaCO3)	mg/L	11	1.0	B020880	11	1.0	B020880			
Bicarbonate (HCO3)	mg/L	14	1.0	B020880	14	1.0	B020880			
Carbonate (CO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880			
Hydroxide (OH)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880			
Sulphate (SO4)	mg/L				130	5.0	B021246			
Physical Properties										
Turbidity	NTU				7.4	0.10	B017222	7.3	0.10	B017222

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO811			BTO811			BTO813		
Sampling Date		2023/06/27 10:15			2023/06/27 10:15			2023/06/27 08:50		
COC Number		697998-01-01			697998-01-01			697998-02-01		
	UNITS	CLD	RDL	QC Batch	CLD Lab-Dup	RDL	QC Batch	CL-3 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	160	0.50	B016322				110	0.50	B016322
Total Hardness (CaCO3)	mg/L	155	0.50	B016133				107	0.50	B016133
Misc. Inorganics										
pH	pH	6.37	N/A	B020883				6.45	N/A	B020883
Total Organic Carbon (C)	mg/L	7.4	0.50	B021387				8.8	0.50	B021387
Total Suspended Solids	mg/L	2.3	0.95	B019909				2.1	0.96	B019909
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.5 (1)	0.50	B021245	7.8	0.50	B021245	8.3 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020882				<1.0	1.0	B020882
Alkalinity (Total as CaCO3)	mg/L	11	1.0	B020882				16	1.0	B020882
Bicarbonate (HCO3)	mg/L	13	1.0	B020882				19	1.0	B020882
Carbonate (CO3)	mg/L	<1.0	1.0	B020882				<1.0	1.0	B020882
Hydroxide (OH)	mg/L	<1.0	1.0	B020882				<1.0	1.0	B020882
Sulphate (SO4)	mg/L	130	5.0	B021246				88	1.0	B021246
Physical Properties										
Turbidity	NTU	8.0	0.10	B017222				4.9	0.10	B017222

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO814			BTO815			BTO816		
Sampling Date		2023/06/27 08:55			2023/06/27 09:00			2023/06/27 09:05		
COC Number		697998-02-01			697998-02-01			697998-02-01		
	UNITS	CL-3 BTM	RDL	QC Batch	CL-7 SFC	RDL	QC Batch	CL-7 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	77	0.50	B016322	97	0.50	B016322	97	0.50	B016322
Total Hardness (CaCO3)	mg/L	72.6	0.50	B016133	83.7	0.50	B016133	92.0	0.50	B016133
Misc. Inorganics										
pH	pH	6.51	N/A	B020881	6.47	N/A	B020881	6.40	N/A	B020883
Total Organic Carbon (C)	mg/L	9.2	0.50	B021387	9.5	0.50	B021380	9.2	0.50	B021380
Total Suspended Solids	mg/L	2.3	0.97	B019909	1.5	0.95	B019909	2.5	1.0	B019909
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.5 (1)	0.50	B021240	8.4 (1)	0.50	B021240	9.1 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020882
Alkalinity (Total as CaCO3)	mg/L	21	1.0	B020880	17	1.0	B020880	16	1.0	B020882
Bicarbonate (HCO3)	mg/L	26	1.0	B020880	21	1.0	B020880	20	1.0	B020882
Carbonate (CO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020882
Hydroxide (OH)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020882
Sulphate (SO4)	mg/L	53	1.0	B021246	78	1.0	B021242	75	1.0	B021246
Physical Properties										
Turbidity	NTU	2.9	0.10	B017222	4.6	0.10	B017222	4.5	0.10	B017222

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO816			BTO817			BTO818		
Sampling Date		2023/06/27 09:05			2023/06/27 08:40			2023/06/27 08:45		
COC Number		697998-02-01			697998-02-01			697998-02-01		
	UNITS	CL-7 BTM Lab-Dup	RDL	QC Batch	CL-8 SFC	RDL	QC Batch	CL-8 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				52	0.50	B016322	53	0.50	B016322
Total Hardness (CaCO3)	mg/L				49.7	0.50	B016133	51.1	0.50	B016133
Misc. Inorganics										
pH	pH	6.49	N/A	B020883	6.53	N/A	B020881	6.67	N/A	B020881
Total Organic Carbon (C)	mg/L				9.0	0.50	B021387	9.9	0.50	B021380
Total Suspended Solids	mg/L				2.2	0.99	B019909	<1.0	1.0	B019926
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				9.7 (1)	0.50	B021245	9.7 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020882	<1.0	1.0	B020880	<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L	16	1.0	B020882	26	1.0	B020880	27	1.0	B020880
Bicarbonate (HCO3)	mg/L	20	1.0	B020882	32	1.0	B020880	32	1.0	B020880
Carbonate (CO3)	mg/L	<1.0	1.0	B020882	<1.0	1.0	B020880	<1.0	1.0	B020880
Hydroxide (OH)	mg/L	<1.0	1.0	B020882	<1.0	1.0	B020880	<1.0	1.0	B020880
Sulphate (SO4)	mg/L				27	1.0	B021040	28	1.0	B021040
Physical Properties										
Turbidity	NTU				0.59	0.10	B017222	2.4	0.10	B017222

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO818			BTO819			BTO820		
Sampling Date		2023/06/27 08:45			2023/06/27 09:10			2023/06/27 09:15		
COC Number		697998-02-01			697998-02-01			697998-02-01		
	UNITS	CL-8 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	RDL	QC Batch	CL-2 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				52	0.50	B016322	47	0.50	B016322
Total Hardness (CaCO3)	mg/L				48.9	0.50	B016133	46.2	0.50	B016133
Misc. Inorganics										
pH	pH				6.64	N/A	B020881	6.53	N/A	B020881
Total Organic Carbon (C)	mg/L				10	0.50	B021380	10	0.50	B021380
Total Suspended Solids	mg/L	1.3	0.99	B019926	<1.0	1.0	B019926	<0.97	0.97	B019926
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				11 (1)	0.50	B021491	9.7 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B020880	<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L				26	1.0	B020880	26	1.0	B020880
Bicarbonate (HCO3)	mg/L				32	1.0	B020880	31	1.0	B020880
Carbonate (CO3)	mg/L				<1.0	1.0	B020880	<1.0	1.0	B020880
Hydroxide (OH)	mg/L				<1.0	1.0	B020880	<1.0	1.0	B020880
Sulphate (SO4)	mg/L				26	1.0	B021246	21	1.0	B021137
Physical Properties										
Turbidity	NTU				0.20	0.10	B017222	2.6	0.10	B017222

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO820			BTO821			BTO822		
Sampling Date		2023/06/27 09:15			2023/06/27 08:30			2023/06/27 08:35		
COC Number		697998-02-01			697998-02-01			697998-02-01		
	UNITS	CL-2 BTM Lab-Dup	RDL	QC Batch	CL-4 SFC	RDL	QC Batch	CL-4 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				50	0.50	B016322	44	0.50	B016322
Total Hardness (CaCO3)	mg/L				44.9	0.50	B016133	42.0	0.50	B016133
Misc. Inorganics										
pH	pH				6.66	N/A	B020881	6.52	N/A	B020881
Total Organic Carbon (C)	mg/L				10	0.50	B021380	9.4	0.50	B021387
Total Suspended Solids	mg/L				<0.99	0.99	B019926	1.2	1.0	B019926
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				9.8 (1)	0.50	B021245	9.9 (1)	0.50	B021245
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B020880	<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L				27	1.0	B020880	29	1.0	B020880
Bicarbonate (HCO3)	mg/L				33	1.0	B020880	35	1.0	B020880
Carbonate (CO3)	mg/L				<1.0	1.0	B020880	<1.0	1.0	B020880
Hydroxide (OH)	mg/L				<1.0	1.0	B020880	<1.0	1.0	B020880
Sulphate (SO4)	mg/L	21	1.0	B021137	22	1.0	B021040	17	1.0	B021040
Physical Properties										
Turbidity	NTU				0.38	0.10	B017222	11	0.10	B017222

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO823			BTO824			BTO825		
Sampling Date		2023/06/27 08:20			2023/06/27 08:25			2023/06/27 08:10		
COC Number		697998-03-01			697998-03-01			697998-03-01		
	UNITS	CL-5 SFC	RDL	QC Batch	CL-5 BTM	RDL	QC Batch	CL-6 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	49	0.50	B016322	46	0.50	B016322	44	0.50	B016322
Total Hardness (CaCO3)	mg/L	42.6	0.50	B016133	44.5	0.50	B016133	42.6	0.50	B016133
Misc. Inorganics										
pH	pH	6.56	N/A	B020881	6.64	N/A	B020881	6.54	N/A	B020881
Total Organic Carbon (C)	mg/L	10	0.50	B021380	10	0.50	B021387	10	0.50	B021380
Total Suspended Solids	mg/L	<0.94	0.94	B019926	1.6	0.99	B019926	<0.95	0.95	B019926
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.7 (1)	0.50	B021245	9.6 (1)	0.50	B021245	9.6 (1)	0.50	B021491
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L	27	1.0	B020880	27	1.0	B020880	28	1.0	B020880
Bicarbonate (HCO3)	mg/L	33	1.0	B020880	32	1.0	B020880	34	1.0	B020880
Carbonate (CO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020880
Hydroxide (OH)	mg/L	<1.0	1.0	B020880	<1.0	1.0	B020880	<1.0	1.0	B020880
Sulphate (SO4)	mg/L	21	1.0	B021246	17	1.0	B021246	17	1.0	B021040
Physical Properties										
Turbidity	NTU	0.20	0.10	B017222	4.0	0.10	B017222	0.37	0.10	B017222

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Bureau Veritas Job #: C348539
Report Date: 2023/07/06

KGS Group
Client Project #: 21-1357-005
Sampler Initials: MJN

RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO826			BTO827		BTO828		
Sampling Date		2023/06/27 08:15			2023/06/27		2023/06/27		
COC Number		697998-03-01			697998-03-01		697998-03-01		
	UNITS	**CL-6 BTM**	**RDL**	**QC Batch**	**SW-110**	**RDL**	**SW-111**	**RDL**	**QC Batch**
Calculated Parameters									
Hardness (CaCO3)	mg/L	42	0.50	B016322	47	0.50	100	0.50	B016322
Total Hardness (CaCO3)	mg/L	39.0	0.50	B016133	45.7	0.50	88.6	0.50	B016324
Misc. Inorganics									
pH	pH	6.59	N/A	B020881	6.56	N/A	6.55	N/A	B020881
Total Organic Carbon (C)	mg/L	9.5	0.50	B021387	10	0.50	9.0	0.50	B021380
Total Suspended Solids	mg/L	1.4	0.99	B019926	<1.0	1.0	1.6	0.96	B019926
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.2 (1)	0.50	B021245	8.9 (1)	0.50	8.2 (1)	0.50	B021245
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	<1.0	1.0	B020880
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B020880	27	1.0	21	1.0	B020880
Bicarbonate (HCO3)	mg/L	37	1.0	B020880	33	1.0	25	1.0	B020880
Carbonate (CO3)	mg/L	<1.0	1.0	B020880	<1.0	1.0	<1.0	1.0	B020880
Hydroxide (OH)	mg/L	<1.0	1.0	B020880	<1.0	1.0	<1.0	1.0	B020880
Sulphate (SO4)	mg/L	14	1.0	B021246	20	1.0	74	1.0	B021246
Physical Properties									
Turbidity	NTU	0.37	0.10	B017222	0.36	0.10	4.7	0.10	B017222

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BTO829		BTO830		
Sampling Date		2023/06/27		2023/06/27		
COC Number		697998-03-01		697998-03-01		
	UNITS	**SW-112**	**RDL**	**TRIP BLANK**	**RDL**	**QC Batch**
Calculated Parameters						
Hardness (CaCO3)	mg/L	150	0.50	<0.50	0.50	B016322
Total Hardness (CaCO3)	mg/L	143	0.50	<0.50	0.50	B016324
Misc. Inorganics						
pH	pH	6.31	N/A	5.07	N/A	B020883
Total Organic Carbon (C)	mg/L	8.1	0.50	<0.50	0.50	B021380
Total Suspended Solids	mg/L	1.2	0.97	<0.96	0.96	B019926
Lab Filtered Inorganics						
Dissolved Organic Carbon (C)	mg/L	7.5 (1)	0.50	<0.50 (1)	0.50	B021245
Anions						
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	B020882
Alkalinity (Total as CaCO3)	mg/L	11	1.0	<1.0	1.0	B020882
Bicarbonate (HCO3)	mg/L	14	1.0	<1.0	1.0	B020882
Carbonate (CO3)	mg/L	<1.0	1.0	<1.0	1.0	B020882
Hydroxide (OH)	mg/L	<1.0	1.0	<1.0	1.0	B020882
Sulphate (SO4)	mg/L	130	5.0	<1.0	1.0	B021246
Physical Properties						
Turbidity	NTU	7.5	0.10	<0.10	0.10	B017222

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.3°C
Package 2	0.3°C
Package 3	0.4°C
Package 4	0.0°C

Sample BTO820, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BTO823, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BTO830, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B017218	Turbidity	2023/06/30			104	80 - 120	<0.10	NTU	NC	20
B017222	Turbidity	2023/06/30			102	80 - 120	<0.10	NTU	1.5	20
B019909	Total Suspended Solids	2023/07/05	97	80 - 120	88	80 - 120	<1.0	mg/L	19	20
B019926	Total Suspended Solids	2023/07/06	99	80 - 120	86	80 - 120	<1.0	mg/L	NC	20
B020285	Total Aluminum (Al)	2023/07/04	127 (1)	80 - 120	110	80 - 120	<0.0030	mg/L		
B020285	Total Antimony (Sb)	2023/07/04	128 (1)	80 - 120	122 (1)	80 - 120	<0.00060	mg/L	NC	20
B020285	Total Arsenic (As)	2023/07/04	110	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B020285	Total Beryllium (Be)	2023/07/04	113	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B020285	Total Chromium (Cr)	2023/07/04	110	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B020285	Total Cobalt (Co)	2023/07/04	113	80 - 120	108	80 - 120	<0.00030	mg/L	NC	20
B020285	Total Copper (Cu)	2023/07/04	111	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B020285	Total Lead (Pb)	2023/07/04	112	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B020285	Total Molybdenum (Mo)	2023/07/04	116	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B020285	Total Nickel (Ni)	2023/07/04	110	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
B020285	Total Selenium (Se)	2023/07/04	115	80 - 120	112	80 - 120	<0.00020	mg/L	NC	20
B020285	Total Silver (Ag)	2023/07/04	111	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B020285	Total Thallium (Tl)	2023/07/04	113	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B020285	Total Tin (Sn)	2023/07/04	113	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B020285	Total Titanium (Ti)	2023/07/04	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B020285	Total Uranium (U)	2023/07/04	111	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B020285	Total Vanadium (V)	2023/07/04	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B020285	Total Zinc (Zn)	2023/07/04	111	80 - 120	108	80 - 120	<0.0030	mg/L	NC	20
B020286	Total Barium (Ba)	2023/07/04	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
B020286	Total Boron (B)	2023/07/04	102	80 - 120	101	80 - 120	<0.020	mg/L	NC	20
B020286	Total Calcium (Ca)	2023/07/04	NC	80 - 120	95	80 - 120	<0.30	mg/L	NC	20
B020286	Total Iron (Fe)	2023/07/04	113	80 - 120	100	80 - 120	<0.060	mg/L	NC	20
B020286	Total Lithium (Li)	2023/07/04	99	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B020286	Total Magnesium (Mg)	2023/07/04	NC	80 - 120	104	80 - 120	<0.20	mg/L	NC	20
B020286	Total Manganese (Mn)	2023/07/04	103	80 - 120	100	80 - 120	<0.0040	mg/L	NC	20
B020286	Total Phosphorus (P)	2023/07/04	100	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B020286	Total Potassium (K)	2023/07/04	97	80 - 120	96	80 - 120	<0.30	mg/L	NC	20
B020286	Total Silicon (Si)	2023/07/04	107	80 - 120	101	80 - 120	<0.50	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B020286	Total Sodium (Na)	2023/07/04	NC	80 - 120	95	80 - 120	<0.50	mg/L	NC	20
B020286	Total Strontium (Sr)	2023/07/04	96	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B020286	Total Sulphur (S)	2023/07/04	102	80 - 120	102	80 - 120	<0.20	mg/L	NC	20
B020880	Alkalinity (PP as CaCO3)	2023/07/05					<1.0	mg/L	NC	20
B020880	Alkalinity (Total as CaCO3)	2023/07/05			101	80 - 120	<1.0	mg/L	0.95	20
B020880	Bicarbonate (HCO3)	2023/07/05					<1.0	mg/L	0.95	20
B020880	Carbonate (CO3)	2023/07/05					<1.0	mg/L	NC	20
B020880	Hydroxide (OH)	2023/07/05					<1.0	mg/L	NC	20
B020881	pH	2023/07/05			100	97 - 103			0.82	N/A
B020882	Alkalinity (PP as CaCO3)	2023/07/05					<1.0	mg/L	NC	20
B020882	Alkalinity (Total as CaCO3)	2023/07/05			98	80 - 120	<1.0	mg/L	1.7	20
B020882	Bicarbonate (HCO3)	2023/07/05					<1.0	mg/L	1.7	20
B020882	Carbonate (CO3)	2023/07/05					<1.0	mg/L	NC	20
B020882	Hydroxide (OH)	2023/07/05					<1.0	mg/L	NC	20
B020883	pH	2023/07/05			100	97 - 103			1.4	N/A
B020981	Total Aluminum (Al)	2023/07/05	113	80 - 120	108	80 - 120	<0.0030	mg/L	3.2	20
B020981	Total Antimony (Sb)	2023/07/05	117	80 - 120	116	80 - 120	<0.00060	mg/L	NC	20
B020981	Total Arsenic (As)	2023/07/05	100	80 - 120	101	80 - 120	<0.00020	mg/L	2.0	20
B020981	Total Beryllium (Be)	2023/07/05	105	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B020981	Total Chromium (Cr)	2023/07/05	103	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B020981	Total Cobalt (Co)	2023/07/05	105	80 - 120	106	80 - 120	<0.00030	mg/L	10	20
B020981	Total Copper (Cu)	2023/07/05	103	80 - 120	104	80 - 120	<0.0010	mg/L	1.3	20
B020981	Total Lead (Pb)	2023/07/05	105	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B020981	Total Molybdenum (Mo)	2023/07/05	108	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B020981	Total Nickel (Ni)	2023/07/05	102	80 - 120	104	80 - 120	<0.00050	mg/L	NC	20
B020981	Total Selenium (Se)	2023/07/05	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B020981	Total Silver (Ag)	2023/07/05	104	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B020981	Total Thallium (Tl)	2023/07/05	105	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B020981	Total Tin (Sn)	2023/07/05	105	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B020981	Total Titanium (Ti)	2023/07/05	104	80 - 120	104	80 - 120	<0.0010	mg/L	4.6	20
B020981	Total Uranium (U)	2023/07/05	105	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B020981	Total Vanadium (V)	2023/07/05	104	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B020981	Total Zinc (Zn)	2023/07/05	100	80 - 120	102	80 - 120	<0.0030	mg/L	3.2	20
B021032	Total Barium (Ba)	2023/07/05	105	80 - 120	107	80 - 120	<0.010	mg/L	0.48	20
B021032	Total Boron (B)	2023/07/05	103	80 - 120	104	80 - 120	<0.020	mg/L	5.7	20
B021032	Total Calcium (Ca)	2023/07/05	105	80 - 120	106	80 - 120	<0.30	mg/L	2.5	20
B021032	Total Iron (Fe)	2023/07/05	114	80 - 120	113	80 - 120	<0.060	mg/L	2.1	20
B021032	Total Lithium (Li)	2023/07/05	103	80 - 120	105	80 - 120	<0.020	mg/L	NC	20
B021032	Total Magnesium (Mg)	2023/07/05	109	80 - 120	109	80 - 120	<0.20	mg/L	0.56	20
B021032	Total Manganese (Mn)	2023/07/05	111	80 - 120	112	80 - 120	<0.0040	mg/L	1.4	20
B021032	Total Phosphorus (P)	2023/07/05	104	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
B021032	Total Potassium (K)	2023/07/05	104	80 - 120	106	80 - 120	<0.30	mg/L	0.52	20
B021032	Total Silicon (Si)	2023/07/05	107	80 - 120	109	80 - 120	<0.50	mg/L	1.8	20
B021032	Total Sodium (Na)	2023/07/05	103	80 - 120	105	80 - 120	<0.50	mg/L	2.7	20
B021032	Total Strontium (Sr)	2023/07/05	100	80 - 120	102	80 - 120	<0.020	mg/L	1.3	20
B021032	Total Sulphur (S)	2023/07/05	100	80 - 120	103	80 - 120	<0.20	mg/L	1.2	20
B021035	Total Aluminum (Al)	2023/07/05	112	80 - 120	115	80 - 120	<0.0030	mg/L	4.6	20
B021035	Total Antimony (Sb)	2023/07/05	115	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B021035	Total Arsenic (As)	2023/07/05	89	80 - 120	89	80 - 120	<0.00020	mg/L	5.4	20
B021035	Total Beryllium (Be)	2023/07/05	100	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B021035	Total Chromium (Cr)	2023/07/05	98	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B021035	Total Cobalt (Co)	2023/07/05	98	80 - 120	98	80 - 120	<0.00030	mg/L	5.9	20
B021035	Total Copper (Cu)	2023/07/05	95	80 - 120	94	80 - 120	<0.0010	mg/L	1.7	20
B021035	Total Lead (Pb)	2023/07/05	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B021035	Total Molybdenum (Mo)	2023/07/05	107	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B021035	Total Nickel (Ni)	2023/07/05	95	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
B021035	Total Selenium (Se)	2023/07/05	89	80 - 120	88	80 - 120	<0.00020	mg/L	NC	20
B021035	Total Silver (Ag)	2023/07/05	102	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B021035	Total Thallium (Tl)	2023/07/05	103	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B021035	Total Tin (Sn)	2023/07/05	107	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B021035	Total Titanium (Ti)	2023/07/05	100	80 - 120	101	80 - 120	<0.0010	mg/L	16	20
B021035	Total Uranium (U)	2023/07/05	104	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B021035	Total Vanadium (V)	2023/07/05	98	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B021035	Total Zinc (Zn)	2023/07/05	87	80 - 120	88	80 - 120	<0.0030	mg/L	3.9	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B021036	Total Barium (Ba)	2023/07/06	99	80 - 120	100	80 - 120	<0.010	mg/L	4.5	20
B021036	Total Boron (B)	2023/07/06	101	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B021036	Total Calcium (Ca)	2023/07/06	100	80 - 120	102	80 - 120	<0.30	mg/L	0.21	20
B021036	Total Iron (Fe)	2023/07/06	113	80 - 120	116	80 - 120	<0.060	mg/L	1.8	20
B021036	Total Lithium (Li)	2023/07/06	101	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B021036	Total Magnesium (Mg)	2023/07/06	100	80 - 120	102	80 - 120	<0.20	mg/L	0.31	20
B021036	Total Manganese (Mn)	2023/07/06	107	80 - 120	109	80 - 120	<0.0040	mg/L	1.3	20
B021036	Total Phosphorus (P)	2023/07/06	94	80 - 120	96	80 - 120	<0.10	mg/L	NC	20
B021036	Total Potassium (K)	2023/07/06	103	80 - 120	104	80 - 120	<0.30	mg/L	0.88	20
B021036	Total Silicon (Si)	2023/07/06	98	80 - 120	101	80 - 120	<0.50	mg/L	1.4	20
B021036	Total Sodium (Na)	2023/07/06	101	80 - 120	102	80 - 120	<0.50	mg/L	0.015	20
B021036	Total Strontium (Sr)	2023/07/06	96	80 - 120	98	80 - 120	<0.020	mg/L	2.5	20
B021036	Total Sulphur (S)	2023/07/06	94	80 - 120	98	80 - 120	<0.20	mg/L	0.88	20
B021040	Sulphate (SO4)	2023/07/05	130 (1)	80 - 120	101	80 - 120	<1.0	mg/L	NC	20
B021052	Total Aluminum (Al)	2023/07/05	NC	80 - 120	107	80 - 120	<0.0030	mg/L	8.6	20
B021052	Total Antimony (Sb)	2023/07/05	114	80 - 120	116	80 - 120	<0.00060	mg/L	NC	20
B021052	Total Arsenic (As)	2023/07/05	99	80 - 120	101	80 - 120	<0.00020	mg/L	11	20
B021052	Total Beryllium (Be)	2023/07/05	105	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B021052	Total Chromium (Cr)	2023/07/05	101	80 - 120	102	80 - 120	<0.0010	mg/L	126 (1)	20
B021052	Total Cobalt (Co)	2023/07/05	101	80 - 120	103	80 - 120	<0.00030	mg/L	NC	20
B021052	Total Copper (Cu)	2023/07/05	98	80 - 120	101	80 - 120	<0.0010	mg/L	10	20
B021052	Total Lead (Pb)	2023/07/05	103	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B021052	Total Molybdenum (Mo)	2023/07/05	108	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B021052	Total Nickel (Ni)	2023/07/05	99	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
B021052	Total Selenium (Se)	2023/07/05	107	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B021052	Total Silver (Ag)	2023/07/05	103	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B021052	Total Thallium (Tl)	2023/07/05	105	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B021052	Total Tin (Sn)	2023/07/05	106	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B021052	Total Titanium (Ti)	2023/07/05	101	80 - 120	104	80 - 120	<0.0010	mg/L	14	20
B021052	Total Uranium (U)	2023/07/05	103	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B021052	Total Vanadium (V)	2023/07/05	103	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B021052	Total Zinc (Zn)	2023/07/05	102	80 - 120	104	80 - 120	<0.0030	mg/L	10	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B021087	Total Barium (Ba)	2023/07/05	107	80 - 120	108	80 - 120	<0.010	mg/L	NC	20
B021087	Total Boron (B)	2023/07/05	104	80 - 120	106	80 - 120	<0.020	mg/L	NC	20
B021087	Total Calcium (Ca)	2023/07/05	103	80 - 120	105	80 - 120	<0.30	mg/L	5.2	20
B021087	Total Iron (Fe)	2023/07/05	109	80 - 120	111	80 - 120	<0.060	mg/L	10	20
B021087	Total Lithium (Li)	2023/07/05	102	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B021087	Total Magnesium (Mg)	2023/07/05	107	80 - 120	107	80 - 120	<0.20	mg/L	4.3	20
B021087	Total Manganese (Mn)	2023/07/05	109	80 - 120	112	80 - 120	<0.0040	mg/L	3.1	20
B021087	Total Phosphorus (P)	2023/07/05	104	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
B021087	Total Potassium (K)	2023/07/05	103	80 - 120	105	80 - 120	<0.30	mg/L	11	20
B021087	Total Silicon (Si)	2023/07/05	106	80 - 120	109	80 - 120	<0.50	mg/L	2.2	20
B021087	Total Sodium (Na)	2023/07/05	101	80 - 120	104	80 - 120	<0.50	mg/L	5.1	20
B021087	Total Strontium (Sr)	2023/07/05	102	80 - 120	104	80 - 120	<0.020	mg/L	3.6	20
B021087	Total Sulphur (S)	2023/07/05	102	80 - 120	104	80 - 120	<0.20	mg/L	1.7	20
B021137	Sulphate (SO4)	2023/07/05	103	80 - 120	100	80 - 120	<1.0	mg/L	0.75	20
B021240	Dissolved Organic Carbon (C)	2023/07/05	107	80 - 120	102	80 - 120	<0.50	mg/L	5.8	20
B021242	Sulphate (SO4)	2023/07/05	102	80 - 120	102	80 - 120	<1.0	mg/L		
B021245	Dissolved Organic Carbon (C)	2023/07/05	94	80 - 120	100	80 - 120	<0.50	mg/L	3.2	20
B021246	Sulphate (SO4)	2023/07/05	NC	80 - 120	100	80 - 120	<1.0	mg/L	0.47	20
B021380	Total Organic Carbon (C)	2023/07/05	91	80 - 120	99	80 - 120	<0.50	mg/L	NC	20
B021387	Total Organic Carbon (C)	2023/07/05	98	80 - 120	98	80 - 120	<0.50	mg/L	2.7	20
B021491	Dissolved Organic Carbon (C)	2023/07/05	99	80 - 120	93	80 - 120	<0.50	mg/L	NC	20
B021501	Dissolved Aluminum (Al)	2023/07/05	119	80 - 120	115	80 - 120	<0.0030	mg/L	5.3	20
B021501	Dissolved Antimony (Sb)	2023/07/05	101	80 - 120	99	80 - 120	<0.00060	mg/L	NC	20
B021501	Dissolved Arsenic (As)	2023/07/05	91	80 - 120	86	80 - 120	<0.00020	mg/L	17	20
B021501	Dissolved Beryllium (Be)	2023/07/05	94	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
B021501	Dissolved Chromium (Cr)	2023/07/05	96	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B021501	Dissolved Cobalt (Co)	2023/07/05	94	80 - 120	92	80 - 120	<0.00030	mg/L	NC	20
B021501	Dissolved Copper (Cu)	2023/07/05	94	80 - 120	91	80 - 120	<0.0010	mg/L	2.5	20
B021501	Dissolved Lead (Pb)	2023/07/05	92	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
B021501	Dissolved Molybdenum (Mo)	2023/07/05	97	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
B021501	Dissolved Nickel (Ni)	2023/07/05	95	80 - 120	92	80 - 120	<0.00050	mg/L	8.2	20
B021501	Dissolved Selenium (Se)	2023/07/05	89	80 - 120	84	80 - 120	<0.00020	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B021501	Dissolved Silver (Ag)	2023/07/05	92	80 - 120	92	80 - 120	<0.00010	mg/L	NC	20
B021501	Dissolved Thallium (Tl)	2023/07/05	93	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B021501	Dissolved Tin (Sn)	2023/07/05	95	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B021501	Dissolved Titanium (Ti)	2023/07/05	98	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B021501	Dissolved Uranium (U)	2023/07/05	95	80 - 120	93	80 - 120	<0.00010	mg/L	NC	20
B021501	Dissolved Vanadium (V)	2023/07/05	98	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B021501	Dissolved Zinc (Zn)	2023/07/05	NC	80 - 120	85	80 - 120	<0.0030	mg/L	4.0	20
B021521	Dissolved Aluminum (Al)	2023/07/05	110	80 - 120	82	80 - 120	<0.0030	mg/L	9.6	20
B021521	Dissolved Antimony (Sb)	2023/07/05	105	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B021521	Dissolved Arsenic (As)	2023/07/05	81	80 - 120	90	80 - 120	<0.00020	mg/L	NC	20
B021521	Dissolved Beryllium (Be)	2023/07/05	89	80 - 120	83	80 - 120	<0.0010	mg/L	NC	20
B021521	Dissolved Chromium (Cr)	2023/07/05	89	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B021521	Dissolved Cobalt (Co)	2023/07/05	87	80 - 120	96	80 - 120	<0.00030	mg/L	NC	20
B021521	Dissolved Copper (Cu)	2023/07/05	88	80 - 120	92	80 - 120	<0.0010	mg/L	15	20
B021521	Dissolved Lead (Pb)	2023/07/05	89	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B021521	Dissolved Molybdenum (Mo)	2023/07/05	92	80 - 120	101	80 - 120	<0.00020	mg/L	6.5	20
B021521	Dissolved Nickel (Ni)	2023/07/05	88	80 - 120	93	80 - 120	<0.00050	mg/L	NC	20
B021521	Dissolved Selenium (Se)	2023/07/05	93	80 - 120	102	80 - 120	<0.00020	mg/L	1.1	20
B021521	Dissolved Silver (Ag)	2023/07/05	89	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20
B021521	Dissolved Thallium (Tl)	2023/07/05	92	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B021521	Dissolved Tin (Sn)	2023/07/05	89	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
B021521	Dissolved Titanium (Ti)	2023/07/05	91	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B021521	Dissolved Uranium (U)	2023/07/05	85	80 - 120	91	80 - 120	<0.00010	mg/L	NC	20
B021521	Dissolved Vanadium (V)	2023/07/05	93	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B021521	Dissolved Zinc (Zn)	2023/07/05	83	80 - 120	89	80 - 120	<0.0030	mg/L	15	20
B022090	Dissolved Barium (Ba)	2023/07/06	104	80 - 120	107	80 - 120	<0.010	mg/L	NC	20
B022090	Dissolved Boron (B)	2023/07/06	100	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B022090	Dissolved Calcium (Ca)	2023/07/06	98	80 - 120	103	80 - 120	<0.30	mg/L	0.74	20
B022090	Dissolved Iron (Fe)	2023/07/06	108	80 - 120	110	80 - 120	<0.060	mg/L	20	20
B022090	Dissolved Lithium (Li)	2023/07/06	98	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B022090	Dissolved Magnesium (Mg)	2023/07/06	105	80 - 120	107	80 - 120	<0.20	mg/L	1.5	20
B022090	Dissolved Manganese (Mn)	2023/07/06	105	80 - 120	111	80 - 120	<0.0040	mg/L	0.18	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B022090	Dissolved Phosphorus (P)	2023/07/06	102	80 - 120	107	80 - 120	<0.10	mg/L	NC	20
B022090	Dissolved Potassium (K)	2023/07/06	101	80 - 120	103	80 - 120	<0.30	mg/L	4.2	20
B022090	Dissolved Silicon (Si)	2023/07/06	96	80 - 120	104	80 - 120	<0.50	mg/L	5.2	20
B022090	Dissolved Sodium (Na)	2023/07/06	98	80 - 120	100	80 - 120	<0.50	mg/L	0.021	20
B022090	Dissolved Strontium (Sr)	2023/07/06	98	80 - 120	102	80 - 120	<0.020	mg/L	0.74	20
B022090	Dissolved Sulphur (S)	2023/07/06	99	80 - 120	106	80 - 120	<0.20	mg/L	2.2	20
B022097	Dissolved Barium (Ba)	2023/07/05	79 (1)	80 - 120	104	80 - 120	<0.010	mg/L		
B022097	Dissolved Boron (B)	2023/07/05	99	80 - 120	102	80 - 120	<0.020	mg/L		
B022097	Dissolved Calcium (Ca)	2023/07/05	NC	80 - 120	103	80 - 120	<0.30	mg/L	0.48	20
B022097	Dissolved Iron (Fe)	2023/07/05	115	80 - 120	113	80 - 120	<0.060	mg/L	NC	20
B022097	Dissolved Lithium (Li)	2023/07/05	102	80 - 120	103	80 - 120	<0.020	mg/L		
B022097	Dissolved Magnesium (Mg)	2023/07/05	NC	80 - 120	112	80 - 120	<0.20	mg/L	1.2	20
B022097	Dissolved Manganese (Mn)	2023/07/05	114	80 - 120	113	80 - 120	<0.0040	mg/L	4.0	20
B022097	Dissolved Phosphorus (P)	2023/07/05	116	80 - 120	114	80 - 120	<0.10	mg/L		
B022097	Dissolved Potassium (K)	2023/07/05	102	80 - 120	103	80 - 120	<0.30	mg/L	0.67	20
B022097	Dissolved Silicon (Si)	2023/07/05	107	80 - 120	110	80 - 120	<0.50	mg/L		
B022097	Dissolved Sodium (Na)	2023/07/05	NC	80 - 120	99	80 - 120	<0.50	mg/L	0.82	20
B022097	Dissolved Strontium (Sr)	2023/07/05	86	80 - 120	97	80 - 120	<0.020	mg/L		
B022097	Dissolved Sulphur (S)	2023/07/05	NA	80 - 120	113	80 - 120	<0.20	mg/L		
B022999	Dissolved Antimony (Sb)	2023/07/06	111	80 - 120	111	80 - 120	<0.00060	mg/L	0.40	20
B022999	Dissolved Lead (Pb)	2023/07/06	NC	80 - 120	103	80 - 120	<0.00020	mg/L	2.3	20
B022999	Dissolved Molybdenum (Mo)	2023/07/06	106	80 - 120	106	80 - 120	<0.00020	mg/L	1.1	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

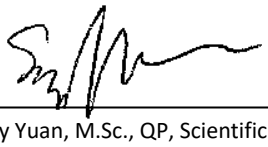
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

28-Jun-23 12:25

Janelle Kochan

C348539

INVOICE TO:		Report Information		Project Information		Only
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins, Monika Niemczyk	P.O. #		697998
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	
	Winnipeg MB R3T 5T4			Project Name		Chain Of Custody Record / Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site	C#697998-01-01 / Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com	Sampled By	MJN, RCP	

SMT INS-0126

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1	mcal-06-568	SC-1	23/06/27	11:45	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		SB-1		09:40				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		09:35				X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		09:45				X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		09:50				X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		09:55				X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		10:00				X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		10:10				X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		10:05				X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:15				X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____

Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Monika Niemczyk	23/06/28	12:20	Ashton Raith MR	2023/06/28	12:25	
			Sue Enz	2023/06/29	08:30	

Lab Use Only: Time Sensitive [ ] | Temperature (°C) on Receipt: ACTR | Custody Seal Intact on Cooler? [ ] Yes [ ] No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

28-Jun-23 12:25
Janelle Kochan
C348539

SMT INS-0126

INVOICE TO:
Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St, Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information
Company Name:
Contact Name: Ed Collins, Monika Niemczyk
Address:
Phone: Fax:
Email: Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com

Project Information
Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By: MJN, RCP

Lab Use Only
Bottle Order #: 697998
Chain Of Custody Record: C#697998-02-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/06/27	08:50 ~~09:50~~	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity + DOC
2		CL-3 BTM		08:55				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-7 SFC		09:00				X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		09:05				X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		08:40				X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		08:45				X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		09:10				X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		09:15				X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		08:30				X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		08:35				X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required
Please provide advance notice for rush projects
Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Monika Niemczyk	23/06/28	12:20	Ashton Raitt AR	2023/06/28	12:25	
			Sam Fox SF	2023/06/29	08:30	

Lab Use Only: Time Sensitive [ ] | Temperature (°C) on Receipt: ACTR | Custody Seal Intact on Cooler? [ ] Yes [ ] No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

28-Jun-23 12:25
Janelle Kochan
C348539
SMT INS-0126

INVOICE TO:
Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St
Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information
Company Name:
Contact Name: Ed Collins , mniemczyk
Address:
Phone: Fax:
Email: Ecollins@kgsgroup.com , mniemczyk@kgsgroup.com

Project Information
Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By: MJN, RCP

Use Only
Bottle Order #: 697998
Chain Of Custody Record: C#697998-03-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/06/27	08:20	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity, DOC
2		CL-5 BTM		08:25				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-6 SFC		08:10				X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		08:15				X	X	X	X	X	X	X	X	X	X	4	
5		SW-110		AM				X	X	X	X	X	X	X	X	X	X	4	
6		SW-111		AM				X	X	X	X	X	X	X	X	X	X	4	
7		SW-112		AM				X	X	X	X	X	X	X	X	X	X	4	
8		~~Field~~ Trip blank		—	Blank			X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

Turnaround Time (TAT) Required
Please provide advance notice for rush projects
Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Monika Niemczyk	23/06/28	12:20	Ashton Rawt AR	2023/06/28	12:25	
			Sun Env	2023/06/29	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt: AC TR | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS. AC TR
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 699322-01-01, 699322-02-01, 699322-03-01

Report Date: 2023/07/20
Report #: R3367831
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C352754
Received: 2023/07/12, 11:55

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	19	N/A	2023/07/15	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	9	N/A	2023/07/16	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/07/15		Auto Calc
Cadmium - low level CCME (Total) (1)	9	N/A	2023/07/18		Auto Calc
Cadmium - low level CCME (Total) (1)	19	N/A	2023/07/19		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	24	N/A	2023/07/17	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	4	N/A	2023/07/18	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	20	N/A	2023/07/18	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	8	N/A	2023/07/19	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	28	N/A	2023/07/15		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	5	N/A	2023/07/17	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	4	N/A	2023/07/18	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	19	N/A	2023/07/19	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	28	N/A	2023/07/14	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	5	2023/07/17	2023/07/17	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	10	2023/07/18	2023/07/18	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	10	2023/07/18	2023/07/19	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/07/19	2023/07/19	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	28	N/A	2023/07/14	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	1	2023/07/17	2023/07/17	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	4	2023/07/17	2023/07/18	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	20	2023/07/18	2023/07/18	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
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Canada R3T 5P4

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Report Date: 2023/07/20
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C352754
Received: 2023/07/12, 11:55

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS - Total (1)	3	2023/07/19	2023/07/19	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	19	N/A	2023/07/15	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (1, 6)	9	N/A	2023/07/16	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (1, 7)	28	N/A	2023/07/18	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	8	2023/07/18	2023/07/18	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	20	2023/07/18	2023/07/19	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/07/14	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 699322-01-01, 699322-02-01, 699322-03-01

Report Date: 2023/07/20
Report #: R3367831
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C352754

Received: 2023/07/12, 11:55

(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM771	BUM772		BUM773		BUM774		
Sampling Date		2023/07/11 10:30	2023/07/11 09:30		2023/07/11 09:25		2023/07/11 09:35		
COC Number		699322-01-01	699322-01-01		699322-01-01		699322-01-01		
	UNITS	SC-1	SB-1	QC Batch	SB-2	QC Batch	CB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.47	0.23	B033013	0.26	B033013	0.24	0.020	B033013
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.020	0.0090	B034272	0.011	B034268	0.0094	0.0030	B034272
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B034272	0.00063	B034268	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L	0.00042	0.00022	B034272	0.00033	B034268	0.00024	0.00020	B034272
Dissolved Barium (Ba)	mg/L	<0.010	0.011	B034804	0.011	B034807	0.011	0.010	B034804
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B034272	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	<0.020	B034804	<0.020	B034807	<0.020	0.020	B034804
Dissolved Calcium (Ca)	mg/L	9.4	37	B034804	37	B034807	40	0.30	B034804
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B034272	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B034272	<0.00030	B034268	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L	0.016	0.0075	B034272	0.0079	B034268	0.0073	0.0010	B034272
Dissolved Iron (Fe)	mg/L	0.18	2.7	B034804	2.7	B034807	2.1	0.060	B034804
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B034272	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B034804	<0.020	B034807	<0.020	0.020	B034804
Dissolved Magnesium (Mg)	mg/L	3.0	6.6	B034804	6.7	B034807	6.9	0.20	B034804
Dissolved Manganese (Mn)	mg/L	0.023	0.059	B034804	0.060	B034807	0.050	0.0040	B034804
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B034272	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Nickel (Ni)	mg/L	0.00066	0.00096	B034272	0.00094	B034268	0.00095	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B034804	<0.10	B034807	<0.10	0.10	B034804
Dissolved Potassium (K)	mg/L	1.2	3.2	B034804	3.3	B034807	3.4	0.30	B034804
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B034272	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	1.2	0.87	B034804	0.87	B034807	0.82	0.50	B034804
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B034272	<0.00010	B034268	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.1	2.6	B034804	2.6	B034807	2.7	0.50	B034804
Dissolved Strontium (Sr)	mg/L	0.024	0.046	B034804	0.046	B034807	0.047	0.020	B034804
Dissolved Sulphur (S)	mg/L	2.9	38	B034804	37	B034807	39	0.20	B034804
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B034272	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B034272	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L	0.0010	<0.0010	B034272	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B034272	<0.00010	B034268	<0.00010	0.00010	B034272

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM771	BUM772		BUM773		BUM774		
Sampling Date		2023/07/11 10:30	2023/07/11 09:30		2023/07/11 09:25		2023/07/11 09:35		
COC Number		699322-01-01	699322-01-01		699322-01-01		699322-01-01		
	UNITS	**SC-1**	**SB-1**	**QC Batch**	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B034272	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L	0.20	0.076	B034272	0.079	B034268	0.074	0.0030	B034272
RDL = Reportable Detection Limit									

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM775		BUM776			BUM776		
Sampling Date		2023/07/11 09:40		2023/07/11 09:45			2023/07/11 09:45		
COC Number		699322-01-01		699322-01-01			699322-01-01		
	UNITS	CB-2	QC Batch	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.26	B033013	0.30	0.020	B033013			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.011	B034268	0.0097	0.0030	B034268	0.011	0.0030	B034268
Dissolved Antimony (Sb)	mg/L	<0.00060	B034268	<0.00060	0.00060	B034268	<0.00060	0.00060	B034268
Dissolved Arsenic (As)	mg/L	0.00025	B034268	0.00021	0.00020	B034268	<0.00020	0.00020	B034268
Dissolved Barium (Ba)	mg/L	0.011	B034804	0.013	0.010	B034807			
Dissolved Beryllium (Be)	mg/L	<0.0010	B034268	<0.0010	0.0010	B034268	<0.0010	0.0010	B034268
Dissolved Boron (B)	mg/L	<0.020	B034804	<0.020	0.020	B034807			
Dissolved Calcium (Ca)	mg/L	39	B034804	48	0.30	B034807			
Dissolved Chromium (Cr)	mg/L	<0.0010	B034268	<0.0010	0.0010	B034268	<0.0010	0.0010	B034268
Dissolved Cobalt (Co)	mg/L	<0.00030	B034268	<0.00030	0.00030	B034268	<0.00030	0.00030	B034268
Dissolved Copper (Cu)	mg/L	0.0091	B034268	0.0071	0.0010	B034268	0.0085	0.0010	B034268
Dissolved Iron (Fe)	mg/L	2.2	B034804	0.87	0.060	B034807			
Dissolved Lead (Pb)	mg/L	<0.00020	B034268	<0.00020	0.00020	B034268	<0.00020	0.00020	B034268
Dissolved Lithium (Li)	mg/L	<0.020	B034804	<0.020	0.020	B034807			
Dissolved Magnesium (Mg)	mg/L	6.8	B034804	8.0	0.20	B034807			
Dissolved Manganese (Mn)	mg/L	0.051	B034804	0.035	0.0040	B034807			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B034268	<0.00020	0.00020	B034268	<0.00020	0.00020	B034268
Dissolved Nickel (Ni)	mg/L	0.00093	B034268	0.00099	0.00050	B034268	0.0011	0.00050	B034268
Dissolved Phosphorus (P)	mg/L	<0.10	B034804	<0.10	0.10	B034807			
Dissolved Potassium (K)	mg/L	3.4	B034804	3.9	0.30	B034807			
Dissolved Selenium (Se)	mg/L	<0.00020	B034268	<0.00020	0.00020	B034268	<0.00020	0.00020	B034268
Dissolved Silicon (Si)	mg/L	0.82	B034804	0.71	0.50	B034807			
Dissolved Silver (Ag)	mg/L	<0.00010	B034268	<0.00010	0.00010	B034268	<0.00010	0.00010	B034268
Dissolved Sodium (Na)	mg/L	2.6	B034804	2.9	0.50	B034807			
Dissolved Strontium (Sr)	mg/L	0.047	B034804	0.054	0.020	B034807			
Dissolved Sulphur (S)	mg/L	39	B034804	47	0.20	B034807			
Dissolved Thallium (Tl)	mg/L	<0.00020	B034268	<0.00020	0.00020	B034268	<0.00020	0.00020	B034268
Dissolved Tin (Sn)	mg/L	<0.0010	B034268	<0.0010	0.0010	B034268	<0.0010	0.0010	B034268
Dissolved Titanium (Ti)	mg/L	<0.0010	B034268	<0.0010	0.0010	B034268	<0.0010	0.0010	B034268
Dissolved Uranium (U)	mg/L	<0.00010	B034268	<0.00010	0.00010	B034268	<0.00010	0.00010	B034268

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM775		BUM776			BUM776		
Sampling Date		2023/07/11 09:40		2023/07/11 09:45			2023/07/11 09:45		
COC Number		699322-01-01		699322-01-01			699322-01-01		
	UNITS	**CB-2**	**QC Batch**	**EB-1**	**RDL**	**QC Batch**	**EB-1 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B034268	<0.0010	0.0010	B034268	<0.0010	0.0010	B034268
Dissolved Zinc (Zn)	mg/L	0.082	B034268	0.081	0.0030	B034268	0.096	0.0030	B034268

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM777	BUM778	BUM779	BUM780		BUM808		
Sampling Date		2023/07/11 09:50	2023/07/11 10:00	2023/07/11 09:55	2023/07/11 10:05		2023/07/11 08:40		
COC Number		699322-01-01	699322-01-01	699322-01-01	699322-01-01		699322-02-01		
	UNITS	EB-2	NB-1	NB-2	CLD	QC Batch	CL-3 SFC	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.33	0.24	0.25	0.23	B033013	0.051	0.020	B033013
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0086	0.0080	0.0099	0.0084	B034272	0.013	0.0030	B034272
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	B034272	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L	0.00034	0.00021	<0.00020	<0.00020	B034272	0.00042	0.00020	B034272
Dissolved Barium (Ba)	mg/L	0.013	0.011	0.010	0.011	B034804	<0.010	0.010	B034804
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	B034804	<0.020	0.020	B034804
Dissolved Calcium (Ca)	mg/L	49	43	42	44	B034804	14	0.30	B034804
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	B034272	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L	0.0076	0.0071	0.0079	0.0080	B034272	0.0049	0.0010	B034272
Dissolved Iron (Fe)	mg/L	0.54	1.3	1.2	1.2	B034804	0.14	0.060	B034804
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	B034804	<0.020	0.020	B034804
Dissolved Magnesium (Mg)	mg/L	8.0	7.3	7.1	7.4	B034804	3.6	0.20	B034804
Dissolved Manganese (Mn)	mg/L	0.035	0.054	0.043	0.051	B034804	<0.0040	0.0040	B034804
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B034272	<0.00020	0.00020	B037724
Dissolved Nickel (Ni)	mg/L	0.0011	0.00089	0.00074	0.0012	B034272	<0.00050	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	B034804	<0.10	0.10	B034804
Dissolved Potassium (K)	mg/L	3.8	3.4	3.3	3.5	B034804	1.7	0.30	B034804
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	0.72	0.82	0.82	0.81	B034804	0.74	0.50	B034804
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	B034272	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.9	2.7	2.6	2.7	B034804	2.0	0.50	B034804
Dissolved Strontium (Sr)	mg/L	0.055	0.049	0.048	0.050	B034804	0.029	0.020	B034804
Dissolved Sulphur (S)	mg/L	50	44	43	45	B034804	8.6	0.20	B034804
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	B034272	<0.00010	0.00010	B034272

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM777	BUM778	BUM779	BUM780		BUM808		
Sampling Date		2023/07/11 09:50	2023/07/11 10:00	2023/07/11 09:55	2023/07/11 10:05		2023/07/11 08:40		
COC Number		699322-01-01	699322-01-01	699322-01-01	699322-01-01		699322-02-01		
	UNITS	**EB-2**	**NB-1**	**NB-2**	**CLD**	**QC Batch**	**CL-3 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L	0.094	0.073	0.072	0.077	B034272	0.018	0.0030	B034272
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM809		BUM810		BUM811		
Sampling Date		2023/07/11 08:45		2023/07/11 08:50		2023/07/11 08:55		
COC Number		699322-02-01		699322-02-01		699322-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.046	B033013	0.051	B033013	0.046	0.020	B033013
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.012	B034268	0.012	B034268	0.013	0.0030	B034272
Dissolved Antimony (Sb)	mg/L	<0.00060	B034268	<0.00060	B034268	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L	0.00027	B034268	0.00033	B034268	0.00028	0.00020	B034272
Dissolved Barium (Ba)	mg/L	<0.010	B034807	<0.010	B034804	0.012	0.010	B034807
Dissolved Beryllium (Be)	mg/L	<0.0010	B034268	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	B034807	<0.020	B034804	<0.020	0.020	B034807
Dissolved Calcium (Ca)	mg/L	14	B034807	14	B034804	14	0.30	B034807
Dissolved Chromium (Cr)	mg/L	<0.0010	B034268	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L	<0.00030	B034268	<0.00030	B034268	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L	0.0049	B034268	0.0047	B034268	0.0050	0.0010	B034272
Dissolved Iron (Fe)	mg/L	0.13	B034807	0.15	B034804	0.15	0.060	B034807
Dissolved Lead (Pb)	mg/L	<0.00020	B034268	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	B034807	<0.020	B034804	<0.020	0.020	B034807
Dissolved Magnesium (Mg)	mg/L	3.6	B034807	3.6	B034804	3.7	0.20	B034807
Dissolved Manganese (Mn)	mg/L	<0.0040	B034807	<0.0040	B034804	<0.0040	0.0040	B034807
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B034268	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Nickel (Ni)	mg/L	<0.00050	B037724	<0.00050	B034268	0.00053	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	B034807	<0.10	B034804	<0.10	0.10	B034807
Dissolved Potassium (K)	mg/L	1.6	B034807	1.6	B034804	1.7	0.30	B034807
Dissolved Selenium (Se)	mg/L	<0.00020	B034268	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	0.74	B034807	0.74	B034804	0.81	0.50	B034807
Dissolved Silver (Ag)	mg/L	<0.00010	B034268	<0.00010	B034268	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.0	B034807	2.0	B034804	2.1	0.50	B034807
Dissolved Strontium (Sr)	mg/L	0.029	B034807	0.029	B034804	0.030	0.020	B034807
Dissolved Sulphur (S)	mg/L	8.6	B034807	9.0	B034804	9.0	0.20	B034807
Dissolved Thallium (Tl)	mg/L	<0.00020	B034268	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L	<0.0010	B034268	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L	<0.0010	B034268	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L	<0.00010	B034268	<0.00010	B034268	<0.00010	0.00010	B034272

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM809		BUM810		BUM811		
Sampling Date		2023/07/11 08:45		2023/07/11 08:50		2023/07/11 08:55		
COC Number		699322-02-01		699322-02-01		699322-02-01		
	UNITS	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B034268	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L	0.018	B034268	0.017	B034268	0.019	0.0030	B034272
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM811			BUM812	BUM813		BUM814		
Sampling Date		2023/07/11 08:55			2023/07/11 08:30	2023/07/11 08:35		2023/07/11 09:00		
COC Number		699322-02-01			699322-02-01	699322-02-01		699322-02-01		
	UNITS	CL-7 BTM Lab-Dup	RDL	QC Batch	CL-8 SFC	CL-8 BTM	QC Batch	CL-2 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L				0.042	0.053	B033013	0.040	0.020	B033013
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L				0.013	0.013	B034268	0.012	0.0030	B034272
Dissolved Antimony (Sb)	mg/L				<0.00060	<0.00060	B034268	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L				0.00042	0.00043	B034268	0.00034	0.00020	B034272
Dissolved Barium (Ba)	mg/L	0.010	0.010	B034807	<0.010	<0.010	B034807	<0.010	0.010	B034804
Dissolved Beryllium (Be)	mg/L				<0.0010	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	0.020	B034807	<0.020	<0.020	B034807	<0.020	0.020	B034804
Dissolved Calcium (Ca)	mg/L	15	0.30	B034807	14	14	B034807	14	0.30	B034804
Dissolved Chromium (Cr)	mg/L				<0.0010	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L				<0.00030	<0.00030	B034268	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L				0.0049	0.0050	B034268	0.0044	0.0010	B034272
Dissolved Iron (Fe)	mg/L	0.14	0.060	B034807	0.15	0.15	B034807	0.14	0.060	B034804
Dissolved Lead (Pb)	mg/L				<0.00020	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B034807	<0.020	<0.020	B034807	<0.020	0.020	B034804
Dissolved Magnesium (Mg)	mg/L	3.6	0.20	B034807	3.5	3.6	B034807	3.5	0.20	B034804
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B034807	<0.0040	<0.0040	B034807	<0.0040	0.0040	B034804
Dissolved Molybdenum (Mo)	mg/L				<0.00020	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Nickel (Ni)	mg/L				0.00054	<0.00050	B034268	<0.00050	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B034807	<0.10	<0.10	B034807	<0.10	0.10	B034804
Dissolved Potassium (K)	mg/L	1.7	0.30	B034807	1.6	1.7	B034807	1.6	0.30	B034804
Dissolved Selenium (Se)	mg/L				<0.00020	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	0.76	0.50	B034807	0.74	0.75	B034807	0.76	0.50	B034804
Dissolved Silver (Ag)	mg/L				<0.00010	<0.00010	B034268	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.0	0.50	B034807	2.0	2.0	B034807	2.0	0.50	B034804
Dissolved Strontium (Sr)	mg/L	0.030	0.020	B034807	0.029	0.030	B034807	0.029	0.020	B034804
Dissolved Sulphur (S)	mg/L	8.9	0.20	B034807	8.7	8.3	B034807	8.1	0.20	B034804
Dissolved Thallium (Tl)	mg/L				<0.00020	<0.00020	B034268	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L				<0.0010	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L				<0.0010	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L				<0.00010	<0.00010	B034268	<0.00010	0.00010	B034272

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM811			BUM812	BUM813		BUM814		
Sampling Date		2023/07/11 08:55			2023/07/11 08:30	2023/07/11 08:35		2023/07/11 09:00		
COC Number		699322-02-01			699322-02-01	699322-02-01		699322-02-01		
	UNITS	**CL-7 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-8 SFC**	**CL-8 BTM**	**QC Batch**	**CL-2 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L				<0.0010	<0.0010	B034268	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L				0.018	0.018	B034268	0.015	0.0030	B034272

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM815		BUM816		BUM817		BUM822		
Sampling Date		2023/07/11 09:05		2023/07/11 08:20		2023/07/11 08:25		2023/07/11 08:10		
COC Number		699322-02-01		699322-02-01		699322-02-01		699322-03-01		
	UNITS	CL-2 BTM	QC Batch	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.062	B033013	0.036	B033013	0.052	B033221	0.026	0.020	B033221
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.019	B034268	0.012	B034272	0.018	B034272	0.012	0.0030	B034272
Dissolved Antimony (Sb)	mg/L	<0.00060	B034268	<0.00060	B034272	<0.00060	B034272	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L	0.00023	B034268	0.00034	B034272	0.00032	B034272	0.00039	0.00020	B034272
Dissolved Barium (Ba)	mg/L	<0.010	B034807	<0.010	B034804	<0.010	B034807	<0.010	0.010	B034804
Dissolved Beryllium (Be)	mg/L	<0.0010	B034268	<0.0010	B034272	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	B034807	<0.020	B034804	<0.020	B034807	<0.020	0.020	B034804
Dissolved Calcium (Ca)	mg/L	13	B034807	13	B034804	12	B034807	13	0.30	B034804
Dissolved Chromium (Cr)	mg/L	<0.0010	B034268	<0.0010	B034272	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L	<0.00030	B034268	<0.00030	B034272	<0.00030	B034272	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L	0.0054	B034268	0.0042	B034272	0.0047	B034272	0.0042	0.0010	B034272
Dissolved Iron (Fe)	mg/L	0.34	B034807	0.10	B034804	0.43	B034807	0.082	0.060	B034804
Dissolved Lead (Pb)	mg/L	<0.00020	B034268	<0.00020	B034272	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	B034807	<0.020	B034804	<0.020	B034807	<0.020	0.020	B034804
Dissolved Magnesium (Mg)	mg/L	3.4	B034807	3.5	B034804	3.3	B034807	3.4	0.20	B034804
Dissolved Manganese (Mn)	mg/L	0.020	B034807	<0.0040	B034804	0.037	B034807	<0.0040	0.0040	B034804
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B034268	<0.00020	B034272	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Nickel (Ni)	mg/L	0.00051	B034268	<0.00050	B034272	<0.00050	B034272	<0.00050	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	B034807	<0.10	B034804	<0.10	B034807	<0.10	0.10	B034804
Dissolved Potassium (K)	mg/L	1.5	B034807	1.6	B034804	1.5	B034807	1.6	0.30	B034804
Dissolved Selenium (Se)	mg/L	<0.00020	B034268	<0.00020	B034272	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	0.99	B034807	0.70	B034804	0.96	B034807	0.67	0.50	B034804
Dissolved Silver (Ag)	mg/L	<0.00010	B034268	<0.00010	B034272	<0.00010	B034272	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.0	B034807	2.0	B034804	2.0	B034807	2.0	0.50	B034804
Dissolved Strontium (Sr)	mg/L	0.028	B034807	0.029	B034804	0.028	B034807	0.028	0.020	B034804
Dissolved Sulphur (S)	mg/L	6.9	B034807	7.5	B034804	6.7	B034807	6.8	0.20	B034804
Dissolved Thallium (Tl)	mg/L	<0.00020	B034268	<0.00020	B034272	<0.00020	B034272	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L	<0.0010	B034268	<0.0010	B034272	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L	<0.0010	B034268	<0.0010	B034272	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L	<0.00010	B034268	<0.00010	B034272	<0.00010	B034272	<0.00010	0.00010	B034272

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM815		BUM816		BUM817		BUM822		
Sampling Date		2023/07/11 09:05		2023/07/11 08:20		2023/07/11 08:25		2023/07/11 08:10		
COC Number		699322-02-01		699322-02-01		699322-02-01		699322-03-01		
	UNITS	**CL-2 BTM**	**QC Batch**	**CL-4 SFC**	**QC Batch**	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B034268	<0.0010	B034272	<0.0010	B034272	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L	0.023	B034268	0.014	B034272	0.018	B034272	0.013	0.0030	B034272
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM823		BUM824		BUM825	BUM826		
Sampling Date		2023/07/11 08:15		2023/07/11 08:00		2023/07/11 08:05	2023/07/11		
COC Number		699322-03-01		699322-03-01		699322-03-01	699322-03-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	SW-113	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.025	B033221	0.027	B033221	0.021	0.24	0.020	B033221
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.011	B034272	0.011	B034272	0.010	0.012	0.0030	B034272
Dissolved Antimony (Sb)	mg/L	<0.00060	B034272	<0.00060	B034272	<0.00060	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L	0.00024	B034272	0.00037	B034272	0.00030	0.00024	0.00020	B034272
Dissolved Barium (Ba)	mg/L	<0.010	B034804	<0.010	B034804	<0.010	0.015	0.010	B034804
Dissolved Beryllium (Be)	mg/L	<0.0010	B034272	<0.0010	B034272	<0.0010	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	B034804	<0.020	B034804	<0.020	0.024	0.020	B034804
Dissolved Calcium (Ca)	mg/L	13	B034804	12	B034804	12	37	0.30	B034804
Dissolved Chromium (Cr)	mg/L	<0.0010	B034272	<0.0010	B034272	<0.0010	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L	<0.00030	B034272	<0.00030	B034272	<0.00030	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L	0.0039	B034272	0.0040	B034272	0.0037	0.0082	0.0010	B034272
Dissolved Iron (Fe)	mg/L	0.092	B034804	0.062	B034804	<0.060	2.8	0.060	B034804
Dissolved Lead (Pb)	mg/L	<0.00020	B034272	<0.00020	B037724	<0.00020	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	B034804	<0.020	B034804	<0.020	<0.020	0.020	B034804
Dissolved Magnesium (Mg)	mg/L	3.5	B034804	3.3	B034804	3.3	6.7	0.20	B034804
Dissolved Manganese (Mn)	mg/L	<0.0040	B034804	<0.0040	B034804	<0.0040	0.060	0.0040	B034804
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B034272	<0.00020	B034272	<0.00020	<0.00020	0.00020	B034272
Dissolved Nickel (Ni)	mg/L	<0.00050	B034272	<0.00050	B034272	<0.00050	0.00094	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	B034804	<0.10	B034804	<0.10	<0.10	0.10	B034804
Dissolved Potassium (K)	mg/L	1.6	B034804	1.5	B034804	1.5	3.3	0.30	B034804
Dissolved Selenium (Se)	mg/L	<0.00020	B034272	<0.00020	B034272	<0.00020	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	0.72	B034804	0.62	B034804	0.65	0.96	0.50	B034804
Dissolved Silver (Ag)	mg/L	<0.00010	B034272	<0.00010	B034272	<0.00010	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.0	B034804	2.0	B034804	2.0	2.7	0.50	B034804
Dissolved Strontium (Sr)	mg/L	0.029	B034804	0.028	B034804	0.028	0.048	0.020	B034804
Dissolved Sulphur (S)	mg/L	7.0	B034804	6.0	B034804	6.0	38	0.20	B034804
Dissolved Thallium (Tl)	mg/L	<0.00020	B034272	<0.00020	B034272	<0.00020	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L	<0.0010	B034272	<0.0010	B034272	<0.0010	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L	<0.0010	B034272	<0.0010	B034272	<0.0010	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L	<0.00010	B034272	<0.00010	B034272	<0.00010	<0.00010	0.00010	B034272
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM823		BUM824		BUM825	BUM826		
Sampling Date		2023/07/11 08:15		2023/07/11 08:00		2023/07/11 08:05	2023/07/11		
COC Number		699322-03-01		699322-03-01		699322-03-01	699322-03-01		
	UNITS	**CL-5 BTM**	**QC Batch**	**CL-6 SFC**	**QC Batch**	**CL-6 BTM**	**SW-113**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B034272	<0.0010	B034272	<0.0010	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L	0.012	B034272	0.011	B034272	0.0096	0.077	0.0030	B034272
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM826			BUM827	BUM828	BUM829		
Sampling Date		2023/07/11			2023/07/11	2023/07/11	2023/07/11		
COC Number		699322-03-01			699322-03-01	699322-03-01	699322-03-01		
	UNITS	SW-113 Lab-Dup	RDL	QC Batch	TRIP BLANK	SW-115	SW-114	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				<0.020	0.031	0.043	0.020	B033221
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.015	0.0030	B034272	<0.0030	0.011	0.012	0.0030	B034272
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B034272	<0.00060	<0.00060	<0.00060	0.00060	B034272
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B034272	<0.00020	0.00047	0.00033	0.00020	B034272
Dissolved Barium (Ba)	mg/L	0.011	0.010	B034804	<0.010	<0.010	<0.010	0.010	B034804
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B034272	<0.0010	<0.0010	<0.0010	0.0010	B034272
Dissolved Boron (B)	mg/L	<0.020	0.020	B034804	<0.020	<0.020	<0.020	0.020	B034804
Dissolved Calcium (Ca)	mg/L	38	0.30	B034804	<0.30	12	14	0.30	B034804
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B034272	<0.0010	<0.0010	<0.0010	0.0010	B034272
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B034272	<0.00030	<0.00030	<0.00030	0.00030	B034272
Dissolved Copper (Cu)	mg/L	0.0082	0.0010	B034272	<0.0010	0.0037	0.0045	0.0010	B034272
Dissolved Iron (Fe)	mg/L	2.8	0.060	B034804	<0.060	<0.060	0.13	0.060	B034804
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B034272	<0.00020	<0.00020	<0.00020	0.00020	B034272
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B034804	<0.020	<0.020	<0.020	0.020	B034804
Dissolved Magnesium (Mg)	mg/L	6.7	0.20	B034804	<0.20	3.3	3.6	0.20	B034804
Dissolved Manganese (Mn)	mg/L	0.060	0.0040	B034804	<0.0040	<0.0040	<0.0040	0.0040	B034804
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B034272	<0.00020	<0.00020	<0.00020	0.00020	B034272
Dissolved Nickel (Ni)	mg/L	0.00083	0.00050	B034272	<0.00050	<0.00050	<0.00050	0.00050	B034272
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B034804	<0.10	<0.10	<0.10	0.10	B034804
Dissolved Potassium (K)	mg/L	3.3	0.30	B034804	<0.30	1.5	1.6	0.30	B034804
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B034272	<0.00020	<0.00020	<0.00020	0.00020	B034272
Dissolved Silicon (Si)	mg/L	0.90	0.50	B034804	<0.50	0.63	0.74	0.50	B034804
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B034272	<0.00010	<0.00010	<0.00010	0.00010	B034272
Dissolved Sodium (Na)	mg/L	2.6	0.50	B034804	<0.50	2.0	2.0	0.50	B034804
Dissolved Strontium (Sr)	mg/L	0.046	0.020	B034804	<0.020	0.028	0.029	0.020	B034804
Dissolved Sulphur (S)	mg/L	38	0.20	B034804	<0.20	6.0	8.5	0.20	B034804
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B034272	<0.00020	<0.00020	<0.00020	0.00020	B034272
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B034272	<0.0010	<0.0010	<0.0010	0.0010	B034272
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B034272	<0.0010	<0.0010	<0.0010	0.0010	B034272
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B034272	<0.00010	<0.00010	<0.00010	0.00010	B034272

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BUM826			BUM827	BUM828	BUM829		
Sampling Date		2023/07/11			2023/07/11	2023/07/11	2023/07/11		
COC Number		699322-03-01			699322-03-01	699322-03-01	699322-03-01		
	UNITS	**SW-113 Lab-Dup**	**RDL**	**QC Batch**	**TRIP BLANK**	**SW-115**	**SW-114**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B034272	<0.0010	<0.0010	<0.0010	0.0010	B034272
Dissolved Zinc (Zn)	mg/L	0.081	0.0030	B034272	<0.0030	0.0097	0.017	0.0030	B034272

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM771		BUM772			BUM772		
Sampling Date		2023/07/11 10:30		2023/07/11 09:30			2023/07/11 09:30		
COC Number		699322-01-01		699322-01-01			699322-01-01		
	UNITS	SC-1	QC Batch	SB-1	RDL	QC Batch	SB-1 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.62	B033103	0.33	0.020	B033103			
Total Aluminum (Al)	mg/L	0.18	B037448	0.055	0.0030	B037568	0.054	0.0030	B037568
Total Antimony (Sb)	mg/L	<0.00060	B037448	<0.00060	0.00060	B037568	<0.00060	0.00060	B037568
Total Arsenic (As)	mg/L	0.00046	B037448	0.00037	0.00020	B037568	0.00029	0.00020	B037568
Total Barium (Ba)	mg/L	<0.010	B037462	0.012	0.010	B037608	0.011	0.010	B037608
Total Beryllium (Be)	mg/L	<0.0010	B037448	<0.0010	0.0010	B037568	<0.0010	0.0010	B037568
Total Boron (B)	mg/L	0.037	B037462	<0.020	0.020	B037608	<0.020	0.020	B037608
Total Calcium (Ca)	mg/L	10	B037462	40	0.30	B037608	38	0.30	B037608
Total Chromium (Cr)	mg/L	<0.0010	B037448	<0.0010	0.0010	B037568	<0.0010	0.0010	B037568
Total Cobalt (Co)	mg/L	<0.00030	B037448	<0.00030	0.00030	B037568	<0.00030	0.00030	B037568
Total Copper (Cu)	mg/L	0.020	B037448	0.012	0.0010	B037568	0.012	0.0010	B037568
Total Iron (Fe)	mg/L	0.34	B037462	4.2	0.060	B037608	4.1	0.060	B037608
Total Lead (Pb)	mg/L	<0.00020	B037448	<0.00020	0.00020	B037568	<0.00020	0.00020	B037568
Total Lithium (Li)	mg/L	<0.020	B037462	<0.020	0.020	B037608	<0.020	0.020	B037608
Total Magnesium (Mg)	mg/L	3.0	B037462	7.4	0.20	B037608	7.1	0.20	B037608
Total Manganese (Mn)	mg/L	0.050	B037462	0.062	0.0040	B037608	0.060	0.0040	B037608
Total Molybdenum (Mo)	mg/L	<0.00020	B037448	<0.00020	0.00020	B037568	<0.00020	0.00020	B037568
Total Nickel (Ni)	mg/L	0.0013	B037448	0.0013	0.00050	B037568	0.0014	0.00050	B037568
Total Phosphorus (P)	mg/L	<0.10	B037462	<0.10	0.10	B037608	<0.10	0.10	B037608
Total Potassium (K)	mg/L	1.3	B037462	3.6	0.30	B037608	3.4	0.30	B037608
Total Selenium (Se)	mg/L	<0.00020	B037448	<0.00020	0.00020	B037568	<0.00020	0.00020	B037568
Total Silicon (Si)	mg/L	1.4	B037462	0.98	0.50	B037608	0.93	0.50	B037608
Total Silver (Ag)	mg/L	<0.00010	B037448	<0.00010	0.00010	B037568	<0.00010	0.00010	B037568
Total Sodium (Na)	mg/L	2.3	B037462	2.7	0.50	B037608	2.6	0.50	B037608
Total Strontium (Sr)	mg/L	0.030	B037462	0.048	0.020	B037608	0.046	0.020	B037608
Total Sulphur (S)	mg/L	2.8	B037462	38	0.20	B037608	36	0.20	B037608
Total Thallium (Tl)	mg/L	<0.00020	B037448	<0.00020	0.00020	B037568	<0.00020	0.00020	B037568
Total Tin (Sn)	mg/L	<0.0010	B037448	<0.0010	0.0010	B037568	<0.0010	0.0010	B037568
Total Titanium (Ti)	mg/L	0.0031	B037448	<0.0010	0.0010	B037568	<0.0010	0.0010	B037568
Total Uranium (U)	mg/L	<0.00010	B037448	<0.00010	0.00010	B037568	<0.00010	0.00010	B037568
Total Vanadium (V)	mg/L	<0.0010	B037448	<0.0010	0.0010	B037568	<0.0010	0.0010	B037568

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM771		BUM772			BUM772		
Sampling Date		2023/07/11 10:30		2023/07/11 09:30			2023/07/11 09:30		
COC Number		699322-01-01		699322-01-01			699322-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**	**SB-1 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.23	B037448	0.11	0.0030	B037568	0.11	0.0030	B037568

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM773		BUM774		BUM775		BUM776		
Sampling Date		2023/07/11 09:25		2023/07/11 09:35		2023/07/11 09:40		2023/07/11 09:45		
COC Number		699322-01-01		699322-01-01		699322-01-01		699322-01-01		
	UNITS	SB-2	QC Batch	CB-1	QC Batch	CB-2	QC Batch	EB-1	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.35	B033103	0.34	B033103	0.32	B033103	0.43	0.020	B033103
Total Aluminum (Al)	mg/L	0.062	B037489	0.046	B037547	0.058	B037448	0.065	0.0030	B037489
Total Antimony (Sb)	mg/L	<0.00060	B037489	<0.00060	B037547	<0.00060	B037448	<0.00060	0.00060	B037489
Total Arsenic (As)	mg/L	0.00036	B037489	0.00034	B037547	0.00031	B037448	0.00032	0.00020	B037489
Total Barium (Ba)	mg/L	0.011	B037540	0.011	B037560	0.011	B037462	0.013	0.010	B037540
Total Beryllium (Be)	mg/L	<0.0010	B037489	<0.0010	B037547	<0.0010	B037448	<0.0010	0.0010	B037489
Total Boron (B)	mg/L	<0.020	B037540	<0.020	B037560	<0.020	B037462	<0.020	0.020	B037540
Total Calcium (Ca)	mg/L	40	B037540	40	B037560	41	B037462	51	0.30	B037540
Total Chromium (Cr)	mg/L	<0.0010	B037489	<0.0010	B037547	<0.0010	B037448	<0.0010	0.0010	B037489
Total Cobalt (Co)	mg/L	<0.00030	B037489	<0.00030	B037547	<0.00030	B037448	<0.00030	0.00030	B037489
Total Copper (Cu)	mg/L	0.015	B037489	0.012	B037547	0.012	B037448	0.012	0.0010	B037489
Total Iron (Fe)	mg/L	4.5	B037540	3.3	B037560	3.6	B037462	1.5	0.060	B037540
Total Lead (Pb)	mg/L	<0.00020	B037489	<0.00020	B037547	<0.00020	B037448	<0.00020	0.00020	B037489
Total Lithium (Li)	mg/L	<0.020	B037540	<0.020	B037560	<0.020	B037462	<0.020	0.020	B037540
Total Magnesium (Mg)	mg/L	6.8	B037540	6.7	B037560	7.0	B037462	8.0	0.20	B037540
Total Manganese (Mn)	mg/L	0.067	B037540	0.053	B037560	0.058	B037462	0.041	0.0040	B037540
Total Molybdenum (Mo)	mg/L	<0.00020	B037489	<0.00020	B037547	<0.00020	B037448	<0.00020	0.00020	B037489
Total Nickel (Ni)	mg/L	0.0012	B037489	0.0011	B037547	0.0013	B037448	0.0015	0.00050	B037489
Total Phosphorus (P)	mg/L	<0.10	B037540	<0.10	B037560	<0.10	B037462	<0.10	0.10	B037540
Total Potassium (K)	mg/L	3.5	B037540	3.4	B037560	3.5	B037462	3.9	0.30	B037540
Total Selenium (Se)	mg/L	<0.00020	B037489	<0.00020	B037547	<0.00020	B037448	<0.00020	0.00020	B037489
Total Silicon (Si)	mg/L	1.1	B037540	0.94	B037560	0.96	B037462	0.87	0.50	B037540
Total Silver (Ag)	mg/L	<0.00010	B037489	<0.00010	B037547	<0.00010	B037448	<0.00010	0.00010	B037489
Total Sodium (Na)	mg/L	2.9	B037540	2.8	B037560	2.8	B037462	3.2	0.50	B037540
Total Strontium (Sr)	mg/L	0.047	B037540	0.046	B037560	0.047	B037462	0.054	0.020	B037540
Total Sulphur (S)	mg/L	37	B037540	37	B037560	38	B037462	47	0.20	B037540
Total Thallium (Tl)	mg/L	<0.00020	B037489	<0.00020	B037547	<0.00020	B037448	<0.00020	0.00020	B037489
Total Tin (Sn)	mg/L	<0.0010	B037489	<0.0010	B037547	<0.0010	B037448	<0.0010	0.0010	B037489
Total Titanium (Ti)	mg/L	0.0025	B037489	0.0015	B037547	0.0025	B037448	0.0020	0.0010	B037489
Total Uranium (U)	mg/L	<0.00010	B037489	<0.00010	B037547	<0.00010	B037448	<0.00010	0.00010	B037489
Total Vanadium (V)	mg/L	<0.0010	B037489	<0.0010	B037547	<0.0010	B037448	<0.0010	0.0010	B037489
Total Zinc (Zn)	mg/L	0.11	B037489	0.10	B037547	0.10	B037448	0.13	0.0030	B037489

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM777	BUM778	BUM779	BUM780		BUM808		
Sampling Date		2023/07/11 09:50	2023/07/11 10:00	2023/07/11 09:55	2023/07/11 10:05		2023/07/11 08:40		
COC Number		699322-01-01	699322-01-01	699322-01-01	699322-01-01		699322-02-01		
	UNITS	EB-2	NB-1	NB-2	CLD	QC Batch	CL-3 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.46	0.35	0.36	0.34	B033103	0.066	0.020	B033103
Total Aluminum (Al)	mg/L	0.15	0.045	0.053	0.039	B035937	0.052	0.0030	B037489
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	B035937	<0.00060	0.00060	B037489
Total Arsenic (As)	mg/L	0.00027	0.00031	0.00034	0.00028	B035937	0.00051	0.00020	B037489
Total Barium (Ba)	mg/L	0.014	0.011	0.010	0.010	B035942	0.010	0.010	B037540
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B035937	<0.0010	0.0010	B037489
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	B035942	<0.020	0.020	B037540
Total Calcium (Ca)	mg/L	53	46	45	47	B035942	15	0.30	B037540
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B035937	<0.0010	0.0010	B037489
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	B035937	<0.00030	0.00030	B037489
Total Copper (Cu)	mg/L	0.013	0.012	0.014	0.013	B035937	0.0061	0.0010	B037489
Total Iron (Fe)	mg/L	1.4	2.4	2.1	2.2	B035942	0.34	0.060	B037540
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B035937	<0.00020	0.00020	B037489
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	B035942	<0.020	0.020	B037540
Total Magnesium (Mg)	mg/L	9.0	8.0	8.0	8.1	B035942	3.6	0.20	B037540
Total Manganese (Mn)	mg/L	0.040	0.057	0.050	0.055	B035942	0.015	0.0040	B037540
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B035937	<0.00020	0.00020	B037489
Total Nickel (Ni)	mg/L	0.0019	0.0012	0.0015	0.0014	B035937	0.00080	0.00050	B037489
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	B035942	<0.10	0.10	B037540
Total Potassium (K)	mg/L	3.9	3.5	3.5	3.5	B035942	1.7	0.30	B037540
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B035937	<0.00020	0.00020	B037489
Total Silicon (Si)	mg/L	1.2	1.0	1.0	0.98	B035942	0.88	0.50	B037540
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	B035937	<0.00010	0.00010	B037489
Total Sodium (Na)	mg/L	3.1	2.7	2.7	2.7	B035942	2.2	0.50	B037540
Total Strontium (Sr)	mg/L	0.056	0.049	0.049	0.049	B035942	0.029	0.020	B037540
Total Sulphur (S)	mg/L	49	43	42	44	B035942	8.3	0.20	B037540
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	B035937	<0.00020	0.00020	B037489
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B035937	<0.0010	0.0010	B037489
Total Titanium (Ti)	mg/L	0.0071	0.0017	0.0027	0.0014	B035937	0.0016	0.0010	B037489
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	B035937	<0.00010	0.00010	B037489
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	B035937	<0.0010	0.0010	B037489
Total Zinc (Zn)	mg/L	0.13	0.11	0.11	0.11	B035937	0.025	0.0030	B037489

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM809		BUM810	BUM811		BUM812		
Sampling Date		2023/07/11 08:45		2023/07/11 08:50	2023/07/11 08:55		2023/07/11 08:30		
COC Number		699322-02-01		699322-02-01	699322-02-01		699322-02-01		
	UNITS	CL-3 BTM	QC Batch	CL-7 SFC	CL-7 BTM	QC Batch	CL-8 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.071	B033103	0.079	0.085	B033103	0.074	0.020	B033103
Total Aluminum (Al)	mg/L	0.047	B037547	0.051	0.059	B037489	0.045	0.0030	B037547
Total Antimony (Sb)	mg/L	<0.00060	B037547	<0.00060	<0.00060	B037489	<0.00060	0.00060	B037547
Total Arsenic (As)	mg/L	0.00044	B037547	0.00045	0.00057	B037489	0.00049	0.00020	B037547
Total Barium (Ba)	mg/L	0.011	B037560	0.010	0.010	B037540	<0.010	0.010	B037560
Total Beryllium (Be)	mg/L	<0.0010	B037547	<0.0010	<0.0010	B037489	<0.0010	0.0010	B037547
Total Boron (B)	mg/L	<0.020	B037560	<0.020	<0.020	B037540	<0.020	0.020	B037560
Total Calcium (Ca)	mg/L	15	B037560	15	16	B037540	15	0.30	B037560
Total Chromium (Cr)	mg/L	<0.0010	B037547	<0.0010	<0.0010	B037489	<0.0010	0.0010	B037547
Total Cobalt (Co)	mg/L	<0.00030	B037547	<0.00030	<0.00030	B037489	<0.00030	0.00030	B037547
Total Copper (Cu)	mg/L	0.0061	B037547	0.0077	0.0066	B037489	0.0060	0.0010	B037547
Total Iron (Fe)	mg/L	0.35	B037560	0.39	0.41	B037540	0.35	0.060	B037560
Total Lead (Pb)	mg/L	0.00034	B037547	0.00052	0.00080	B037489	0.00057	0.00020	B037547
Total Lithium (Li)	mg/L	<0.020	B037560	<0.020	<0.020	B037540	<0.020	0.020	B037560
Total Magnesium (Mg)	mg/L	3.7	B037560	3.6	3.7	B037540	3.6	0.20	B037560
Total Manganese (Mn)	mg/L	0.016	B037560	0.017	0.017	B037540	0.016	0.0040	B037560
Total Molybdenum (Mo)	mg/L	0.00023	B037547	<0.00020	<0.00020	B037489	<0.00020	0.00020	B037547
Total Nickel (Ni)	mg/L	0.00081	B037547	0.0016	0.00073	B037489	0.00062	0.00050	B037547
Total Phosphorus (P)	mg/L	<0.10	B037560	<0.10	<0.10	B037540	<0.10	0.10	B037560
Total Potassium (K)	mg/L	1.7	B037560	1.7	1.7	B037540	1.7	0.30	B037560
Total Selenium (Se)	mg/L	<0.00020	B037547	<0.00020	<0.00020	B037489	<0.00020	0.00020	B037547
Total Silicon (Si)	mg/L	0.89	B037560	0.88	0.92	B037540	0.83	0.50	B037560
Total Silver (Ag)	mg/L	<0.00010	B037547	<0.00010	<0.00010	B037489	<0.00010	0.00010	B037547
Total Sodium (Na)	mg/L	2.3	B037560	2.2	2.2	B037540	2.2	0.50	B037560
Total Strontium (Sr)	mg/L	0.030	B037560	0.029	0.030	B037540	0.030	0.020	B037560
Total Sulphur (S)	mg/L	8.4	B037560	8.7	8.9	B037540	8.4	0.20	B037560
Total Thallium (Tl)	mg/L	<0.00020	B037547	<0.00020	<0.00020	B037489	<0.00020	0.00020	B037547
Total Tin (Sn)	mg/L	<0.0010	B037547	<0.0010	<0.0010	B037489	<0.0010	0.0010	B037547
Total Titanium (Ti)	mg/L	0.0016	B037547	0.0015	0.0017	B037489	0.0014	0.0010	B037547
Total Uranium (U)	mg/L	<0.00010	B037547	<0.00010	<0.00010	B037489	<0.00010	0.00010	B037547
Total Vanadium (V)	mg/L	<0.0010	B037547	<0.0010	<0.0010	B037489	<0.0010	0.0010	B037547
Total Zinc (Zn)	mg/L	0.026	B037547	0.026	0.027	B037489	0.027	0.0030	B037547

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM813		BUM814		BUM815		BUM816		
Sampling Date		2023/07/11 08:35		2023/07/11 09:00		2023/07/11 09:05		2023/07/11 08:20		
COC Number		699322-02-01		699322-02-01		699322-02-01		699322-02-01		
	UNITS	CL-8 BTM	QC Batch	CL-2 SFC	QC Batch	CL-2 BTM	QC Batch	CL-4 SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.069	B033103	0.080	B033103	0.099	B033103	0.070	0.020	B033103
Total Aluminum (Al)	mg/L	0.053	B037489	0.061	B037568	0.071	B037489	0.061	0.0030	B037448
Total Antimony (Sb)	mg/L	<0.00060	B037489	<0.00060	B037568	<0.00060	B037489	<0.00060	0.00060	B037448
Total Arsenic (As)	mg/L	0.00050	B037489	0.00054	B037568	0.00054	B037489	0.00039	0.00020	B037448
Total Barium (Ba)	mg/L	0.010	B037540	0.010	B037608	0.011	B037540	0.010	0.010	B037462
Total Beryllium (Be)	mg/L	<0.0010	B037489	<0.0010	B037568	<0.0010	B037489	<0.0010	0.0010	B037448
Total Boron (B)	mg/L	<0.020	B037540	<0.020	B037608	<0.020	B037540	<0.020	0.020	B037462
Total Calcium (Ca)	mg/L	15	B037540	14	B037608	14	B037540	14	0.30	B037462
Total Chromium (Cr)	mg/L	<0.0010	B037489	<0.0010	B037568	<0.0010	B037489	<0.0010	0.0010	B037448
Total Cobalt (Co)	mg/L	<0.00030	B037489	<0.00030	B037568	<0.00030	B037489	<0.00030	0.00030	B037448
Total Copper (Cu)	mg/L	0.0061	B037489	0.0070	B037568	0.0074	B037489	0.0057	0.0010	B037448
Total Iron (Fe)	mg/L	0.37	B037540	0.33	B037608	0.82	B037540	0.30	0.060	B037462
Total Lead (Pb)	mg/L	0.00023	B037489	0.00038	B037568	<0.00020	B037489	0.00022	0.00020	B037448
Total Lithium (Li)	mg/L	<0.020	B037540	<0.020	B037608	<0.020	B037540	<0.020	0.020	B037462
Total Magnesium (Mg)	mg/L	3.6	B037540	3.8	B037608	3.6	B037540	3.4	0.20	B037462
Total Manganese (Mn)	mg/L	0.017	B037540	0.016	B037608	0.052	B037540	0.016	0.0040	B037462
Total Molybdenum (Mo)	mg/L	<0.00020	B037489	<0.00020	B037568	0.00027	B037489	<0.00020	0.00020	B037448
Total Nickel (Ni)	mg/L	0.00066	B037489	0.00071	B037568	0.00069	B037489	0.0010	0.00050	B037448
Total Phosphorus (P)	mg/L	<0.10	B037540	<0.10	B037608	<0.10	B037540	<0.10	0.10	B037462
Total Potassium (K)	mg/L	1.7	B037540	1.7	B037608	1.7	B037540	1.6	0.30	B037462
Total Selenium (Se)	mg/L	<0.00020	B037489	<0.00020	B037568	<0.00020	B037489	<0.00020	0.00020	B037448
Total Silicon (Si)	mg/L	0.90	B037540	0.83	B037608	1.2	B037540	0.84	0.50	B037462
Total Silver (Ag)	mg/L	<0.00010	B037489	<0.00010	B037568	<0.00010	B037489	<0.00010	0.00010	B037448
Total Sodium (Na)	mg/L	2.1	B037540	2.1	B037608	2.2	B037540	2.1	0.50	B037462
Total Strontium (Sr)	mg/L	0.029	B037540	0.029	B037608	0.030	B037540	0.028	0.020	B037462
Total Sulphur (S)	mg/L	8.4	B037540	7.8	B037608	7.1	B037540	7.1	0.20	B037462
Total Thallium (Tl)	mg/L	<0.00020	B037489	<0.00020	B037568	<0.00020	B037489	<0.00020	0.00020	B037448
Total Tin (Sn)	mg/L	<0.0010	B037489	<0.0010	B037568	<0.0010	B037489	<0.0010	0.0010	B037448
Total Titanium (Ti)	mg/L	0.0015	B037489	0.0011	B037568	0.0013	B037489	0.0017	0.0010	B037448
Total Uranium (U)	mg/L	<0.00010	B037489	<0.00010	B037568	<0.00010	B037489	<0.00010	0.00010	B037448
Total Vanadium (V)	mg/L	<0.0010	B037489	<0.0010	B037568	<0.0010	B037489	<0.0010	0.0010	B037448
Total Zinc (Zn)	mg/L	0.026	B037489	0.028	B037568	0.033	B037489	0.021	0.0030	B037448

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM817	BUM822		BUM823		BUM824		
Sampling Date		2023/07/11 08:25	2023/07/11 08:10		2023/07/11 08:15		2023/07/11 08:00		
COC Number		699322-02-01	699322-03-01		699322-03-01		699322-03-01		
	UNITS	CL-4 BTM	CL-5 SFC	QC Batch	CL-5 BTM	QC Batch	CL-6 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.089	0.063	B033103	0.063	B033103	0.047	0.020	B033222
Total Aluminum (Al)	mg/L	0.088	0.064	B037489	0.055	B037547	0.078	0.0030	B037448
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	B037489	<0.00060	B037547	<0.00060	0.00060	B037448
Total Arsenic (As)	mg/L	0.00057	0.00051	B037489	0.00053	B037547	0.00047	0.00020	B037448
Total Barium (Ba)	mg/L	0.011	0.010	B037540	<0.010	B037560	<0.010	0.010	B037462
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	B037489	<0.0010	B037547	<0.0010	0.0010	B037448
Total Boron (B)	mg/L	<0.020	<0.020	B037540	<0.020	B037560	<0.020	0.020	B037462
Total Calcium (Ca)	mg/L	14	14	B037540	13	B037560	12	0.30	B037462
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	B037489	<0.0010	B037547	<0.0010	0.0010	B037448
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	B037489	<0.00030	B037547	<0.00030	0.00030	B037448
Total Copper (Cu)	mg/L	0.0070	0.0053	B037489	0.0057	B037547	0.0051	0.0010	B037448
Total Iron (Fe)	mg/L	1.1	0.26	B037540	0.25	B037560	0.21	0.060	B037462
Total Lead (Pb)	mg/L	0.00041	<0.00020	B037489	<0.00020	B037547	<0.00020	0.00020	B037448
Total Lithium (Li)	mg/L	<0.020	<0.020	B037540	<0.020	B037560	<0.020	0.020	B037462
Total Magnesium (Mg)	mg/L	3.4	3.5	B037540	3.3	B037560	3.1	0.20	B037462
Total Manganese (Mn)	mg/L	0.064	0.016	B037540	0.015	B037560	0.018	0.0040	B037462
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B037489	<0.00020	B037547	<0.00020	0.00020	B037448
Total Nickel (Ni)	mg/L	0.00091	0.00066	B037489	0.00066	B037547	0.0011	0.00050	B037448
Total Phosphorus (P)	mg/L	<0.10	<0.10	B037540	<0.10	B037560	<0.10	0.10	B037462
Total Potassium (K)	mg/L	1.7	1.6	B037540	1.6	B037560	1.5	0.30	B037462
Total Selenium (Se)	mg/L	<0.00020	<0.00020	B037489	<0.00020	B037547	<0.00020	0.00020	B037448
Total Silicon (Si)	mg/L	1.2	0.84	B037540	0.82	B037560	0.84	0.50	B037462
Total Silver (Ag)	mg/L	<0.00010	<0.00010	B037489	<0.00010	B037547	<0.00010	0.00010	B037448
Total Sodium (Na)	mg/L	2.2	2.2	B037540	2.1	B037560	2.0	0.50	B037462
Total Strontium (Sr)	mg/L	0.029	0.029	B037540	0.028	B037560	0.027	0.020	B037462
Total Sulphur (S)	mg/L	6.7	6.9	B037540	6.6	B037560	5.8	0.20	B037462
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	B037489	<0.00020	B037547	<0.00020	0.00020	B037448
Total Tin (Sn)	mg/L	<0.0010	<0.0010	B037489	<0.0010	B037547	<0.0010	0.0010	B037448
Total Titanium (Ti)	mg/L	0.0023	0.0022	B037489	0.0017	B037547	0.0024	0.0010	B037448
Total Uranium (U)	mg/L	<0.00010	<0.00010	B037489	<0.00010	B037547	<0.00010	0.00010	B037448
Total Vanadium (V)	mg/L	<0.0010	<0.0010	B037489	<0.0010	B037547	<0.0010	0.0010	B037448
Total Zinc (Zn)	mg/L	0.031	0.021	B037489	0.021	B037547	0.016	0.0030	B037448

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM825		BUM826			BUM826		
Sampling Date		2023/07/11 08:05		2023/07/11			2023/07/11		
COC Number		699322-03-01		699322-03-01			699322-03-01		
	UNITS	CL-6 BTM	QC Batch	SW-113	RDL	QC Batch	SW-113 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.044	B033222	0.33	0.020	B033222			
Total Aluminum (Al)	mg/L	0.074	B037568	0.047	0.0030	B035937	0.050	0.0030	B035937
Total Antimony (Sb)	mg/L	<0.00060	B037568	<0.00060	0.00060	B035937	<0.00060	0.00060	B035937
Total Arsenic (As)	mg/L	0.00052	B037568	0.00036	0.00020	B035937	0.00035	0.00020	B035937
Total Barium (Ba)	mg/L	0.011	B037608	0.010	0.010	B035942	0.010	0.010	B035942
Total Beryllium (Be)	mg/L	<0.0010	B037568	<0.0010	0.0010	B035937	<0.0010	0.0010	B035937
Total Boron (B)	mg/L	<0.020	B037608	<0.020	0.020	B035942	<0.020	0.020	B035942
Total Calcium (Ca)	mg/L	12	B037608	38	0.30	B035942	39	0.30	B035942
Total Chromium (Cr)	mg/L	<0.0010	B037568	<0.0010	0.0010	B035937	<0.0010	0.0010	B035937
Total Cobalt (Co)	mg/L	<0.00030	B037568	<0.00030	0.00030	B035937	<0.00030	0.00030	B035937
Total Copper (Cu)	mg/L	0.0051	B037568	0.011	0.0010	B035937	0.013	0.0010	B035937
Total Iron (Fe)	mg/L	0.19	B037608	4.1	0.060	B035942	4.2	0.060	B035942
Total Lead (Pb)	mg/L	0.00024	B037568	<0.00020	0.00020	B035937	<0.00020	0.00020	B035937
Total Lithium (Li)	mg/L	<0.020	B037608	<0.020	0.020	B035942	<0.020	0.020	B035942
Total Magnesium (Mg)	mg/L	3.5	B037608	7.1	0.20	B035942	7.2	0.20	B035942
Total Manganese (Mn)	mg/L	0.017	B037608	0.059	0.0040	B035942	0.061	0.0040	B035942
Total Molybdenum (Mo)	mg/L	<0.00020	B037568	<0.00020	0.00020	B035937	<0.00020	0.00020	B035937
Total Nickel (Ni)	mg/L	0.00058	B037568	0.0012	0.00050	B035937	0.0019	0.00050	B035937
Total Phosphorus (P)	mg/L	<0.10	B037608	<0.10	0.10	B035942	<0.10	0.10	B035942
Total Potassium (K)	mg/L	1.6	B037608	3.2	0.30	B035942	3.2	0.30	B035942
Total Selenium (Se)	mg/L	<0.00020	B037568	<0.00020	0.00020	B035937	<0.00020	0.00020	B035937
Total Silicon (Si)	mg/L	0.86	B037608	1.1	0.50	B035942	1.1	0.50	B035942
Total Silver (Ag)	mg/L	<0.00010	B037568	<0.00010	0.00010	B035937	<0.00010	0.00010	B035937
Total Sodium (Na)	mg/L	2.0	B037608	2.5	0.50	B035942	2.6	0.50	B035942
Total Strontium (Sr)	mg/L	0.028	B037608	0.044	0.020	B035942	0.045	0.020	B035942
Total Sulphur (S)	mg/L	5.7	B037608	36	0.20	B035942	37	0.20	B035942
Total Thallium (Tl)	mg/L	<0.00020	B037568	<0.00020	0.00020	B035937	<0.00020	0.00020	B035937
Total Tin (Sn)	mg/L	<0.0010	B037568	<0.0010	0.0010	B035937	<0.0010	0.0010	B035937
Total Titanium (Ti)	mg/L	0.0017	B037568	0.0017	0.0010	B035937	0.0021	0.0010	B035937
Total Uranium (U)	mg/L	<0.00010	B037568	<0.00010	0.00010	B035937	<0.00010	0.00010	B035937
Total Vanadium (V)	mg/L	<0.0010	B037568	<0.0010	0.0010	B035937	<0.0010	0.0010	B035937

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM825		BUM826			BUM826		
Sampling Date		2023/07/11 08:05		2023/07/11			2023/07/11		
COC Number		699322-03-01		699322-03-01			699322-03-01		
	UNITS	**CL-6 BTM**	**QC Batch**	**SW-113**	**RDL**	**QC Batch**	**SW-113 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.017	B037568	0.10	0.0030	B035937	0.11	0.0030	B035937

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM827		BUM828			BUM828		
Sampling Date		2023/07/11		2023/07/11			2023/07/11		
COC Number		699322-03-01		699322-03-01			699322-03-01		
	UNITS	TRIP BLANK	QC Batch	SW-115	RDL	QC Batch	SW-115 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	<0.020	B033222	0.050	0.020	B033222			
Total Aluminum (Al)	mg/L	<0.0030	B037547	0.072	0.0030	B037489	0.070	0.0030	B037489
Total Antimony (Sb)	mg/L	<0.00060	B037547	<0.00060	0.00060	B037489	<0.00060	0.00060	B037489
Total Arsenic (As)	mg/L	<0.00020	B037547	0.00049	0.00020	B037489	0.00053	0.00020	B037489
Total Barium (Ba)	mg/L	<0.010	B037560	0.010	0.010	B037540	0.010	0.010	B037540
Total Beryllium (Be)	mg/L	<0.0010	B037547	<0.0010	0.0010	B037489	<0.0010	0.0010	B037489
Total Boron (B)	mg/L	<0.020	B037560	<0.020	0.020	B037540	<0.020	0.020	B037540
Total Calcium (Ca)	mg/L	<0.30	B037560	13	0.30	B037540	12	0.30	B037540
Total Chromium (Cr)	mg/L	<0.0010	B037547	<0.0010	0.0010	B037489	<0.0010	0.0010	B037489
Total Cobalt (Co)	mg/L	<0.00030	B037547	<0.00030	0.00030	B037489	<0.00030	0.00030	B037489
Total Copper (Cu)	mg/L	<0.0010	B037547	0.0047	0.0010	B037489	0.0050	0.0010	B037489
Total Iron (Fe)	mg/L	<0.060	B037560	0.21	0.060	B037540	0.20	0.060	B037540
Total Lead (Pb)	mg/L	<0.00020	B037547	<0.00020	0.00020	B037489	<0.00020	0.00020	B037489
Total Lithium (Li)	mg/L	<0.020	B037560	<0.020	0.020	B037540	<0.020	0.020	B037540
Total Magnesium (Mg)	mg/L	<0.20	B037560	3.3	0.20	B037540	3.3	0.20	B037540
Total Manganese (Mn)	mg/L	<0.0040	B037560	0.018	0.0040	B037540	0.017	0.0040	B037540
Total Molybdenum (Mo)	mg/L	<0.00020	B037547	<0.00020	0.00020	B037489	<0.00020	0.00020	B037489
Total Nickel (Ni)	mg/L	<0.00050	B037547	0.00059	0.00050	B037489	0.00062	0.00050	B037489
Total Phosphorus (P)	mg/L	<0.10	B037560	<0.10	0.10	B037540	<0.10	0.10	B037540
Total Potassium (K)	mg/L	<0.30	B037560	1.6	0.30	B037540	1.5	0.30	B037540
Total Selenium (Se)	mg/L	<0.00020	B037547	<0.00020	0.00020	B037489	<0.00020	0.00020	B037489
Total Silicon (Si)	mg/L	<0.50	B037560	0.82	0.50	B037540	0.80	0.50	B037540
Total Silver (Ag)	mg/L	<0.00010	B037547	<0.00010	0.00010	B037489	<0.00010	0.00010	B037489
Total Sodium (Na)	mg/L	<0.50	B037560	2.1	0.50	B037540	2.1	0.50	B037540
Total Strontium (Sr)	mg/L	<0.020	B037560	0.029	0.020	B037540	0.028	0.020	B037540
Total Sulphur (S)	mg/L	<0.20	B037560	5.9	0.20	B037540	5.8	0.20	B037540
Total Thallium (Tl)	mg/L	<0.00020	B037547	<0.00020	0.00020	B037489	<0.00020	0.00020	B037489
Total Tin (Sn)	mg/L	<0.0010	B037547	<0.0010	0.0010	B037489	<0.0010	0.0010	B037489
Total Titanium (Ti)	mg/L	<0.0010	B037547	0.0027	0.0010	B037489	0.0024	0.0010	B037489
Total Uranium (U)	mg/L	<0.00010	B037547	<0.00010	0.00010	B037489	<0.00010	0.00010	B037489
Total Vanadium (V)	mg/L	<0.0010	B037547	<0.0010	0.0010	B037489	<0.0010	0.0010	B037489

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM827		BUM828			BUM828		
Sampling Date		2023/07/11		2023/07/11			2023/07/11		
COC Number		699322-03-01		699322-03-01			699322-03-01		
	UNITS	**TRIP BLANK**	**QC Batch**	**SW-115**	**RDL**	**QC Batch**	**SW-115 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	<0.0030	B037547	0.017	0.0030	B037489	0.018	0.0030	B037489

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BUM829		
Sampling Date		2023/07/11		
COC Number		699322-03-01		
	UNITS	SW-114	RDL	QC Batch
Elements				
Total Cadmium (Cd)	ug/L	0.078	0.020	B033222
Total Aluminum (Al)	mg/L	0.046	0.0030	B037547
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B037547
Total Arsenic (As)	mg/L	0.00051	0.00020	B037547
Total Barium (Ba)	mg/L	0.010	0.010	B037560
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B037547
Total Boron (B)	mg/L	<0.020	0.020	B037560
Total Calcium (Ca)	mg/L	15	0.30	B037560
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B037547
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B037547
Total Copper (Cu)	mg/L	0.0062	0.0010	B037547
Total Iron (Fe)	mg/L	0.35	0.060	B037560
Total Lead (Pb)	mg/L	0.00023	0.00020	B037547
Total Lithium (Li)	mg/L	<0.020	0.020	B037560
Total Magnesium (Mg)	mg/L	3.6	0.20	B037560
Total Manganese (Mn)	mg/L	0.016	0.0040	B037560
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B037547
Total Nickel (Ni)	mg/L	0.00051	0.00050	B037547
Total Phosphorus (P)	mg/L	<0.10	0.10	B037560
Total Potassium (K)	mg/L	1.7	0.30	B037560
Total Selenium (Se)	mg/L	<0.00020	0.00020	B037547
Total Silicon (Si)	mg/L	0.88	0.50	B037560
Total Silver (Ag)	mg/L	<0.00010	0.00010	B037547
Total Sodium (Na)	mg/L	2.3	0.50	B037560
Total Strontium (Sr)	mg/L	0.030	0.020	B037560
Total Sulphur (S)	mg/L	8.5	0.20	B037560
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B037547
Total Tin (Sn)	mg/L	<0.0010	0.0010	B037547
Total Titanium (Ti)	mg/L	0.0015	0.0010	B037547
Total Uranium (U)	mg/L	<0.00010	0.00010	B037547
Total Vanadium (V)	mg/L	<0.0010	0.0010	B037547
Total Zinc (Zn)	mg/L	0.026	0.0030	B037547
RDL = Reportable Detection Limit				

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM771			BUM772			BUM773		
Sampling Date		2023/07/11 10:30			2023/07/11 09:30			2023/07/11 09:25		
COC Number		699322-01-01			699322-01-01			699322-01-01		
	UNITS	SC-1	RDL	QC Batch	SB-1	RDL	QC Batch	SB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	36	0.50	B033014	120	0.50	B033014	120	0.50	B033228
Total Hardness (CaCO3)	mg/L	38.1	0.50	B032507	130	0.50	B032507	128	0.50	B032507
Misc. Inorganics										
pH	pH	6.50	N/A	B035434	6.07	N/A	B035434	6.34	N/A	B035466
Total Organic Carbon (C)	mg/L	12	0.50	B036791	9.2	0.50	B036791	9.6	0.50	B036791
Total Suspended Solids	mg/L	1.5	0.95	B037235	1.9	0.97	B037235	2.3	1.0	B037235
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11	0.50	B036772	7.7	0.50	B036758	8.3	0.50	B036758
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035433	<1.0	1.0	B035433	<1.0	1.0	B035465
Alkalinity (Total as CaCO3)	mg/L	36	1.0	B035433	9.6	1.0	B035433	10	1.0	B035465
Bicarbonate (HCO3)	mg/L	44	1.0	B035433	12	1.0	B035433	12	1.0	B035465
Carbonate (CO3)	mg/L	<1.0	1.0	B035433	<1.0	1.0	B035433	<1.0	1.0	B035465
Hydroxide (OH)	mg/L	<1.0	1.0	B035433	<1.0	1.0	B035433	<1.0	1.0	B035465
Sulphate (SO4)	mg/L	7.6	1.0	B037049	120	1.0	B037039	110	1.0	B037050
Physical Properties										
Turbidity	NTU	2.3	0.10	B034573	15	0.10	B034573	14	0.10	B034573

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C352754
Report Date: 2023/07/20

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM774			BUM774			BUM775		
Sampling Date		2023/07/11 09:35			2023/07/11 09:35			2023/07/11 09:40		
COC Number		699322-01-01			699322-01-01			699322-01-01		
	UNITS	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch	CB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	130	0.50	B033228				130	0.50	B033228
Total Hardness (CaCO3)	mg/L	128	0.50	B032507				132	0.50	B033230
Misc. Inorganics										
pH	pH	6.23	N/A	B035434				6.39	N/A	B035466
Total Organic Carbon (C)	mg/L	9.4	0.50	B036791				7.6	0.50	B036791
Total Suspended Solids	mg/L	1.2	1.0	B037235				1.7	1.0	B037235
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.7	0.50	B036772				8.6	0.50	B036758
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035433				<1.0	1.0	B035465
Alkalinity (Total as CaCO3)	mg/L	12	1.0	B035433				11	1.0	B035465
Bicarbonate (HCO3)	mg/L	15	1.0	B035433				14	1.0	B035465
Carbonate (CO3)	mg/L	<1.0	1.0	B035433				<1.0	1.0	B035465
Hydroxide (OH)	mg/L	<1.0	1.0	B035433				<1.0	1.0	B035465
Sulphate (SO4)	mg/L	120	1.0	B037049	120	1.0	B037049	120	1.0	B037049
Physical Properties										
Turbidity	NTU	10	0.10	B034573				11	0.10	B034573

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM776			BUM776			BUM777		
Sampling Date		2023/07/11 09:45			2023/07/11 09:45			2023/07/11 09:50		
COC Number		699322-01-01			699322-01-01			699322-01-01		
	UNITS	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch	EB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	150	0.50	B033228				150	0.50	B033228
Total Hardness (CaCO3)	mg/L	161	0.50	B033230				169	0.50	B033230
Misc. Inorganics										
pH	pH	6.35	N/A	B035466				6.16	N/A	B035434
Total Organic Carbon (C)	mg/L	8.7 (1)	0.50	B036789	8.2	0.50	B036789	8.3	0.50	B036791
Total Suspended Solids	mg/L	<1.0	1.0	B037235				1.4	0.96	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.9	0.50	B036758				6.0	0.50	B036772
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035465				<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L	10	1.0	B035465				12	1.0	B035433
Bicarbonate (HCO3)	mg/L	13	1.0	B035465				15	1.0	B035433
Carbonate (CO3)	mg/L	<1.0	1.0	B035465				<1.0	1.0	B035433
Hydroxide (OH)	mg/L	<1.0	1.0	B035465				<1.0	1.0	B035433
Sulphate (SO4)	mg/L	140	5.0	B037049				140	5.0	B037039
Physical Properties										
Turbidity	NTU	6.1	0.10	B034573				7.8	0.10	B034573

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM777			BUM778			BUM779		
Sampling Date		2023/07/11 09:50			2023/07/11 10:00			2023/07/11 09:55		
COC Number		699322-01-01			699322-01-01			699322-01-01		
	UNITS	EB-2 Lab-Dup	RDL	QC Batch	NB-1	RDL	QC Batch	NB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				140	0.50	B033228	130	0.50	B033228
Total Hardness (CaCO3)	mg/L				148	0.50	B033230	146	0.50	B033230
Misc. Inorganics										
pH	pH				6.21	N/A	B035434	6.24	N/A	B035434
Total Organic Carbon (C)	mg/L				8.7	0.50	B036791	8.1	0.50	B036791
Total Suspended Solids	mg/L	1.0	0.96	B037238	1.0	1.0	B037238	1.3	0.94	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				8.3	0.50	B036758	6.9	0.50	B036758
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B035433	<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L				12	1.0	B035433	14	1.0	B035433
Bicarbonate (HCO3)	mg/L				15	1.0	B035433	18	1.0	B035433
Carbonate (CO3)	mg/L				<1.0	1.0	B035433	<1.0	1.0	B035433
Hydroxide (OH)	mg/L				<1.0	1.0	B035433	<1.0	1.0	B035433
Sulphate (SO4)	mg/L				130	2.0	B037050	120	2.0	B037049
Physical Properties										
Turbidity	NTU				9.5	0.10	B034573	8.0	0.10	B034573

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM780			BUM808		BUM809		
Sampling Date		2023/07/11 10:05			2023/07/11 08:40		2023/07/11 08:45		
COC Number		699322-01-01			699322-02-01		699322-02-01		
	UNITS	CLD	RDL	QC Batch	CL-3 SFC	RDL	CL-3 BTM	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	140	0.50	B033228	50	0.50	50	0.50	B033228
Total Hardness (CaCO3)	mg/L	150	0.50	B033230	52.0	0.50	53.3	0.50	B033230
Misc. Inorganics									
pH	pH	6.13	N/A	B035434	6.42	N/A	6.49	N/A	B035434
Total Organic Carbon (C)	mg/L	8.4	0.50	B036791	10	0.50	10	0.50	B036789
Total Suspended Solids	mg/L	<1.0	1.0	B037238	<0.96	0.96	<1.0	1.0	B037238
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	6.5	0.50	B036772	9.9	0.50	9.9	0.50	B036758
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035433	<1.0	1.0	<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L	10	1.0	B035433	28	1.0	35	1.0	B035433
Bicarbonate (HCO3)	mg/L	13	1.0	B035433	35	1.0	43	1.0	B035433
Carbonate (CO3)	mg/L	<1.0	1.0	B035433	<1.0	1.0	<1.0	1.0	B035433
Hydroxide (OH)	mg/L	<1.0	1.0	B035433	<1.0	1.0	<1.0	1.0	B035433
Sulphate (SO4)	mg/L	130	5.0	B037049	25	1.0	25 (1)	1.0	B037039
Physical Properties									
Turbidity	NTU	8.5	0.10	B034573	2.8	0.10	2.7	0.10	B034573

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM809			BUM810			BUM811		
Sampling Date		2023/07/11 08:45			2023/07/11 08:50			2023/07/11 08:55		
COC Number		699322-02-01			699322-02-01			699322-02-01		
	UNITS	CL-3 BTM Lab-Dup	RDL	QC Batch	CL-7 SFC	RDL	QC Batch	CL-7 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				51	0.50	B033228	51	0.50	B033228
Total Hardness (CaCO3)	mg/L				52.7	0.50	B033230	54.2	0.50	B033230
Misc. Inorganics										
pH	pH				6.67	N/A	B035466	6.50	N/A	B035434
Total Organic Carbon (C)	mg/L				10	0.50	B036791	10	0.50	B036789
Total Suspended Solids	mg/L				<0.95	0.95	B037238	<0.97	0.97	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				9.5	0.50	B036758	9.5	0.50	B036758
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B035465	<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L				26	1.0	B035465	32	1.0	B035433
Bicarbonate (HCO3)	mg/L				32	1.0	B035465	39	1.0	B035433
Carbonate (CO3)	mg/L				<1.0	1.0	B035465	<1.0	1.0	B035433
Hydroxide (OH)	mg/L				<1.0	1.0	B035465	<1.0	1.0	B035433
Sulphate (SO4)	mg/L	25	1.0	B037039	27	1.0	B037049	27	1.0	B037049
Physical Properties										
Turbidity	NTU				3.5	0.10	B034573	2.7	0.10	B034573

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM812			BUM812			BUM813		
Sampling Date		2023/07/11 08:30			2023/07/11 08:30			2023/07/11 08:35		
COC Number		699322-02-01			699322-02-01			699322-02-01		
	UNITS	CL-8 SFC	RDL	QC Batch	CL-8 SFC Lab-Dup	RDL	QC Batch	CL-8 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	50	0.50	B033228				51	0.50	B033228
Total Hardness (CaCO3)	mg/L	52.5	0.50	B033230				51.7	0.50	B033230
Misc. Inorganics										
pH	pH	6.45	N/A	B035434	6.48	N/A	B035434	6.66	N/A	B035466
Total Organic Carbon (C)	mg/L	11	0.50	B036789				11	0.50	B036789
Total Suspended Solids	mg/L	<0.99	0.99	B037238				1.2	0.99	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	10	0.50	B036758				10	0.50	B036758
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035433	<1.0	1.0	B035433	<1.0	1.0	B035465
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B035433	30	1.0	B035433	25	1.0	B035465
Bicarbonate (HCO3)	mg/L	36	1.0	B035433	36	1.0	B035433	30	1.0	B035465
Carbonate (CO3)	mg/L	<1.0	1.0	B035433	<1.0	1.0	B035433	<1.0	1.0	B035465
Hydroxide (OH)	mg/L	<1.0	1.0	B035433	<1.0	1.0	B035433	<1.0	1.0	B035465
Sulphate (SO4)	mg/L	26	1.0	B037049				26	1.0	B037049
Physical Properties										
Turbidity	NTU	2.6	0.10	B034573				3.0	0.10	B034583

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM813			BUM814			BUM815		
Sampling Date		2023/07/11 08:35			2023/07/11 09:00			2023/07/11 09:05		
COC Number		699322-02-01			699322-02-01			699322-02-01		
	UNITS	CL-8 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	RDL	QC Batch	CL-2 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				49	0.50	B033228	46	0.50	B033228
Total Hardness (CaCO3)	mg/L				50.5	0.50	B033230	50.0	0.50	B033230
Misc. Inorganics										
pH	pH				6.41	N/A	B035434	6.64	N/A	B035466
Total Organic Carbon (C)	mg/L				10	0.50	B036791	11	0.50	B036791
Total Suspended Solids	mg/L				1.8	0.95	B037238	1.1	0.99	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				9.7	0.50	B036758	9.7 (1)	0.50	B036758
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B035433	<1.0	1.0	B035465
Alkalinity (Total as CaCO3)	mg/L				31	1.0	B035433	27	1.0	B035465
Bicarbonate (HCO3)	mg/L				37	1.0	B035433	33	1.0	B035465
Carbonate (CO3)	mg/L				<1.0	1.0	B035433	<1.0	1.0	B035465
Hydroxide (OH)	mg/L				<1.0	1.0	B035433	<1.0	1.0	B035465
Sulphate (SO4)	mg/L				25	1.0	B037049	21	1.0	B037050
Physical Properties										
Turbidity	NTU	2.5	0.10	B034583	2.8	0.10	B034583	6.3	0.10	B034583

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM815			BUM816		BUM817		
Sampling Date		2023/07/11 09:05			2023/07/11 08:20		2023/07/11 08:25		
COC Number		699322-02-01			699322-02-01		699322-02-01		
	UNITS	CL-2 BTM Lab-Dup	RDL	QC Batch	CL-4 SFC	QC Batch	CL-4 BTM	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				47	B033228	45	0.50	B033228
Total Hardness (CaCO3)	mg/L				48.3	B033230	48.2	0.50	B033230
Misc. Inorganics									
pH	pH				6.68	B035466	6.63	N/A	B035466
Total Organic Carbon (C)	mg/L				10	B036791	11	0.50	B036789
Total Suspended Solids	mg/L				1.1	B037238	2.0	0.99	B037238
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.3	0.50	B036758	10	B036758	10	0.50	B036758
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	B035465	<1.0	1.0	B035465
Alkalinity (Total as CaCO3)	mg/L				25	B035465	28	1.0	B035465
Bicarbonate (HCO3)	mg/L				31	B035465	34	1.0	B035465
Carbonate (CO3)	mg/L				<1.0	B035465	<1.0	1.0	B035465
Hydroxide (OH)	mg/L				<1.0	B035465	<1.0	1.0	B035465
Sulphate (SO4)	mg/L				23	B037049	20	1.0	B037049
Physical Properties									
Turbidity	NTU				0.39	B034583	11	0.10	B034583

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM822			BUM822			BUM823		
Sampling Date		2023/07/11 08:10			2023/07/11 08:10			2023/07/11 08:15		
COC Number		699322-03-01			699322-03-01			699322-03-01		
	UNITS	CL-5 SFC	RDL	QC Batch	CL-5 SFC Lab-Dup	RDL	QC Batch	CL-5 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	46	0.50	B033228				46	0.50	B033228
Total Hardness (CaCO3)	mg/L	48.1	0.50	B033230				46.5	0.50	B033230
Misc. Inorganics										
pH	pH	6.45	N/A	B035434				6.51	N/A	B035434
Total Organic Carbon (C)	mg/L	10	0.50	B036791	10	0.50	B036791	9.9	0.50	B036791
Total Suspended Solids	mg/L	1.2	0.96	B037238				<1.0	1.0	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.0	0.50	B036772				8.3	0.50	B036772
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035433				<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L	27	1.0	B035433				31	1.0	B035433
Bicarbonate (HCO3)	mg/L	33	1.0	B035433				38	1.0	B035433
Carbonate (CO3)	mg/L	<1.0	1.0	B035433				<1.0	1.0	B035433
Hydroxide (OH)	mg/L	<1.0	1.0	B035433				<1.0	1.0	B035433
Sulphate (SO4)	mg/L	21	1.0	B037049				21	1.0	B037049
Physical Properties										
Turbidity	NTU	0.43	0.10	B034583				0.35	0.10	B034583

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM824			BUM825			BUM826		
Sampling Date		2023/07/11 08:00			2023/07/11 08:05			2023/07/11		
COC Number		699322-03-01			699322-03-01			699322-03-01		
	UNITS	CL-6 SFC	RDL	QC Batch	CL-6 BTM	RDL	QC Batch	SW-113	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	43	0.50	B033228	43	0.50	B033228	120	0.50	B033228
Total Hardness (CaCO3)	mg/L	42.1	0.50	B033230	44.2	0.50	B033230	125	0.50	B033230
Misc. Inorganics										
pH	pH	6.71	N/A	B035466	6.53	N/A	B035434	6.18	N/A	B035434
Total Organic Carbon (C)	mg/L	7.9	0.50	B036791	10	0.50	B036791	9.4	0.50	B036791
Total Suspended Solids	mg/L	1.4	0.99	B037238	1.1	0.97	B037238	2.1	1.0	B037238
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.7	0.50	B036758	8.6	0.50	B036758	7.6 (1)	0.50	B036772
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B035465	<1.0	1.0	B035433	<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L	28	1.0	B035465	31	1.0	B035433	12	1.0	B035433
Bicarbonate (HCO3)	mg/L	34	1.0	B035465	37	1.0	B035433	14	1.0	B035433
Carbonate (CO3)	mg/L	<1.0	1.0	B035465	<1.0	1.0	B035433	<1.0	1.0	B035433
Hydroxide (OH)	mg/L	<1.0	1.0	B035465	<1.0	1.0	B035433	<1.0	1.0	B035433
Sulphate (SO4)	mg/L	18	1.0	B037049	18	1.0	B037049	110	1.0	B037050
Physical Properties										
Turbidity	NTU	0.23	0.10	B034583	2.5	0.10	B034583	14	0.10	B034583

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM826			BUM827		BUM828		
Sampling Date		2023/07/11			2023/07/11		2023/07/11		
COC Number		699322-03-01			699322-03-01		699322-03-01		
	UNITS	SW-113 Lab-Dup	RDL	QC Batch	TRIP BLANK	QC Batch	SW-115	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				<0.50	B033228	43	0.50	B033228
Total Hardness (CaCO3)	mg/L				<0.50	B033230	45.0	0.50	B033230
Misc. Inorganics									
pH	pH				4.90	B035434	6.51	N/A	B035434
Total Organic Carbon (C)	mg/L				<0.50	B036791	11	0.50	B036789
Total Suspended Solids	mg/L				<1.0	B037238	1.4	1.0	B037241
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	7.2	0.50	B036772	<0.50	B036772	9.5	0.50	B036758
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	B035433	<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L				1.0	B035433	31	1.0	B035433
Bicarbonate (HCO3)	mg/L				1.3	B035433	38	1.0	B035433
Carbonate (CO3)	mg/L				<1.0	B035433	<1.0	1.0	B035433
Hydroxide (OH)	mg/L				<1.0	B035433	<1.0	1.0	B035433
Sulphate (SO4)	mg/L				<1.0	B037039	18	1.0	B036174
Physical Properties									
Turbidity	NTU				<0.10	B034583	2.2	0.10	B034583

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM828			BUM829		
Sampling Date		2023/07/11			2023/07/11		
COC Number		699322-03-01			699322-03-01		
	UNITS	SW-115 Lab-Dup	RDL	QC Batch	SW-114	RDL	QC Batch
Calculated Parameters							
Hardness (CaCO3)	mg/L				50	0.50	B033228
Total Hardness (CaCO3)	mg/L				52.2	0.50	B033230
Misc. Inorganics							
pH	pH				6.49	N/A	B035434
Total Organic Carbon (C)	mg/L				10	0.50	B036791
Total Suspended Solids	mg/L	1.1	1.0	B037241	1.1	1.0	B037241
Lab Filtered Inorganics							
Dissolved Organic Carbon (C)	mg/L				9.9	0.50	B036758
Anions							
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B035433
Alkalinity (Total as CaCO3)	mg/L				32	1.0	B035433
Bicarbonate (HCO3)	mg/L				39	1.0	B035433
Carbonate (CO3)	mg/L				<1.0	1.0	B035433
Hydroxide (OH)	mg/L				<1.0	1.0	B035433
Sulphate (SO4)	mg/L				26	1.0	B037050
Physical Properties							
Turbidity	NTU				2.5	0.10	B034583

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.2°C

Sample BUM808, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BUM809, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BUM824, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B034268	Dissolved Aluminum (Al)	2023/07/14	101	80 - 120	99	80 - 120	<0.0030	mg/L	12	20
B034268	Dissolved Antimony (Sb)	2023/07/14	100	80 - 120	98	80 - 120	<0.00060	mg/L	NC	20
B034268	Dissolved Arsenic (As)	2023/07/14	89	80 - 120	86	80 - 120	<0.00020	mg/L	5.3	20
B034268	Dissolved Beryllium (Be)	2023/07/14	91	80 - 120	88	80 - 120	<0.0010	mg/L	NC	20
B034268	Dissolved Chromium (Cr)	2023/07/14	90	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
B034268	Dissolved Cobalt (Co)	2023/07/14	91	80 - 120	89	80 - 120	<0.00030	mg/L	NC	20
B034268	Dissolved Copper (Cu)	2023/07/14	93	80 - 120	89	80 - 120	<0.0010	mg/L	19	20
B034268	Dissolved Lead (Pb)	2023/07/14	94	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B034268	Dissolved Molybdenum (Mo)	2023/07/14	97	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
B034268	Dissolved Nickel (Ni)	2023/07/14	89	80 - 120	89	80 - 120	<0.00050	mg/L	9.0	20
B034268	Dissolved Selenium (Se)	2023/07/14	91	80 - 120	88	80 - 120	<0.00020	mg/L	NC	20
B034268	Dissolved Silver (Ag)	2023/07/14	92	80 - 120	89	80 - 120	<0.00010	mg/L	NC	20
B034268	Dissolved Thallium (Tl)	2023/07/14	95	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B034268	Dissolved Tin (Sn)	2023/07/14	94	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
B034268	Dissolved Titanium (Ti)	2023/07/14	89	80 - 120	87	80 - 120	<0.0010	mg/L	NC	20
B034268	Dissolved Uranium (U)	2023/07/14	94	80 - 120	92	80 - 120	<0.00010	mg/L	NC	20
B034268	Dissolved Vanadium (V)	2023/07/14	91	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
B034268	Dissolved Zinc (Zn)	2023/07/14	NC	80 - 120	88	80 - 120	<0.0030	mg/L	17	20
B034272	Dissolved Aluminum (Al)	2023/07/14	90	80 - 120	110	80 - 120	<0.0030	mg/L	NC	20
B034272	Dissolved Antimony (Sb)	2023/07/14	90	80 - 120	108	80 - 120	<0.00060	mg/L	NC	20
B034272	Dissolved Arsenic (As)	2023/07/14	85	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B034272	Dissolved Beryllium (Be)	2023/07/14	83	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B034272	Dissolved Chromium (Cr)	2023/07/14	89	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B034272	Dissolved Cobalt (Co)	2023/07/14	88	80 - 120	100	80 - 120	<0.00030	mg/L	NC	20
B034272	Dissolved Copper (Cu)	2023/07/14	89	80 - 120	100	80 - 120	<0.0010	mg/L	0.28	20
B034272	Dissolved Lead (Pb)	2023/07/14	83	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B034272	Dissolved Molybdenum (Mo)	2023/07/14	90	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B034272	Dissolved Nickel (Ni)	2023/07/14	89	80 - 120	100	80 - 120	<0.00050	mg/L	13	20
B034272	Dissolved Selenium (Se)	2023/07/14	83	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B034272	Dissolved Silver (Ag)	2023/07/14	85	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B034272	Dissolved Thallium (Tl)	2023/07/14	84	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B034272	Dissolved Tin (Sn)	2023/07/14	88	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B034272	Dissolved Titanium (Ti)	2023/07/14	90	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B034272	Dissolved Uranium (U)	2023/07/14	86	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B034272	Dissolved Vanadium (V)	2023/07/14	89	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B034272	Dissolved Zinc (Zn)	2023/07/14	NC	80 - 120	99	80 - 120	<0.0030	mg/L	5.0	20
B034573	Turbidity	2023/07/14			103	80 - 120	<0.10	NTU	5.9	20
B034583	Turbidity	2023/07/14			102	80 - 120	<0.10	NTU	17	20
B034804	Dissolved Barium (Ba)	2023/07/14	115	80 - 120	104	80 - 120	<0.010	mg/L	NC	20
B034804	Dissolved Boron (B)	2023/07/14	108	80 - 120	96	80 - 120	<0.020	mg/L	16	20
B034804	Dissolved Calcium (Ca)	2023/07/14	112	80 - 120	102	80 - 120	<0.30	mg/L	0.56	20
B034804	Dissolved Iron (Fe)	2023/07/14	113	80 - 120	106	80 - 120	<0.060	mg/L	0.35	20
B034804	Dissolved Lithium (Li)	2023/07/14	114	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B034804	Dissolved Magnesium (Mg)	2023/07/14	114	80 - 120	105	80 - 120	<0.20	mg/L	0.40	20
B034804	Dissolved Manganese (Mn)	2023/07/14	116	80 - 120	106	80 - 120	<0.0040	mg/L	0.17	20
B034804	Dissolved Phosphorus (P)	2023/07/14	118	80 - 120	104	80 - 120	<0.10	mg/L	NC	20
B034804	Dissolved Potassium (K)	2023/07/14	113	80 - 120	103	80 - 120	<0.30	mg/L	0.98	20
B034804	Dissolved Silicon (Si)	2023/07/14	104	80 - 120	97	80 - 120	<0.50	mg/L	5.6	20
B034804	Dissolved Sodium (Na)	2023/07/14	111	80 - 120	100	80 - 120	<0.50	mg/L	2.6	20
B034804	Dissolved Strontium (Sr)	2023/07/14	110	80 - 120	99	80 - 120	<0.020	mg/L	4.3	20
B034804	Dissolved Sulphur (S)	2023/07/14	118	80 - 120	104	80 - 120	<0.20	mg/L	0.96	20
B034807	Dissolved Barium (Ba)	2023/07/14	109	80 - 120	104	80 - 120	<0.010	mg/L	20	20
B034807	Dissolved Boron (B)	2023/07/14	103	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B034807	Dissolved Calcium (Ca)	2023/07/14	105	80 - 120	102	80 - 120	<0.30	mg/L	0.52	20
B034807	Dissolved Iron (Fe)	2023/07/14	111	80 - 120	103	80 - 120	<0.060	mg/L	4.4	20
B034807	Dissolved Lithium (Li)	2023/07/14	107	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B034807	Dissolved Magnesium (Mg)	2023/07/14	108	80 - 120	104	80 - 120	<0.20	mg/L	1.1	20
B034807	Dissolved Manganese (Mn)	2023/07/14	112	80 - 120	103	80 - 120	<0.0040	mg/L	NC	20
B034807	Dissolved Phosphorus (P)	2023/07/14	110	80 - 120	103	80 - 120	<0.10	mg/L	NC	20
B034807	Dissolved Potassium (K)	2023/07/14	105	80 - 120	102	80 - 120	<0.30	mg/L	0.50	20
B034807	Dissolved Silicon (Si)	2023/07/14	97	80 - 120	95	80 - 120	<0.50	mg/L	5.6	20
B034807	Dissolved Sodium (Na)	2023/07/14	104	80 - 120	100	80 - 120	<0.50	mg/L	1.1	20
B034807	Dissolved Strontium (Sr)	2023/07/14	103	80 - 120	99	80 - 120	<0.020	mg/L	2.0	20
B034807	Dissolved Sulphur (S)	2023/07/14	113	80 - 120	103	80 - 120	<0.20	mg/L	1.0	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B035433	Alkalinity (PP as CaCO3)	2023/07/15					<1.0	mg/L	NC	20
B035433	Alkalinity (Total as CaCO3)	2023/07/15			109	80 - 120	<1.0	mg/L	0.36	20
B035433	Bicarbonate (HCO3)	2023/07/15					<1.0	mg/L	0.36	20
B035433	Carbonate (CO3)	2023/07/15					<1.0	mg/L	NC	20
B035433	Hydroxide (OH)	2023/07/15					<1.0	mg/L	NC	20
B035434	pH	2023/07/15			101	97 - 103			0.49	N/A
B035465	Alkalinity (PP as CaCO3)	2023/07/16					<1.0	mg/L	NC	20
B035465	Alkalinity (Total as CaCO3)	2023/07/16			100	80 - 120	<1.0	mg/L	0.19	20
B035465	Bicarbonate (HCO3)	2023/07/16					<1.0	mg/L	0.19	20
B035465	Carbonate (CO3)	2023/07/16					<1.0	mg/L	NC	20
B035465	Hydroxide (OH)	2023/07/16					<1.0	mg/L	NC	20
B035466	pH	2023/07/16			100	97 - 103			0.18	N/A
B035937	Total Aluminum (Al)	2023/07/18	NC	80 - 120	106	80 - 120	<0.0030	mg/L	6.8	20
B035937	Total Antimony (Sb)	2023/07/18	118	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B035937	Total Arsenic (As)	2023/07/18	104	80 - 120	103	80 - 120	<0.00020	mg/L	1.8	20
B035937	Total Beryllium (Be)	2023/07/18	107	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B035937	Total Chromium (Cr)	2023/07/18	105	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B035937	Total Cobalt (Co)	2023/07/18	105	80 - 120	103	80 - 120	<0.00030	mg/L	NC	20
B035937	Total Copper (Cu)	2023/07/18	104	80 - 120	103	80 - 120	<0.0010	mg/L	14	20
B035937	Total Lead (Pb)	2023/07/18	107	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B035937	Total Molybdenum (Mo)	2023/07/18	112	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B035937	Total Nickel (Ni)	2023/07/18	103	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20
B035937	Total Selenium (Se)	2023/07/18	109	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B035937	Total Silver (Ag)	2023/07/18	107	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B035937	Total Thallium (Tl)	2023/07/18	108	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B035937	Total Tin (Sn)	2023/07/18	109	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B035937	Total Titanium (Ti)	2023/07/18	109	80 - 120	103	80 - 120	<0.0010	mg/L	20	20
B035937	Total Uranium (U)	2023/07/18	106	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B035937	Total Vanadium (V)	2023/07/18	106	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B035937	Total Zinc (Zn)	2023/07/18	105	80 - 120	105	80 - 120	<0.0030	mg/L	7.0	20
B035942	Total Barium (Ba)	2023/07/17	100	80 - 120	102	80 - 120	<0.010	mg/L	0.98	20
B035942	Total Boron (B)	2023/07/17	98	80 - 120	99	80 - 120	<0.020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B035942	Total Calcium (Ca)	2023/07/17	NC	80 - 120	108	80 - 120	<0.30	mg/L	1.8	20
B035942	Total Iron (Fe)	2023/07/17	NC	80 - 120	104	80 - 120	<0.060	mg/L	2.2	20
B035942	Total Lithium (Li)	2023/07/17	106	80 - 120	107	80 - 120	<0.020	mg/L	NC	20
B035942	Total Magnesium (Mg)	2023/07/17	110	80 - 120	113	80 - 120	<0.20	mg/L	1.3	20
B035942	Total Manganese (Mn)	2023/07/17	104	80 - 120	105	80 - 120	<0.0040	mg/L	2.3	20
B035942	Total Phosphorus (P)	2023/07/17	104	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
B035942	Total Potassium (K)	2023/07/17	100	80 - 120	102	80 - 120	<0.30	mg/L	0.16	20
B035942	Total Silicon (Si)	2023/07/17	99	80 - 120	100	80 - 120	<0.50	mg/L	0.80	20
B035942	Total Sodium (Na)	2023/07/17	98	80 - 120	100	80 - 120	<0.50	mg/L	1.3	20
B035942	Total Strontium (Sr)	2023/07/17	98	80 - 120	100	80 - 120	<0.020	mg/L	0.90	20
B035942	Total Sulphur (S)	2023/07/17	99	80 - 120	100	80 - 120	<0.20	mg/L	2.6	20
B036174	Sulphate (SO4)	2023/07/17	97	80 - 120	104	80 - 120	<1.0	mg/L	0.17	20
B036758	Dissolved Organic Carbon (C)	2023/07/18	72 (1)	80 - 120	107	80 - 120	<0.50	mg/L	15	20
B036772	Dissolved Organic Carbon (C)	2023/07/19	70 (1)	80 - 120	96	80 - 120	<0.50	mg/L	4.2	20
B036789	Total Organic Carbon (C)	2023/07/18	71 (1)	80 - 120	102	80 - 120	<0.50	mg/L	6.0	20
B036791	Total Organic Carbon (C)	2023/07/18	NC	80 - 120	100	80 - 120	<0.50	mg/L	2.1	20
B037039	Sulphate (SO4)	2023/07/17	61 (1)	80 - 120	100	80 - 120	<1.0	mg/L	0.12	20
B037049	Sulphate (SO4)	2023/07/17	NC	80 - 120	105	80 - 120	<1.0	mg/L	1.7	20
B037050	Sulphate (SO4)	2023/07/17	NC	80 - 120	108	80 - 120	<1.0	mg/L	0.19	20
B037235	Total Suspended Solids	2023/07/18	102	80 - 120	94	80 - 120	<1.0	mg/L	7.5	20
B037238	Total Suspended Solids	2023/07/19	96	80 - 120	90	80 - 120	<1.0	mg/L	NC	20
B037241	Total Suspended Solids	2023/07/18	96	80 - 120	93	80 - 120	<1.0	mg/L	NC	20
B037448	Total Aluminum (Al)	2023/07/18	114	80 - 120	114	80 - 120	<0.0030	mg/L	0.72	20
B037448	Total Antimony (Sb)	2023/07/18	119	80 - 120	117	80 - 120	<0.00060	mg/L	NC	20
B037448	Total Arsenic (As)	2023/07/18	102	80 - 120	101	80 - 120	<0.00020	mg/L	10	20
B037448	Total Beryllium (Be)	2023/07/18	108	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B037448	Total Chromium (Cr)	2023/07/18	104	80 - 120	103	80 - 120	<0.0010	mg/L	4.2	20
B037448	Total Cobalt (Co)	2023/07/18	104	80 - 120	103	80 - 120	<0.00030	mg/L	NC	20
B037448	Total Copper (Cu)	2023/07/18	102	80 - 120	103	80 - 120	<0.0010	mg/L	0.24	20
B037448	Total Lead (Pb)	2023/07/18	107	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B037448	Total Molybdenum (Mo)	2023/07/18	112	80 - 120	108	80 - 120	<0.00020	mg/L	0.87	20
B037448	Total Nickel (Ni)	2023/07/18	102	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B037448	Total Selenium (Se)	2023/07/18	105	80 - 120	104	80 - 120	<0.00020	mg/L	7.5	20
B037448	Total Silver (Ag)	2023/07/18	108	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B037448	Total Thallium (Tl)	2023/07/18	108	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B037448	Total Tin (Sn)	2023/07/18	109	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B037448	Total Titanium (Ti)	2023/07/18	106	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B037448	Total Uranium (U)	2023/07/18	108	80 - 120	106	80 - 120	<0.00010	mg/L	1.9	20
B037448	Total Vanadium (V)	2023/07/18	106	80 - 120	104	80 - 120	<0.0010	mg/L	6.2	20
B037448	Total Zinc (Zn)	2023/07/18	103	80 - 120	103	80 - 120	<0.0030	mg/L	17	20
B037462	Total Barium (Ba)	2023/07/18	104	80 - 120	105	80 - 120	<0.010	mg/L	NC	20
B037462	Total Boron (B)	2023/07/18	102	80 - 120	102	80 - 120	<0.020	mg/L	0.58	20
B037462	Total Calcium (Ca)	2023/07/18	110	80 - 120	109	80 - 120	<0.30	mg/L	1.2	20
B037462	Total Iron (Fe)	2023/07/18	107	80 - 120	113	80 - 120	<0.060	mg/L	NC	20
B037462	Total Lithium (Li)	2023/07/18	112	80 - 120	113	80 - 120	<0.020	mg/L	0.12	20
B037462	Total Magnesium (Mg)	2023/07/18	106	80 - 120	106	80 - 120	<0.20	mg/L	8.4	20
B037462	Total Manganese (Mn)	2023/07/18	110	80 - 120	115	80 - 120	<0.0040	mg/L	NC	20
B037462	Total Phosphorus (P)	2023/07/18	102	80 - 120	102	80 - 120	<0.10	mg/L	2.4	20
B037462	Total Potassium (K)	2023/07/18	109	80 - 120	108	80 - 120	<0.30	mg/L	1.2	20
B037462	Total Silicon (Si)	2023/07/18	NC	80 - 120	99	80 - 120	<0.50	mg/L	0.074	20
B037462	Total Sodium (Na)	2023/07/18	NC	80 - 120	109	80 - 120	<0.50	mg/L	0.31	20
B037462	Total Strontium (Sr)	2023/07/18	101	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B037462	Total Sulphur (S)	2023/07/18	NC	80 - 120	99	80 - 120	<0.20	mg/L	0.15	20
B037489	Total Aluminum (Al)	2023/07/18	101	80 - 120	107	80 - 120	<0.0030	mg/L	2.4	20
B037489	Total Antimony (Sb)	2023/07/18	116	80 - 120	121 (1)	80 - 120	<0.00060	mg/L	NC	20
B037489	Total Arsenic (As)	2023/07/18	104	80 - 120	108	80 - 120	<0.00020	mg/L	6.9	20
B037489	Total Beryllium (Be)	2023/07/18	104	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B037489	Total Chromium (Cr)	2023/07/18	100	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B037489	Total Cobalt (Co)	2023/07/18	99	80 - 120	105	80 - 120	<0.00030	mg/L	NC	20
B037489	Total Copper (Cu)	2023/07/18	98	80 - 120	104	80 - 120	<0.0010	mg/L	5.3	20
B037489	Total Lead (Pb)	2023/07/18	101	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B037489	Total Molybdenum (Mo)	2023/07/18	109	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B037489	Total Nickel (Ni)	2023/07/18	97	80 - 120	103	80 - 120	<0.00050	mg/L	4.5	20
B037489	Total Selenium (Se)	2023/07/18	108	80 - 120	115	80 - 120	<0.00020	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B037489	Total Silver (Ag)	2023/07/18	102	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B037489	Total Thallium (Tl)	2023/07/18	102	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B037489	Total Tin (Sn)	2023/07/18	104	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B037489	Total Titanium (Ti)	2023/07/18	102	80 - 120	105	80 - 120	<0.0010	mg/L	10	20
B037489	Total Uranium (U)	2023/07/18	103	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
B037489	Total Vanadium (V)	2023/07/18	103	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B037489	Total Zinc (Zn)	2023/07/18	101	80 - 120	111	80 - 120	<0.0030	mg/L	6.6	20
B037540	Total Barium (Ba)	2023/07/19	103	80 - 120	104	80 - 120	<0.010	mg/L	1.0	20
B037540	Total Boron (B)	2023/07/19	102	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B037540	Total Calcium (Ca)	2023/07/19	106	80 - 120	108	80 - 120	<0.30	mg/L	1.8	20
B037540	Total Iron (Fe)	2023/07/19	NC	80 - 120	112	80 - 120	<0.060	mg/L	3.1	20
B037540	Total Lithium (Li)	2023/07/19	111	80 - 120	113	80 - 120	<0.020	mg/L	NC	20
B037540	Total Magnesium (Mg)	2023/07/19	102	80 - 120	104	80 - 120	<0.20	mg/L	1.1	20
B037540	Total Manganese (Mn)	2023/07/19	109	80 - 120	114	80 - 120	<0.0040	mg/L	2.8	20
B037540	Total Phosphorus (P)	2023/07/19	101	80 - 120	106	80 - 120	<0.10	mg/L	NC	20
B037540	Total Potassium (K)	2023/07/19	105	80 - 120	107	80 - 120	<0.30	mg/L	7.9	20
B037540	Total Silicon (Si)	2023/07/19	96	80 - 120	102	80 - 120	<0.50	mg/L	2.9	20
B037540	Total Sodium (Na)	2023/07/19	106	80 - 120	108	80 - 120	<0.50	mg/L	2.3	20
B037540	Total Strontium (Sr)	2023/07/19	99	80 - 120	101	80 - 120	<0.020	mg/L	2.5	20
B037540	Total Sulphur (S)	2023/07/19	100	80 - 120	104	80 - 120	<0.20	mg/L	1.0	20
B037547	Total Aluminum (Al)	2023/07/18	101	80 - 120	104	80 - 120	<0.0030	mg/L	3.0	20
B037547	Total Antimony (Sb)	2023/07/18	119	80 - 120	117	80 - 120	<0.00060	mg/L	NC	20
B037547	Total Arsenic (As)	2023/07/18	101	80 - 120	106	80 - 120	<0.00020	mg/L	18	20
B037547	Total Beryllium (Be)	2023/07/18	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B037547	Total Chromium (Cr)	2023/07/18	99	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B037547	Total Cobalt (Co)	2023/07/18	98	80 - 120	102	80 - 120	<0.00030	mg/L	NC	20
B037547	Total Copper (Cu)	2023/07/18	98	80 - 120	101	80 - 120	<0.0010	mg/L	12	20
B037547	Total Lead (Pb)	2023/07/18	102	80 - 120	105	80 - 120	<0.00020	mg/L	2.2	20
B037547	Total Molybdenum (Mo)	2023/07/18	110	80 - 120	107	80 - 120	<0.00020	mg/L	1.9	20
B037547	Total Nickel (Ni)	2023/07/18	97	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20
B037547	Total Selenium (Se)	2023/07/18	106	80 - 120	113	80 - 120	<0.00020	mg/L	NC	20
B037547	Total Silver (Ag)	2023/07/18	101	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B037547	Total Thallium (Tl)	2023/07/18	102	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B037547	Total Tin (Sn)	2023/07/18	107	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B037547	Total Titanium (Ti)	2023/07/18	104	80 - 120	104	80 - 120	<0.0010	mg/L	10	20
B037547	Total Uranium (U)	2023/07/18	100	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B037547	Total Vanadium (V)	2023/07/18	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B037547	Total Zinc (Zn)	2023/07/18	104	80 - 120	109	80 - 120	<0.0030	mg/L	NC	20
B037560	Total Barium (Ba)	2023/07/18	104	80 - 120	103	80 - 120	<0.010	mg/L	NC	20
B037560	Total Boron (B)	2023/07/18	102	80 - 120	101	80 - 120	<0.020	mg/L	1.9	20
B037560	Total Calcium (Ca)	2023/07/18	NC	80 - 120	106	80 - 120	<0.30	mg/L	NC	20
B037560	Total Iron (Fe)	2023/07/18	NC	80 - 120	108	80 - 120	<0.060	mg/L	2.7	20
B037560	Total Lithium (Li)	2023/07/18	113	80 - 120	110	80 - 120	<0.020	mg/L	NC	20
B037560	Total Magnesium (Mg)	2023/07/18	105	80 - 120	102	80 - 120	<0.20	mg/L	6.5	20
B037560	Total Manganese (Mn)	2023/07/18	110	80 - 120	109	80 - 120	<0.0040	mg/L	NC	20
B037560	Total Phosphorus (P)	2023/07/18	102	80 - 120	101	80 - 120	<0.10	mg/L	3.6	20
B037560	Total Potassium (K)	2023/07/18	108	80 - 120	105	80 - 120	<0.30	mg/L	4.4	20
B037560	Total Silicon (Si)	2023/07/18	97	80 - 120	97	80 - 120	<0.50	mg/L	1.4	20
B037560	Total Sodium (Na)	2023/07/18	108	80 - 120	105	80 - 120	<0.50	mg/L	3.6	20
B037560	Total Strontium (Sr)	2023/07/18	100	80 - 120	100	80 - 120	<0.020	mg/L	NC	20
B037560	Total Sulphur (S)	2023/07/18	99	80 - 120	99	80 - 120	<0.20	mg/L	NC	20
B037568	Total Aluminum (Al)	2023/07/19	117	80 - 120	109	80 - 120	<0.0030	mg/L	2.2	20
B037568	Total Antimony (Sb)	2023/07/19	123 (1)	80 - 120	119	80 - 120	<0.00060	mg/L	NC	20
B037568	Total Arsenic (As)	2023/07/19	110	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B037568	Total Beryllium (Be)	2023/07/19	109	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B037568	Total Chromium (Cr)	2023/07/19	110	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B037568	Total Cobalt (Co)	2023/07/19	111	80 - 120	106	80 - 120	<0.00030	mg/L	NC	20
B037568	Total Copper (Cu)	2023/07/19	110	80 - 120	106	80 - 120	<0.0010	mg/L	0.25	20
B037568	Total Lead (Pb)	2023/07/19	110	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B037568	Total Molybdenum (Mo)	2023/07/19	114	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B037568	Total Nickel (Ni)	2023/07/19	109	80 - 120	104	80 - 120	<0.00050	mg/L	2.2	20
B037568	Total Selenium (Se)	2023/07/19	112	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B037568	Total Silver (Ag)	2023/07/19	111	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
B037568	Total Thallium (Tl)	2023/07/19	110	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B037568	Total Tin (Sn)	2023/07/19	112	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B037568	Total Titanium (Ti)	2023/07/19	111	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B037568	Total Uranium (U)	2023/07/19	109	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B037568	Total Vanadium (V)	2023/07/19	111	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B037568	Total Zinc (Zn)	2023/07/19	112	80 - 120	108	80 - 120	<0.0030	mg/L	0.47	20
B037608	Total Barium (Ba)	2023/07/19	108	80 - 120	104	80 - 120	<0.010	mg/L	3.5	20
B037608	Total Boron (B)	2023/07/19	102	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B037608	Total Calcium (Ca)	2023/07/19	109	80 - 120	105	80 - 120	<0.30	mg/L	3.8	20
B037608	Total Iron (Fe)	2023/07/19	110	80 - 120	100	80 - 120	<0.060	mg/L	3.1	20
B037608	Total Lithium (Li)	2023/07/19	112	80 - 120	108	80 - 120	<0.020	mg/L	NC	20
B037608	Total Magnesium (Mg)	2023/07/19	115	80 - 120	111	80 - 120	<0.20	mg/L	3.8	20
B037608	Total Manganese (Mn)	2023/07/19	110	80 - 120	103	80 - 120	<0.0040	mg/L	3.8	20
B037608	Total Phosphorus (P)	2023/07/19	103	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B037608	Total Potassium (K)	2023/07/19	114	80 - 120	110	80 - 120	<0.30	mg/L	5.7	20
B037608	Total Silicon (Si)	2023/07/19	97	80 - 120	94	80 - 120	<0.50	mg/L	4.5	20
B037608	Total Sodium (Na)	2023/07/19	106	80 - 120	103	80 - 120	<0.50	mg/L	3.9	20
B037608	Total Strontium (Sr)	2023/07/19	104	80 - 120	100	80 - 120	<0.020	mg/L	4.3	20
B037608	Total Sulphur (S)	2023/07/19	102	80 - 120	99	80 - 120	<0.20	mg/L	3.9	20
B037724	Dissolved Lead (Pb)	2023/07/18	91	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B037724	Dissolved Molybdenum (Mo)	2023/07/18	97	80 - 120	100	80 - 120	<0.00020	mg/L	3.5	20
B037724	Dissolved Nickel (Ni)	2023/07/18	96	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

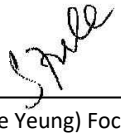
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C352754	699322
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#699322-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, MHiemcziyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	KEJ, AJA		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/07/11	10:30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		SB-1		9:30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		9:25	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:35	SW	N	N	X	X	X	X	X	X	X	Y	X	X	4	
5		CB-2		9:40	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		9:45	SW	N	N	Y	X	Y	X	X	X	X	X	X	X	4	
7		EB-2		9:50	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		10:00	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		9:55	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	

9/9

mcal-07-114

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only		
Rachel Dyck / Rachel Dyck	23/07/12	11:50	Ashton Raith AR	2023/07/12	11:55		Time Sensitive ☐	Temperature (°C) on Receipt -0.3 | 1.5 | -0.6	Custody Seal Intact on Cooler? ☐ Yes ☐ No
			AJRAVERGILL	2023/07/13	08:30				

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White: Bureau Veritas Yellow: Client

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:

Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St
Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information

Company Name:
Contact Name: Ed Collins
Address:
Phone: Fax:
Email: Ecollins@kgsgroup.com, mnieves2y4@kgsgroup.com

Project Information

Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By: KED, AH

Laboratory Use Only

Bureau Veritas Job #: C352754
Bottle Order #: 699322
Chain Of Custody Record: C#699322-02-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/07/11	8:40	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-3 BTM		8:45	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-7 SFC		8:50	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		8:55	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		8:30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		8:35	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		9:00	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		9:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		8:20	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		8:25	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Dyck / Rachel Dyck	23/07/17	11:50	Ayton Rault AR	2023/07/12	11:55	
			ASRAVERLEN	2023/07/13	08:30	

Lab Use Only

Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
☐	1.5/0.0/1.2	☐ Yes ☐ No

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See ACTR

ICE-YES

White: Bureau Veritas Yellow: Client

Bureau Veritas
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Chain Of Custody Record

INVOICE TO:

Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St, Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information

Company Name:
Contact Name: Ed Collins
Address:
Phone: Fax:
Email: Ecollins@kgsgroup.com, Mniemczyk@kgsgroup.com

Project Information

Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By: RED, AMA

Laboratory Use Only

Bureau Veritas Job #: C352754
Bottle Order #: 699322
Chain Of Custody Record: C#699322-03-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/07/11	8:10	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-5 BTM	23/07/11	8:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-6 SFC	23/07/11	8:00	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM	23/07/11	8:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SW-113	23/07/11	AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
6		TRIP BLANK	23/07/11					X	X	X	X	X	X	X	X	X	X	4	
7		SW-115	23/07/11	AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
8		SW-114	23/07/11	AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Dyck / Rachel Dyck	23/07/12	11:50	Hayden Platt HAP	2023/07/12	11:55	
			ADRAVER COLL	2023/07/13	08:30	

Lab Use Only

Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
[ ]	1.8/1.6/2.1	[ ] Yes [ ] No

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White: Bureau Veritas Yellow: Client

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 700505-01-01, 700505-02-01, 700505-03-01

Report Date: 2023/08/08
Report #: R3377502
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C357081
Received: 2023/07/26, 11:05

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	1	N/A	2023/07/30	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	27	N/A	2023/08/01	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved (1)	1	N/A	2023/07/30		Auto Calc
Cadmium - low level CCME - Dissolved (1)	27	N/A	2023/08/01		Auto Calc
Cadmium - low level CCME (Total) (1)	2	N/A	2023/07/28		Auto Calc
Cadmium - low level CCME (Total) (1)	15	N/A	2023/07/29		Auto Calc
Cadmium - low level CCME (Total) (1)	7	N/A	2023/08/01		Auto Calc
Cadmium - low level CCME (Total) (1)	4	N/A	2023/08/02		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	28	N/A	2023/08/01	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (2, 3)	1	N/A	2023/08/01	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (2, 3)	27	N/A	2023/08/05	BBY6SOP-00053	SM 24 5310 B m
Hardness (1)	1	N/A	2023/07/31		Auto Calc
Hardness (1)	22	N/A	2023/08/01		Auto Calc
Hardness (1)	5	N/A	2023/08/02		Auto Calc
Hardness Total (calculated as CaCO3) (1, 4)	7	N/A	2023/07/28	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 4)	10	N/A	2023/07/30	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 4)	11	N/A	2023/08/01	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 5)	1	N/A	2023/07/30	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 5)	22	N/A	2023/07/31	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 5)	5	N/A	2023/08/01	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	8	2023/07/28	2023/07/28	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	9	2023/07/28	2023/07/29	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	7	2023/07/31	2023/07/31	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	4	2023/07/31	2023/08/01	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 6)	1	N/A	2023/07/30	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 6)	27	N/A	2023/07/31	AB SOP-00043	EPA 6020b R2 m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 700505-01-01, 700505-02-01, 700505-03-01

Report Date: 2023/08/08
Report #: R3377502
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C357081
Received: 2023/07/26, 11:05

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS - Total (1)	17	2023/07/28	2023/07/28	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	7	2023/07/31	2023/07/31	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	4	2023/07/31	2023/08/01	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 7)	1	N/A	2023/07/30	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (1, 7)	27	N/A	2023/08/01	AB SOP-00005	SM 23 4500-H+B m
Carbon (Total Organic) (2, 8)	21	N/A	2023/08/04	BBY6SOP-00053	SM 24 5310 B m
Carbon (Total Organic) (2, 8)	5	N/A	2023/08/05	BBY6SOP-00053	SM 24 5310 B m
Carbon (Total Organic) (2, 8)	2	N/A	2023/08/06	BBY6SOP-00053	SM 24 5310 B m
Total Suspended Solids (NFR) (1)	28	2023/08/01	2023/08/02	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/07/28	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 700505-01-01, 700505-02-01, 700505-03-01

Report Date: 2023/08/08
Report #: R3377502
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C357081

Received: 2023/07/26, 11:05

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) This test was performed by Bureau Veritas Vancouver, 4606 Canada Way , Burnaby, BC, V5G 1K5
(3) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(4) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(5) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(7) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(8) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM615			BVM615			BVM616		
Sampling Date		2023/07/25 10:15			2023/07/25 10:15			2023/07/25 09:25		
COC Number		700505-01-01			700505-01-01			700505-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.18	0.020	B049515				0.22	0.020	B049515
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.023	0.0030	B054051				0.0068	0.0030	B054027
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B054051				<0.00060	0.00060	B054027
Dissolved Arsenic (As)	mg/L	0.00052	0.00020	B054051				0.00023	0.00020	B054027
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B054435	<0.010	0.010	B054435	0.010	0.010	B054435
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B054051				<0.0010	0.0010	B054027
Dissolved Boron (B)	mg/L	<0.020	0.020	B054435	<0.020	0.020	B054435	<0.020	0.020	B054435
Dissolved Calcium (Ca)	mg/L	8.4	0.30	B054435	8.7	0.30	B054435	35	0.30	B054435
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B054051				<0.0010	0.0010	B054027
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B054051				<0.00030	0.00030	B054027
Dissolved Copper (Cu)	mg/L	0.0078	0.0010	B054051				0.0087	0.0010	B054027
Dissolved Iron (Fe)	mg/L	0.19	0.060	B054435	0.18	0.060	B054435	1.1	0.060	B054435
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B054051				<0.00020	0.00020	B054027
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B054435	<0.020	0.020	B054435	<0.020	0.020	B054435
Dissolved Magnesium (Mg)	mg/L	2.7	0.20	B054435	2.7	0.20	B054435	5.9	0.20	B054435
Dissolved Manganese (Mn)	mg/L	0.0047	0.0040	B054435	0.0043	0.0040	B054435	0.037	0.0040	B054435
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B054051				<0.00020	0.00020	B054027
Dissolved Nickel (Ni)	mg/L	0.00050	0.00050	B054051				0.00079	0.00050	B054027
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B054435	<0.10	0.10	B054435	<0.10	0.10	B054435
Dissolved Potassium (K)	mg/L	1.3	0.30	B054435	1.4	0.30	B054435	3.3	0.30	B054435
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B054051				<0.00020	0.00020	B054027
Dissolved Silicon (Si)	mg/L	0.95	0.50	B054435	0.91	0.50	B054435	0.68	0.50	B054435
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B054051				<0.00010	0.00010	B054027
Dissolved Sodium (Na)	mg/L	2.0	0.50	B054435	2.0	0.50	B054435	2.6	0.50	B054435
Dissolved Strontium (Sr)	mg/L	0.022	0.020	B054435	0.022	0.020	B054435	0.039	0.020	B054435
Dissolved Sulphur (S)	mg/L	1.7	0.20	B054435	1.6	0.20	B054435	35	0.20	B054435
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B054051				<0.00020	0.00020	B054027
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B054051				<0.0010	0.0010	B054027
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B054051				<0.0010	0.0010	B054027
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B054051				<0.00010	0.00010	B054027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM615			BVM615			BVM616		
Sampling Date		2023/07/25 10:15			2023/07/25 10:15			2023/07/25 09:25		
COC Number		700505-01-01			700505-01-01			700505-01-01		
	UNITS	**SC-1**	**RDL**	**QC Batch**	**SC-1 Lab-Dup**	**RDL**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B054051				<0.0010	0.0010	B054027
Dissolved Zinc (Zn)	mg/L	0.10	0.0030	B054051				0.069	0.0030	B054027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM617		BVM618		BVM619		BVM620		
Sampling Date		2023/07/25 09:20		2023/07/25 09:30		2023/07/25 09:35		2023/07/25 09:40		
COC Number		700505-01-01		700505-01-01		700505-01-01		700505-01-01		
	UNITS	SB-2	QC Batch	CB-1	QC Batch	CB-2	QC Batch	EB-1	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.21	B049515	0.21	B049515	0.24	B049515	0.28	0.020	B049515
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0068	B054027	0.0066	B054051	0.0082	B054051	0.0094	0.0030	B054051
Dissolved Antimony (Sb)	mg/L	<0.00060	B054027	<0.00060	B054051	<0.00060	B054051	<0.00060	0.00060	B054051
Dissolved Arsenic (As)	mg/L	0.00027	B054027	0.00024	B054051	0.00023	B054051	0.00022	0.00020	B054051
Dissolved Barium (Ba)	mg/L	0.011	B054435	0.011	B054435	0.011	B054212	0.011	0.010	B054431
Dissolved Beryllium (Be)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B054051
Dissolved Boron (B)	mg/L	<0.020	B054435	<0.020	B054435	<0.020	B054212	<0.020	0.020	B054431
Dissolved Calcium (Ca)	mg/L	40	B054435	39	B054435	43	B054212	44	0.30	B054431
Dissolved Chromium (Cr)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B054051
Dissolved Cobalt (Co)	mg/L	<0.00030	B054027	<0.00030	B054051	<0.00030	B054051	<0.00030	0.00030	B054051
Dissolved Copper (Cu)	mg/L	0.0073	B054027	0.0082	B054051	0.0066	B054051	0.0068	0.0010	B054051
Dissolved Iron (Fe)	mg/L	1.1	B054435	0.95	B054435	1.2	B054212	0.45	0.060	B054431
Dissolved Lead (Pb)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B054051
Dissolved Lithium (Li)	mg/L	<0.020	B054435	<0.020	B054435	<0.020	B054212	<0.020	0.020	B054431
Dissolved Magnesium (Mg)	mg/L	6.9	B054435	6.9	B054435	7.0	B054212	7.4	0.20	B054431
Dissolved Manganese (Mn)	mg/L	0.037	B054435	0.035	B054435	0.036	B054212	0.020	0.0040	B054431
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B054051
Dissolved Nickel (Ni)	mg/L	0.00081	B054027	0.00091	B054051	0.00085	B054051	0.00083	0.00050	B054051
Dissolved Phosphorus (P)	mg/L	<0.10	B054435	<0.10	B054435	<0.10	B054212	<0.10	0.10	B054431
Dissolved Potassium (K)	mg/L	3.7	B054435	3.6	B054435	3.7	B054212	3.8	0.30	B054431
Dissolved Selenium (Se)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B054051
Dissolved Silicon (Si)	mg/L	0.69	B054435	0.66	B054435	0.68	B054212	0.52	0.50	B054431
Dissolved Silver (Ag)	mg/L	<0.00010	B054027	<0.00010	B054051	<0.00010	B054051	<0.00010	0.00010	B054051
Dissolved Sodium (Na)	mg/L	2.9	B054435	2.8	B054435	2.8	B054212	2.9	0.50	B054431
Dissolved Strontium (Sr)	mg/L	0.042	B054435	0.042	B054435	0.051	B054212	0.043	0.020	B054431
Dissolved Sulphur (S)	mg/L	35	B054435	36	B054435	43	B054212	42	0.20	B054431
Dissolved Thallium (Tl)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B054051
Dissolved Tin (Sn)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B054051
Dissolved Titanium (Ti)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B054051
Dissolved Uranium (U)	mg/L	<0.00010	B054027	<0.00010	B054051	<0.00010	B054051	<0.00010	0.00010	B054051

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM617		BVM618		BVM619		BVM620		
Sampling Date		2023/07/25 09:20		2023/07/25 09:30		2023/07/25 09:35		2023/07/25 09:40		
COC Number		700505-01-01		700505-01-01		700505-01-01		700505-01-01		
	UNITS	**SB-2**	**QC Batch**	**CB-1**	**QC Batch**	**CB-2**	**QC Batch**	**EB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B054051
Dissolved Zinc (Zn)	mg/L	0.067	B054027	0.068	B054051	0.074	B054051	0.085	0.0030	B054051
RDL = Reportable Detection Limit										

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM621	BVM622		BVM623		BVM624		
Sampling Date		2023/07/25 09:45	2023/07/25 09:55		2023/07/25 09:50		2023/07/25 10:00		
COC Number		700505-01-01	700505-01-01		700505-01-01		700505-01-01		
	UNITS	EB-2	NB-1	QC Batch	NB-2	QC Batch	CLD	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.31	0.22	B049515	0.23	B049515	0.22	0.020	B050205
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0088	0.010	B054051	0.0082	B054051	0.0097	0.0030	B053330
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B054051	<0.00060	B054051	<0.00060	0.00060	B053330
Dissolved Arsenic (As)	mg/L	0.00025	0.00022	B054051	0.00024	B054051	0.00025	0.00020	B053330
Dissolved Barium (Ba)	mg/L	0.012	0.011	B054212	0.011	B054435	0.011	0.010	B053313
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B053330
Dissolved Boron (B)	mg/L	<0.020	<0.020	B054212	<0.020	B054435	<0.020	0.020	B053313
Dissolved Calcium (Ca)	mg/L	49	46	B054212	42	B054435	35	0.30	B053313
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B053330
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B054051	<0.00030	B054051	<0.00030	0.00030	B053330
Dissolved Copper (Cu)	mg/L	0.0069	0.0067	B054051	0.0070	B054051	0.0069	0.0010	B053330
Dissolved Iron (Fe)	mg/L	0.73	1.2	B054212	0.96	B054435	1.0	0.060	B053313
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B053330
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B054212	<0.020	B054435	<0.020	0.020	B053313
Dissolved Magnesium (Mg)	mg/L	7.6	7.3	B054212	7.1	B054435	5.6	0.20	B053313
Dissolved Manganese (Mn)	mg/L	0.023	0.040	B054212	0.035	B054435	0.032	0.0040	B053313
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B053330
Dissolved Nickel (Ni)	mg/L	0.0010	0.00066	B054051	0.00077	B054051	0.00089	0.00050	B053330
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B054212	<0.10	B054435	<0.10	0.10	B053313
Dissolved Potassium (K)	mg/L	4.0	3.8	B054212	3.6	B054435	3.0	0.30	B053313
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B053330
Dissolved Silicon (Si)	mg/L	0.59	0.69	B054212	0.65	B054435	0.62	0.50	B053313
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B054051	<0.00010	B054051	<0.00010	0.00010	B053330
Dissolved Sodium (Na)	mg/L	3.0	2.9	B054212	2.8	B054435	2.3	0.50	B053313
Dissolved Strontium (Sr)	mg/L	0.055	0.052	B054212	0.042	B054435	0.037	0.020	B053313
Dissolved Sulphur (S)	mg/L	48	42	B054212	38	B054435	39	0.20	B053313
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B054051	<0.00020	B054051	<0.00020	0.00020	B053330
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B053330
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B053330
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B054051	<0.00010	B054051	<0.00010	0.00010	B053330

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM621	BVM622		BVM623		BVM624		
Sampling Date		2023/07/25 09:45	2023/07/25 09:55		2023/07/25 09:50		2023/07/25 10:00		
COC Number		700505-01-01	700505-01-01		700505-01-01		700505-01-01		
	UNITS	**EB-2**	**NB-1**	**QC Batch**	**NB-2**	**QC Batch**	**CLD**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B054051	<0.0010	B054051	<0.0010	0.0010	B053330
Dissolved Zinc (Zn)	mg/L	0.092	0.070	B054051	0.072	B054051	0.068	0.0030	B053330
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM624			BVM629		BVM630		
Sampling Date		2023/07/25 10:00			2023/07/25 08:45		2023/07/25 08:50		
COC Number		700505-01-01			700505-02-01		700505-02-01		
	UNITS	CLD Lab-Dup	RDL	QC Batch	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.033	B050207	0.031	0.020	B050205
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0082	0.0030	B053330	0.018	B054051	0.0090	0.0030	B054027
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B053330	<0.00060	B054051	<0.00060	0.00060	B054027
Dissolved Arsenic (As)	mg/L	0.00021	0.00020	B053330	0.00040	B054051	0.00039	0.00020	B054027
Dissolved Barium (Ba)	mg/L				0.010	B054212	<0.010	0.010	B054435
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B053330	<0.0010	B054051	<0.0010	0.0010	B054027
Dissolved Boron (B)	mg/L				<0.020	B054212	<0.020	0.020	B054435
Dissolved Calcium (Ca)	mg/L				15	B054212	13	0.30	B054435
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B053330	<0.0010	B054051	<0.0010	0.0010	B054027
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B053330	<0.00030	B054051	<0.00030	0.00030	B054027
Dissolved Copper (Cu)	mg/L	0.0068	0.0010	B053330	0.0043	B054051	0.0063	0.0010	B054027
Dissolved Iron (Fe)	mg/L				0.097	B054212	0.099	0.060	B054435
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B053330	<0.00020	B054051	<0.00020	0.00020	B054027
Dissolved Lithium (Li)	mg/L				<0.020	B054212	<0.020	0.020	B054435
Dissolved Magnesium (Mg)	mg/L				3.5	B054212	3.5	0.20	B054435
Dissolved Manganese (Mn)	mg/L				<0.0040	B054212	<0.0040	0.0040	B054435
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B053330	<0.00020	B054051	<0.00020	0.00020	B054027
Dissolved Nickel (Ni)	mg/L	0.00079	0.00050	B053330	<0.00050	B054051	<0.00050	0.00050	B054027
Dissolved Phosphorus (P)	mg/L				<0.10	B054212	<0.10	0.10	B054435
Dissolved Potassium (K)	mg/L				1.7	B054212	1.7	0.30	B054435
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B053330	<0.00020	B054051	<0.00020	0.00020	B054027
Dissolved Silicon (Si)	mg/L				0.66	B054212	0.56	0.50	B054435
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B053330	<0.00010	B054051	<0.00010	0.00010	B054027
Dissolved Sodium (Na)	mg/L				2.2	B054212	2.1	0.50	B054435
Dissolved Strontium (Sr)	mg/L				0.031	B054212	0.027	0.020	B054435
Dissolved Sulphur (S)	mg/L				8.2	B054212	7.0	0.20	B054435
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B053330	<0.00020	B054051	<0.00020	0.00020	B054027
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B053330	<0.0010	B054051	<0.0010	0.0010	B054027
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B053330	<0.0010	B054051	<0.0010	0.0010	B054027
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B053330	<0.00010	B054051	<0.00010	0.00010	B054027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM624			BVM629		BVM630		
Sampling Date		2023/07/25 10:00			2023/07/25 08:45		2023/07/25 08:50		
COC Number		700505-01-01			700505-02-01		700505-02-01		
	UNITS	**CLD Lab-Dup**	**RDL**	**QC Batch**	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B053330	<0.0010	B054051	<0.0010	0.0010	B054027
Dissolved Zinc (Zn)	mg/L	0.067	0.0030	B053330	0.013	B054051	0.011	0.0030	B054027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM631		BVM632		BVM633		BVM634		
Sampling Date		2023/07/25 08:55		2023/07/25 09:00		2023/07/25 08:35		2023/07/25 08:40		
COC Number		700505-02-01		700505-02-01		700505-02-01		700505-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	QC Batch	CL-8 SFC	QC Batch	CL-8 BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.023	B050207	0.025	B050207	0.026	B050207	0.026	0.020	B050207
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0093	B054027	0.015	B054051	0.014	B054027	0.016	0.0030	B054051
Dissolved Antimony (Sb)	mg/L	<0.00060	B054027	<0.00060	B054051	<0.00060	B054027	<0.00060	0.00060	B054051
Dissolved Arsenic (As)	mg/L	0.00043	B054027	0.00040	B054051	0.00034	B054027	0.00040	0.00020	B054051
Dissolved Barium (Ba)	mg/L	<0.010	B054435	<0.010	B054212	<0.010	B054212	<0.010	0.010	B054431
Dissolved Beryllium (Be)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054027	<0.0010	0.0010	B054051
Dissolved Boron (B)	mg/L	<0.020	B054435	<0.020	B054212	<0.020	B054212	<0.020	0.020	B054431
Dissolved Calcium (Ca)	mg/L	10	B054435	13	B054212	13	B054212	12	0.30	B054431
Dissolved Chromium (Cr)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054027	<0.0010	0.0010	B054051
Dissolved Cobalt (Co)	mg/L	<0.00030	B054027	<0.00030	B054051	<0.00030	B054027	<0.00030	0.00030	B054051
Dissolved Copper (Cu)	mg/L	0.0062	B054027	0.0042	B054051	0.0042	B054027	0.0042	0.0010	B054051
Dissolved Iron (Fe)	mg/L	<0.060	B054435	<0.060	B054212	0.064	B054212	<0.060	0.060	B054431
Dissolved Lead (Pb)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054027	<0.00020	0.00020	B054051
Dissolved Lithium (Li)	mg/L	<0.020	B054435	<0.020	B054212	<0.020	B054212	<0.020	0.020	B054431
Dissolved Magnesium (Mg)	mg/L	2.7	B054435	3.3	B054212	3.3	B054212	3.2	0.20	B054431
Dissolved Manganese (Mn)	mg/L	<0.0040	B054435	<0.0040	B054212	<0.0040	B054212	<0.0040	0.0040	B054431
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054027	<0.00020	0.00020	B054051
Dissolved Nickel (Ni)	mg/L	<0.00050	B054027	0.00058	B054051	<0.00050	B054027	<0.00050	0.00050	B054051
Dissolved Phosphorus (P)	mg/L	<0.10	B054435	<0.10	B054212	<0.10	B054212	<0.10	0.10	B054431
Dissolved Potassium (K)	mg/L	1.4	B054435	1.8	B054212	1.6	B054212	1.6	0.30	B054431
Dissolved Selenium (Se)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054027	<0.00020	0.00020	B054051
Dissolved Silicon (Si)	mg/L	0.54	B054435	0.61	B054212	0.61	B054212	0.60	0.50	B054431
Dissolved Silver (Ag)	mg/L	<0.00010	B054027	<0.00010	B054051	<0.00010	B054027	<0.00010	0.00010	B054051
Dissolved Sodium (Na)	mg/L	1.8	B054435	2.1	B054212	2.1	B054212	2.0	0.50	B054431
Dissolved Strontium (Sr)	mg/L	0.024	B054435	0.029	B054212	0.029	B054212	0.025	0.020	B054431
Dissolved Sulphur (S)	mg/L	5.6	B054435	6.5	B054212	6.6	B054212	6.0	0.20	B054431
Dissolved Thallium (Tl)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	B054027	<0.00020	0.00020	B054051
Dissolved Tin (Sn)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054027	<0.0010	0.0010	B054051
Dissolved Titanium (Ti)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054027	<0.0010	0.0010	B054051
Dissolved Uranium (U)	mg/L	<0.00010	B054027	<0.00010	B054051	<0.00010	B054027	<0.00010	0.00010	B054051

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM631		BVM632		BVM633		BVM634		
Sampling Date		2023/07/25 08:55		2023/07/25 09:00		2023/07/25 08:35		2023/07/25 08:40		
COC Number		700505-02-01		700505-02-01		700505-02-01		700505-02-01		
	UNITS	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	B054027	<0.0010	0.0010	B054051
Dissolved Zinc (Zn)	mg/L	0.0097	B054027	0.011	B054051	0.010	B054027	0.011	0.0030	B054051
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM635		BVM636			BVM636		
Sampling Date		2023/07/25 09:05		2023/07/25 09:10			2023/07/25 09:10		
COC Number		700505-02-01		700505-02-01			700505-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch	CL-2 BTM Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.035	B050207	0.060	0.020	B050207			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0099	B054051	0.014	0.0030	B054027	0.014	0.0030	B054027
Dissolved Antimony (Sb)	mg/L	<0.00060	B054051	<0.00060	0.00060	B054027	<0.00060	0.00060	B054027
Dissolved Arsenic (As)	mg/L	0.00040	B054051	0.00037	0.00020	B054027	0.00035	0.00020	B054027
Dissolved Barium (Ba)	mg/L	<0.010	B054435	<0.010	0.010	B054443			
Dissolved Beryllium (Be)	mg/L	<0.0010	B054051	<0.0010	0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Boron (B)	mg/L	<0.020	B054435	<0.020	0.020	B054443			
Dissolved Calcium (Ca)	mg/L	13	B054435	13	0.30	B054443			
Dissolved Chromium (Cr)	mg/L	<0.0010	B054051	<0.0010	0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Cobalt (Co)	mg/L	<0.00030	B054051	<0.00030	0.00030	B054027	<0.00030	0.00030	B054027
Dissolved Copper (Cu)	mg/L	0.0049	B054051	0.0054 (1)	0.0010	B054027	0.0080 (2)	0.0010	B054027
Dissolved Iron (Fe)	mg/L	<0.060	B054435	0.19	0.060	B054443			
Dissolved Lead (Pb)	mg/L	<0.00020	B057180	<0.00020	0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Lithium (Li)	mg/L	<0.020	B054435	<0.020	0.020	B054443			
Dissolved Magnesium (Mg)	mg/L	3.4	B054435	3.3	0.20	B054443			
Dissolved Manganese (Mn)	mg/L	<0.0040	B054435	0.0046	0.0040	B054443			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B054051	<0.00020	0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Nickel (Ni)	mg/L	0.00054	B054051	<0.00050	0.00050	B054027	<0.00050	0.00050	B054027
Dissolved Phosphorus (P)	mg/L	<0.10	B054435	<0.10	0.10	B054443			
Dissolved Potassium (K)	mg/L	1.7	B054435	1.7	0.30	B054443			
Dissolved Selenium (Se)	mg/L	<0.00020	B054051	<0.00020	0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Silicon (Si)	mg/L	0.61	B054435	1.0	0.50	B054443			
Dissolved Silver (Ag)	mg/L	<0.00010	B054051	<0.00010	0.00010	B054027	<0.00010	0.00010	B054027
Dissolved Sodium (Na)	mg/L	2.1	B054435	2.0	0.50	B054443			
Dissolved Strontium (Sr)	mg/L	0.027	B054435	0.025	0.020	B054443			
Dissolved Sulphur (S)	mg/L	6.2	B054435	8.3	0.20	B054443			
Dissolved Thallium (Tl)	mg/L	<0.00020	B054051	<0.00020	0.00020	B054027	<0.00020	0.00020	B054027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Duplicate exceeds acceptance criteria due to sample non homogeneity. Reanalysis yields similar results.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM635		BVM636			BVM636		
Sampling Date		2023/07/25 09:05		2023/07/25 09:10			2023/07/25 09:10		
COC Number		700505-02-01		700505-02-01			700505-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch	CL-2 BTM Lab-Dup	RDL	QC Batch
Dissolved Tin (Sn)	mg/L	<0.0010	B054051	<0.0010	0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Titanium (Ti)	mg/L	<0.0010	B054051	<0.0010	0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Uranium (U)	mg/L	<0.00010	B054051	<0.00010	0.00010	B054027	<0.00010	0.00010	B054027
Dissolved Vanadium (V)	mg/L	<0.0010	B054051	<0.0010	0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Zinc (Zn)	mg/L	0.013	B054051	0.024	0.0030	B054027	0.024	0.0030	B054027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM637	BVM638	BVM640		BVM641		
Sampling Date		2023/07/25 08:25	2023/07/25 08:30	2023/07/25 08:15		2023/07/25 08:20		
COC Number		700505-02-01	700505-02-01	700505-03-01		700505-03-01		
	UNITS	CL-4 SFC	CL-4 BTM	CL-5 SFC	QC Batch	CL-5 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.021	0.035	<0.020	B050207	0.030	0.020	B050207
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.0097	0.011	0.0098	B054027	0.010	0.0030	B054027
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B054027	<0.00060	0.00060	B054027
Dissolved Arsenic (As)	mg/L	0.00037	0.00036	0.00044	B054027	0.00039	0.00020	B054027
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	B054435	<0.010	0.010	B054443
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	B054435	<0.020	0.020	B054443
Dissolved Calcium (Ca)	mg/L	12	13	12	B054435	13	0.30	B054443
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B054027	<0.00030	0.00030	B054027
Dissolved Copper (Cu)	mg/L	0.0063	0.0071	0.0060	B054027	0.0070	0.0010	B054027
Dissolved Iron (Fe)	mg/L	<0.060	0.13	<0.060	B054435	0.090	0.060	B054443
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B054027	0.00038	0.00020	B054027
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B054435	<0.020	0.020	B054443
Dissolved Magnesium (Mg)	mg/L	3.2	3.4	3.2	B054435	3.3	0.20	B054443
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	<0.0040	B054435	<0.0040	0.0040	B054443
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	B054027	<0.00050	0.00050	B054027
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B054435	<0.10	0.10	B054443
Dissolved Potassium (K)	mg/L	1.6	1.8	1.7	B054435	1.6	0.30	B054443
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Silicon (Si)	mg/L	0.52	0.71	0.50	B054435	0.79	0.50	B054443
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B054027	<0.00010	0.00010	B054027
Dissolved Sodium (Na)	mg/L	2.1	2.1	2.1	B054435	2.0	0.50	B054443
Dissolved Strontium (Sr)	mg/L	0.026	0.027	0.026	B054435	0.025	0.020	B054443
Dissolved Sulphur (S)	mg/L	5.5	6.2	4.9	B054435	7.8	0.20	B054443
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B054027	<0.00010	0.00010	B054027

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM637	BVM638	BVM640		BVM641		
Sampling Date		2023/07/25 08:25	2023/07/25 08:30	2023/07/25 08:15		2023/07/25 08:20		
COC Number		700505-02-01	700505-02-01	700505-03-01		700505-03-01		
	UNITS	**CL-4 SFC**	**CL-4 BTM**	**CL-5 SFC**	**QC Batch**	**CL-5 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Zinc (Zn)	mg/L	0.0089	0.016	0.0086	B054027	0.015	0.0030	B054027
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM642		BVM643		BVM644	BVM645		
Sampling Date		2023/07/25 08:05		2023/07/25 08:10		2023/07/25	2023/07/25		
COC Number		700505-03-01		700505-03-01		700505-03-01	700505-03-01		
	UNITS	**CL-6 SFC**	**QC Batch**	**CL-6 BTM**	**QC Batch**	**SW-118**	**SW-117**	**RDL**	**QC Batch**
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B050207	0.022	B050207	0.30	0.029	0.020	B050207
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0088	B054027	0.012	B054051	0.0074	0.0083	0.0030	B054027
Dissolved Antimony (Sb)	mg/L	<0.00060	B054027	<0.00060	B054051	<0.00060	<0.00060	0.00060	B054027
Dissolved Arsenic (As)	mg/L	0.00045	B054027	0.00041	B054051	0.00026	0.00036	0.00020	B054027
Dissolved Barium (Ba)	mg/L	<0.010	B054435	<0.010	B054212	0.012	<0.010	0.010	B054443
Dissolved Beryllium (Be)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	<0.0010	0.0010	B054027
Dissolved Boron (B)	mg/L	<0.020	B054435	<0.020	B054212	<0.020	<0.020	0.020	B054443
Dissolved Calcium (Ca)	mg/L	11	B054435	12	B054212	47	13	0.30	B054443
Dissolved Chromium (Cr)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	<0.0010	0.0010	B054027
Dissolved Cobalt (Co)	mg/L	<0.00030	B054027	<0.00030	B054051	<0.00030	<0.00030	0.00030	B054027
Dissolved Copper (Cu)	mg/L	0.0058	B054027	0.0039	B054051	0.0089	0.0066	0.0010	B054027
Dissolved Iron (Fe)	mg/L	<0.060	B054435	<0.060	B054212	0.76	0.065	0.060	B054443
Dissolved Lead (Pb)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	<0.00020	0.00020	B054027
Dissolved Lithium (Li)	mg/L	<0.020	B054435	<0.020	B054212	<0.020	<0.020	0.020	B054443
Dissolved Magnesium (Mg)	mg/L	3.2	B054435	3.2	B054212	7.8	3.4	0.20	B054443
Dissolved Manganese (Mn)	mg/L	<0.0040	B054435	<0.0040	B054212	0.025	<0.0040	0.0040	B054443
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	<0.00020	0.00020	B054027
Dissolved Nickel (Ni)	mg/L	<0.00050	B054027	<0.00050	B054051	0.00096	<0.00050	0.00050	B054027
Dissolved Phosphorus (P)	mg/L	<0.10	B054435	<0.10	B054212	<0.10	<0.10	0.10	B054443
Dissolved Potassium (K)	mg/L	1.6	B054435	1.5	B054212	4.0	1.7	0.30	B054443
Dissolved Selenium (Se)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	<0.00020	0.00020	B054027
Dissolved Silicon (Si)	mg/L	<0.50	B054435	0.66	B054212	0.68	0.74	0.50	B054443
Dissolved Silver (Ag)	mg/L	<0.00010	B054027	<0.00010	B054051	<0.00010	<0.00010	0.00010	B054027
Dissolved Sodium (Na)	mg/L	2.1	B054435	2.0	B054212	3.0	2.1	0.50	B054443
Dissolved Strontium (Sr)	mg/L	0.026	B054435	0.029	B054212	0.045	0.026	0.020	B054443
Dissolved Sulphur (S)	mg/L	4.2	B054435	6.0	B054212	55	8.5	0.20	B054443
Dissolved Thallium (Tl)	mg/L	<0.00020	B054027	<0.00020	B054051	<0.00020	<0.00020	0.00020	B054027
Dissolved Tin (Sn)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	<0.0010	0.0010	B054027
Dissolved Titanium (Ti)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	<0.0010	0.0010	B054027
Dissolved Uranium (U)	mg/L	<0.00010	B054027	<0.00010	B054051	<0.00010	<0.00010	0.00010	B054027

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM642		BVM643		BVM644	BVM645		
Sampling Date		2023/07/25 08:05		2023/07/25 08:10		2023/07/25	2023/07/25		
COC Number		700505-03-01		700505-03-01		700505-03-01	700505-03-01		
	UNITS	**CL-6 SFC**	**QC Batch**	**CL-6 BTM**	**QC Batch**	**SW-118**	**SW-117**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B054027	<0.0010	B054051	<0.0010	<0.0010	0.0010	B054027
Dissolved Zinc (Zn)	mg/L	0.0075	B054027	0.011	B054051	0.087	0.012	0.0030	B054027
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM646		BVM647		
Sampling Date		2023/07/25		2023/07/25		
COC Number		700505-03-01		700505-03-01		
	UNITS	TRIP BLANK	QC Batch	SW-116	RDL	QC Batch
Elements						
Dissolved Cadmium (Cd)	ug/L	<0.020	B050207	0.033	0.020	B050207
Lab Filtered Elements						
Dissolved Aluminum (Al)	mg/L	<0.0030	B054027	0.011	0.0030	B054027
Dissolved Antimony (Sb)	mg/L	<0.00060	B054027	<0.00060	0.00060	B054027
Dissolved Arsenic (As)	mg/L	<0.00020	B054027	0.00036	0.00020	B054027
Dissolved Barium (Ba)	mg/L	<0.010	B054212	<0.010	0.010	B054443
Dissolved Beryllium (Be)	mg/L	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Boron (B)	mg/L	<0.020	B054212	<0.020	0.020	B054443
Dissolved Calcium (Ca)	mg/L	<0.30	B054212	13	0.30	B054443
Dissolved Chromium (Cr)	mg/L	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Cobalt (Co)	mg/L	<0.00030	B054027	<0.00030	0.00030	B054027
Dissolved Copper (Cu)	mg/L	<0.0010	B054027	0.0073	0.0010	B054027
Dissolved Iron (Fe)	mg/L	<0.060	B054212	0.14	0.060	B054443
Dissolved Lead (Pb)	mg/L	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Lithium (Li)	mg/L	<0.020	B054212	<0.020	0.020	B054443
Dissolved Magnesium (Mg)	mg/L	<0.20	B054212	3.4	0.20	B054443
Dissolved Manganese (Mn)	mg/L	<0.0040	B054212	<0.0040	0.0040	B054443
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Nickel (Ni)	mg/L	<0.00050	B054027	<0.00050	0.00050	B054027
Dissolved Phosphorus (P)	mg/L	<0.10	B054212	<0.10	0.10	B054443
Dissolved Potassium (K)	mg/L	<0.30	B054212	1.7	0.30	B054443
Dissolved Selenium (Se)	mg/L	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Silicon (Si)	mg/L	<0.50	B054212	0.90	0.50	B054443
Dissolved Silver (Ag)	mg/L	<0.00010	B054027	<0.00010	0.00010	B054027
Dissolved Sodium (Na)	mg/L	<0.50	B054212	2.1	0.50	B054443
Dissolved Strontium (Sr)	mg/L	<0.020	B054212	0.026	0.020	B054443
Dissolved Sulphur (S)	mg/L	<0.20	B054212	8.4	0.20	B054443
Dissolved Thallium (Tl)	mg/L	<0.00020	B054027	<0.00020	0.00020	B054027
Dissolved Tin (Sn)	mg/L	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Titanium (Ti)	mg/L	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Uranium (U)	mg/L	<0.00010	B054027	<0.00010	0.00010	B054027

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BVM646		BVM647		
Sampling Date		2023/07/25		2023/07/25		
COC Number		700505-03-01		700505-03-01		
	UNITS	**TRIP BLANK**	**QC Batch**	**SW-116**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B054027	<0.0010	0.0010	B054027
Dissolved Zinc (Zn)	mg/L	<0.0030	B054027	0.017	0.0030	B054027
RDL = Reportable Detection Limit						

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM615		BVM616	BVM617	BVM618	BVM619		
Sampling Date		2023/07/25 10:15		2023/07/25 09:25	2023/07/25 09:20	2023/07/25 09:30	2023/07/25 09:35		
COC Number		700505-01-01		700505-01-01	700505-01-01	700505-01-01	700505-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**SB-2**	**CB-1**	**CB-2**	**RDL**	**QC Batch**
Elements									
Total Cadmium (Cd)	ug/L	0.25	B049516	0.33	0.35	0.32	0.38	0.020	B049516
Total Aluminum (Al)	mg/L	0.057	B051942	0.042	0.047	0.044	0.052	0.0030	B054021
Total Antimony (Sb)	mg/L	<0.00060	B051942	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B054021
Total Arsenic (As)	mg/L	0.00050	B051942	0.00024	0.00034	0.00028	0.00037	0.00020	B054021
Total Barium (Ba)	mg/L	<0.010	B051944	0.012	0.012	0.012	0.013	0.010	B054024
Total Beryllium (Be)	mg/L	<0.0010	B051942	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B054021
Total Boron (B)	mg/L	<0.020	B051944	0.021	0.022	0.032	0.024	0.020	B054024
Total Calcium (Ca)	mg/L	8.9	B051944	42	42	44	45	0.30	B054024
Total Chromium (Cr)	mg/L	<0.0010	B051942	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B054021
Total Cobalt (Co)	mg/L	<0.00030	B051942	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B054021
Total Copper (Cu)	mg/L	0.0094	B051942	0.010	0.011	0.011	0.012	0.0010	B054021
Total Iron (Fe)	mg/L	0.37	B051944	3.4	3.4	3.4	3.4	0.060	B054024
Total Lead (Pb)	mg/L	<0.00020	B051942	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B054021
Total Lithium (Li)	mg/L	<0.020	B051944	<0.020	<0.020	<0.020	<0.020	0.020	B054024
Total Magnesium (Mg)	mg/L	2.8	B051944	7.9	7.9	8.1	8.2	0.20	B054024
Total Manganese (Mn)	mg/L	0.044	B051944	0.050	0.051	0.050	0.046	0.0040	B054024
Total Molybdenum (Mo)	mg/L	0.00034	B051942	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B054021
Total Nickel (Ni)	mg/L	0.00053	B051942	0.00099	0.0010	0.00099	0.0011	0.00050	B054021
Total Phosphorus (P)	mg/L	<0.10	B051944	<0.10	<0.10	<0.10	<0.10	0.10	B054024
Total Potassium (K)	mg/L	1.3	B051944	3.8	3.8	3.9	3.9	0.30	B054024
Total Selenium (Se)	mg/L	<0.00020	B051942	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B054021
Total Silicon (Si)	mg/L	1.1	B051944	0.94	0.93	0.96	0.88	0.50	B054024
Total Silver (Ag)	mg/L	<0.00010	B051942	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B054021
Total Sodium (Na)	mg/L	2.0	B051944	3.0	3.0	3.0	3.1	0.50	B054024
Total Strontium (Sr)	mg/L	0.021	B051944	0.041	0.041	0.043	0.044	0.020	B054024
Total Sulphur (S)	mg/L	1.9	B051944	40	40	42	42	0.20	B054024
Total Thallium (Tl)	mg/L	<0.00020	B051942	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B054021
Total Tin (Sn)	mg/L	<0.0010	B051942	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B054021
Total Titanium (Ti)	mg/L	0.0023	B051942	0.0014	0.0017	0.0015	0.0019	0.0010	B054021
Total Uranium (U)	mg/L	<0.00010	B051942	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B054021
Total Vanadium (V)	mg/L	<0.0010	B051942	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B054021
Total Zinc (Zn)	mg/L	0.11	B051942	0.094	0.11	0.10	0.12	0.0030	B054021

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM620		BVM621		BVM622	BVM623		
Sampling Date		2023/07/25 09:40		2023/07/25 09:45		2023/07/25 09:55	2023/07/25 09:50		
COC Number		700505-01-01		700505-01-01		700505-01-01	700505-01-01		
	UNITS	EB-1	QC Batch	EB-2	QC Batch	NB-1	NB-2	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.41	B049516	0.42	B049516	0.33	0.33	0.020	B049516
Total Aluminum (Al)	mg/L	0.065	B054026	0.077	B051309	0.040	0.048	0.0030	B051942
Total Antimony (Sb)	mg/L	<0.00060	B054026	<0.00060	B051309	<0.00060	<0.00060	0.00060	B051942
Total Arsenic (As)	mg/L	0.00035	B054026	0.00038	B051309	0.00032	0.00039	0.00020	B051942
Total Barium (Ba)	mg/L	0.012	B054040	0.014	B051318	0.011	0.011	0.010	B051944
Total Beryllium (Be)	mg/L	<0.0010	B054026	<0.0010	B051309	<0.0010	<0.0010	0.0010	B051942
Total Boron (B)	mg/L	<0.020	B054040	0.023	B051318	<0.020	<0.020	0.020	B051944
Total Calcium (Ca)	mg/L	47	B054040	47	B051318	42	43	0.30	B051944
Total Chromium (Cr)	mg/L	<0.0010	B054026	<0.0010	B051309	<0.0010	<0.0010	0.0010	B051942
Total Cobalt (Co)	mg/L	<0.00030	B054026	<0.00030	B051309	<0.00030	<0.00030	0.00030	B051942
Total Copper (Cu)	mg/L	0.012	B054026	0.012	B051309	0.011	0.011	0.0010	B051942
Total Iron (Fe)	mg/L	2.2	B054040	2.2	B051318	2.9	3.0	0.060	B051944
Total Lead (Pb)	mg/L	<0.00020	B054026	<0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Lithium (Li)	mg/L	<0.020	B054040	<0.020	B051318	<0.020	<0.020	0.020	B051944
Total Magnesium (Mg)	mg/L	8.0	B054040	7.7	B051318	6.9	7.2	0.20	B051944
Total Manganese (Mn)	mg/L	0.028	B054040	0.031	B051318	0.041	0.040	0.0040	B051944
Total Molybdenum (Mo)	mg/L	<0.00020	B054026	0.00034	B051309	<0.00020	<0.00020	0.00020	B051942
Total Nickel (Ni)	mg/L	0.0011	B054026	0.0012	B051309	0.0011	0.0011	0.00050	B051942
Total Phosphorus (P)	mg/L	<0.10	B054040	<0.10	B051318	<0.10	<0.10	0.10	B051944
Total Potassium (K)	mg/L	4.0	B054040	3.9	B051318	3.4	3.5	0.30	B051944
Total Selenium (Se)	mg/L	<0.00020	B054026	0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Silicon (Si)	mg/L	0.79	B054040	0.85	B051318	0.86	0.84	0.50	B051944
Total Silver (Ag)	mg/L	<0.00010	B054026	<0.00010	B051309	<0.00010	<0.00010	0.00010	B051942
Total Sodium (Na)	mg/L	3.0	B054040	3.0	B051318	2.8	2.9	0.50	B051944
Total Strontium (Sr)	mg/L	0.043	B054040	0.054	B051318	0.040	0.040	0.020	B051944
Total Sulphur (S)	mg/L	48	B054040	48	B051318	42	42	0.20	B051944
Total Thallium (Tl)	mg/L	<0.00020	B054026	<0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Tin (Sn)	mg/L	<0.0010	B054026	0.0011	B051309	<0.0010	<0.0010	0.0010	B051942
Total Titanium (Ti)	mg/L	0.0019	B054026	0.0022	B051309	0.0012	0.0013	0.0010	B051942
Total Uranium (U)	mg/L	<0.00010	B054026	<0.00010	B051309	<0.00010	<0.00010	0.00010	B051942
Total Vanadium (V)	mg/L	<0.0010	B054026	<0.0010	B051309	<0.0010	<0.0010	0.0010	B051942
Total Zinc (Zn)	mg/L	0.12	B054026	0.11	B051309	0.097	0.10	0.0030	B051942

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM624		BVM629	BVM630		BVM631		
Sampling Date		2023/07/25 10:00		2023/07/25 08:45	2023/07/25 08:50		2023/07/25 08:55		
COC Number		700505-01-01		700505-02-01	700505-02-01		700505-02-01		
	UNITS	CLD	QC Batch	CL-3 SFC	CL-3 BTM	QC Batch	CL-7 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.33	B049516	0.058	0.055	B049516	0.065	0.020	B049516
Total Aluminum (Al)	mg/L	0.059	B051942	0.050	0.053	B051309	0.047	0.0030	B051942
Total Antimony (Sb)	mg/L	<0.00060	B051942	<0.00060	<0.00060	B051309	<0.00060	0.00060	B051942
Total Arsenic (As)	mg/L	0.00029	B051942	0.00049	0.00051	B051309	0.00057	0.00020	B051942
Total Barium (Ba)	mg/L	0.012	B051944	0.010	<0.010	B051318	<0.010	0.010	B051944
Total Beryllium (Be)	mg/L	<0.0010	B051942	<0.0010	<0.0010	B051309	<0.0010	0.0010	B051942
Total Boron (B)	mg/L	<0.020	B051944	<0.020	<0.020	B051318	<0.020	0.020	B051944
Total Calcium (Ca)	mg/L	46	B051944	14	14	B051318	12	0.30	B051944
Total Chromium (Cr)	mg/L	<0.0010	B051942	<0.0010	<0.0010	B051309	<0.0010	0.0010	B051942
Total Cobalt (Co)	mg/L	<0.00030	B051942	<0.00030	<0.00030	B051309	<0.00030	0.00030	B051942
Total Copper (Cu)	mg/L	0.011	B051942	0.0054	0.0054	B051309	0.0052	0.0010	B051942
Total Iron (Fe)	mg/L	3.2	B051944	0.32	0.29	B051318	0.16	0.060	B051944
Total Lead (Pb)	mg/L	<0.00020	B051942	<0.00020	<0.00020	B051309	<0.00020	0.00020	B051942
Total Lithium (Li)	mg/L	<0.020	B051944	<0.020	<0.020	B051318	<0.020	0.020	B051944
Total Magnesium (Mg)	mg/L	7.8	B051944	3.5	3.4	B051318	3.3	0.20	B051944
Total Manganese (Mn)	mg/L	0.043	B051944	0.010	0.0097	B051318	0.0073	0.0040	B051944
Total Molybdenum (Mo)	mg/L	<0.00020	B051942	<0.00020	<0.00020	B051309	<0.00020	0.00020	B051942
Total Nickel (Ni)	mg/L	0.00096	B051942	0.0011	0.00056	B051309	0.00077	0.00050	B051942
Total Phosphorus (P)	mg/L	<0.10	B051944	<0.10	<0.10	B051318	<0.10	0.10	B051944
Total Potassium (K)	mg/L	3.7	B051944	1.6	1.6	B051318	1.6	0.30	B051944
Total Selenium (Se)	mg/L	<0.00020	B051942	<0.00020	<0.00020	B051309	<0.00020	0.00020	B051942
Total Silicon (Si)	mg/L	0.83	B051944	0.90	0.85	B051318	0.75	0.50	B051944
Total Silver (Ag)	mg/L	<0.00010	B051942	<0.00010	<0.00010	B051309	<0.00010	0.00010	B051942
Total Sodium (Na)	mg/L	3.0	B051944	2.1	2.1	B051318	2.1	0.50	B051944
Total Strontium (Sr)	mg/L	0.042	B051944	0.030	0.029	B051318	0.025	0.020	B051944
Total Sulphur (S)	mg/L	44	B051944	8.6	8.4	B051318	6.6	0.20	B051944
Total Thallium (Tl)	mg/L	<0.00020	B051942	<0.00020	<0.00020	B051309	<0.00020	0.00020	B051942
Total Tin (Sn)	mg/L	<0.0010	B051942	0.0011	0.0012	B051309	<0.0010	0.0010	B051942
Total Titanium (Ti)	mg/L	0.0021	B051942	0.0016	0.0019	B051309	0.0016	0.0010	B051942
Total Uranium (U)	mg/L	<0.00010	B051942	<0.00010	<0.00010	B051309	<0.00010	0.00010	B051942
Total Vanadium (V)	mg/L	<0.0010	B051942	<0.0010	<0.0010	B051309	<0.0010	0.0010	B051942
Total Zinc (Zn)	mg/L	0.10	B051942	0.016	0.016	B051309	0.015	0.0030	B051942

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM632		BVM633		BVM634		BVM635		
Sampling Date		2023/07/25 09:00		2023/07/25 08:35		2023/07/25 08:40		2023/07/25 09:05		
COC Number		700505-02-01		700505-02-01		700505-02-01		700505-02-01		
	UNITS	CL-7 BTM	QC Batch	CL-8 SFC	QC Batch	CL-8 BTM	QC Batch	CL-2 SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.040	B049516	0.046	B049516	0.047	B049516	0.054	0.020	B050210
Total Aluminum (Al)	mg/L	0.045	B054021	0.046	B051309	0.065	B054026	0.040	0.0030	B051309
Total Antimony (Sb)	mg/L	<0.00060	B054021	<0.00060	B051309	<0.00060	B054026	<0.00060	0.00060	B051309
Total Arsenic (As)	mg/L	0.00043	B054021	0.00051	B051309	0.00049	B054026	0.00043	0.00020	B051309
Total Barium (Ba)	mg/L	0.010	B054024	0.011	B051318	<0.010	B054040	0.010	0.010	B051318
Total Beryllium (Be)	mg/L	<0.0010	B054021	<0.0010	B051309	<0.0010	B054026	<0.0010	0.0010	B051309
Total Boron (B)	mg/L	<0.020	B054024	<0.020	B051318	<0.020	B054040	<0.020	0.020	B051318
Total Calcium (Ca)	mg/L	13	B054024	13	B051318	12	B054040	13	0.30	B051318
Total Chromium (Cr)	mg/L	<0.0010	B054021	<0.0010	B051309	<0.0010	B054026	<0.0010	0.0010	B051309
Total Cobalt (Co)	mg/L	<0.00030	B054021	<0.00030	B051309	<0.00030	B054026	<0.00030	0.00030	B051309
Total Copper (Cu)	mg/L	0.0050	B054021	0.0050	B051309	0.0055	B054026	0.0052	0.0010	B051309
Total Iron (Fe)	mg/L	0.18	B054024	0.17	B051318	0.20	B054040	0.25	0.060	B051318
Total Lead (Pb)	mg/L	<0.00020	B054021	<0.00020	B051309	0.00022	B054026	<0.00020	0.00020	B051309
Total Lithium (Li)	mg/L	<0.020	B054024	<0.020	B051318	<0.020	B054040	<0.020	0.020	B051318
Total Magnesium (Mg)	mg/L	3.8	B054024	3.3	B051318	3.4	B054040	3.3	0.20	B051318
Total Manganese (Mn)	mg/L	0.0088	B054024	0.0065	B051318	0.0083	B054040	0.0077	0.0040	B051318
Total Molybdenum (Mo)	mg/L	<0.00020	B054021	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051309
Total Nickel (Ni)	mg/L	<0.00050	B054021	0.00051	B051309	0.00065	B054026	0.00060	0.00050	B051309
Total Phosphorus (P)	mg/L	<0.10	B054024	<0.10	B051318	<0.10	B054040	<0.10	0.10	B051318
Total Potassium (K)	mg/L	1.8	B054024	1.7	B051318	1.7	B054040	1.5	0.30	B051318
Total Selenium (Se)	mg/L	<0.00020	B054021	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051309
Total Silicon (Si)	mg/L	0.85	B054024	0.80	B051318	0.84	B054040	0.83	0.50	B051318
Total Silver (Ag)	mg/L	<0.00010	B054021	<0.00010	B051309	<0.00010	B054026	<0.00010	0.00010	B051309
Total Sodium (Na)	mg/L	2.3	B054024	2.8	B051318	2.0	B054040	2.0	0.50	B051318
Total Strontium (Sr)	mg/L	0.027	B054024	0.029	B051318	0.024	B054040	0.028	0.020	B051318
Total Sulphur (S)	mg/L	6.7	B054024	6.7	B051318	6.8	B054040	7.4	0.20	B051318
Total Thallium (Tl)	mg/L	<0.00020	B054021	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051309
Total Tin (Sn)	mg/L	<0.0010	B054021	0.0012	B051309	<0.0010	B054026	0.0011	0.0010	B051309
Total Titanium (Ti)	mg/L	0.0015	B054021	0.0015	B051309	0.0028	B054026	0.0013	0.0010	B051309
Total Uranium (U)	mg/L	<0.00010	B054021	<0.00010	B051309	<0.00010	B054026	<0.00010	0.00010	B051309
Total Vanadium (V)	mg/L	<0.0010	B054021	<0.0010	B051309	<0.0010	B054026	<0.0010	0.0010	B051309
Total Zinc (Zn)	mg/L	0.013	B054021	0.012	B051309	0.016	B054026	0.015	0.0030	B051309

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM636		BVM637		BVM638		BVM640		
Sampling Date		2023/07/25 09:10		2023/07/25 08:25		2023/07/25 08:30		2023/07/25 08:15		
COC Number		700505-02-01		700505-02-01		700505-02-01		700505-03-01		
	UNITS	CL-2 BTM	QC Batch	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.11	B050210	0.041	B050210	0.067	B050210	0.065	0.020	B050210
Total Aluminum (Al)	mg/L	0.053	B051942	0.052	B051309	0.052	B054026	0.051	0.0030	B051942
Total Antimony (Sb)	mg/L	<0.00060	B051942	<0.00060	B051309	<0.00060	B054026	<0.00060	0.00060	B051942
Total Arsenic (As)	mg/L	0.00050	B051942	0.00050	B051309	0.00050	B054026	0.00060	0.00020	B051942
Total Barium (Ba)	mg/L	<0.010	B051944	<0.010	B051318	<0.010	B054040	<0.010	0.010	B051944
Total Beryllium (Be)	mg/L	<0.0010	B051942	<0.0010	B051309	<0.0010	B054026	<0.0010	0.0010	B051942
Total Boron (B)	mg/L	<0.020	B051944	<0.020	B051318	<0.020	B054040	<0.020	0.020	B051944
Total Calcium (Ca)	mg/L	13	B051944	12	B051318	13	B054040	12	0.30	B051944
Total Chromium (Cr)	mg/L	<0.0010	B051942	<0.0010	B051309	<0.0010	B054026	<0.0010	0.0010	B051942
Total Cobalt (Co)	mg/L	<0.00030	B051942	<0.00030	B051309	<0.00030	B054026	<0.00030	0.00030	B051942
Total Copper (Cu)	mg/L	0.0067	B051942	0.0049	B051309	0.0064	B054026	0.0045	0.0010	B051942
Total Iron (Fe)	mg/L	0.56	B051944	0.17	B051318	0.47	B054040	0.13	0.060	B051944
Total Lead (Pb)	mg/L	<0.00020	B051942	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051942
Total Lithium (Li)	mg/L	<0.020	B051944	<0.020	B051318	<0.020	B054040	<0.020	0.020	B051944
Total Magnesium (Mg)	mg/L	3.3	B051944	3.3	B051318	3.5	B054040	3.3	0.20	B051944
Total Manganese (Mn)	mg/L	0.045	B051944	0.0072	B051318	0.024	B054040	0.0082	0.0040	B051944
Total Molybdenum (Mo)	mg/L	<0.00020	B051942	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051942
Total Nickel (Ni)	mg/L	0.00064	B051942	<0.00050	B051309	0.00056	B054026	0.00064	0.00050	B051942
Total Phosphorus (P)	mg/L	<0.10	B051944	<0.10	B051318	<0.10	B054040	<0.10	0.10	B051944
Total Potassium (K)	mg/L	1.6	B051944	1.6	B051318	1.7	B054040	1.6	0.30	B051944
Total Selenium (Se)	mg/L	<0.00020	B051942	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051942
Total Silicon (Si)	mg/L	1.1	B051944	0.82	B051318	0.99	B054040	0.72	0.50	B051944
Total Silver (Ag)	mg/L	<0.00010	B051942	<0.00010	B051309	<0.00010	B054026	<0.00010	0.00010	B051942
Total Sodium (Na)	mg/L	2.0	B051944	2.1	B051318	2.0	B054040	2.1	0.50	B051944
Total Strontium (Sr)	mg/L	0.025	B051944	0.028	B051318	0.025	B054040	0.025	0.020	B051944
Total Sulphur (S)	mg/L	7.0	B051944	6.6	B051318	7.4	B054040	5.9	0.20	B051944
Total Thallium (Tl)	mg/L	<0.00020	B051942	<0.00020	B051309	<0.00020	B054026	<0.00020	0.00020	B051942
Total Tin (Sn)	mg/L	<0.0010	B051942	0.0011	B051309	<0.0010	B054026	<0.0010	0.0010	B051942
Total Titanium (Ti)	mg/L	0.0016	B051942	0.0016	B051309	0.0014	B054026	0.0015	0.0010	B051942
Total Uranium (U)	mg/L	<0.00010	B051942	<0.00010	B051309	<0.00010	B054026	<0.00010	0.00010	B051942
Total Vanadium (V)	mg/L	<0.0010	B051942	<0.0010	B051309	<0.0010	B054026	<0.0010	0.0010	B051942
Total Zinc (Zn)	mg/L	0.031	B051942	0.012	B051309	0.024	B054026	0.013	0.0030	B051942

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM641		BVM642		BVM643		BVM644		
Sampling Date		2023/07/25 08:20		2023/07/25 08:05		2023/07/25 08:10		2023/07/25		
COC Number		700505-03-01		700505-03-01		700505-03-01		700505-03-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	QC Batch	SW-118	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.066	B050210	0.035	B050210	0.063	B050210	0.42	0.020	B050210
Total Aluminum (Al)	mg/L	0.062	B054021	0.052	B054026	0.052	B051942	0.065	0.0030	B054021
Total Antimony (Sb)	mg/L	<0.00060	B054021	<0.00060	B054026	<0.00060	B051942	<0.00060	0.00060	B054021
Total Arsenic (As)	mg/L	0.00063	B054021	0.00049	B054026	0.00054	B051942	0.00027	0.00020	B054021
Total Barium (Ba)	mg/L	0.010	B054024	<0.010	B054040	<0.010	B051944	0.013	0.010	B054024
Total Beryllium (Be)	mg/L	<0.0010	B054021	<0.0010	B054026	<0.0010	B051942	<0.0010	0.0010	B054021
Total Boron (B)	mg/L	<0.020	B054024	<0.020	B054040	<0.020	B051944	0.024	0.020	B054024
Total Calcium (Ca)	mg/L	13	B054024	11	B054040	12	B051944	50	0.30	B054024
Total Chromium (Cr)	mg/L	<0.0010	B054021	<0.0010	B054026	<0.0010	B051942	<0.0010	0.0010	B054021
Total Cobalt (Co)	mg/L	<0.00030	B054021	<0.00030	B054026	<0.00030	B051942	<0.00030	0.00030	B054021
Total Copper (Cu)	mg/L	0.0077	B054021	0.0041	B054026	0.0050	B051942	0.011	0.0010	B054021
Total Iron (Fe)	mg/L	0.33	B054024	0.10	B054040	0.19	B051944	2.0	0.060	B054024
Total Lead (Pb)	mg/L	<0.00020	B054021	<0.00020	B054026	<0.00020	B051942	<0.00020	0.00020	B054021
Total Lithium (Li)	mg/L	<0.020	B054024	<0.020	B054040	<0.020	B051944	<0.020	0.020	B054024
Total Magnesium (Mg)	mg/L	3.8	B054024	3.3	B054040	3.2	B051944	8.7	0.20	B054024
Total Manganese (Mn)	mg/L	0.017	B054024	0.0085	B054040	0.013	B051944	0.030	0.0040	B054024
Total Molybdenum (Mo)	mg/L	<0.00020	B054021	<0.00020	B054026	<0.00020	B051942	<0.00020	0.00020	B054021
Total Nickel (Ni)	mg/L	0.00083	B054021	0.00052	B054026	0.00076	B051942	0.0010	0.00050	B054021
Total Phosphorus (P)	mg/L	<0.10	B054024	<0.10	B054040	<0.10	B051944	<0.10	0.10	B054024
Total Potassium (K)	mg/L	1.8	B054024	1.6	B054040	1.6	B051944	4.1	0.30	B054024
Total Selenium (Se)	mg/L	<0.00020	B054021	<0.00020	B054026	<0.00020	B051942	<0.00020	0.00020	B054021
Total Silicon (Si)	mg/L	0.96	B054024	0.69	B054040	0.82	B051944	0.81	0.50	B054024
Total Silver (Ag)	mg/L	<0.00010	B054021	<0.00010	B054026	<0.00010	B051942	<0.00010	0.00010	B054021
Total Sodium (Na)	mg/L	2.2	B054024	2.0	B054040	2.1	B051944	3.2	0.50	B054024
Total Strontium (Sr)	mg/L	0.027	B054024	0.025	B054040	0.025	B051944	0.047	0.020	B054024
Total Sulphur (S)	mg/L	6.9	B054024	5.1	B054040	5.8	B051944	47	0.20	B054024
Total Thallium (Tl)	mg/L	<0.00020	B054021	<0.00020	B054026	<0.00020	B051942	<0.00020	0.00020	B054021
Total Tin (Sn)	mg/L	<0.0010	B054021	<0.0010	B054026	<0.0010	B051942	<0.0010	0.0010	B054021
Total Titanium (Ti)	mg/L	0.0023	B054021	0.0017	B054026	0.0019	B051942	0.0023	0.0010	B054021
Total Uranium (U)	mg/L	<0.00010	B054021	<0.00010	B054026	<0.00010	B051942	<0.00010	0.00010	B054021
Total Vanadium (V)	mg/L	<0.0010	B054021	<0.0010	B054026	<0.0010	B051942	<0.0010	0.0010	B054021
Total Zinc (Zn)	mg/L	0.027	B054021	0.013	B054026	0.018	B051942	0.12	0.0030	B054021

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BVM645		BVM646	BVM647		
Sampling Date		2023/07/25		2023/07/25	2023/07/25		
COC Number		700505-03-01		700505-03-01	700505-03-01		
	UNITS	SW-117	QC Batch	TRIP BLANK	SW-116	RDL	QC Batch
Elements							
Total Cadmium (Cd)	ug/L	0.047	B050210	<0.020	0.088	0.020	B050210
Total Aluminum (Al)	mg/L	0.040	B051309	0.0036	0.050	0.0030	B051942
Total Antimony (Sb)	mg/L	<0.00060	B051309	<0.00060	<0.00060	0.00060	B051942
Total Arsenic (As)	mg/L	0.00043	B051309	<0.00020	0.00055	0.00020	B051942
Total Barium (Ba)	mg/L	<0.010	B051318	<0.010	<0.010	0.010	B051944
Total Beryllium (Be)	mg/L	<0.0010	B051309	<0.0010	<0.0010	0.0010	B051942
Total Boron (B)	mg/L	<0.020	B051318	<0.020	<0.020	0.020	B051944
Total Calcium (Ca)	mg/L	13	B051318	<0.30	13	0.30	B051944
Total Chromium (Cr)	mg/L	<0.0010	B051309	<0.0010	<0.0010	0.0010	B051942
Total Cobalt (Co)	mg/L	<0.00030	B051309	<0.00030	<0.00030	0.00030	B051942
Total Copper (Cu)	mg/L	0.0053	B051309	<0.0010	0.0065	0.0010	B051942
Total Iron (Fe)	mg/L	0.22	B051318	<0.060	0.46	0.060	B051944
Total Lead (Pb)	mg/L	<0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Lithium (Li)	mg/L	<0.020	B051318	<0.020	<0.020	0.020	B051944
Total Magnesium (Mg)	mg/L	3.4	B051318	<0.20	3.4	0.20	B051944
Total Manganese (Mn)	mg/L	0.0069	B051318	<0.0040	0.022	0.0040	B051944
Total Molybdenum (Mo)	mg/L	<0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Nickel (Ni)	mg/L	0.00062	B051309	<0.00050	0.00061	0.00050	B051942
Total Phosphorus (P)	mg/L	<0.10	B051318	<0.10	<0.10	0.10	B051944
Total Potassium (K)	mg/L	1.6	B051318	<0.30	1.6	0.30	B051944
Total Selenium (Se)	mg/L	<0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Silicon (Si)	mg/L	0.89	B051318	<0.50	0.91	0.50	B051944
Total Silver (Ag)	mg/L	<0.00010	B051309	<0.00010	<0.00010	0.00010	B051942
Total Sodium (Na)	mg/L	2.1	B051318	<0.50	2.1	0.50	B051944
Total Strontium (Sr)	mg/L	0.029	B051318	<0.020	0.026	0.020	B051944
Total Sulphur (S)	mg/L	7.7	B051318	<0.20	7.2	0.20	B051944
Total Thallium (Tl)	mg/L	<0.00020	B051309	<0.00020	<0.00020	0.00020	B051942
Total Tin (Sn)	mg/L	0.0012	B051309	<0.0010	<0.0010	0.0010	B051942
Total Titanium (Ti)	mg/L	<0.0010	B051309	<0.0010	0.0015	0.0010	B051942
Total Uranium (U)	mg/L	<0.00010	B051309	<0.00010	<0.00010	0.00010	B051942
Total Vanadium (V)	mg/L	<0.0010	B051309	<0.0010	<0.0010	0.0010	B051942
Total Zinc (Zn)	mg/L	0.015	B051309	<0.0030	0.024	0.0030	B051942

RDL = Reportable Detection Limit

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM615			BVM615			BVM616		
Sampling Date		2023/07/25 10:15			2023/07/25 10:15			2023/07/25 09:25		
COC Number		700505-01-01			700505-01-01			700505-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	32	0.50	B049985				110	0.50	B049985
Total Hardness (CaCO3)	mg/L	33.6	0.50	B049987				137	0.50	B049987
Misc. Inorganics										
pH	pH	6.80	N/A	B054516				6.42	N/A	B054569
Total Organic Carbon (C)	mg/L	13	0.50	B060382	13	0.50	B060382	8.8	0.50	B060382
Total Suspended Solids	mg/L	<1.0	1.0	B055091				1.7	0.96	B055091
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12 (1)	0.50	B061322				8.2 (1)	0.50	B061322
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054571
Alkalinity (Total as CaCO3)	mg/L	32	1.0	B054514				13	1.0	B054571
Bicarbonate (HCO3)	mg/L	40	1.0	B054514				16	1.0	B054571
Carbonate (CO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054571
Hydroxide (OH)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054571
Sulphate (SO4)	mg/L	4.9	1.0	B055312				130	5.0	B055280
Physical Properties										
Turbidity	NTU	0.37	0.10	B051145				13	0.10	B051145

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM617		BVM618			BVM619		
Sampling Date		2023/07/25 09:20		2023/07/25 09:30			2023/07/25 09:35		
COC Number		700505-01-01		700505-01-01			700505-01-01		
	UNITS	SB-2	QC Batch	CB-1	RDL	QC Batch	CB-2	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	130	B049985	130	0.50	B049985	140	0.50	B049985
Total Hardness (CaCO3)	mg/L	138	B049987	143	0.50	B049987	145	0.50	B049987
Misc. Inorganics									
pH	pH	6.43	B054516	6.41	N/A	B054516	6.42	N/A	B054516
Total Organic Carbon (C)	mg/L	8.9	B060382	8.7	0.50	B060382	8.8	0.50	B060382
Total Suspended Solids	mg/L	1.6	B055091	2.0	0.99	B055091	1.6	1.0	B055091
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.4 (1)	B061322	8.3 (1)	0.50	B061322	7.7 (1)	0.50	B061322
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B054514	<1.0	1.0	B054514	<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	11	B054514	10	1.0	B054514	12	1.0	B054514
Bicarbonate (HCO3)	mg/L	13	B054514	12	1.0	B054514	14	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	B054514	<1.0	1.0	B054514	<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	B054514	<1.0	1.0	B054514	<1.0	1.0	B054514
Sulphate (SO4)	mg/L	130	B055317	140	5.0	B055303	120	2.0	B055312
Physical Properties									
Turbidity	NTU	13	B051145	13	0.10	B051145	13	0.10	B051145

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM620		BVM621		BVM622			BVM623		
Sampling Date		2023/07/25 09:40		2023/07/25 09:45		2023/07/25 09:55			2023/07/25 09:50		
COC Number		700505-01-01		700505-01-01		700505-01-01			700505-01-01		
	UNITS	**EB-1**	**RDL**	**EB-2**	**QC Batch**	**NB-1**	**RDL**	**QC Batch**	**NB-2**	**RDL**	**QC Batch**
Calculated Parameters											
Hardness (CaCO3)	mg/L	140	0.50	150	B049985	150	0.50	B049985	130	0.50	B049985
Total Hardness (CaCO3)	mg/L	149	0.50	150	B049987	134	0.50	B049987	137	0.50	B049987
Misc. Inorganics											
pH	pH	6.40	N/A	6.38	B054569	6.43	N/A	B054516	6.42	N/A	B054516
Total Organic Carbon (C)	mg/L	8.2	0.50	8.2	B060382	8.6	0.50	B060382	8.7	0.50	B060382
Total Suspended Solids	mg/L	<0.96	0.96	2.3	B055091	0.97	0.97	B055091	1.5	0.96	B055091
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	8.0 (1)	0.50	7.5 (1)	B061322	8.0 (1)	0.50	B061322	8.2 (1)	0.50	B061322
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	<1.0	B054571	<1.0	1.0	B054514	<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	11	1.0	10	B054571	9.6	1.0	B054514	11	1.0	B054514
Bicarbonate (HCO3)	mg/L	13	1.0	13	B054571	12	1.0	B054514	14	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	1.0	<1.0	B054571	<1.0	1.0	B054514	<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	1.0	<1.0	B054571	<1.0	1.0	B054514	<1.0	1.0	B054514
Sulphate (SO4)	mg/L	140	5.0	140	B055312	130	5.0	B055312	140	5.0	B055303
Physical Properties											
Turbidity	NTU	9.0	0.10	8.4	B051145	11	0.10	B051145	11	0.10	B051145

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM624			BVM629			BVM630		
Sampling Date		2023/07/25 10:00			2023/07/25 08:45			2023/07/25 08:50		
COC Number		700505-01-01			700505-02-01			700505-02-01		
	UNITS	CLD	RDL	QC Batch	CL-3 SFC	RDL	QC Batch	CL-3 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	110	0.50	B049985	51	0.50	B049985	48	0.50	B049985
Total Hardness (CaCO3)	mg/L	147	0.50	B049987	49.2	0.50	B049987	48.2	0.50	B049987
Misc. Inorganics										
pH	pH	6.42	N/A	B053269	6.77	N/A	B054516	6.76	N/A	B054516
Total Organic Carbon (C)	mg/L	8.7	0.50	B060382	10	0.50	B060382	10	0.50	B060382
Total Suspended Solids	mg/L	2.6	1.0	B055091	<0.96	0.96	B055091	<0.95	0.95	B055091
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.0 (1)	0.50	B061322	9.7 (1)	0.50	B061347	9.7 (1)	0.50	B061347
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B053274	<1.0	1.0	B054514	<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	11	1.0	B053274	28	1.0	B054514	30	1.0	B054514
Bicarbonate (HCO3)	mg/L	14	1.0	B053274	34	1.0	B054514	36	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	1.0	B053274	<1.0	1.0	B054514	<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	1.0	B053274	<1.0	1.0	B054514	<1.0	1.0	B054514
Sulphate (SO4)	mg/L	140	5.0	B055303	26	1.0	B055312	29	1.0	B055283
Physical Properties										
Turbidity	NTU	11	0.10	B051145	0.21	0.10	B051145	0.22	0.10	B051145

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM631			BVM631			BVM632		
Sampling Date		2023/07/25 08:55			2023/07/25 08:55			2023/07/25 09:00		
COC Number		700505-02-01			700505-02-01			700505-02-01		
	UNITS	CL-7 SFC	RDL	QC Batch	CL-7 SFC Lab-Dup	RDL	QC Batch	CL-7 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	37	0.50	B049985				46	0.50	B049985
Total Hardness (CaCO3)	mg/L	44.3	0.50	B049987				49.2	0.50	B049987
Misc. Inorganics										
pH	pH	6.79	N/A	B054516				6.76	N/A	B054569
Total Organic Carbon (C)	mg/L	10	0.50	B060382				11	0.50	B060382
Total Suspended Solids	mg/L	<0.95	0.95	B055094	<0.99	0.99	B055094	<0.95	0.95	B055094
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	10 (1)	0.50	B061347				9.8 (1)	0.50	B061347
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054571
Alkalinity (Total as CaCO3)	mg/L	31	1.0	B054514				28	1.0	B054571
Bicarbonate (HCO3)	mg/L	38	1.0	B054514				34	1.0	B054571
Carbonate (CO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054571
Hydroxide (OH)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054571
Sulphate (SO4)	mg/L	23	1.0	B055317				20	1.0	B055312
Physical Properties										
Turbidity	NTU	0.18	0.10	B051178	0.18	0.10	B051178	0.19	0.10	B051178

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM633			BVM634			BVM635		
Sampling Date		2023/07/25 08:35			2023/07/25 08:40			2023/07/25 09:05		
COC Number		700505-02-01			700505-02-01			700505-02-01		
	UNITS	CL-8 SFC	RDL	QC Batch	CL-8 BTM	RDL	QC Batch	CL-2 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	46	0.50	B049985	43	0.50	B049985	46	0.50	B049985
Total Hardness (CaCO3)	mg/L	45.1	0.50	B049987	44.6	0.50	B050230	45.6	0.50	B050234
Misc. Inorganics										
pH	pH	6.77	N/A	B054516	6.76	N/A	B054569	6.78	N/A	B054516
Total Organic Carbon (C)	mg/L	10	0.50	B060382	10	0.50	B060382	10	0.50	B060382
Total Suspended Solids	mg/L	<1.0	1.0	B055094	<0.95	0.95	B055094	<0.97	0.97	B055094
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.4 (1)	0.50	B061347	9.2 (1)	0.50	B061347	11	0.50	B054790
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054571	<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B054514	31	1.0	B054571	29	1.0	B054514
Bicarbonate (HCO3)	mg/L	37	1.0	B054514	38	1.0	B054571	35	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054571	<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054571	<1.0	1.0	B054514
Sulphate (SO4)	mg/L	20	1.0	B055312	21	1.0	B055312	26	1.0	B055272
Physical Properties										
Turbidity	NTU	0.27	0.10	B051178	0.21	0.10	B051178	0.16	0.10	B051178

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM636			BVM637		BVM638		
Sampling Date		2023/07/25 09:10			2023/07/25 08:25		2023/07/25 08:30		
COC Number		700505-02-01			700505-02-01		700505-02-01		
	UNITS	CL-2 BTM	RDL	QC Batch	CL-4 SFC	QC Batch	CL-4 BTM	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	45	0.50	B050223	43	B050223	47	0.50	B050223
Total Hardness (CaCO3)	mg/L	45.5	0.50	B050234	44.3	B050234	46.7	0.50	B050234
Misc. Inorganics									
pH	pH	6.72	N/A	B054516	6.78	B054569	6.66	N/A	B054516
Total Organic Carbon (C)	mg/L	10	0.50	B060382	10	B060382	10	0.50	B060382
Total Suspended Solids	mg/L	1.3	0.95	B055094	<1.0	B055094	<1.0	1.0	B055094
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.1 (1)	0.50	B061347	9.9 (1)	B061347	9.5 (1)	0.50	B061347
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514	<1.0	B054571	<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B054514	32	B054571	27	1.0	B054514
Bicarbonate (HCO3)	mg/L	36	1.0	B054514	40	B054571	32	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	1.0	B054514	<1.0	B054571	<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	1.0	B054514	<1.0	B054571	<1.0	1.0	B054514
Sulphate (SO4)	mg/L	26	1.0	B055280	20	B055312	25	1.0	B055280
Physical Properties									
Turbidity	NTU	4.3	0.10	B051178	0.21	B051178	3.8	0.10	B051178

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM638			BVM640			BVM640		
Sampling Date		2023/07/25 08:30			2023/07/25 08:15			2023/07/25 08:15		
COC Number		700505-02-01			700505-03-01			700505-03-01		
	UNITS	CL-4 BTM Lab-Dup	RDL	QC Batch	CL-5 SFC	RDL	QC Batch	CL-5 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				42	0.50	B050223			
Total Hardness (CaCO3)	mg/L				43.3	0.50	B050234			
Misc. Inorganics										
pH	pH	6.75	N/A	B054516	6.81	N/A	B054516			
Total Organic Carbon (C)	mg/L				10	0.50	B061249	10	0.50	B061249
Total Suspended Solids	mg/L				<0.96	0.96	B055094			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				9.6 (1)	0.50	B061347			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054514			
Alkalinity (Total as CaCO3)	mg/L	28	1.0	B054514	30	1.0	B054514			
Bicarbonate (HCO3)	mg/L	35	1.0	B054514	37	1.0	B054514			
Carbonate (CO3)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054514			
Hydroxide (OH)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054514			
Sulphate (SO4)	mg/L				20	1.0	B055266			
Physical Properties										
Turbidity	NTU				0.17	0.10	B051178			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM641			BVM642			BVM642		
Sampling Date		2023/07/25 08:20			2023/07/25 08:05			2023/07/25 08:05		
COC Number		700505-03-01			700505-03-01			700505-03-01		
	UNITS	CL-5 BTM	RDL	QC Batch	CL-6 SFC	RDL	QC Batch	CL-6 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	45	0.50	B050223	41	0.50	B050223			
Total Hardness (CaCO3)	mg/L	49.3	0.50	B050234	41.1	0.50	B050234			
Misc. Inorganics										
pH	pH	6.75	N/A	B054516	6.77	N/A	B054569			
Total Organic Carbon (C)	mg/L	10	0.50	B061398	10	0.50	B061398	10	0.50	B061398
Total Suspended Solids	mg/L	<0.99	0.99	B055094	<0.97	0.97	B055094			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.4 (1)	0.50	B061347	9.7 (1)	0.50	B061347			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054571			
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B054514	31	1.0	B054571			
Bicarbonate (HCO3)	mg/L	37	1.0	B054514	38	1.0	B054571			
Carbonate (CO3)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054571			
Hydroxide (OH)	mg/L	<1.0	1.0	B054514	<1.0	1.0	B054571			
Sulphate (SO4)	mg/L	26	1.0	B055266	18	1.0	B055280			
Physical Properties										
Turbidity	NTU	2.8	0.10	B051178	0.17	0.10	B051178			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM643			BVM643			BVM644		
Sampling Date		2023/07/25 08:10			2023/07/25 08:10			2023/07/25		
COC Number		700505-03-01			700505-03-01			700505-03-01		
	UNITS	CL-6 BTM	RDL	QC Batch	CL-6 BTM Lab-Dup	RDL	QC Batch	SW-118	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	44	0.50	B050223				150	0.50	B050223
Total Hardness (CaCO3)	mg/L	43.0	0.50	B050234				160	0.50	B050234
Misc. Inorganics										
pH	pH	6.78	N/A	B054516				6.40	N/A	B054516
Total Organic Carbon (C)	mg/L	10	0.50	B061148	10	0.50	B061148	8.2	0.50	B061325
Total Suspended Solids	mg/L	<0.96	0.96	B055094				<0.95	0.95	B055094
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.9 (1)	0.50	B061347				7.9 (1)	0.50	B061347
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	31	1.0	B054514				10	1.0	B054514
Bicarbonate (HCO3)	mg/L	38	1.0	B054514				12	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054514
Sulphate (SO4)	mg/L	18	1.0	B055312				150	5.0	B055261
Physical Properties										
Turbidity	NTU	0.41	0.10	B051178				8.5	0.10	B051178

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM644			BVM645			BVM645		
Sampling Date		2023/07/25			2023/07/25			2023/07/25		
COC Number		700505-03-01			700505-03-01			700505-03-01		
	UNITS	SW-118 Lab-Dup	RDL	QC Batch	SW-117	RDL	QC Batch	SW-117 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				47	0.50	B050223			
Total Hardness (CaCO3)	mg/L				47.5	0.50	B050234			
Misc. Inorganics										
pH	pH				6.76	N/A	B054516			
Total Organic Carbon (C)	mg/L	8.0	0.50	B061325	10	0.50	B061429	10	0.50	B061429
Total Suspended Solids	mg/L				<0.96	0.96	B055094			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				10 (1)	0.50	B061347			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B054514			
Alkalinity (Total as CaCO3)	mg/L				29	1.0	B054514			
Bicarbonate (HCO3)	mg/L				36	1.0	B054514			
Carbonate (CO3)	mg/L				<1.0	1.0	B054514			
Hydroxide (OH)	mg/L				<1.0	1.0	B054514			
Sulphate (SO4)	mg/L				26	1.0	B055280			
Physical Properties										
Turbidity	NTU				0.32	0.10	B051178			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM646			BVM646			BVM647		
Sampling Date		2023/07/25			2023/07/25			2023/07/25		
COC Number		700505-03-01			700505-03-01			700505-03-01		
	UNITS	TRIP BLANK	RDL	QC Batch	TRIP BLANK Lab-Dup	RDL	QC Batch	SW-116	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	<0.50	0.50	B050223				47	0.50	B050223
Total Hardness (CaCO3)	mg/L	<0.50	0.50	B050234				47.2	0.50	B050234
Misc. Inorganics										
pH	pH	5.04	N/A	B054516				6.76	N/A	B054516
Total Organic Carbon (C)	mg/L	<0.50	0.50	B061431	<0.50	0.50	B061431	10	0.50	B061526
Total Suspended Solids	mg/L	<0.97	0.97	B055094				1.4	0.97	B055094
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	<0.50 (1)	0.50	B061347				10 (1)	0.50	B061347
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054514
Alkalinity (Total as CaCO3)	mg/L	<1.0	1.0	B054514				30	1.0	B054514
Bicarbonate (HCO3)	mg/L	<1.0	1.0	B054514				36	1.0	B054514
Carbonate (CO3)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054514
Hydroxide (OH)	mg/L	<1.0	1.0	B054514				<1.0	1.0	B054514
Sulphate (SO4)	mg/L	<1.0	1.0	B055312				26	1.0	B055317
Physical Properties										
Turbidity	NTU	<0.10	0.10	B051178				3.7	0.10	B051178

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BVM647		
Sampling Date		2023/07/25		
COC Number		700505-03-01		
	UNITS	**SW-116 Lab-Dup**	**RDL**	**QC Batch**
Misc. Inorganics				
Total Organic Carbon (C)	mg/L	10	0.50	B061526
Anions				
Sulphate (SO4)	mg/L	26	1.0	B055317

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	3.6°C
Package 2	1.1°C
Package 3	17.2°C

Sample BVM635, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B051145	Turbidity	2023/07/28			102	80 - 120	<0.10	NTU		
B051178	Turbidity	2023/07/28			100	80 - 120	<0.10	NTU	1.1	20
B051309	Total Aluminum (Al)	2023/07/28	121 (1)	80 - 120	115	80 - 120	<0.0030	mg/L		
B051309	Total Antimony (Sb)	2023/07/28	113	80 - 120	110	80 - 120	<0.00060	mg/L		
B051309	Total Arsenic (As)	2023/07/28	99	80 - 120	97	80 - 120	<0.00020	mg/L	11	20
B051309	Total Beryllium (Be)	2023/07/28	107	80 - 120	102	80 - 120	<0.0010	mg/L		
B051309	Total Chromium (Cr)	2023/07/28	105	80 - 120	103	80 - 120	<0.0010	mg/L		
B051309	Total Cobalt (Co)	2023/07/28	107	80 - 120	105	80 - 120	<0.00030	mg/L		
B051309	Total Copper (Cu)	2023/07/28	105	80 - 120	104	80 - 120	<0.0010	mg/L		
B051309	Total Lead (Pb)	2023/07/28	110	80 - 120	106	80 - 120	<0.00020	mg/L		
B051309	Total Molybdenum (Mo)	2023/07/28	113	80 - 120	109	80 - 120	<0.00020	mg/L	4.3	20
B051309	Total Nickel (Ni)	2023/07/28	105	80 - 120	103	80 - 120	<0.00050	mg/L		
B051309	Total Selenium (Se)	2023/07/28	98	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B051309	Total Silver (Ag)	2023/07/28	110	80 - 120	106	80 - 120	<0.00010	mg/L		
B051309	Total Thallium (Tl)	2023/07/28	110	80 - 120	106	80 - 120	<0.00020	mg/L		
B051309	Total Tin (Sn)	2023/07/28	112	80 - 120	108	80 - 120	<0.0010	mg/L		
B051309	Total Titanium (Ti)	2023/07/28	107	80 - 120	106	80 - 120	<0.0010	mg/L		
B051309	Total Uranium (U)	2023/07/28	109	80 - 120	106	80 - 120	<0.00010	mg/L		
B051309	Total Vanadium (V)	2023/07/28	107	80 - 120	104	80 - 120	<0.0010	mg/L		
B051309	Total Zinc (Zn)	2023/07/28	98	80 - 120	95	80 - 120	<0.0030	mg/L		
B051318	Total Barium (Ba)	2023/07/28	97	80 - 120	99	80 - 120	<0.010	mg/L	3.3	20
B051318	Total Boron (B)	2023/07/28	99	80 - 120	100	80 - 120	<0.020	mg/L	2.9	20
B051318	Total Calcium (Ca)	2023/07/28	NC	80 - 120	98	80 - 120	<0.30	mg/L	2.0	20
B051318	Total Iron (Fe)	2023/07/28	NC	80 - 120	110	80 - 120	<0.060	mg/L	3.6	20
B051318	Total Lithium (Li)	2023/07/28	96	80 - 120	97	80 - 120	<0.020	mg/L	0.64	20
B051318	Total Magnesium (Mg)	2023/07/28	96	80 - 120	98	80 - 120	<0.20	mg/L	1.8	20
B051318	Total Manganese (Mn)	2023/07/28	106	80 - 120	107	80 - 120	<0.0040	mg/L	3.4	20
B051318	Total Phosphorus (P)	2023/07/28	100	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B051318	Total Potassium (K)	2023/07/28	100	80 - 120	101	80 - 120	<0.30	mg/L	4.5	20
B051318	Total Silicon (Si)	2023/07/28	100	80 - 120	101	80 - 120	<0.50	mg/L	4.3	20
B051318	Total Sodium (Na)	2023/07/28	98	80 - 120	99	80 - 120	<0.50	mg/L	2.2	20
B051318	Total Strontium (Sr)	2023/07/28	94	80 - 120	97	80 - 120	<0.020	mg/L	4.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B051318	Total Sulphur (S)	2023/07/28	95	80 - 120	98	80 - 120	<0.20	mg/L	3.5	20
B051942	Total Aluminum (Al)	2023/07/28	NC	80 - 120	104	80 - 120	<0.0030	mg/L	4.0	20
B051942	Total Antimony (Sb)	2023/07/28	111	80 - 120	111	80 - 120	<0.00060	mg/L	NC	20
B051942	Total Arsenic (As)	2023/07/28	101	80 - 120	101	80 - 120	<0.00020	mg/L	12	20
B051942	Total Beryllium (Be)	2023/07/28	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B051942	Total Chromium (Cr)	2023/07/28	100	80 - 120	98	80 - 120	<0.0010	mg/L	2.3	20
B051942	Total Cobalt (Co)	2023/07/28	101	80 - 120	99	80 - 120	<0.00030	mg/L	1.4	20
B051942	Total Copper (Cu)	2023/07/28	98	80 - 120	99	80 - 120	<0.0010	mg/L	3.4	20
B051942	Total Lead (Pb)	2023/07/28	100	80 - 120	100	80 - 120	<0.00020	mg/L	7.8	20
B051942	Total Molybdenum (Mo)	2023/07/28	109	80 - 120	104	80 - 120	<0.00020	mg/L	1.6	20
B051942	Total Nickel (Ni)	2023/07/28	99	80 - 120	98	80 - 120	<0.00050	mg/L	3.8	20
B051942	Total Selenium (Se)	2023/07/28	109	80 - 120	109	80 - 120	<0.00020	mg/L	0.74	20
B051942	Total Silver (Ag)	2023/07/28	103	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B051942	Total Thallium (Tl)	2023/07/28	78 (1)	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B051942	Total Tin (Sn)	2023/07/28	106	80 - 120	104	80 - 120	<0.0010	mg/L	3.1	20
B051942	Total Titanium (Ti)	2023/07/28	102	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B051942	Total Uranium (U)	2023/07/28	102	80 - 120	101	80 - 120	<0.00010	mg/L	2.9	20
B051942	Total Vanadium (V)	2023/07/28	102	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B051942	Total Zinc (Zn)	2023/07/28	104	80 - 120	102	80 - 120	<0.0030	mg/L	0.31	20
B051944	Total Barium (Ba)	2023/07/29	99	80 - 120	98	80 - 120	<0.010	mg/L	0.020	20
B051944	Total Boron (B)	2023/07/29	93	80 - 120	91	80 - 120	<0.020	mg/L	2.6	20
B051944	Total Calcium (Ca)	2023/07/29	NC	80 - 120	100	80 - 120	<0.30	mg/L	0.66	20
B051944	Total Iron (Fe)	2023/07/29	NC	80 - 120	109	80 - 120	<0.060	mg/L	2.3	20
B051944	Total Lithium (Li)	2023/07/29	97	80 - 120	98	80 - 120	<0.020	mg/L	1.8	20
B051944	Total Magnesium (Mg)	2023/07/29	103	80 - 120	101	80 - 120	<0.20	mg/L	0.28	20
B051944	Total Manganese (Mn)	2023/07/29	95	80 - 120	95	80 - 120	<0.0040	mg/L	2.5	20
B051944	Total Phosphorus (P)	2023/07/29	100	80 - 120	100	80 - 120	<0.10	mg/L	0.72	20
B051944	Total Potassium (K)	2023/07/29	100	80 - 120	99	80 - 120	<0.30	mg/L	0.69	20
B051944	Total Silicon (Si)	2023/07/29	NC	80 - 120	96	80 - 120	<0.50	mg/L	1.9	20
B051944	Total Sodium (Na)	2023/07/29	99	80 - 120	98	80 - 120	<0.50	mg/L	0.90	20
B051944	Total Strontium (Sr)	2023/07/29	94	80 - 120	94	80 - 120	<0.020	mg/L	0.15	20
B051944	Total Sulphur (S)	2023/07/29	98	80 - 120	95	80 - 120	<0.20	mg/L	1.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B053269	pH	2023/07/30			100	97 - 103			0.52	N/A
B053274	Alkalinity (PP as CaCO3)	2023/07/30					<1.0	mg/L	NC	20
B053274	Alkalinity (Total as CaCO3)	2023/07/30			102	80 - 120	<1.0	mg/L	2.3	20
B053274	Bicarbonate (HCO3)	2023/07/30					<1.0	mg/L	2.3	20
B053274	Carbonate (CO3)	2023/07/30					<1.0	mg/L	NC	20
B053274	Hydroxide (OH)	2023/07/30					<1.0	mg/L	NC	20
B053313	Dissolved Barium (Ba)	2023/07/30	101	80 - 120	102	80 - 120	<0.010	mg/L		
B053313	Dissolved Boron (B)	2023/07/30	97	80 - 120	93	80 - 120	<0.020	mg/L		
B053313	Dissolved Calcium (Ca)	2023/07/30	106	80 - 120	104	80 - 120	<0.30	mg/L	1.0	20
B053313	Dissolved Iron (Fe)	2023/07/30	96	80 - 120	95	80 - 120	<0.060	mg/L	NC	20
B053313	Dissolved Lithium (Li)	2023/07/30	101	80 - 120	103	80 - 120	<0.020	mg/L		
B053313	Dissolved Magnesium (Mg)	2023/07/30	107	80 - 120	111	80 - 120	<0.20	mg/L	1.1	20
B053313	Dissolved Manganese (Mn)	2023/07/30	97	80 - 120	95	80 - 120	<0.0040	mg/L	NC	20
B053313	Dissolved Phosphorus (P)	2023/07/30	98	80 - 120	96	80 - 120	<0.10	mg/L		
B053313	Dissolved Potassium (K)	2023/07/30	105	80 - 120	103	80 - 120	<0.30	mg/L	1.8	20
B053313	Dissolved Silicon (Si)	2023/07/30	92	80 - 120	91	80 - 120	<0.50	mg/L		
B053313	Dissolved Sodium (Na)	2023/07/30	102	80 - 120	101	80 - 120	<0.50	mg/L	0.084	20
B053313	Dissolved Strontium (Sr)	2023/07/30	97	80 - 120	99	80 - 120	<0.020	mg/L		
B053313	Dissolved Sulphur (S)	2023/07/30	100	80 - 120	93	80 - 120	<0.20	mg/L		
B053330	Dissolved Aluminum (Al)	2023/07/30	106	80 - 120	109	80 - 120	<0.0030	mg/L	17	20
B053330	Dissolved Antimony (Sb)	2023/07/30	110	80 - 120	111	80 - 120	<0.00060	mg/L	NC	20
B053330	Dissolved Arsenic (As)	2023/07/30	99	80 - 120	100	80 - 120	<0.00020	mg/L	20	20
B053330	Dissolved Beryllium (Be)	2023/07/30	100	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B053330	Dissolved Chromium (Cr)	2023/07/30	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B053330	Dissolved Cobalt (Co)	2023/07/30	102	80 - 120	105	80 - 120	<0.00030	mg/L	NC	20
B053330	Dissolved Copper (Cu)	2023/07/30	102	80 - 120	103	80 - 120	<0.0010	mg/L	1.1	20
B053330	Dissolved Lead (Pb)	2023/07/30	99	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B053330	Dissolved Molybdenum (Mo)	2023/07/30	103	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B053330	Dissolved Nickel (Ni)	2023/07/30	101	80 - 120	103	80 - 120	<0.00050	mg/L	12	20
B053330	Dissolved Selenium (Se)	2023/07/30	102	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B053330	Dissolved Silver (Ag)	2023/07/30	99	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B053330	Dissolved Thallium (Tl)	2023/07/30	99	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B053330	Dissolved Tin (Sn)	2023/07/30	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B053330	Dissolved Titanium (Ti)	2023/07/30	105	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B053330	Dissolved Uranium (U)	2023/07/30	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B053330	Dissolved Vanadium (V)	2023/07/30	103	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B053330	Dissolved Zinc (Zn)	2023/07/30	NC	80 - 120	102	80 - 120	<0.0030	mg/L	1.1	20
B054021	Total Aluminum (Al)	2023/08/01	NC	80 - 120	105	80 - 120	<0.0030	mg/L	19	20
B054021	Total Antimony (Sb)	2023/08/01	110	80 - 120	108	80 - 120	<0.00060	mg/L	NC	20
B054021	Total Arsenic (As)	2023/08/01	97	80 - 120	97	80 - 120	<0.00020	mg/L	9.8	20
B054021	Total Beryllium (Be)	2023/08/01	99	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B054021	Total Chromium (Cr)	2023/08/01	97	80 - 120	96	80 - 120	<0.0010	mg/L	11	20
B054021	Total Cobalt (Co)	2023/08/01	97	80 - 120	97	80 - 120	<0.00030	mg/L	13	20
B054021	Total Copper (Cu)	2023/08/01	93	80 - 120	96	80 - 120	<0.0010	mg/L	36 (1)	20
B054021	Total Lead (Pb)	2023/08/01	97	80 - 120	99	80 - 120	<0.00020	mg/L	12	20
B054021	Total Molybdenum (Mo)	2023/08/01	106	80 - 120	101	80 - 120	<0.00020	mg/L	19	20
B054021	Total Nickel (Ni)	2023/08/01	92	80 - 120	95	80 - 120	<0.00050	mg/L	10	20
B054021	Total Selenium (Se)	2023/08/01	100	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B054021	Total Silver (Ag)	2023/08/01	101	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B054021	Total Thallium (Tl)	2023/08/01	99	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B054021	Total Tin (Sn)	2023/08/01	107	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B054021	Total Titanium (Ti)	2023/08/01	106	80 - 120	98	80 - 120	<0.0010	mg/L	19	20
B054021	Total Uranium (U)	2023/08/01	99	80 - 120	97	80 - 120	<0.00010	mg/L	8.5	20
B054021	Total Vanadium (V)	2023/08/01	100	80 - 120	97	80 - 120	<0.0010	mg/L	13	20
B054021	Total Zinc (Zn)	2023/08/01	93	80 - 120	97	80 - 120	<0.0030	mg/L	0.58	20
B054024	Total Barium (Ba)	2023/07/31	100	80 - 120	101	80 - 120	<0.010	mg/L	5.2	20
B054024	Total Boron (B)	2023/07/31	101	80 - 120	103	80 - 120	<0.020	mg/L	1.9	20
B054024	Total Calcium (Ca)	2023/07/31	101	80 - 120	103	80 - 120	<0.30	mg/L	1.3	20
B054024	Total Iron (Fe)	2023/07/31	100	80 - 120	103	80 - 120	<0.060	mg/L	7.9	20
B054024	Total Lithium (Li)	2023/07/31	101	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B054024	Total Magnesium (Mg)	2023/07/31	112	80 - 120	113	80 - 120	<0.20	mg/L	0.71	20
B054024	Total Manganese (Mn)	2023/07/31	103	80 - 120	104	80 - 120	<0.0040	mg/L	0.36	20
B054024	Total Phosphorus (P)	2023/07/31	97	80 - 120	98	80 - 120	<0.10	mg/L	1.5	20
B054024	Total Potassium (K)	2023/07/31	101	80 - 120	103	80 - 120	<0.30	mg/L	8.0	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B054024	Total Silicon (Si)	2023/07/31	92	80 - 120	94	80 - 120	<0.50	mg/L	9.0	20
B054024	Total Sodium (Na)	2023/07/31	99	80 - 120	103	80 - 120	<0.50	mg/L	1.1	20
B054024	Total Strontium (Sr)	2023/07/31	96	80 - 120	98	80 - 120	<0.020	mg/L	1.6	20
B054024	Total Sulphur (S)	2023/07/31	96	80 - 120	96	80 - 120	<0.20	mg/L	15	20
B054026	Total Aluminum (Al)	2023/08/01	NC	80 - 120	109	80 - 120	<0.0030	mg/L		
B054026	Total Antimony (Sb)	2023/08/01	111	80 - 120	113	80 - 120	<0.00060	mg/L	NC	20
B054026	Total Arsenic (As)	2023/08/01	99	80 - 120	104	80 - 120	<0.00020	mg/L	4.0	20
B054026	Total Beryllium (Be)	2023/08/01	104	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B054026	Total Chromium (Cr)	2023/08/01	99	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B054026	Total Cobalt (Co)	2023/08/01	99	80 - 120	106	80 - 120	<0.00030	mg/L	2.4	20
B054026	Total Copper (Cu)	2023/08/01	97	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B054026	Total Lead (Pb)	2023/08/01	101	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B054026	Total Molybdenum (Mo)	2023/08/01	109	80 - 120	108	80 - 120	<0.00020	mg/L	0.59	20
B054026	Total Nickel (Ni)	2023/08/01	98	80 - 120	105	80 - 120	<0.00050	mg/L	8.6	20
B054026	Total Selenium (Se)	2023/08/01	101	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B054026	Total Silver (Ag)	2023/08/01	103	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B054026	Total Thallium (Tl)	2023/08/01	101	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B054026	Total Tin (Sn)	2023/08/01	107	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
B054026	Total Titanium (Ti)	2023/08/01	95	80 - 120	104	80 - 120	<0.0010	mg/L	6.1	20
B054026	Total Uranium (U)	2023/08/01	104	80 - 120	105	80 - 120	<0.00010	mg/L	5.2	20
B054026	Total Vanadium (V)	2023/08/01	102	80 - 120	106	80 - 120	<0.0010	mg/L	3.9	20
B054026	Total Zinc (Zn)	2023/08/01	98	80 - 120	107	80 - 120	<0.0030	mg/L	6.4	20
B054027	Dissolved Aluminum (Al)	2023/07/31	96	80 - 120	110	80 - 120	<0.0030	mg/L	2.4	20
B054027	Dissolved Antimony (Sb)	2023/07/31	103	80 - 120	112	80 - 120	<0.00060	mg/L	NC	20
B054027	Dissolved Arsenic (As)	2023/07/31	93	80 - 120	100	80 - 120	<0.00020	mg/L	7.7	20
B054027	Dissolved Beryllium (Be)	2023/07/31	93	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B054027	Dissolved Chromium (Cr)	2023/07/31	92	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B054027	Dissolved Cobalt (Co)	2023/07/31	93	80 - 120	102	80 - 120	<0.00030	mg/L	NC	20
B054027	Dissolved Copper (Cu)	2023/07/31	91	80 - 120	101	80 - 120	<0.0010	mg/L	38 (1)	20
B054027	Dissolved Lead (Pb)	2023/07/31	92	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B054027	Dissolved Molybdenum (Mo)	2023/07/31	96	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B054027	Dissolved Nickel (Ni)	2023/07/31	91	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B054027	Dissolved Selenium (Se)	2023/07/31	99	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B054027	Dissolved Silver (Ag)	2023/07/31	92	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B054027	Dissolved Thallium (Tl)	2023/07/31	92	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B054027	Dissolved Tin (Sn)	2023/07/31	95	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B054027	Dissolved Titanium (Ti)	2023/07/31	94	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B054027	Dissolved Uranium (U)	2023/07/31	93	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B054027	Dissolved Vanadium (V)	2023/07/31	93	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B054027	Dissolved Zinc (Zn)	2023/07/31	93	80 - 120	102	80 - 120	<0.0030	mg/L	0.29	20
B054040	Total Barium (Ba)	2023/08/01	95	80 - 120	95	80 - 120	<0.010	mg/L		
B054040	Total Boron (B)	2023/08/01	90	80 - 120	92	80 - 120	<0.020	mg/L	4.6	20
B054040	Total Calcium (Ca)	2023/08/01	96	80 - 120	96	80 - 120	<0.30	mg/L		
B054040	Total Iron (Fe)	2023/08/01	101	80 - 120	104	80 - 120	<0.060	mg/L	5.3	20
B054040	Total Lithium (Li)	2023/08/01	96	80 - 120	96	80 - 120	<0.020	mg/L		
B054040	Total Magnesium (Mg)	2023/08/01	104	80 - 120	104	80 - 120	<0.20	mg/L		
B054040	Total Manganese (Mn)	2023/08/01	98	80 - 120	100	80 - 120	<0.0040	mg/L	5.5	20
B054040	Total Phosphorus (P)	2023/08/01	107	80 - 120	109	80 - 120	<0.10	mg/L		
B054040	Total Potassium (K)	2023/08/01	98	80 - 120	99	80 - 120	<0.30	mg/L		
B054040	Total Silicon (Si)	2023/08/01	96	80 - 120	98	80 - 120	<0.50	mg/L		
B054040	Total Sodium (Na)	2023/08/01	93	80 - 120	94	80 - 120	<0.50	mg/L		
B054040	Total Strontium (Sr)	2023/08/01	90	80 - 120	91	80 - 120	<0.020	mg/L		
B054040	Total Sulphur (S)	2023/08/01	97	80 - 120	98	80 - 120	<0.20	mg/L		
B054051	Dissolved Aluminum (Al)	2023/07/31	108	80 - 120	109	80 - 120	<0.0030	mg/L	NC	20
B054051	Dissolved Antimony (Sb)	2023/07/31	112	80 - 120	110	80 - 120	<0.00060	mg/L	NC	20
B054051	Dissolved Arsenic (As)	2023/07/31	105	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B054051	Dissolved Beryllium (Be)	2023/07/31	101	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B054051	Dissolved Chromium (Cr)	2023/07/31	98	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B054051	Dissolved Cobalt (Co)	2023/07/31	98	80 - 120	101	80 - 120	<0.00030	mg/L	0.049	20
B054051	Dissolved Copper (Cu)	2023/07/31	96	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B054051	Dissolved Lead (Pb)	2023/07/31	98	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B054051	Dissolved Molybdenum (Mo)	2023/07/31	NC	80 - 120	104	80 - 120	<0.00020	mg/L	3.0	20
B054051	Dissolved Nickel (Ni)	2023/07/31	96	80 - 120	100	80 - 120	<0.00050	mg/L	3.9	20
B054051	Dissolved Selenium (Se)	2023/07/31	108	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B054051	Dissolved Silver (Ag)	2023/07/31	100	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B054051	Dissolved Thallium (Tl)	2023/07/31	99	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B054051	Dissolved Tin (Sn)	2023/07/31	106	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B054051	Dissolved Titanium (Ti)	2023/07/31	107	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B054051	Dissolved Uranium (U)	2023/07/31	100	80 - 120	101	80 - 120	<0.00010	mg/L	1.4	20
B054051	Dissolved Vanadium (V)	2023/07/31	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B054051	Dissolved Zinc (Zn)	2023/07/31	102	80 - 120	101	80 - 120	<0.0030	mg/L	NC	20
B054212	Dissolved Barium (Ba)	2023/07/31	113	80 - 120	102	80 - 120	<0.010	mg/L	7.4	20
B054212	Dissolved Boron (B)	2023/07/31	114	80 - 120	98	80 - 120	<0.020	mg/L	NC	20
B054212	Dissolved Calcium (Ca)	2023/07/31	111	80 - 120	104	80 - 120	<0.30	mg/L	0.32	20
B054212	Dissolved Iron (Fe)	2023/07/31	115	80 - 120	104	80 - 120	<0.060	mg/L	NC	20
B054212	Dissolved Lithium (Li)	2023/07/31	119	80 - 120	109	80 - 120	<0.020	mg/L	NC	20
B054212	Dissolved Magnesium (Mg)	2023/07/31	109	80 - 120	101	80 - 120	<0.20	mg/L	0.25	20
B054212	Dissolved Manganese (Mn)	2023/07/31	116	80 - 120	105	80 - 120	<0.0040	mg/L	NC	20
B054212	Dissolved Phosphorus (P)	2023/07/31	115	80 - 120	102	80 - 120	<0.10	mg/L	NC	20
B054212	Dissolved Potassium (K)	2023/07/31	117	80 - 120	106	80 - 120	<0.30	mg/L	6.2	20
B054212	Dissolved Silicon (Si)	2023/07/31	105	80 - 120	96	80 - 120	<0.50	mg/L	5.1	20
B054212	Dissolved Sodium (Na)	2023/07/31	113	80 - 120	103	80 - 120	<0.50	mg/L	2.9	20
B054212	Dissolved Strontium (Sr)	2023/07/31	108	80 - 120	100	80 - 120	<0.020	mg/L	1.8	20
B054212	Dissolved Sulphur (S)	2023/07/31	119	80 - 120	103	80 - 120	<0.20	mg/L	1.4	20
B054431	Dissolved Barium (Ba)	2023/07/31	92	80 - 120	97	80 - 120	<0.010	mg/L		
B054431	Dissolved Boron (B)	2023/07/31	97	80 - 120	99	80 - 120	<0.020	mg/L		
B054431	Dissolved Calcium (Ca)	2023/07/31	93	80 - 120	97	80 - 120	<0.30	mg/L		
B054431	Dissolved Iron (Fe)	2023/07/31	87	80 - 120	95	80 - 120	<0.060	mg/L		
B054431	Dissolved Lithium (Li)	2023/07/31	91	80 - 120	96	80 - 120	<0.020	mg/L		
B054431	Dissolved Magnesium (Mg)	2023/07/31	101	80 - 120	108	80 - 120	<0.20	mg/L		
B054431	Dissolved Manganese (Mn)	2023/07/31	90	80 - 120	97	80 - 120	<0.0040	mg/L		
B054431	Dissolved Phosphorus (P)	2023/07/31	88	80 - 120	93	80 - 120	<0.10	mg/L		
B054431	Dissolved Potassium (K)	2023/07/31	94	80 - 120	97	80 - 120	<0.30	mg/L		
B054431	Dissolved Silicon (Si)	2023/07/31	81	80 - 120	87	80 - 120	<0.50	mg/L		
B054431	Dissolved Sodium (Na)	2023/07/31	89	80 - 120	95	80 - 120	<0.50	mg/L		
B054431	Dissolved Strontium (Sr)	2023/07/31	87	80 - 120	94	80 - 120	<0.020	mg/L		

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B054431	Dissolved Sulphur (S)	2023/07/31	89	80 - 120	93	80 - 120	<0.20	mg/L		
B054435	Dissolved Barium (Ba)	2023/07/31	98	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
B054435	Dissolved Boron (B)	2023/07/31	99	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B054435	Dissolved Calcium (Ca)	2023/07/31	97	80 - 120	100	80 - 120	<0.30	mg/L	3.1	20
B054435	Dissolved Iron (Fe)	2023/07/31	88	80 - 120	100	80 - 120	<0.060	mg/L	3.1	20
B054435	Dissolved Lithium (Li)	2023/07/31	95	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B054435	Dissolved Magnesium (Mg)	2023/07/31	102	80 - 120	111	80 - 120	<0.20	mg/L	0.23	20
B054435	Dissolved Manganese (Mn)	2023/07/31	92	80 - 120	104	80 - 120	<0.0040	mg/L	7.6	20
B054435	Dissolved Phosphorus (P)	2023/07/31	91	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B054435	Dissolved Potassium (K)	2023/07/31	97	80 - 120	102	80 - 120	<0.30	mg/L	3.2	20
B054435	Dissolved Silicon (Si)	2023/07/31	84	80 - 120	94	80 - 120	<0.50	mg/L	4.3	20
B054435	Dissolved Sodium (Na)	2023/07/31	97	80 - 120	101	80 - 120	<0.50	mg/L	3.3	20
B054435	Dissolved Strontium (Sr)	2023/07/31	94	80 - 120	98	80 - 120	<0.020	mg/L	4.1	20
B054435	Dissolved Sulphur (S)	2023/07/31	93	80 - 120	99	80 - 120	<0.20	mg/L	4.5	20
B054443	Dissolved Barium (Ba)	2023/08/01	98	80 - 120	98	80 - 120	<0.010	mg/L		
B054443	Dissolved Boron (B)	2023/08/01	97	80 - 120	93	80 - 120	<0.020	mg/L		
B054443	Dissolved Calcium (Ca)	2023/08/01	102	80 - 120	99	80 - 120	<0.30	mg/L	2.0	20
B054443	Dissolved Iron (Fe)	2023/08/01	105	80 - 120	99	80 - 120	<0.060	mg/L	3.6	20
B054443	Dissolved Lithium (Li)	2023/08/01	98	80 - 120	99	80 - 120	<0.020	mg/L		
B054443	Dissolved Magnesium (Mg)	2023/08/01	105	80 - 120	102	80 - 120	<0.20	mg/L	1.7	20
B054443	Dissolved Manganese (Mn)	2023/08/01	104	80 - 120	96	80 - 120	<0.0040	mg/L	NC	20
B054443	Dissolved Phosphorus (P)	2023/08/01	114	80 - 120	105	80 - 120	<0.10	mg/L		
B054443	Dissolved Potassium (K)	2023/08/01	103	80 - 120	101	80 - 120	<0.30	mg/L	0.81	20
B054443	Dissolved Silicon (Si)	2023/08/01	97	80 - 120	93	80 - 120	<0.50	mg/L		
B054443	Dissolved Sodium (Na)	2023/08/01	99	80 - 120	97	80 - 120	<0.50	mg/L	1.9	20
B054443	Dissolved Strontium (Sr)	2023/08/01	93	80 - 120	95	80 - 120	<0.020	mg/L		
B054443	Dissolved Sulphur (S)	2023/08/01	102	80 - 120	97	80 - 120	<0.20	mg/L		
B054514	Alkalinity (PP as CaCO3)	2023/08/01					<1.0	mg/L	NC	20
B054514	Alkalinity (Total as CaCO3)	2023/08/01			103	80 - 120	<1.0	mg/L	6.5	20
B054514	Bicarbonate (HCO3)	2023/08/01					<1.0	mg/L	6.5	20
B054514	Carbonate (CO3)	2023/08/01					<1.0	mg/L	NC	20
B054514	Hydroxide (OH)	2023/08/01					<1.0	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B054516	pH	2023/08/01			101	97 - 103			1.3	N/A
B054569	pH	2023/08/01			100	97 - 103			0.058	N/A
B054571	Alkalinity (PP as CaCO3)	2023/08/01					<1.0	mg/L	NC	20
B054571	Alkalinity (Total as CaCO3)	2023/08/01			104	80 - 120	<1.0	mg/L	0.39	20
B054571	Bicarbonate (HCO3)	2023/08/01					<1.0	mg/L	0.39	20
B054571	Carbonate (CO3)	2023/08/01					<1.0	mg/L	NC	20
B054571	Hydroxide (OH)	2023/08/01					<1.0	mg/L	NC	20
B054790	Dissolved Organic Carbon (C)	2023/08/01	107	80 - 120	110	80 - 120	<0.50	mg/L	NC	20
B055091	Total Suspended Solids	2023/08/02	98	80 - 120	94	80 - 120	<1.0	mg/L	NC	20
B055094	Total Suspended Solids	2023/08/02	115	80 - 120	94	80 - 120	<1.0	mg/L	NC	20
B055261	Sulphate (SO4)	2023/08/01	116	80 - 120	98	80 - 120	<1.0	mg/L	NC	20
B055266	Sulphate (SO4)	2023/08/01	98	80 - 120	101	80 - 120	<1.0	mg/L	NC	20
B055272	Sulphate (SO4)	2023/08/01	115	80 - 120	97	80 - 120	<1.0	mg/L	NC	20
B055280	Sulphate (SO4)	2023/08/01	115	80 - 120	100	80 - 120	<1.0	mg/L	NC	20
B055283	Sulphate (SO4)	2023/08/01	92	80 - 120	97	80 - 120	<1.0	mg/L	NC	20
B055303	Sulphate (SO4)	2023/08/01	94	80 - 120	99	80 - 120	<1.0	mg/L	1.4	20
B055312	Sulphate (SO4)	2023/08/01	88	80 - 120	104	80 - 120	<1.0	mg/L	2.4	20
B055317	Sulphate (SO4)	2023/08/01	83	80 - 120	97	80 - 120	<1.0	mg/L	1.5	20
B057180	Dissolved Lead (Pb)	2023/08/02	91	80 - 120	89	80 - 120	<0.00020	mg/L	NC	20
B060382	Total Organic Carbon (C)	2023/08/04	98	80 - 120	94	80 - 120	<0.50	mg/L	0.68	20
B061148	Total Organic Carbon (C)	2023/08/04	96	80 - 120	93	80 - 120	<0.50	mg/L	0.79	20
B061249	Total Organic Carbon (C)	2023/08/05	91	80 - 120	95	80 - 120	<0.50	mg/L	2.1	20
B061322	Dissolved Organic Carbon (C)	2023/08/05			94	80 - 120	<0.50	mg/L		
B061325	Total Organic Carbon (C)	2023/08/05	91	80 - 120	94	80 - 120	<0.50	mg/L	2.1	20
B061347	Dissolved Organic Carbon (C)	2023/08/05			93	80 - 120	<0.50	mg/L		
B061398	Total Organic Carbon (C)	2023/08/05	92	80 - 120	93	80 - 120	<0.50	mg/L	0.30	20
B061429	Total Organic Carbon (C)	2023/08/05	93	80 - 120	95	80 - 120	<0.50	mg/L	1.2	20
B061431	Total Organic Carbon (C)	2023/08/06	91	80 - 120	93	80 - 120	<0.50	mg/L	NC	20

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B061526	Total Organic Carbon (C)	2023/08/06	99	80 - 120	96	80 - 120	<0.50	mg/L	0.96	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

Mauro Oselin, Scientific Specialist

Sandy Yuan, M.Sc., QP, Scientific Specialist

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Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C357081	700505
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#700505-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mmierczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/07/25	10:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC ASAP
2		SB-1		9:25		N	N	X	X	X	X	X	X	X	X	X	X	4	to meet hold times
3		SB-2		9:20		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:30		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		9:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		9:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		9:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		9:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		9:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:00		N	N	X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X

(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number *(call lab for #)*

mcal-07-1693

5/5

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dipple / Rachel Dipple	23/07/26	11:00	Monica Sharma / ASRACER ORIN	23/07/26 2023/07/27	11:05 09:00		☐	ACTR	☐ Yes ☑ No

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White: Bureau Veritas Yellow: Client

ice-yes

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C357081	700505
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#700505-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mmiemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

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Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/07/25	8:45	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-3 BTM		8:50		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-7 SFC		8:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		9:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		8:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		8:46		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		9:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		9:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		8:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		8:30		N	N	X	X	X	X	X	X	X	X	X	X	4	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Dupuis / Rachel Dupuis	23/07/26	11:00	Monica Sharma	23/07/26	11:05			ACTR	Yes / No
			AS RAVERGIER	2023/07/24	09:00				

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See ACTR

ice-yes

Bureau Veritas
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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C357081	700505
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#700505-03-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, MNiemczynski@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/07/25	8:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-5 BTM		8:20		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times.
3		CL-6 SFC		8:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SW-118		AM		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SW-117		AM		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		TRIP BLANK						X	X	X	X	X	X	X	X	X	X	4	
8		SW-116		AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / [signature]	23/07/26	11:00	Monica Sharma [signature]	23/07/26	11:05			ACTR	Yes / No
			BJRAURAGIN	2023/07/27	09:00				

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See ATR

ice - yes

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 701930-01-01, 701930-02-01, 701930-03-01

Report Date: 2023/08/17
Report #: R3382291
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C362057
Received: 2023/08/10, 12:45

Sample Matrix: Surface Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	1	N/A	2023/08/13	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	20	N/A	2023/08/14	AB SOP-00005	SM 23 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	7	N/A	2023/08/15	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	27	N/A	2023/08/14		Auto Calc
Cadmium - low level CCME - Dissolved (1)	1	N/A	2023/08/17		Auto Calc
Cadmium - low level CCME (Total) (1)	6	N/A	2023/08/15		Auto Calc
Cadmium - low level CCME (Total) (1)	22	N/A	2023/08/16		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	26	N/A	2023/08/15	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	2	N/A	2023/08/16	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	28	N/A	2023/08/17	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	16	N/A	2023/08/14		Auto Calc
Hardness (1)	12	N/A	2023/08/16		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	6	N/A	2023/08/15	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	14	N/A	2023/08/16	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	8	N/A	2023/08/17	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	16	N/A	2023/08/14	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	12	N/A	2023/08/16	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/08/14	2023/08/15	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	25	2023/08/15	2023/08/15	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	27	N/A	2023/08/14	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	1	N/A	2023/08/16	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	3	2023/08/14	2023/08/15	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	25	2023/08/15	2023/08/15	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	1	N/A	2023/08/13	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (1, 6)	20	N/A	2023/08/14	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (1, 6)	7	N/A	2023/08/15	AB SOP-00005	SM 24 4500-H+B m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 701930-01-01, 701930-02-01, 701930-03-01

Report Date: 2023/08/17
Report #: R3382291
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C362057
Received: 2023/08/10, 12:45

Sample Matrix: Surface Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon (Total Organic) (1, 7)	28	N/A	2023/08/17	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	27	2023/08/16	2023/08/16	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	1	2023/08/17	2023/08/17	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	26	N/A	2023/08/12	CAL SOP-00081	SM 23 2130 B m
Turbidity (1)	2	N/A	2023/08/17	CAL SOP-00081	SM 23 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.

(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).

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Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 701930-01-01, 701930-02-01, 701930-03-01

Report Date: 2023/08/17
Report #: R3382291
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C362057

Received: 2023/08/10, 12:45

(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP577		BWP578		BWP579	BWP580		
Sampling Date		2023/08/09 11:15		2023/08/09 09:50		2023/08/09 09:45	2023/08/09 09:55		
COC Number		701930-01-01		701930-01-01		701930-01-01	701930-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	CB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.49	B068104	0.24	B068104	0.23	0.25	0.020	B068104
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.016	B073902	0.0075	B069812	0.0073	0.0084	0.0030	B069812
Dissolved Antimony (Sb)	mg/L	<0.00060	B073902	<0.00060	B069812	<0.00060	<0.00060	0.00060	B069812
Dissolved Arsenic (As)	mg/L	0.00046	B073902	0.00024	B069812	0.00021	0.00022	0.00020	B069812
Dissolved Barium (Ba)	mg/L	<0.010	B069946	0.011	B069946	0.011	0.011	0.010	B069946
Dissolved Beryllium (Be)	mg/L	<0.0010	B073902	<0.0010	B069812	<0.0010	<0.0010	0.0010	B069812
Dissolved Boron (B)	mg/L	<0.020	B069946	<0.020	B069946	<0.020	<0.020	0.020	B069946
Dissolved Calcium (Ca)	mg/L	10	B069946	48	B069946	48	49	0.30	B069946
Dissolved Chromium (Cr)	mg/L	<0.0010	B073902	<0.0010	B069812	<0.0010	<0.0010	0.0010	B069812
Dissolved Cobalt (Co)	mg/L	<0.00030	B073902	<0.00030	B069812	<0.00030	<0.00030	0.00030	B069812
Dissolved Copper (Cu)	mg/L	0.021	B073902	0.0067	B069812	0.0065	0.0070	0.0010	B069812
Dissolved Iron (Fe)	mg/L	0.22	B069946	0.54	B069946	0.67	0.49	0.060	B069946
Dissolved Lead (Pb)	mg/L	<0.00020	B073902	<0.00020	B069812	<0.00020	<0.00020	0.00020	B069812
Dissolved Lithium (Li)	mg/L	<0.020	B069946	<0.020	B069946	<0.020	<0.020	0.020	B069946
Dissolved Magnesium (Mg)	mg/L	3.1	B069946	7.8	B069946	7.8	8.0	0.20	B069946
Dissolved Manganese (Mn)	mg/L	0.024	B069946	0.041	B069946	0.044	0.039	0.0040	B069946
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B073902	<0.00020	B069812	<0.00020	<0.00020	0.00020	B069812
Dissolved Nickel (Ni)	mg/L	0.00062	B073902	0.00085	B075062	0.00063	0.00063	0.00050	B069812
Dissolved Phosphorus (P)	mg/L	<0.10	B069946	<0.10	B069946	<0.10	<0.10	0.10	B069946
Dissolved Potassium (K)	mg/L	1.4	B069946	4.0	B069946	4.0	4.0	0.30	B069946
Dissolved Selenium (Se)	mg/L	<0.00020	B073902	<0.00020	B069812	<0.00020	<0.00020	0.00020	B069812
Dissolved Silicon (Si)	mg/L	1.1	B069946	0.69	B069946	0.68	0.66	0.50	B069946
Dissolved Silver (Ag)	mg/L	<0.00010	B073902	<0.00010	B069812	<0.00010	<0.00010	0.00010	B069812
Dissolved Sodium (Na)	mg/L	2.0	B069946	3.0	B069946	3.0	3.1	0.50	B069946
Dissolved Strontium (Sr)	mg/L	0.024	B069946	0.050	B069946	0.050	0.051	0.020	B069946
Dissolved Sulphur (S)	mg/L	3.1	B069946	46	B069946	46	46	0.20	B069946
Dissolved Thallium (Tl)	mg/L	<0.00020	B073902	<0.00020	B069812	<0.00020	<0.00020	0.00020	B069812
Dissolved Tin (Sn)	mg/L	<0.0010	B073902	<0.0010	B069812	<0.0010	<0.0010	0.0010	B069812
Dissolved Titanium (Ti)	mg/L	<0.0010	B073902	<0.0010	B069812	<0.0010	<0.0010	0.0010	B069812
Dissolved Uranium (U)	mg/L	<0.00010	B073902	<0.00010	B069812	<0.00010	<0.00010	0.00010	B069812
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP577		BWP578		BWP579	BWP580		
Sampling Date		2023/08/09 11:15		2023/08/09 09:50		2023/08/09 09:45	2023/08/09 09:55		
COC Number		701930-01-01		701930-01-01		701930-01-01	701930-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**QC Batch**	**SB-2**	**CB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B073902	<0.0010	B069812	<0.0010	<0.0010	0.0010	B069812
Dissolved Zinc (Zn)	mg/L	0.23	B073902	0.065	B069812	0.065	0.070	0.0030	B069812
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP581	BWP582	BWP583	BWP584	BWP585	BWP586		
Sampling Date		2023/08/09 10:00	2023/08/09 10:05	2023/08/09 10:10	2023/08/09 10:25	2023/08/09 10:20	2023/08/09 10:30		
COC Number		701930-01-01	701930-01-01	701930-01-01	701930-01-01	701930-01-01	701930-01-01		
	UNITS	CB-2	EB-1	EB-2	NB-1	NB-2	CLD	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.25	0.34	0.36	0.25	0.25	0.22	0.020	B068104
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0086	0.011	0.013	0.0095	0.0080	0.0086	0.0030	B069812
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B069812
Dissolved Arsenic (As)	mg/L	0.00023	0.00022	0.00022	0.00025	0.00022	0.00024	0.00020	B069812
Dissolved Barium (Ba)	mg/L	0.011	0.012	0.013	0.011	0.011	0.011	0.010	B069946
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B069946
Dissolved Calcium (Ca)	mg/L	49	53	56	51	51	52	0.30	B069946
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B069812
Dissolved Copper (Cu)	mg/L	0.0071	0.0077	0.0072	0.0078	0.0077	0.0072	0.0010	B069812
Dissolved Iron (Fe)	mg/L	0.51	0.53	0.31	0.51	0.62	0.55	0.060	B069946
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B069946
Dissolved Magnesium (Mg)	mg/L	7.9	8.4	8.7	8.2	8.2	8.1	0.20	B069946
Dissolved Manganese (Mn)	mg/L	0.039	0.030	0.028	0.048	0.039	0.041	0.0040	B069946
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00079	0.00084	<0.00050	0.00077	0.00072	0.00050	B069812
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B069946
Dissolved Potassium (K)	mg/L	4.0	4.2	4.3	3.9	4.0	3.9	0.30	B069946
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Silicon (Si)	mg/L	0.67	0.54	0.51	0.66	0.65	0.67	0.50	B069946
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B069812
Dissolved Sodium (Na)	mg/L	3.0	3.1	3.3	3.0	3.0	3.0	0.50	B069946
Dissolved Strontium (Sr)	mg/L	0.051	0.053	0.055	0.051	0.051	0.051	0.020	B069946
Dissolved Sulphur (S)	mg/L	46	51	52	49	49	48	0.20	B069946
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B069812

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP581	BWP582	BWP583	BWP584	BWP585	BWP586		
Sampling Date		2023/08/09 10:00	2023/08/09 10:05	2023/08/09 10:10	2023/08/09 10:25	2023/08/09 10:20	2023/08/09 10:30		
COC Number		701930-01-01	701930-01-01	701930-01-01	701930-01-01	701930-01-01	701930-01-01		
	UNITS	**CB-2**	**EB-1**	**EB-2**	**NB-1**	**NB-2**	**CLD**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Zinc (Zn)	mg/L	0.067	0.092	0.098	0.071	0.071	0.067	0.0030	B069812
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP587	BWP588	BWP589		BWP590		
Sampling Date		2023/08/09 08:45	2023/08/09 08:50	2023/08/09 08:55		2023/08/09 09:00		
COC Number		701930-02-01	701930-02-01	701930-02-01		701930-02-01		
	UNITS	CL-3 SFC	CL-3 BTM	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	<0.020	0.025	0.027	B068104	0.028	0.020	B068104
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.0095	0.010	0.010	B069817	0.011	0.0030	B069812
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B069817	<0.00060	0.00060	B069812
Dissolved Arsenic (As)	mg/L	0.00045	0.00036	0.00039	B069817	0.00043	0.00020	B069812
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	B070311	<0.010	0.010	B069946
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069812
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	B070311	<0.020	0.020	B069946
Dissolved Calcium (Ca)	mg/L	13	14	14	B070311	14	0.30	B069946
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069812
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B069817	<0.00030	0.00030	B069812
Dissolved Copper (Cu)	mg/L	0.0044	0.0049	0.0046	B069817	0.0044	0.0010	B069812
Dissolved Iron (Fe)	mg/L	<0.060	<0.060	0.061	B070311	0.073	0.060	B069946
Dissolved Lead (Pb)	mg/L	0.00028	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069812
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B070311	<0.020	0.020	B069946
Dissolved Magnesium (Mg)	mg/L	3.6	3.7	3.7	B070311	3.6	0.20	B069946
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	<0.0040	B070311	<0.0040	0.0040	B069946
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069812
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	B069817	<0.00050	0.00050	B069812
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B070311	<0.10	0.10	B069946
Dissolved Potassium (K)	mg/L	1.6	1.7	1.6	B070311	1.6	0.30	B069946
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069812
Dissolved Silicon (Si)	mg/L	0.70	0.68	0.71	B070311	0.66	0.50	B069946
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B069817	<0.00010	0.00010	B069812
Dissolved Sodium (Na)	mg/L	2.2	2.3	2.2	B070311	2.1	0.50	B069946
Dissolved Strontium (Sr)	mg/L	0.028	0.030	0.029	B070311	0.028	0.020	B069946
Dissolved Sulphur (S)	mg/L	7.9	7.7	8.3	B070311	7.2	0.20	B069946
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069812
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069812
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069812
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B069817	<0.00010	0.00010	B069812

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP587	BWP588	BWP589		BWP590		
Sampling Date		2023/08/09 08:45	2023/08/09 08:50	2023/08/09 08:55		2023/08/09 09:00		
COC Number		701930-02-01	701930-02-01	701930-02-01		701930-02-01		
	UNITS	**CL-3 SFC**	**CL-3 BTM**	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069812
Dissolved Zinc (Zn)	mg/L	0.0058	0.0069	0.0065	B069817	0.0072	0.0030	B069812
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP591	BWP592		BWP593	BWP594	BWP595		
Sampling Date		2023/08/09 08:35	2023/08/09 08:40		2023/08/09 09:05	2023/08/09 09:10	2023/08/09 08:25		
COC Number		701930-02-01	701930-02-01		701930-02-01	701930-02-01	701930-02-01		
	UNITS	CL-8 SFC	CL-8 BTM	QC Batch	CL-2 SFC	CL-2BTM	CL-4 SFC	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	0.023	B068104	0.021	0.071	<0.020	0.020	B068104
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0097	0.010	B069817	0.011	0.015	0.0096	0.0030	B069812
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B069817	<0.00060	<0.00060	<0.00060	0.00060	B069812
Dissolved Arsenic (As)	mg/L	0.00038	0.00040	B069817	0.00039	0.00036	0.00041	0.00020	B069812
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	B070311	<0.010	<0.010	<0.010	0.010	B069946
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B069817	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Boron (B)	mg/L	<0.020	<0.020	B070311	<0.020	<0.020	<0.020	0.020	B069946
Dissolved Calcium (Ca)	mg/L	14	13	B070311	14	15	13	0.30	B069946
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B069817	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B069817	<0.00030	<0.00030	<0.00030	0.00030	B069812
Dissolved Copper (Cu)	mg/L	0.0045	0.0048	B069817	0.0045	0.0052	0.0040	0.0010	B069812
Dissolved Iron (Fe)	mg/L	<0.060	<0.060	B070311	0.069	0.20	<0.060	0.060	B069946
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B069817	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B070311	<0.020	<0.020	<0.020	0.020	B069946
Dissolved Magnesium (Mg)	mg/L	3.7	3.5	B070311	3.5	3.6	3.5	0.20	B069946
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	B070311	<0.0040	0.020	<0.0040	0.0040	B069946
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B069817	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	B069817	<0.00050	<0.00050	0.00083	0.00050	B069812
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B070311	<0.10	<0.10	<0.10	0.10	B069946
Dissolved Potassium (K)	mg/L	1.7	1.6	B070311	1.6	1.7	1.6	0.30	B069946
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B069817	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Silicon (Si)	mg/L	0.69	0.70	B070311	0.68	1.0	0.61	0.50	B069946
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B069817	<0.00010	<0.00010	<0.00010	0.00010	B069812
Dissolved Sodium (Na)	mg/L	2.2	2.1	B070311	2.1	2.2	2.1	0.50	B069946
Dissolved Strontium (Sr)	mg/L	0.029	0.028	B070311	0.027	0.028	0.028	0.020	B069946
Dissolved Sulphur (S)	mg/L	7.6	7.8	B070311	7.2	7.6	6.4	0.20	B069946
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B069817	<0.00020	<0.00020	<0.00020	0.00020	B069812
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B069817	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B069817	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B069817	<0.00010	<0.00010	<0.00010	0.00010	B069812

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP591	BWP592		BWP593	BWP594	BWP595		
Sampling Date		2023/08/09 08:35	2023/08/09 08:40		2023/08/09 09:05	2023/08/09 09:10	2023/08/09 08:25		
COC Number		701930-02-01	701930-02-01		701930-02-01	701930-02-01	701930-02-01		
	UNITS	**CL-8 SFC**	**CL-8 BTM**	**QC Batch**	**CL-2 SFC**	**CL-2BTM**	**CL-4 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B069817	<0.0010	<0.0010	<0.0010	0.0010	B069812
Dissolved Zinc (Zn)	mg/L	0.0061	0.0068	B069817	0.0070	0.021	0.0055	0.0030	B069812
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP595			BWP596		BWP597		
Sampling Date		2023/08/09 08:25			2023/08/09 08:30		2023/08/09 08:15		
COC Number		701930-02-01			701930-02-01		701930-03-01		
	UNITS	CL-4 SFC Lab-Dup	RDL	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.039	B068104	<0.020	0.020	B068445
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.010	0.0030	B069812	0.014	B069812	0.0085	0.0030	B069817
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B069812	<0.00060	B069812	<0.00060	0.00060	B069817
Dissolved Arsenic (As)	mg/L	0.00037	0.00020	B069812	0.00039	B069812	0.00034	0.00020	B069817
Dissolved Barium (Ba)	mg/L				0.010	B069946	<0.010	0.010	B070311
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B069812	<0.0010	B069812	<0.0010	0.0010	B069817
Dissolved Boron (B)	mg/L				<0.020	B069946	<0.020	0.020	B070311
Dissolved Calcium (Ca)	mg/L				14	B069946	12	0.30	B070311
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B069812	<0.0010	B069812	<0.0010	0.0010	B069817
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B069812	<0.00030	B069812	<0.00030	0.00030	B069817
Dissolved Copper (Cu)	mg/L	0.0040	0.0010	B069812	0.0049	B069812	0.0038	0.0010	B069817
Dissolved Iron (Fe)	mg/L				0.20	B069946	<0.060	0.060	B070311
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B069812	<0.00020	B069812	<0.00020	0.00020	B069817
Dissolved Lithium (Li)	mg/L				<0.020	B069946	<0.020	0.020	B070311
Dissolved Magnesium (Mg)	mg/L				3.6	B069946	3.5	0.20	B070311
Dissolved Manganese (Mn)	mg/L				0.0085	B069946	<0.0040	0.0040	B070311
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B069812	<0.00020	B069812	<0.00020	0.00020	B069817
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B069812	<0.00050	B069812	<0.00050	0.00050	B069817
Dissolved Phosphorus (P)	mg/L				<0.10	B069946	<0.10	0.10	B070311
Dissolved Potassium (K)	mg/L				1.7	B069946	1.5	0.30	B070311
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B069812	<0.00020	B069812	<0.00020	0.00020	B069817
Dissolved Silicon (Si)	mg/L				0.94	B069946	0.63	0.50	B070311
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B069812	<0.00010	B069812	<0.00010	0.00010	B069817
Dissolved Sodium (Na)	mg/L				2.2	B069946	2.1	0.50	B070311
Dissolved Strontium (Sr)	mg/L				0.028	B069946	0.028	0.020	B070311
Dissolved Sulphur (S)	mg/L				7.0	B069946	7.0	0.20	B070311
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B069812	<0.00020	B069812	<0.00020	0.00020	B069817
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B069812	<0.0010	B069812	<0.0010	0.0010	B069817
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B069812	<0.0010	B069812	<0.0010	0.0010	B069817
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B069812	<0.00010	B069812	<0.00010	0.00010	B069817

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP595			BWP596		BWP597		
Sampling Date		2023/08/09 08:25			2023/08/09 08:30		2023/08/09 08:15		
COC Number		701930-02-01			701930-02-01		701930-03-01		
	UNITS	**CL-4 SFC Lab-Dup**	**RDL**	**QC Batch**	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B069812	<0.0010	B069812	<0.0010	0.0010	B069817
Dissolved Zinc (Zn)	mg/L	0.0053	0.0030	B069812	0.012	B069812	0.0047	0.0030	B069817

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP598		BWP599	BWP600		BWP601		
Sampling Date		2023/08/09 08:20		2023/08/09 08:05	2023/08/09 08:10		2023/08/09 08:20		
COC Number		701930-03-01		701930-03-01	701930-03-01		701930-03-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	CL-6 BTM	QC Batch	SW-119	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.020	B068445	<0.020	<0.020	B068445	<0.020	0.020	B068445
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.012	B069812	0.0087	0.0094	B069817	0.0099	0.0030	B069817
Dissolved Antimony (Sb)	mg/L	<0.00060	B069812	<0.00060	<0.00060	B069817	<0.00060	0.00060	B069817
Dissolved Arsenic (As)	mg/L	0.00040	B069812	0.00041	0.00037	B069817	0.00038	0.00020	B069817
Dissolved Barium (Ba)	mg/L	<0.010	B069946	<0.010	<0.010	B070311	<0.010	0.010	B070311
Dissolved Beryllium (Be)	mg/L	<0.0010	B069812	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069817
Dissolved Boron (B)	mg/L	<0.020	B069946	<0.020	<0.020	B070311	<0.020	0.020	B070311
Dissolved Calcium (Ca)	mg/L	13	B069946	13	12	B070311	12	0.30	B070311
Dissolved Chromium (Cr)	mg/L	<0.0010	B069812	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069817
Dissolved Cobalt (Co)	mg/L	<0.00030	B069812	<0.00030	<0.00030	B069817	<0.00030	0.00030	B069817
Dissolved Copper (Cu)	mg/L	0.0039	B069812	0.0034	0.0039	B069817	0.0045	0.0010	B069817
Dissolved Iron (Fe)	mg/L	<0.060	B069946	<0.060	<0.060	B070311	<0.060	0.060	B070311
Dissolved Lead (Pb)	mg/L	<0.00020	B069812	<0.00020	<0.00020	B069817	<0.00020	0.00020	B075062
Dissolved Lithium (Li)	mg/L	<0.020	B069946	<0.020	<0.020	B070311	<0.020	0.020	B070311
Dissolved Magnesium (Mg)	mg/L	3.4	B069946	3.9	3.5	B070311	3.4	0.20	B070311
Dissolved Manganese (Mn)	mg/L	<0.0040	B069946	<0.0040	<0.0040	B070311	<0.0040	0.0040	B070311
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B069812	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069817
Dissolved Nickel (Ni)	mg/L	<0.00050	B069812	<0.00050	<0.00050	B069817	<0.00050	0.00050	B069817
Dissolved Phosphorus (P)	mg/L	<0.10	B069946	<0.10	<0.10	B070311	<0.10	0.10	B070311
Dissolved Potassium (K)	mg/L	1.5	B069946	1.7	1.5	B070311	1.5	0.30	B070311
Dissolved Selenium (Se)	mg/L	<0.00020	B069812	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069817
Dissolved Silicon (Si)	mg/L	0.58	B069946	0.54	0.57	B070311	0.66	0.50	B070311
Dissolved Silver (Ag)	mg/L	<0.00010	B069812	<0.00010	<0.00010	B069817	<0.00010	0.00010	B069817
Dissolved Sodium (Na)	mg/L	2.1	B069946	2.4	2.2	B070311	2.1	0.50	B070311
Dissolved Strontium (Sr)	mg/L	0.027	B069946	0.029	0.028	B070311	0.028	0.020	B070311
Dissolved Sulphur (S)	mg/L	6.2	B069946	5.5	5.8	B070311	7.0	0.20	B070311
Dissolved Thallium (Tl)	mg/L	<0.00020	B069812	<0.00020	<0.00020	B069817	<0.00020	0.00020	B069817
Dissolved Tin (Sn)	mg/L	<0.0010	B069812	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069817
Dissolved Titanium (Ti)	mg/L	<0.0010	B069812	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069817
Dissolved Uranium (U)	mg/L	<0.00010	B069812	<0.00010	<0.00010	B069817	<0.00010	0.00010	B069817

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP598		BWP599	BWP600		BWP601		
Sampling Date		2023/08/09 08:20		2023/08/09 08:05	2023/08/09 08:10		2023/08/09 08:20		
COC Number		701930-03-01		701930-03-01	701930-03-01		701930-03-01		
	UNITS	**CL-5 BTM**	**QC Batch**	**CL-6 SFC**	**CL-6 BTM**	**QC Batch**	**SW-119**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B069812	<0.0010	<0.0010	B069817	<0.0010	0.0010	B069817
Dissolved Zinc (Zn)	mg/L	0.0048	B069812	<0.0030	0.0047	B069817	0.0066	0.0030	B069817
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP602	BWP603	BWP604		
Sampling Date		2023/08/09 08:50	2023/08/09 10:00	2023/08/09		
COC Number		701930-03-01	701930-03-01	701930-03-01		
	UNITS	SW-120	SW-121	TRIP BLANK	RDL	QC Batch
Elements						
Dissolved Cadmium (Cd)	ug/L	<0.020	0.25	<0.020	0.020	B068445
Lab Filtered Elements						
Dissolved Aluminum (Al)	mg/L	0.010	0.0061	<0.0030	0.0030	B069817
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	B069817
Dissolved Arsenic (As)	mg/L	0.00040	0.00027	<0.00020	0.00020	B069817
Dissolved Barium (Ba)	mg/L	<0.010	0.011	<0.010	0.010	B070311
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B069817
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	B070311
Dissolved Calcium (Ca)	mg/L	13	48	<0.30	0.30	B070311
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B069817
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	0.00030	B069817
Dissolved Copper (Cu)	mg/L	0.0046	0.0071	<0.0010	0.0010	B069817
Dissolved Iron (Fe)	mg/L	<0.060	0.83	<0.060	0.060	B070311
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B069817
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	B070311
Dissolved Magnesium (Mg)	mg/L	3.6	8.2	<0.20	0.20	B070311
Dissolved Manganese (Mn)	mg/L	<0.0040	0.042	<0.0040	0.0040	B070311
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B069817
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00072	<0.00050	0.00050	B069817
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	B070311
Dissolved Potassium (K)	mg/L	1.6	4.0	<0.30	0.30	B070311
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B069817
Dissolved Silicon (Si)	mg/L	0.76	0.73	<0.50	0.50	B070311
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B069817
Dissolved Sodium (Na)	mg/L	2.2	3.2	<0.50	0.50	B070311
Dissolved Strontium (Sr)	mg/L	0.029	0.053	<0.020	0.020	B070311
Dissolved Sulphur (S)	mg/L	8.2	51	<0.20	0.20	B070311
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B069817
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B069817
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B069817
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B069817
RDL = Reportable Detection Limit						

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BWP602	BWP603	BWP604		
Sampling Date		2023/08/09 08:50	2023/08/09 10:00	2023/08/09		
COC Number		701930-03-01	701930-03-01	701930-03-01		
	UNITS	**SW-120**	**SW-121**	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B069817
Dissolved Zinc (Zn)	mg/L	0.0073	0.069	<0.0030	0.0030	B069817
RDL = Reportable Detection Limit						

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP577		BWP578		BWP579		BWP580		
Sampling Date		2023/08/09 11:15		2023/08/09 09:50		2023/08/09 09:45		2023/08/09 09:55		
COC Number		701930-01-01		701930-01-01		701930-01-01		701930-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	QC Batch	CB-1	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.72	B068055	0.35	B068055	0.33	B068055	0.35	0.020	B068055
Total Aluminum (Al)	mg/L	0.062	B071294	0.049	B071189	0.050	B071194	0.050	0.0030	B071294
Total Antimony (Sb)	mg/L	<0.00060	B071294	<0.00060	B071189	<0.00060	B071194	<0.00060	0.00060	B071294
Total Arsenic (As)	mg/L	0.00056	B071294	0.00029	B071189	0.00033	B071194	0.00031	0.00020	B071294
Total Barium (Ba)	mg/L	<0.010	B071310	0.012	B071190	0.012	B071195	0.011	0.010	B071310
Total Beryllium (Be)	mg/L	<0.0010	B071294	<0.0010	B071189	<0.0010	B071194	<0.0010	0.0010	B071294
Total Boron (B)	mg/L	<0.020	B071310	0.027	B071190	<0.020	B071195	<0.020	0.020	B071310
Total Calcium (Ca)	mg/L	9.7	B071310	44	B071190	44	B071195	44	0.30	B071310
Total Chromium (Cr)	mg/L	<0.0010	B071294	<0.0010	B071189	<0.0010	B071194	<0.0010	0.0010	B071294
Total Cobalt (Co)	mg/L	<0.00030	B071294	<0.00030	B071189	<0.00030	B071194	<0.00030	0.00030	B071294
Total Copper (Cu)	mg/L	0.027	B071294	0.013	B071189	0.012	B071194	0.012	0.0010	B071294
Total Iron (Fe)	mg/L	0.52	B071310	3.0	B071190	3.6	B071195	2.8	0.060	B071310
Total Lead (Pb)	mg/L	<0.00020	B071294	<0.00020	B071189	<0.00020	B071194	<0.00020	0.00020	B071294
Total Lithium (Li)	mg/L	<0.020	B071310	<0.020	B071190	<0.020	B071195	<0.020	0.020	B071310
Total Magnesium (Mg)	mg/L	3.0	B071310	7.5	B071190	7.5	B071195	7.4	0.20	B071310
Total Manganese (Mn)	mg/L	0.080	B071310	0.052	B071190	0.054	B071195	0.047	0.0040	B071310
Total Molybdenum (Mo)	mg/L	0.00077	B071294	<0.00020	B071189	<0.00020	B071194	<0.00020	0.00020	B071294
Total Nickel (Ni)	mg/L	0.00068	B071294	0.00099	B071189	0.0010	B071194	0.0011	0.00050	B071294
Total Phosphorus (P)	mg/L	<0.10	B071310	<0.10	B071190	<0.10	B071195	<0.10	0.10	B071310
Total Potassium (K)	mg/L	1.5	B071310	3.8	B071190	3.8	B071195	3.8	0.30	B071310
Total Selenium (Se)	mg/L	<0.00020	B071294	<0.00020	B071189	<0.00020	B071194	<0.00020	0.00020	B071294
Total Silicon (Si)	mg/L	1.4	B071310	1.0	B071190	0.92	B071195	0.92	0.50	B071310
Total Silver (Ag)	mg/L	<0.00010	B071294	<0.00010	B071189	<0.00010	B071194	<0.00010	0.00010	B071294
Total Sodium (Na)	mg/L	1.9	B071310	2.8	B071190	2.8	B071195	2.7	0.50	B071310
Total Strontium (Sr)	mg/L	0.024	B071310	0.049	B071190	0.049	B071195	0.048	0.020	B071310
Total Sulphur (S)	mg/L	3.3	B071310	50	B071190	49	B071195	53	0.20	B071310
Total Thallium (Tl)	mg/L	<0.00020	B071294	<0.00020	B071189	<0.00020	B071194	<0.00020	0.00020	B071294
Total Tin (Sn)	mg/L	<0.0010	B071294	<0.0010	B071189	<0.0010	B071194	<0.0010	0.0010	B071294
Total Titanium (Ti)	mg/L	0.0015	B071294	0.0013	B071189	0.0013	B071194	0.0011	0.0010	B071294
Total Uranium (U)	mg/L	<0.00010	B071294	<0.00010	B071189	<0.00010	B071194	<0.00010	0.00010	B071294
Total Vanadium (V)	mg/L	<0.0010	B071294	<0.0010	B071189	<0.0010	B071194	<0.0010	0.0010	B071294

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP577		BWP578		BWP579		BWP580		
Sampling Date		2023/08/09 11:15		2023/08/09 09:50		2023/08/09 09:45		2023/08/09 09:55		
COC Number		701930-01-01		701930-01-01		701930-01-01		701930-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**QC Batch**	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.29	B071294	0.10	B071189	0.10	B071194	0.10	0.0030	B071294
RDL = Reportable Detection Limit										

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP581	BWP582			BWP582		
Sampling Date		2023/08/09 10:00	2023/08/09 10:05			2023/08/09 10:05		
COC Number		701930-01-01	701930-01-01			701930-01-01		
	UNITS	CB-2	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.34	0.53	0.020	B068055			
Total Aluminum (Al)	mg/L	0.046	0.077	0.0030	B071194	0.064	0.0030	B071194
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B071194	<0.00060	0.00060	B071194
Total Arsenic (As)	mg/L	0.00026	0.00032	0.00020	B071194	0.00024	0.00020	B071194
Total Barium (Ba)	mg/L	0.011	0.013	0.010	B071195	0.013	0.010	B071195
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B071194	<0.0010	0.0010	B071194
Total Boron (B)	mg/L	<0.020	<0.020	0.020	B071195	<0.020	0.020	B071195
Total Calcium (Ca)	mg/L	43	48	0.30	B071195	49	0.30	B071195
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B071194	<0.0010	0.0010	B071194
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B071194	<0.00030	0.00030	B071194
Total Copper (Cu)	mg/L	0.012	0.016	0.0010	B071194	0.014	0.0010	B071194
Total Iron (Fe)	mg/L	2.8	2.2	0.060	B071195	2.2	0.060	B071195
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B071194	<0.00020	0.00020	B071194
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B071195	<0.020	0.020	B071195
Total Magnesium (Mg)	mg/L	7.3	8.0	0.20	B071195	8.0	0.20	B071195
Total Manganese (Mn)	mg/L	0.046	0.037	0.0040	B071195	0.036	0.0040	B071195
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B071194	<0.00020	0.00020	B071194
Total Nickel (Ni)	mg/L	0.00096	0.0017	0.00050	B071194	0.0012	0.00050	B071194
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B071195	<0.10	0.10	B071195
Total Potassium (K)	mg/L	3.6	4.0	0.30	B071195	4.0	0.30	B071195
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B071194	<0.00020	0.00020	B071194
Total Silicon (Si)	mg/L	0.84	0.75	0.50	B071195	0.74	0.50	B071195
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B071194	<0.00010	0.00010	B071194
Total Sodium (Na)	mg/L	2.8	2.9	0.50	B071195	3.0	0.50	B071195
Total Strontium (Sr)	mg/L	0.048	0.052	0.020	B071195	0.053	0.020	B071195
Total Sulphur (S)	mg/L	48	54	0.20	B071195	54	0.20	B071195
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B071194	<0.00020	0.00020	B071194
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B071194	<0.0010	0.0010	B071194
Total Titanium (Ti)	mg/L	0.0010	0.0014	0.0010	B071194	0.0013	0.0010	B071194
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B071194	<0.00010	0.00010	B071194
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B071194	<0.0010	0.0010	B071194

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP581	BWP582			BWP582		
Sampling Date		2023/08/09 10:00	2023/08/09 10:05			2023/08/09 10:05		
COC Number		701930-01-01	701930-01-01			701930-01-01		
	UNITS	**CB-2**	**EB-1**	**RDL**	**QC Batch**	**EB-1 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.099	0.15	0.0030	B071194	0.14	0.0030	B071194

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP583		BWP584		BWP585	BWP586		
Sampling Date		2023/08/09 10:10		2023/08/09 10:25		2023/08/09 10:20	2023/08/09 10:30		
COC Number		701930-01-01		701930-01-01		701930-01-01	701930-01-01		
	UNITS	EB-2	QC Batch	NB-1	QC Batch	NB-2	CLD	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.48	B068055	0.35	B068055	0.37	0.34	0.020	B068055
Total Aluminum (Al)	mg/L	0.085	B071194	0.047	B070368	0.048	0.048	0.0030	B071194
Total Antimony (Sb)	mg/L	<0.00060	B071194	<0.00060	B070368	<0.00060	<0.00060	0.00060	B071194
Total Arsenic (As)	mg/L	0.00028	B071194	0.00034	B070368	0.00030	0.00026	0.00020	B071194
Total Barium (Ba)	mg/L	0.013	B071195	0.012	B070456	0.011	0.011	0.010	B071195
Total Beryllium (Be)	mg/L	<0.0010	B071194	<0.0010	B070368	<0.0010	<0.0010	0.0010	B071194
Total Boron (B)	mg/L	<0.020	B071195	0.023	B070456	0.022	<0.020	0.020	B071195
Total Calcium (Ca)	mg/L	50	B071195	46	B070456	47	46	0.30	B071195
Total Chromium (Cr)	mg/L	<0.0010	B071194	<0.0010	B070368	<0.0010	<0.0010	0.0010	B071194
Total Cobalt (Co)	mg/L	<0.00030	B071194	<0.00030	B070368	<0.00030	<0.00030	0.00030	B071194
Total Copper (Cu)	mg/L	0.012	B071194	0.014	B070368	0.015	0.013	0.0010	B071194
Total Iron (Fe)	mg/L	2.0	B071195	2.6	B070456	2.5	2.3	0.060	B071195
Total Lead (Pb)	mg/L	<0.00020	B071194	<0.00020	B070368	<0.00020	<0.00020	0.00020	B071194
Total Lithium (Li)	mg/L	<0.020	B071195	<0.020	B070456	<0.020	<0.020	0.020	B071195
Total Magnesium (Mg)	mg/L	8.1	B071195	7.7	B070456	7.7	7.5	0.20	B071195
Total Manganese (Mn)	mg/L	0.034	B071195	0.055	B070456	0.046	0.047	0.0040	B071195
Total Molybdenum (Mo)	mg/L	<0.00020	B071194	<0.00020	B070368	<0.00020	0.00021	0.00020	B071194
Total Nickel (Ni)	mg/L	0.0013	B071194	0.00099	B070368	0.00097	0.00099	0.00050	B071194
Total Phosphorus (P)	mg/L	<0.10	B071195	<0.10	B070456	<0.10	<0.10	0.10	B071195
Total Potassium (K)	mg/L	4.1	B071195	3.7	B070456	3.8	3.6	0.30	B071195
Total Selenium (Se)	mg/L	<0.00020	B071194	<0.00020	B070368	<0.00020	<0.00020	0.00020	B071194
Total Silicon (Si)	mg/L	0.77	B071195	0.92	B070456	0.89	0.86	0.50	B071195
Total Silver (Ag)	mg/L	<0.00010	B071194	<0.00010	B070368	<0.00010	<0.00010	0.00010	B071194
Total Sodium (Na)	mg/L	3.0	B071195	2.8	B070456	2.8	2.7	0.50	B071195
Total Strontium (Sr)	mg/L	0.053	B071195	0.051	B070456	0.050	0.048	0.020	B071195
Total Sulphur (S)	mg/L	55	B071195	52	B070456	51	50	0.20	B071195
Total Thallium (Tl)	mg/L	<0.00020	B071194	<0.00020	B070368	<0.00020	<0.00020	0.00020	B071194
Total Tin (Sn)	mg/L	<0.0010	B071194	<0.0010	B070368	<0.0010	<0.0010	0.0010	B071194
Total Titanium (Ti)	mg/L	0.0020	B071194	<0.0010	B070368	<0.0010	0.0013	0.0010	B071194
Total Uranium (U)	mg/L	<0.00010	B071194	<0.00010	B070368	<0.00010	<0.00010	0.00010	B071194
Total Vanadium (V)	mg/L	<0.0010	B071194	<0.0010	B070368	<0.0010	<0.0010	0.0010	B071194

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP583		BWP584		BWP585	BWP586		
Sampling Date		2023/08/09 10:10		2023/08/09 10:25		2023/08/09 10:20	2023/08/09 10:30		
COC Number		701930-01-01		701930-01-01		701930-01-01	701930-01-01		
	UNITS	**EB-2**	**QC Batch**	**NB-1**	**QC Batch**	**NB-2**	**CLD**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.14	B071194	0.11	B070368	0.11	0.098	0.0030	B071194
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP587		BWP588		BWP589	BWP590		
Sampling Date		2023/08/09 08:45		2023/08/09 08:50		2023/08/09 08:55	2023/08/09 09:00		
COC Number		701930-02-01		701930-02-01		701930-02-01	701930-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	QC Batch	CL-7 SFC	CL-7 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.041	B068055	0.037	B068055	0.039	0.037	0.020	B068055
Total Aluminum (Al)	mg/L	0.043	B071294	0.044	B071194	0.044	0.047	0.0030	B071294
Total Antimony (Sb)	mg/L	<0.00060	B071294	<0.00060	B071194	<0.00060	<0.00060	0.00060	B071294
Total Arsenic (As)	mg/L	0.00040	B071294	0.00047	B071194	0.00046	0.00042	0.00020	B071294
Total Barium (Ba)	mg/L	0.011	B071310	<0.010	B071195	<0.010	<0.010	0.010	B071310
Total Beryllium (Be)	mg/L	<0.0010	B071294	<0.0010	B071194	<0.0010	<0.0010	0.0010	B071294
Total Boron (B)	mg/L	0.027	B071310	<0.020	B071195	<0.020	<0.020	0.020	B071310
Total Calcium (Ca)	mg/L	12	B071310	13	B071195	13	12	0.30	B071310
Total Chromium (Cr)	mg/L	<0.0010	B071294	<0.0010	B071194	<0.0010	<0.0010	0.0010	B071294
Total Cobalt (Co)	mg/L	<0.00030	B071294	<0.00030	B071194	<0.00030	<0.00030	0.00030	B071294
Total Copper (Cu)	mg/L	0.0051	B071294	0.0053	B071194	0.0052	0.0056	0.0010	B071294
Total Iron (Fe)	mg/L	0.24	B071310	0.23	B071195	0.29	0.27	0.060	B071310
Total Lead (Pb)	mg/L	<0.00020	B071294	<0.00020	B071194	<0.00020	<0.00020	0.00020	B071294
Total Lithium (Li)	mg/L	<0.020	B071310	<0.020	B071195	<0.020	<0.020	0.020	B071310
Total Magnesium (Mg)	mg/L	3.3	B071310	3.4	B071195	3.5	3.3	0.20	B071310
Total Manganese (Mn)	mg/L	0.012	B071310	0.0093	B071195	0.0099	0.0097	0.0040	B071310
Total Molybdenum (Mo)	mg/L	<0.00020	B071294	<0.00020	B071194	<0.00020	0.00022	0.00020	B071294
Total Nickel (Ni)	mg/L	0.00068	B071294	0.00059	B071194	0.00055	<0.00050	0.00050	B071294
Total Phosphorus (P)	mg/L	<0.10	B071310	<0.10	B071195	<0.10	<0.10	0.10	B071310
Total Potassium (K)	mg/L	1.6	B071310	1.6	B071195	1.6	1.6	0.30	B071310
Total Selenium (Se)	mg/L	<0.00020	B071294	<0.00020	B071194	<0.00020	<0.00020	0.00020	B071294
Total Silicon (Si)	mg/L	0.98	B071310	0.86	B071195	0.89	0.85	0.50	B071310
Total Silver (Ag)	mg/L	<0.00010	B071294	<0.00010	B071194	<0.00010	<0.00010	0.00010	B071294
Total Sodium (Na)	mg/L	1.9	B071310	2.0	B071195	2.0	1.9	0.50	B071310
Total Strontium (Sr)	mg/L	0.027	B071310	0.028	B071195	0.028	0.027	0.020	B071310
Total Sulphur (S)	mg/L	7.5	B071310	7.5	B071195	8.1	7.8	0.20	B071310
Total Thallium (Tl)	mg/L	<0.00020	B071294	<0.00020	B071194	<0.00020	<0.00020	0.00020	B071294
Total Tin (Sn)	mg/L	<0.0010	B071294	<0.0010	B071194	<0.0010	<0.0010	0.0010	B071294
Total Titanium (Ti)	mg/L	<0.0010	B071294	0.0012	B071194	0.0011	0.0010	0.0010	B071294
Total Uranium (U)	mg/L	<0.00010	B071294	<0.00010	B071194	<0.00010	<0.00010	0.00010	B071294
Total Vanadium (V)	mg/L	<0.0010	B071294	<0.0010	B071194	<0.0010	<0.0010	0.0010	B071294

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP587		BWP588		BWP589	BWP590		
Sampling Date		2023/08/09 08:45		2023/08/09 08:50		2023/08/09 08:55	2023/08/09 09:00		
COC Number		701930-02-01		701930-02-01		701930-02-01	701930-02-01		
	UNITS	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**CL-7 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.013	B071294	0.013	B071194	0.013	0.014	0.0030	B071294
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP591		BWP592		BWP593	BWP594		
Sampling Date		2023/08/09 08:35		2023/08/09 08:40		2023/08/09 09:05	2023/08/09 09:10		
COC Number		701930-02-01		701930-02-01		701930-02-01	701930-02-01		
	UNITS	CL-8 SFC	QC Batch	CL-8 BTM	QC Batch	CL-2 SFC	CL-2BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.044	B068055	0.040	B068055	0.036	0.091	0.020	B068055
Total Aluminum (Al)	mg/L	0.047	B071194	0.047	B071294	0.041	0.050	0.0030	B071194
Total Antimony (Sb)	mg/L	<0.00060	B071194	<0.00060	B071294	<0.00060	<0.00060	0.00060	B071194
Total Arsenic (As)	mg/L	0.00054	B071194	0.00043	B071294	0.00045	0.00042	0.00020	B071194
Total Barium (Ba)	mg/L	<0.010	B071195	<0.010	B071310	<0.010	0.011	0.010	B071195
Total Beryllium (Be)	mg/L	<0.0010	B071194	<0.0010	B071294	<0.0010	<0.0010	0.0010	B071194
Total Boron (B)	mg/L	<0.020	B071195	<0.020	B071310	<0.020	<0.020	0.020	B071195
Total Calcium (Ca)	mg/L	13	B071195	12	B071310	13	14	0.30	B071195
Total Chromium (Cr)	mg/L	<0.0010	B071194	<0.0010	B071294	<0.0010	<0.0010	0.0010	B071194
Total Cobalt (Co)	mg/L	<0.00030	B071194	<0.00030	B071294	<0.00030	<0.00030	0.00030	B071194
Total Copper (Cu)	mg/L	0.0057	B071194	0.0049	B071294	0.0051	0.0067	0.0010	B071194
Total Iron (Fe)	mg/L	0.24	B071195	0.23	B071310	0.21	0.66	0.060	B071195
Total Lead (Pb)	mg/L	<0.00020	B071194	<0.00020	B071294	<0.00020	<0.00020	0.00020	B071194
Total Lithium (Li)	mg/L	<0.020	B071195	<0.020	B071310	<0.020	<0.020	0.020	B071195
Total Magnesium (Mg)	mg/L	3.3	B071195	3.3	B071310	3.5	3.6	0.20	B071195
Total Manganese (Mn)	mg/L	0.0094	B071195	0.0087	B071310	0.0089	0.058	0.0040	B071195
Total Molybdenum (Mo)	mg/L	<0.00020	B071194	<0.00020	B071294	<0.00020	<0.00020	0.00020	B071194
Total Nickel (Ni)	mg/L	0.00058	B071194	0.00060	B071294	<0.00050	0.00055	0.00050	B071194
Total Phosphorus (P)	mg/L	<0.10	B071195	<0.10	B071310	<0.10	<0.10	0.10	B071195
Total Potassium (K)	mg/L	1.6	B071195	1.5	B071310	1.6	1.6	0.30	B071195
Total Selenium (Se)	mg/L	<0.00020	B071194	<0.00020	B071294	<0.00020	<0.00020	0.00020	B071194
Total Silicon (Si)	mg/L	0.84	B071195	0.83	B071310	0.88	1.2	0.50	B071195
Total Silver (Ag)	mg/L	<0.00010	B071194	<0.00010	B071294	<0.00010	<0.00010	0.00010	B071194
Total Sodium (Na)	mg/L	2.0	B071195	1.9	B071310	2.0	2.1	0.50	B071195
Total Strontium (Sr)	mg/L	0.027	B071195	0.026	B071310	0.028	0.028	0.020	B071195
Total Sulphur (S)	mg/L	7.5	B071195	7.4	B071310	7.8	8.2	0.20	B071195
Total Thallium (Tl)	mg/L	<0.00020	B071194	<0.00020	B071294	<0.00020	<0.00020	0.00020	B071194
Total Tin (Sn)	mg/L	<0.0010	B071194	<0.0010	B071294	<0.0010	<0.0010	0.0010	B071194
Total Titanium (Ti)	mg/L	0.0012	B071194	0.0026	B071294	<0.0010	0.0012	0.0010	B071194
Total Uranium (U)	mg/L	<0.00010	B071194	<0.00010	B071294	<0.00010	<0.00010	0.00010	B071194
Total Vanadium (V)	mg/L	<0.0010	B071194	<0.0010	B071294	<0.0010	<0.0010	0.0010	B071194

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP591		BWP592		BWP593	BWP594		
Sampling Date		2023/08/09 08:35		2023/08/09 08:40		2023/08/09 09:05	2023/08/09 09:10		
COC Number		701930-02-01		701930-02-01		701930-02-01	701930-02-01		
	UNITS	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**QC Batch**	**CL-2 SFC**	**CL-2BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.014	B071194	0.014	B071294	0.013	0.030	0.0030	B071194
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP595		BWP596		BWP597		
Sampling Date		2023/08/09 08:25		2023/08/09 08:30		2023/08/09 08:15		
COC Number		701930-02-01		701930-02-01		701930-03-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.033	B068447	0.065	B068450	0.028	0.020	B068447
Total Aluminum (Al)	mg/L	0.044	B071294	0.064	B070368	0.045	0.0030	B071294
Total Antimony (Sb)	mg/L	<0.00060	B071294	<0.00060	B070368	<0.00060	0.00060	B071294
Total Arsenic (As)	mg/L	0.00045	B071294	0.00051	B070368	0.00044	0.00020	B071294
Total Barium (Ba)	mg/L	<0.010	B071310	0.011	B070456	<0.010	0.010	B071310
Total Beryllium (Be)	mg/L	<0.0010	B071294	<0.0010	B070368	<0.0010	0.0010	B071294
Total Boron (B)	mg/L	<0.020	B071310	<0.020	B070456	<0.020	0.020	B071310
Total Calcium (Ca)	mg/L	12	B071310	13	B070456	12	0.30	B071310
Total Chromium (Cr)	mg/L	<0.0010	B071294	<0.0010	B070368	<0.0010	0.0010	B071294
Total Cobalt (Co)	mg/L	<0.00030	B071294	<0.00030	B070368	<0.00030	0.00030	B071294
Total Copper (Cu)	mg/L	0.0045	B071294	0.0067	B070368	0.0042	0.0010	B071294
Total Iron (Fe)	mg/L	0.18	B071310	0.81	B070456	0.16	0.060	B071310
Total Lead (Pb)	mg/L	<0.00020	B071294	<0.00020	B070368	<0.00020	0.00020	B071294
Total Lithium (Li)	mg/L	<0.020	B071310	<0.020	B070456	<0.020	0.020	B071310
Total Magnesium (Mg)	mg/L	3.4	B071310	3.6	B070456	3.2	0.20	B071310
Total Manganese (Mn)	mg/L	0.0087	B071310	0.066	B070456	0.010	0.0040	B071310
Total Molybdenum (Mo)	mg/L	0.00071	B071294	0.00046	B070368	<0.00020	0.00020	B071294
Total Nickel (Ni)	mg/L	0.00055	B071294	0.00067	B070368	<0.00050	0.00050	B071294
Total Phosphorus (P)	mg/L	<0.10	B071310	<0.10	B070456	<0.10	0.10	B071310
Total Potassium (K)	mg/L	1.6	B071310	1.6	B070456	1.5	0.30	B071310
Total Selenium (Se)	mg/L	<0.00020	B071294	<0.00020	B070368	<0.00020	0.00020	B071294
Total Silicon (Si)	mg/L	0.85	B071310	1.2	B070456	0.86	0.50	B071310
Total Silver (Ag)	mg/L	<0.00010	B071294	<0.00010	B070368	<0.00010	0.00010	B071294
Total Sodium (Na)	mg/L	1.9	B071310	2.1	B070456	1.9	0.50	B071310
Total Strontium (Sr)	mg/L	0.027	B071310	0.030	B070456	0.026	0.020	B071310
Total Sulphur (S)	mg/L	6.9	B071310	7.6	B070456	6.5	0.20	B071310
Total Thallium (Tl)	mg/L	<0.00020	B071294	<0.00020	B070368	<0.00020	0.00020	B071294
Total Tin (Sn)	mg/L	<0.0010	B071294	<0.0010	B070368	<0.0010	0.0010	B071294
Total Titanium (Ti)	mg/L	0.0014	B071294	0.0016	B070368	0.0015	0.0010	B071294
Total Uranium (U)	mg/L	<0.00010	B071294	<0.00010	B070368	<0.00010	0.00010	B071294
Total Vanadium (V)	mg/L	<0.0010	B071294	<0.0010	B070368	<0.0010	0.0010	B071294

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP595		BWP596		BWP597		
Sampling Date		2023/08/09 08:25		2023/08/09 08:30		2023/08/09 08:15		
COC Number		701930-02-01		701930-02-01		701930-03-01		
	UNITS	**CL-4 SFC**	**QC Batch**	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.011	B071294	0.021	B070368	0.012	0.0030	B071294
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP597			BWP598	BWP599	BWP600		
Sampling Date		2023/08/09 08:15			2023/08/09 08:20	2023/08/09 08:05	2023/08/09 08:10		
COC Number		701930-03-01			701930-03-01	701930-03-01	701930-03-01		
	UNITS	CL-5 SFC Lab-Dup	RDL	QC Batch	CL-5 BTM	CL-6 SFC	CL-6 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L				0.037	0.035	0.026	0.020	B068450
Total Aluminum (Al)	mg/L	0.044	0.0030	B071294	0.054	0.051	0.055	0.0030	B071294
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B071294	<0.00060	<0.00060	<0.00060	0.00060	B071294
Total Arsenic (As)	mg/L	0.00046	0.00020	B071294	0.00047	0.00051	0.00055	0.00020	B071294
Total Barium (Ba)	mg/L	0.011	0.010	B071310	<0.010	<0.010	<0.010	0.010	B071310
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B071294	<0.0010	<0.0010	<0.0010	0.0010	B071294
Total Boron (B)	mg/L	0.024	0.020	B071310	0.023	<0.020	<0.020	0.020	B071310
Total Calcium (Ca)	mg/L	12	0.30	B071310	12	11	11	0.30	B071310
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B071294	<0.0010	<0.0010	<0.0010	0.0010	B071294
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B071294	<0.00030	<0.00030	<0.00030	0.00030	B071294
Total Copper (Cu)	mg/L	0.0043	0.0010	B071294	0.0049	0.0037	0.0045	0.0010	B071294
Total Iron (Fe)	mg/L	0.17	0.060	B071310	0.20	0.13	0.14	0.060	B071310
Total Lead (Pb)	mg/L	<0.00020	0.00020	B071294	<0.00020	<0.00020	<0.00020	0.00020	B071294
Total Lithium (Li)	mg/L	<0.020	0.020	B071310	<0.020	<0.020	<0.020	0.020	B071310
Total Magnesium (Mg)	mg/L	3.3	0.20	B071310	3.2	3.1	3.2	0.20	B071310
Total Manganese (Mn)	mg/L	0.011	0.0040	B071310	0.012	0.014	0.014	0.0040	B071310
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B071294	<0.00020	<0.00020	<0.00020	0.00020	B071294
Total Nickel (Ni)	mg/L	<0.00050	0.00050	B071294	0.0011	0.00082	0.00053	0.00050	B071294
Total Phosphorus (P)	mg/L	<0.10	0.10	B071310	<0.10	<0.10	<0.10	0.10	B071310
Total Potassium (K)	mg/L	1.6	0.30	B071310	1.5	1.4	1.5	0.30	B071310
Total Selenium (Se)	mg/L	<0.00020	0.00020	B071294	<0.00020	<0.00020	<0.00020	0.00020	B071294
Total Silicon (Si)	mg/L	0.93	0.50	B071310	0.91	0.76	0.80	0.50	B071310
Total Silver (Ag)	mg/L	<0.00010	0.00010	B071294	<0.00010	<0.00010	<0.00010	0.00010	B071294
Total Sodium (Na)	mg/L	2.0	0.50	B071310	1.9	1.9	2.0	0.50	B071310
Total Strontium (Sr)	mg/L	0.027	0.020	B071310	0.026	0.026	0.027	0.020	B071310
Total Sulphur (S)	mg/L	6.8	0.20	B071310	6.5	5.5	5.7	0.20	B071310
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B071294	<0.00020	<0.00020	<0.00020	0.00020	B071294
Total Tin (Sn)	mg/L	<0.0010	0.0010	B071294	<0.0010	<0.0010	<0.0010	0.0010	B071294
Total Titanium (Ti)	mg/L	0.0014	0.0010	B071294	0.0017	0.0016	0.0023	0.0010	B071294
Total Uranium (U)	mg/L	<0.00010	0.00010	B071294	<0.00010	<0.00010	<0.00010	0.00010	B071294
Total Vanadium (V)	mg/L	<0.0010	0.0010	B071294	<0.0010	<0.0010	<0.0010	0.0010	B071294

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP597			BWP598	BWP599	BWP600		
Sampling Date		2023/08/09 08:15			2023/08/09 08:20	2023/08/09 08:05	2023/08/09 08:10		
COC Number		701930-03-01			701930-03-01	701930-03-01	701930-03-01		
	UNITS	**CL-5 SFC Lab-Dup**	**RDL**	**QC Batch**	**CL-5 BTM**	**CL-6 SFC**	**CL-6 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.0099	0.0030	B071294	0.015	0.013	0.0098	0.0030	B071294

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP601		BWP602			BWP602		
Sampling Date		2023/08/09 08:20		2023/08/09 08:50			2023/08/09 08:50		
COC Number		701930-03-01		701930-03-01			701930-03-01		
	UNITS	SW-119	QC Batch	SW-120	RDL	QC Batch	SW-120 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.038	B068450	0.035	0.020	B068450			
Total Aluminum (Al)	mg/L	0.050	B071194	0.049	0.0030	B070368	0.045	0.0030	B070368
Total Antimony (Sb)	mg/L	<0.00060	B071194	<0.00060	0.00060	B070368	<0.00060	0.00060	B070368
Total Arsenic (As)	mg/L	0.00054	B071194	0.00052	0.00020	B070368	0.00050	0.00020	B070368
Total Barium (Ba)	mg/L	<0.010	B071195	<0.010	0.010	B070456	<0.010	0.010	B070456
Total Beryllium (Be)	mg/L	<0.0010	B071194	<0.0010	0.0010	B070368	<0.0010	0.0010	B070368
Total Boron (B)	mg/L	<0.020	B071195	<0.020	0.020	B070456	<0.020	0.020	B070456
Total Calcium (Ca)	mg/L	12	B071195	12	0.30	B070456	12	0.30	B070456
Total Chromium (Cr)	mg/L	<0.0010	B071194	<0.0010	0.0010	B070368	<0.0010	0.0010	B070368
Total Cobalt (Co)	mg/L	<0.00030	B071194	<0.00030	0.00030	B070368	<0.00030	0.00030	B070368
Total Copper (Cu)	mg/L	0.0048	B071194	0.0049	0.0010	B070368	0.0055	0.0010	B070368
Total Iron (Fe)	mg/L	0.15	B071195	0.23	0.060	B070456	0.23	0.060	B070456
Total Lead (Pb)	mg/L	<0.00020	B071194	<0.00020	0.00020	B070368	<0.00020	0.00020	B070368
Total Lithium (Li)	mg/L	<0.020	B071195	<0.020	0.020	B070456	<0.020	0.020	B070456
Total Magnesium (Mg)	mg/L	3.2	B071195	3.3	0.20	B070456	3.3	0.20	B070456
Total Manganese (Mn)	mg/L	0.010	B071195	0.0095	0.0040	B070456	0.0088	0.0040	B070456
Total Molybdenum (Mo)	mg/L	<0.00020	B071194	0.0022 (1)	0.00020	B070368	<0.00020 (2)	0.00020	B070368
Total Nickel (Ni)	mg/L	0.00056	B071194	0.00099	0.00050	B070368	<0.00050	0.00050	B070368
Total Phosphorus (P)	mg/L	<0.10	B071195	<0.10	0.10	B070456	<0.10	0.10	B070456
Total Potassium (K)	mg/L	1.5	B071195	1.6	0.30	B070456	1.5	0.30	B070456
Total Selenium (Se)	mg/L	<0.00020	B071194	<0.00020	0.00020	B070368	<0.00020	0.00020	B070368
Total Silicon (Si)	mg/L	0.84	B071195	0.83	0.50	B070456	0.81	0.50	B070456
Total Silver (Ag)	mg/L	<0.00010	B071194	<0.00010	0.00010	B070368	<0.00010	0.00010	B070368
Total Sodium (Na)	mg/L	2.0	B071195	2.0	0.50	B070456	1.9	0.50	B070456
Total Strontium (Sr)	mg/L	0.027	B071195	0.028	0.020	B070456	0.027	0.020	B070456
Total Sulphur (S)	mg/L	6.4	B071195	7.3	0.20	B070456	7.0	0.20	B070456
Total Thallium (Tl)	mg/L	<0.00020	B071194	<0.00020	0.00020	B070368	<0.00020	0.00020	B070368
Total Tin (Sn)	mg/L	<0.0010	B071194	<0.0010	0.0010	B070368	<0.0010	0.0010	B070368

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Duplicate exceeds acceptance criteria due to sample non homogeneity. Reanalysis yields similar results.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP601		BWP602			BWP602		
Sampling Date		2023/08/09 08:20		2023/08/09 08:50			2023/08/09 08:50		
COC Number		701930-03-01		701930-03-01			701930-03-01		
	UNITS	**SW-119**	**QC Batch**	**SW-120**	**RDL**	**QC Batch**	**SW-120 Lab-Dup**	**RDL**	**QC Batch**
Total Titanium (Ti)	mg/L	0.0016	B071194	0.0013	0.0010	B070368	0.0011	0.0010	B070368
Total Uranium (U)	mg/L	<0.00010	B071194	<0.00010	0.00010	B070368	<0.00010	0.00010	B070368
Total Vanadium (V)	mg/L	<0.0010	B071194	<0.0010	0.0010	B070368	<0.0010	0.0010	B070368
Total Zinc (Zn)	mg/L	0.016	B071194	0.013	0.0030	B070368	0.014	0.0030	B070368

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP603		BWP604		
Sampling Date		2023/08/09 10:00		2023/08/09		
COC Number		701930-03-01		701930-03-01		
	UNITS	SW-121	QC Batch	TRIP BLANK	RDL	QC Batch
Elements						
Total Cadmium (Cd)	ug/L	0.33	B068450	<0.020	0.020	B068450
Total Aluminum (Al)	mg/L	0.048	B071189	<0.0030	0.0030	B071194
Total Antimony (Sb)	mg/L	<0.00060	B071189	<0.00060	0.00060	B071194
Total Arsenic (As)	mg/L	0.00030	B071189	<0.00020	0.00020	B071194
Total Barium (Ba)	mg/L	0.012	B071190	<0.010	0.010	B071195
Total Beryllium (Be)	mg/L	<0.0010	B071189	<0.0010	0.0010	B071194
Total Boron (B)	mg/L	0.022	B071190	<0.020	0.020	B071195
Total Calcium (Ca)	mg/L	44	B071190	<0.30	0.30	B071195
Total Chromium (Cr)	mg/L	<0.0010	B071189	<0.0010	0.0010	B071194
Total Cobalt (Co)	mg/L	<0.00030	B071189	<0.00030	0.00030	B071194
Total Copper (Cu)	mg/L	0.012	B071189	<0.0010	0.0010	B071194
Total Iron (Fe)	mg/L	2.9	B071190	<0.060	0.060	B071195
Total Lead (Pb)	mg/L	<0.00020	B071189	<0.00020	0.00020	B071194
Total Lithium (Li)	mg/L	<0.020	B071190	<0.020	0.020	B071195
Total Magnesium (Mg)	mg/L	7.4	B071190	<0.20	0.20	B071195
Total Manganese (Mn)	mg/L	0.047	B071190	<0.0040	0.0040	B071195
Total Molybdenum (Mo)	mg/L	<0.00020	B071189	<0.00020	0.00020	B071194
Total Nickel (Ni)	mg/L	0.0010	B071189	<0.00050	0.00050	B071194
Total Phosphorus (P)	mg/L	<0.10	B071190	<0.10	0.10	B071195
Total Potassium (K)	mg/L	3.8	B071190	<0.30	0.30	B071195
Total Selenium (Se)	mg/L	0.00023	B071189	<0.00020	0.00020	B071194
Total Silicon (Si)	mg/L	0.94	B071190	<0.50	0.50	B071195
Total Silver (Ag)	mg/L	<0.00010	B071189	<0.00010	0.00010	B071194
Total Sodium (Na)	mg/L	2.8	B071190	<0.50	0.50	B071195
Total Strontium (Sr)	mg/L	0.048	B071190	<0.020	0.020	B071195
Total Sulphur (S)	mg/L	49	B071190	<0.20	0.20	B071195
Total Thallium (Tl)	mg/L	<0.00020	B071189	<0.00020	0.00020	B071194
Total Tin (Sn)	mg/L	<0.0010	B071189	<0.0010	0.0010	B071194
Total Titanium (Ti)	mg/L	0.0011	B071189	<0.0010	0.0010	B071194
Total Uranium (U)	mg/L	<0.00010	B071189	<0.00010	0.00010	B071194
Total Vanadium (V)	mg/L	<0.0010	B071189	<0.0010	0.0010	B071194

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BWP603		BWP604		
Sampling Date		2023/08/09 10:00		2023/08/09		
COC Number		701930-03-01		701930-03-01		
	UNITS	**SW-121**	**QC Batch**	**TRIP BLANK**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.10	B071189	<0.0030	0.0030	B071194
RDL = Reportable Detection Limit						

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP577			BWP577			BWP578		
Sampling Date		2023/08/09 11:15			2023/08/09 11:15			2023/08/09 09:50		
COC Number		701930-01-01			701930-01-01			701930-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	39	0.50	B068066				150	0.50	B068066
Total Hardness (CaCO3)	mg/L	36.7	0.50	B067906				142	0.50	B067906
Misc. Inorganics										
pH	pH	6.64	N/A	B072144				6.33	N/A	B072144
Total Organic Carbon (C)	mg/L	12	0.50	B072456				7.9	0.50	B072456
Total Suspended Solids	mg/L	1.3	1.0	B072738				2.3	1.0	B072740
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11 (1)	0.50	B072501				5.7 (1)	0.50	B072501
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B072140				<1.0	1.0	B072140
Alkalinity (Total as CaCO3)	mg/L	35	1.0	B072140				8.8	1.0	B072140
Bicarbonate (HCO3)	mg/L	42	1.0	B072140				11	1.0	B072140
Carbonate (CO3)	mg/L	<1.0	1.0	B072140				<1.0	1.0	B072140
Hydroxide (OH)	mg/L	<1.0	1.0	B072140				<1.0	1.0	B072140
Sulphate (SO4)	mg/L	7.4	1.0	B071707				130	5.0	B071704
Physical Properties										
Turbidity	NTU	2.5	0.10	B068893	2.5	0.10	B068893	10	0.10	B068893

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP578			BWP579			BWP579		
Sampling Date		2023/08/09 09:50			2023/08/09 09:45			2023/08/09 09:45		
COC Number		701930-01-01			701930-01-01			701930-01-01		
	UNITS	SB-1 Lab-Dup	RDL	QC Batch	SB-2	RDL	QC Batch	SB-2 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				150	0.50	B068066			
Total Hardness (CaCO3)	mg/L				141	0.50	B067906			
Misc. Inorganics										
pH	pH				6.31	N/A	B072144			
Total Organic Carbon (C)	mg/L				7.7 (1)	0.50	B072461	8.0	0.50	B072461
Total Suspended Solids	mg/L	2.1	1.0	B072740	2.3	1.0	B072740			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				7.2 (2)	0.50	B072501			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B072140			
Alkalinity (Total as CaCO3)	mg/L				7.2	1.0	B072140			
Bicarbonate (HCO3)	mg/L				8.8	1.0	B072140			
Carbonate (CO3)	mg/L				<1.0	1.0	B072140			
Hydroxide (OH)	mg/L				<1.0	1.0	B072140			
Sulphate (SO4)	mg/L				130	5.0	B071704			
Physical Properties										
Turbidity	NTU				15	0.10	B068893			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.
(2) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP580		BWP581	BWP582			BWP582		
Sampling Date		2023/08/09 09:55		2023/08/09 10:00	2023/08/09 10:05			2023/08/09 10:05		
COC Number		701930-01-01		701930-01-01	701930-01-01			701930-01-01		
	UNITS	CB-1	QC Batch	CB-2	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	160	B068066	150	170	0.50	B068066			
Total Hardness (CaCO3)	mg/L	140	B067906	138	153	0.50	B067906			
Misc. Inorganics										
pH	pH	6.23	B069803	6.24	6.24	N/A	B069803			
Total Organic Carbon (C)	mg/L	7.6	B072456	7.4	6.8	0.50	B072456			
Total Suspended Solids	mg/L	1.9 (1)	B074224	2.1	<1.0	1.0	B072740			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.7 (2)	B072501	6.3 (2)	7.2 (2)	0.50	B072501			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B069802	<1.0	<1.0	1.0	B069802			
Alkalinity (Total as CaCO3)	mg/L	11	B069802	9.4	9.7	1.0	B069802			
Bicarbonate (HCO3)	mg/L	14	B069802	12	12	1.0	B069802			
Carbonate (CO3)	mg/L	<1.0	B069802	<1.0	<1.0	1.0	B069802			
Hydroxide (OH)	mg/L	<1.0	B069802	<1.0	<1.0	1.0	B069802			
Sulphate (SO4)	mg/L	130	B071704	130	150	5.0	B071704	140	5.0	B071704
Physical Properties										
Turbidity	NTU	10 (1)	B075139	11	8.7	0.10	B068893			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample was originally processed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.
(2) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP583		BWP584			BWP585	BWP586		
Sampling Date		2023/08/09 10:10		2023/08/09 10:25			2023/08/09 10:20	2023/08/09 10:30		
COC Number		701930-01-01		701930-01-01			701930-01-01	701930-01-01		
	UNITS	**EB-2**	**RDL**	**NB-1**	**RDL**	**QC Batch**	**NB-2**	**CLD**	**RDL**	**QC Batch**
Calculated Parameters										
Hardness (CaCO3)	mg/L	180	0.50	160	0.50	B068066	160	160	0.50	B068460
Total Hardness (CaCO3)	mg/L	159	0.50	146	0.50	B067906	148	146	0.50	B067906
Misc. Inorganics										
pH	pH	6.29	N/A	6.34	N/A	B072144	6.28	6.30	N/A	B069803
Total Organic Carbon (C)	mg/L	7.3	0.50	7.7	0.50	B072456	6.4	7.6	0.50	B072456
Total Suspended Solids	mg/L	1.9	1.0	1.1	0.99	B072740	1.5	1.5	1.0	B072740
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.3 (1)	0.50	7.2 (1)	0.50	B072501	7.6 (1)	7.3 (1)	0.50	B072501
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	<1.0	1.0	B072140	<1.0	<1.0	1.0	B069802
Alkalinity (Total as CaCO3)	mg/L	8.0	1.0	8.0	1.0	B072140	9.4	11	1.0	B069802
Bicarbonate (HCO3)	mg/L	9.8	1.0	9.8	1.0	B072140	11	13	1.0	B069802
Carbonate (CO3)	mg/L	<1.0	1.0	<1.0	1.0	B072140	<1.0	<1.0	1.0	B069802
Hydroxide (OH)	mg/L	<1.0	1.0	<1.0	1.0	B072140	<1.0	<1.0	1.0	B069802
Sulphate (SO4)	mg/L	150	5.0	140	5.0	B071704	140	140	5.0	B071704
Physical Properties										
Turbidity	NTU	8.5	0.10	9.5	0.10	B068893	9.2	8.8	0.10	B068893

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP587			BWP587			BWP588		
Sampling Date		2023/08/09 08:45			2023/08/09 08:45			2023/08/09 08:50		
COC Number		701930-02-01			701930-02-01			701930-02-01		
	UNITS	CL-3 SFC	RDL	QC Batch	CL-3 SFC Lab-Dup	RDL	QC Batch	CL-3 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	48	0.50	B068460				50	0.50	B068460
Total Hardness (CaCO3)	mg/L	44.7	0.50	B067906				46.1	0.50	B067906
Misc. Inorganics										
pH	pH	6.56	N/A	B069803				6.57	N/A	B069803
Total Organic Carbon (C)	mg/L	9.6	0.50	B072456				9.5	0.50	B072456
Total Suspended Solids	mg/L	<1.0	1.0	B072740				<1.0	1.0	B072740
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.1 (1)	0.50	B072507				9.6 (1)	0.50	B072507
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B069802				<1.0	1.0	B069802
Alkalinity (Total as CaCO3)	mg/L	27	1.0	B069802				29	1.0	B069802
Bicarbonate (HCO3)	mg/L	33	1.0	B069802				35	1.0	B069802
Carbonate (CO3)	mg/L	<1.0	1.0	B069802				<1.0	1.0	B069802
Hydroxide (OH)	mg/L	<1.0	1.0	B069802				<1.0	1.0	B069802
Sulphate (SO4)	mg/L	23	1.0	B070662	25	1.0	B070662	21	1.0	B071694
Physical Properties										
Turbidity	NTU	1.5	0.10	B068893				1.7	0.10	B068893

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Bureau Veritas Job #: C362057
Report Date: 2023/08/17

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RP

RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP589		BWP590		BWP591			BWP591		
Sampling Date		2023/08/09 08:55		2023/08/09 09:00		2023/08/09 08:35			2023/08/09 08:35		
COC Number		701930-02-01		701930-02-01		701930-02-01			701930-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	QC Batch	CL-8 SFC	RDL	QC Batch	CL-8 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L	50	B068460	50	B068460	50	0.50	B068460			
Total Hardness (CaCO3)	mg/L	47.0	B067906	44.9	B068465	45.2	0.50	B068465			
Misc. Inorganics											
pH	pH	6.58	B069803	6.63	B069803	6.54	N/A	B069803	6.55	N/A	B069803
Total Organic Carbon (C)	mg/L	9.3	B072468	8.4	B072468	9.2	0.50	B072456			
Total Suspended Solids	mg/L	<1.0	B072740	<1.0	B072740	<1.0	1.0	B072740			
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	10 (1)	B072507	8.9 (1)	B072501	9.9 (1)	0.50	B072507			
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	B069802	<1.0	B069802	<1.0	1.0	B069802	<1.0	1.0	B069802
Alkalinity (Total as CaCO3)	mg/L	30	B069802	28	B069802	31	1.0	B069802	28	1.0	B069802
Bicarbonate (HCO3)	mg/L	37	B069802	34	B069802	38	1.0	B069802	34	1.0	B069802
Carbonate (CO3)	mg/L	<1.0	B069802	<1.0	B069802	<1.0	1.0	B069802	<1.0	1.0	B069802
Hydroxide (OH)	mg/L	<1.0	B069802	<1.0	B069802	<1.0	1.0	B069802	<1.0	1.0	B069802
Sulphate (SO4)	mg/L	22	B071704	22	B071704	21	1.0	B071694			
Physical Properties											
Turbidity	NTU	1.6	B068893	1.1	B068893	1.3	0.10	B068893			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP592		BWP593		BWP594		
Sampling Date		2023/08/09 08:40		2023/08/09 09:05		2023/08/09 09:10		
COC Number		701930-02-01		701930-02-01		701930-02-01		
	UNITS	**CL-8 BTM**	**QC Batch**	**CL-2 SFC**	**QC Batch**	**CL-2BTM**	**RDL**	**QC Batch**
Calculated Parameters								
Hardness (CaCO3)	mg/L	47	B068460	49	B068460	51	0.50	B068460
Total Hardness (CaCO3)	mg/L	43.6	B068465	46.5	B068465	48.8	0.50	B068465
Misc. Inorganics								
pH	pH	6.59	B069803	6.62	B069803	6.55	N/A	B069803
Total Organic Carbon (C)	mg/L	9.6	B072461	8.8	B072461	9.9	0.50	B072456
Total Suspended Solids	mg/L	<1.0	B072740	<1.0	B072740	<1.0	1.0	B072740
Lab Filtered Inorganics								
Dissolved Organic Carbon (C)	mg/L	9.3 (1)	B072507	9.8 (1)	B072501	9.2 (1)	0.50	B072501
Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	B069802	<1.0	B069802	<1.0	1.0	B069802
Alkalinity (Total as CaCO3)	mg/L	33	B069802	29	B069802	30	1.0	B069802
Bicarbonate (HCO3)	mg/L	40	B069802	35	B069802	37	1.0	B069802
Carbonate (CO3)	mg/L	<1.0	B069802	<1.0	B069802	<1.0	1.0	B069802
Hydroxide (OH)	mg/L	<1.0	B069802	<1.0	B069802	<1.0	1.0	B069802
Sulphate (SO4)	mg/L	21	B071694	22	B071704	22	1.0	B071704
Physical Properties								
Turbidity	NTU	1.7	B068893	1.8	B068893	5.1	0.10	B068893

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP595			BWP596			BWP596		
Sampling Date		2023/08/09 08:25			2023/08/09 08:30			2023/08/09 08:30		
COC Number		701930-02-01			701930-02-01			701930-02-01		
	UNITS	CL-4 SFC	RDL	QC Batch	CL-4 BTM	RDL	QC Batch	CL-4 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	48	0.50	B068460	50	0.50	B068460			
Total Hardness (CaCO3)	mg/L	44.0	0.50	B068465	48.3	0.50	B068465			
Misc. Inorganics										
pH	pH	6.64	N/A	B069803	6.67	N/A	B072144			
Total Organic Carbon (C)	mg/L	9.5	0.50	B072461	8.7	0.50	B072461			
Total Suspended Solids	mg/L	<0.99	0.99	B072740	<1.0	1.0	B072740			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.9 (1)	0.50	B072501	8.6 (1)	0.50	B072514			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B069802	<1.0	1.0	B072140			
Alkalinity (Total as CaCO3)	mg/L	28	1.0	B069802	27	1.0	B072140			
Bicarbonate (HCO3)	mg/L	34	1.0	B069802	33	1.0	B072140			
Carbonate (CO3)	mg/L	<1.0	1.0	B069802	<1.0	1.0	B072140			
Hydroxide (OH)	mg/L	<1.0	1.0	B069802	<1.0	1.0	B072140			
Sulphate (SO4)	mg/L	20	1.0	B071704	21	1.0	B071704			
Physical Properties										
Turbidity	NTU	1.2	0.10	B068893	6.0	0.10	B068896	5.5	0.10	B068896

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP597		BWP598			BWP598		
Sampling Date		2023/08/09 08:15		2023/08/09 08:20			2023/08/09 08:20		
COC Number		701930-03-01		701930-03-01			701930-03-01		
	UNITS	CL-5 SFC	QC Batch	CL-5 BTM	RDL	QC Batch	CL-5 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	45	B068460	46	0.50	B068460			
Total Hardness (CaCO3)	mg/L	42.4	B068465	42.5	0.50	B068465			
Misc. Inorganics									
pH	pH	6.60	B069803	6.72	N/A	B072144			
Total Organic Carbon (C)	mg/L	9.5	B072461	8.7	0.50	B072456			
Total Suspended Solids	mg/L	<1.0	B072740	<1.0	1.0	B072741	<1.0	1.0	B072741
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.3 (1)	B072507	8.0 (1)	0.50	B072501	9.8	0.50	B072501
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B069802	<1.0	1.0	B072140			
Alkalinity (Total as CaCO3)	mg/L	26	B069802	31	1.0	B072140			
Bicarbonate (HCO3)	mg/L	32	B069802	38	1.0	B072140			
Carbonate (CO3)	mg/L	<1.0	B069802	<1.0	1.0	B072140			
Hydroxide (OH)	mg/L	<1.0	B069802	<1.0	1.0	B072140			
Sulphate (SO4)	mg/L	18	B071694	18	1.0	B071704			
Physical Properties									
Turbidity	NTU	1.5	B068896	1.9	0.10	B068896			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP599		BWP600		BWP601		BWP602		
Sampling Date		2023/08/09 08:05		2023/08/09 08:10		2023/08/09 08:20		2023/08/09 08:50		
COC Number		701930-03-01		701930-03-01		701930-03-01		701930-03-01		
	UNITS	CL-6 SFC	QC Batch	CL-6 BTM	QC Batch	SW-119	QC Batch	SW-120	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	48	B068460	44	B068460	45	B068460	48	0.50	B068460
Total Hardness (CaCO3)	mg/L	40.0	B068465	40.7	B068465	42.6	B068465	44.1	0.50	B068465
Misc. Inorganics										
pH	pH	6.61	B069803	6.63	B069531	6.58	B069803	6.57	N/A	B069803
Total Organic Carbon (C)	mg/L	9.5	B072456	9.0	B072461	9.1	B072456	8.3	0.50	B072461
Total Suspended Solids	mg/L	<1.0	B072741	<1.0	B072741	1.3	B072741	<1.0	1.0	B072741
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.0 (1)	B072507	9.4 (1)	B072507	6.7 (1)	B072507	6.3 (1)	0.50	B072507
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B069802	<1.0	B069530	<1.0	B069802	<1.0	1.0	B069802
Alkalinity (Total as CaCO3)	mg/L	29	B069802	31	B069530	29	B069802	31	1.0	B069802
Bicarbonate (HCO3)	mg/L	35	B069802	38	B069530	36	B069802	37	1.0	B069802
Carbonate (CO3)	mg/L	<1.0	B069802	<1.0	B069530	<1.0	B069802	<1.0	1.0	B069802
Hydroxide (OH)	mg/L	<1.0	B069802	<1.0	B069530	<1.0	B069802	<1.0	1.0	B069802
Sulphate (SO4)	mg/L	15	B071694	16	B070335	19	B070335	21	1.0	B071694
Physical Properties										
Turbidity	NTU	1.5	B068896	1.7	B068896	2.4	B068896	2.3	0.10	B068896

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF SURFACE WATER

Bureau Veritas ID		BWP603			BWP604		
Sampling Date		2023/08/09 10:00			2023/08/09		
COC Number		701930-03-01			701930-03-01		
	UNITS	SW-121	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Calculated Parameters							
Hardness (CaCO3)	mg/L	150	0.50	B068460	<0.50	0.50	B068460
Total Hardness (CaCO3)	mg/L	140	0.50	B068465	<0.50	0.50	B068465
Misc. Inorganics							
pH	pH	6.24	N/A	B069803	4.89	N/A	B069803
Total Organic Carbon (C)	mg/L	6.8	0.50	B072456	<0.50	0.50	B072456
Total Suspended Solids	mg/L	1.2	1.0	B072741	<1.0	1.0	B072741
Lab Filtered Inorganics							
Dissolved Organic Carbon (C)	mg/L	7.6 (1)	0.50	B072507	<0.50 (1)	0.50	B072507
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B069802	<1.0	1.0	B069802
Alkalinity (Total as CaCO3)	mg/L	9.2	1.0	B069802	<1.0	1.0	B069802
Bicarbonate (HCO3)	mg/L	11	1.0	B069802	<1.0	1.0	B069802
Carbonate (CO3)	mg/L	<1.0	1.0	B069802	<1.0	1.0	B069802
Hydroxide (OH)	mg/L	<1.0	1.0	B069802	<1.0	1.0	B069802
Sulphate (SO4)	mg/L	130	5.0	B071694	<1.0	1.0	B071743
Physical Properties							
Turbidity	NTU	11	0.10	B068896	<0.10 (2)	0.10	B075139

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Sample was originally processed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.0°C
Package 2	0.6°C
Package 3	0.5°C
Package 4	0.6°C

Sample BWP580 [CB-1] : Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Turbidity.

Sample BWP604 [TRIP BLANK] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Sample BWP578, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BWP601, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B068893	Turbidity	2023/08/12			102	80 - 120	<0.10	NTU	0.41	20
B068896	Turbidity	2023/08/12			102	80 - 120	<0.10	NTU	9.4	20
B069530	Alkalinity (PP as CaCO3)	2023/08/13					<1.0	mg/L	NC	20
B069530	Alkalinity (Total as CaCO3)	2023/08/13			100	80 - 120	<1.0	mg/L	0.17	20
B069530	Bicarbonate (HCO3)	2023/08/13					<1.0	mg/L	0.17	20
B069530	Carbonate (CO3)	2023/08/13					<1.0	mg/L	NC	20
B069530	Hydroxide (OH)	2023/08/13					<1.0	mg/L	NC	20
B069531	pH	2023/08/13			99	97 - 103			1.9	N/A
B069802	Alkalinity (PP as CaCO3)	2023/08/14					<1.0	mg/L	NC	20
B069802	Alkalinity (Total as CaCO3)	2023/08/14			103	80 - 120	<1.0	mg/L	12	20
B069802	Bicarbonate (HCO3)	2023/08/14					<1.0	mg/L	12	20
B069802	Carbonate (CO3)	2023/08/14					<1.0	mg/L	NC	20
B069802	Hydroxide (OH)	2023/08/14					<1.0	mg/L	NC	20
B069803	pH	2023/08/14			101	97 - 103			0.25	N/A
B069812	Dissolved Aluminum (Al)	2023/08/14	118	80 - 120	120	80 - 120	<0.0030	mg/L	3.7	20
B069812	Dissolved Antimony (Sb)	2023/08/14	105	80 - 120	104	80 - 120	<0.00060	mg/L	NC	20
B069812	Dissolved Arsenic (As)	2023/08/14	94	80 - 120	90	80 - 120	<0.00020	mg/L	9.4	20
B069812	Dissolved Beryllium (Be)	2023/08/14	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B069812	Dissolved Chromium (Cr)	2023/08/14	96	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B069812	Dissolved Cobalt (Co)	2023/08/14	97	80 - 120	94	80 - 120	<0.00030	mg/L	NC	20
B069812	Dissolved Copper (Cu)	2023/08/14	98	80 - 120	94	80 - 120	<0.0010	mg/L	1.4	20
B069812	Dissolved Lead (Pb)	2023/08/14	101	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B069812	Dissolved Molybdenum (Mo)	2023/08/14	103	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B069812	Dissolved Nickel (Ni)	2023/08/14	94	80 - 120	92	80 - 120	<0.00050	mg/L	NC	20
B069812	Dissolved Selenium (Se)	2023/08/14	95	80 - 120	90	80 - 120	<0.00020	mg/L	NC	20
B069812	Dissolved Silver (Ag)	2023/08/14	100	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B069812	Dissolved Thallium (Tl)	2023/08/14	103	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B069812	Dissolved Tin (Sn)	2023/08/14	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B069812	Dissolved Titanium (Ti)	2023/08/14	96	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
B069812	Dissolved Uranium (U)	2023/08/14	103	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B069812	Dissolved Vanadium (V)	2023/08/14	98	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B069812	Dissolved Zinc (Zn)	2023/08/14	99	80 - 120	88	80 - 120	<0.0030	mg/L	3.2	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B069817	Dissolved Aluminum (Al)	2023/08/14	110	80 - 120	115	80 - 120	<0.0030	mg/L	NC	20
B069817	Dissolved Antimony (Sb)	2023/08/14	103	80 - 120	104	80 - 120	<0.00060	mg/L	NC	20
B069817	Dissolved Arsenic (As)	2023/08/14	97	80 - 120	92	80 - 120	<0.00020	mg/L	1.1	20
B069817	Dissolved Beryllium (Be)	2023/08/14	102	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B069817	Dissolved Chromium (Cr)	2023/08/14	97	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B069817	Dissolved Cobalt (Co)	2023/08/14	96	80 - 120	94	80 - 120	<0.00030	mg/L	NC	20
B069817	Dissolved Copper (Cu)	2023/08/14	95	80 - 120	95	80 - 120	<0.0010	mg/L	4.2	20
B069817	Dissolved Lead (Pb)	2023/08/14	97	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B069817	Dissolved Molybdenum (Mo)	2023/08/14	104	80 - 120	102	80 - 120	<0.00020	mg/L	1.0	20
B069817	Dissolved Nickel (Ni)	2023/08/14	95	80 - 120	92	80 - 120	<0.00050	mg/L	2.2	20
B069817	Dissolved Selenium (Se)	2023/08/14	100	80 - 120	91	80 - 120	<0.00020	mg/L	1.4	20
B069817	Dissolved Silver (Ag)	2023/08/14	100	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B069817	Dissolved Thallium (Tl)	2023/08/14	99	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B069817	Dissolved Tin (Sn)	2023/08/14	102	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B069817	Dissolved Titanium (Ti)	2023/08/14	97	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B069817	Dissolved Uranium (U)	2023/08/14	101	80 - 120	100	80 - 120	<0.00010	mg/L	0.51	20
B069817	Dissolved Vanadium (V)	2023/08/14	98	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B069817	Dissolved Zinc (Zn)	2023/08/14	95	80 - 120	89	80 - 120	<0.0030	mg/L	NC	20
B069946	Dissolved Barium (Ba)	2023/08/14	89	80 - 120	96	80 - 120	<0.010	mg/L		
B069946	Dissolved Boron (B)	2023/08/14			97	80 - 120	<0.020	mg/L		
B069946	Dissolved Calcium (Ca)	2023/08/16	103	80 - 120	100	80 - 120	<0.30	mg/L	2.0	20
B069946	Dissolved Iron (Fe)	2023/08/16	105	80 - 120	104	80 - 120	<0.060	mg/L	NC	20
B069946	Dissolved Lithium (Li)	2023/08/14	94	80 - 120	95	80 - 120	<0.020	mg/L		
B069946	Dissolved Magnesium (Mg)	2023/08/16	100	80 - 120	97	80 - 120	<0.20	mg/L	1.2	20
B069946	Dissolved Manganese (Mn)	2023/08/16	104	80 - 120	103	80 - 120	<0.0040	mg/L	1.6	20
B069946	Dissolved Phosphorus (P)	2023/08/14	107	80 - 120	101	80 - 120	<0.10	mg/L		
B069946	Dissolved Potassium (K)	2023/08/16	102	80 - 120	102	80 - 120	<0.30	mg/L	1.6	20
B069946	Dissolved Silicon (Si)	2023/08/14	99	80 - 120	97	80 - 120	<0.50	mg/L		
B069946	Dissolved Sodium (Na)	2023/08/16	NC	80 - 120	99	80 - 120	<0.50	mg/L	1.2	20
B069946	Dissolved Strontium (Sr)	2023/08/14	89	80 - 120	91	80 - 120	<0.020	mg/L		
B069946	Dissolved Sulphur (S)	2023/08/14	NC	80 - 120	99	80 - 120	<0.20	mg/L		
B070311	Dissolved Barium (Ba)	2023/08/16	98	80 - 120	100	80 - 120	<0.010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B070311	Dissolved Boron (B)	2023/08/16	98	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B070311	Dissolved Calcium (Ca)	2023/08/16	99	80 - 120	101	80 - 120	<0.30	mg/L	0.71	20
B070311	Dissolved Iron (Fe)	2023/08/16	103	80 - 120	104	80 - 120	<0.060	mg/L	NC	20
B070311	Dissolved Lithium (Li)	2023/08/16	101	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B070311	Dissolved Magnesium (Mg)	2023/08/16	102	80 - 120	103	80 - 120	<0.20	mg/L	3.3	20
B070311	Dissolved Manganese (Mn)	2023/08/16	104	80 - 120	103	80 - 120	<0.0040	mg/L	NC	20
B070311	Dissolved Phosphorus (P)	2023/08/16	103	80 - 120	102	80 - 120	<0.10	mg/L	NC	20
B070311	Dissolved Potassium (K)	2023/08/16	102	80 - 120	102	80 - 120	<0.30	mg/L	6.2	20
B070311	Dissolved Silicon (Si)	2023/08/16	95	80 - 120	100	80 - 120	<0.50	mg/L	0.20	20
B070311	Dissolved Sodium (Na)	2023/08/16	96	80 - 120	103	80 - 120	<0.50	mg/L	6.7	20
B070311	Dissolved Strontium (Sr)	2023/08/16	94	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
B070311	Dissolved Sulphur (S)	2023/08/16	116	80 - 120	100	80 - 120	<0.20	mg/L	2.6	20
B070335	Sulphate (SO4)	2023/08/15	109	80 - 120	106	80 - 120	<1.0	mg/L	1.4	20
B070368	Total Aluminum (Al)	2023/08/15	106	80 - 120	109	80 - 120	<0.0030	mg/L	8.9	20
B070368	Total Antimony (Sb)	2023/08/15	104	80 - 120	106	80 - 120	<0.00060	mg/L	NC	20
B070368	Total Arsenic (As)	2023/08/15	96	80 - 120	96	80 - 120	<0.00020	mg/L	5.5	20
B070368	Total Beryllium (Be)	2023/08/15	102	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B070368	Total Chromium (Cr)	2023/08/15	98	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B070368	Total Cobalt (Co)	2023/08/15	99	80 - 120	101	80 - 120	<0.00030	mg/L	NC	20
B070368	Total Copper (Cu)	2023/08/15	98	80 - 120	100	80 - 120	<0.0010	mg/L	12	20
B070368	Total Lead (Pb)	2023/08/15	102	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B070368	Total Molybdenum (Mo)	2023/08/15	104	80 - 120	104	80 - 120	<0.00020	mg/L	166 (1)	20
B070368	Total Nickel (Ni)	2023/08/15	98	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20
B070368	Total Selenium (Se)	2023/08/15	99	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B070368	Total Silver (Ag)	2023/08/15	103	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B070368	Total Thallium (Tl)	2023/08/15	103	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B070368	Total Tin (Sn)	2023/08/15	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B070368	Total Titanium (Ti)	2023/08/15	98	80 - 120	97	80 - 120	<0.0010	mg/L	18	20
B070368	Total Uranium (U)	2023/08/15	101	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B070368	Total Vanadium (V)	2023/08/15	100	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B070368	Total Zinc (Zn)	2023/08/15	91	80 - 120	98	80 - 120	<0.0030	mg/L	3.0	20
B070456	Total Barium (Ba)	2023/08/15	100	80 - 120	97	80 - 120	<0.010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B070456	Total Boron (B)	2023/08/15	98	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B070456	Total Calcium (Ca)	2023/08/15	96	80 - 120	96	80 - 120	<0.30	mg/L	1.9	20
B070456	Total Iron (Fe)	2023/08/15	111	80 - 120	110	80 - 120	<0.060	mg/L	2.1	20
B070456	Total Lithium (Li)	2023/08/15	100	80 - 120	98	80 - 120	<0.020	mg/L	NC	20
B070456	Total Magnesium (Mg)	2023/08/15	100	80 - 120	98	80 - 120	<0.20	mg/L	0.87	20
B070456	Total Manganese (Mn)	2023/08/15	113	80 - 120	110	80 - 120	<0.0040	mg/L	7.7	20
B070456	Total Phosphorus (P)	2023/08/15	101	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B070456	Total Potassium (K)	2023/08/15	101	80 - 120	98	80 - 120	<0.30	mg/L	3.4	20
B070456	Total Silicon (Si)	2023/08/15	100	80 - 120	98	80 - 120	<0.50	mg/L	1.9	20
B070456	Total Sodium (Na)	2023/08/15	98	80 - 120	96	80 - 120	<0.50	mg/L	1.9	20
B070456	Total Strontium (Sr)	2023/08/15	96	80 - 120	93	80 - 120	<0.020	mg/L	2.2	20
B070456	Total Sulphur (S)	2023/08/15	107	80 - 120	105	80 - 120	<0.20	mg/L	4.7	20
B070662	Sulphate (SO4)	2023/08/15	102	80 - 120	102	80 - 120	<1.0	mg/L	7.6	20
B071189	Total Aluminum (Al)	2023/08/15	109	80 - 120	110	80 - 120	<0.0030	mg/L	4.7	20
B071189	Total Antimony (Sb)	2023/08/15	107	80 - 120	110	80 - 120	<0.00060	mg/L	NC	20
B071189	Total Arsenic (As)	2023/08/15	100	80 - 120	103	80 - 120	<0.00020	mg/L	1.3	20
B071189	Total Beryllium (Be)	2023/08/15	102	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B071189	Total Chromium (Cr)	2023/08/15	99	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B071189	Total Cobalt (Co)	2023/08/15	102	80 - 120	104	80 - 120	<0.00030	mg/L	NC	20
B071189	Total Copper (Cu)	2023/08/15	100	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B071189	Total Lead (Pb)	2023/08/15	103	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B071189	Total Molybdenum (Mo)	2023/08/15	106	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B071189	Total Nickel (Ni)	2023/08/15	100	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
B071189	Total Selenium (Se)	2023/08/15	106	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B071189	Total Silver (Ag)	2023/08/15	104	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B071189	Total Thallium (Tl)	2023/08/15	104	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B071189	Total Tin (Sn)	2023/08/15	105	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B071189	Total Titanium (Ti)	2023/08/15	99	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B071189	Total Uranium (U)	2023/08/15	101	80 - 120	102	80 - 120	<0.00010	mg/L	1.9	20
B071189	Total Vanadium (V)	2023/08/15	101	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B071189	Total Zinc (Zn)	2023/08/15	98	80 - 120	103	80 - 120	<0.0030	mg/L	NC	20
B071190	Total Barium (Ba)	2023/08/15	97	80 - 120	96	80 - 120	<0.010	mg/L	4.3	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B071190	Total Boron (B)	2023/08/15	99	80 - 120	97	80 - 120	<0.020	mg/L	3.2	20
B071190	Total Calcium (Ca)	2023/08/15	NC	80 - 120	98	80 - 120	<0.30	mg/L	4.5	20
B071190	Total Iron (Fe)	2023/08/15	NC	80 - 120	114	80 - 120	<0.060	mg/L	4.4	20
B071190	Total Lithium (Li)	2023/08/15	103	80 - 120	101	80 - 120	<0.020	mg/L	5.6	20
B071190	Total Magnesium (Mg)	2023/08/15	102	80 - 120	98	80 - 120	<0.20	mg/L	3.7	20
B071190	Total Manganese (Mn)	2023/08/15	115	80 - 120	112	80 - 120	<0.0040	mg/L	3.8	20
B071190	Total Phosphorus (P)	2023/08/15	104	80 - 120	101	80 - 120	<0.10	mg/L	NC	20
B071190	Total Potassium (K)	2023/08/15	102	80 - 120	100	80 - 120	<0.30	mg/L	5.0	20
B071190	Total Silicon (Si)	2023/08/15	102	80 - 120	100	80 - 120	<0.50	mg/L	3.7	20
B071190	Total Sodium (Na)	2023/08/15	97	80 - 120	95	80 - 120	<0.50	mg/L	4.5	20
B071190	Total Strontium (Sr)	2023/08/15	93	80 - 120	92	80 - 120	<0.020	mg/L	4.2	20
B071190	Total Sulphur (S)	2023/08/15	117	80 - 120	108	80 - 120	<0.20	mg/L	1.3	20
B071194	Total Aluminum (Al)	2023/08/15	110	80 - 120	115	80 - 120	<0.0030	mg/L	19	20
B071194	Total Antimony (Sb)	2023/08/15	110	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B071194	Total Arsenic (As)	2023/08/15	100	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B071194	Total Beryllium (Be)	2023/08/15	107	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B071194	Total Chromium (Cr)	2023/08/15	100	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B071194	Total Cobalt (Co)	2023/08/15	102	80 - 120	107	80 - 120	<0.00030	mg/L	NC	20
B071194	Total Copper (Cu)	2023/08/15	100	80 - 120	107	80 - 120	<0.0010	mg/L	11	20
B071194	Total Lead (Pb)	2023/08/15	106	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B071194	Total Molybdenum (Mo)	2023/08/15	108	80 - 120	111	80 - 120	<0.00020	mg/L	NC	20
B071194	Total Nickel (Ni)	2023/08/15	100	80 - 120	107	80 - 120	<0.00050	mg/L	NC	20
B071194	Total Selenium (Se)	2023/08/15	106	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B071194	Total Silver (Ag)	2023/08/15	106	80 - 120	110	80 - 120	<0.00010	mg/L	NC	20
B071194	Total Thallium (Tl)	2023/08/15	107	80 - 120	111	80 - 120	<0.00020	mg/L	NC	20
B071194	Total Tin (Sn)	2023/08/15	107	80 - 120	111	80 - 120	<0.0010	mg/L	NC	20
B071194	Total Titanium (Ti)	2023/08/15	101	80 - 120	104	80 - 120	<0.0010	mg/L	6.5	20
B071194	Total Uranium (U)	2023/08/15	104	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B071194	Total Vanadium (V)	2023/08/15	102	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B071194	Total Zinc (Zn)	2023/08/15	97	80 - 120	109	80 - 120	<0.0030	mg/L	11	20
B071195	Total Barium (Ba)	2023/08/15	97	80 - 120	95	80 - 120	<0.010	mg/L	0.80	20
B071195	Total Boron (B)	2023/08/15	96	80 - 120	96	80 - 120	<0.020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B071195	Total Calcium (Ca)	2023/08/15	96	80 - 120	96	80 - 120	<0.30	mg/L	0.67	20
B071195	Total Iron (Fe)	2023/08/15	106	80 - 120	111	80 - 120	<0.060	mg/L	0.67	20
B071195	Total Lithium (Li)	2023/08/15	100	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B071195	Total Magnesium (Mg)	2023/08/15	100	80 - 120	97	80 - 120	<0.20	mg/L	0.82	20
B071195	Total Manganese (Mn)	2023/08/15	107	80 - 120	109	80 - 120	<0.0040	mg/L	0.82	20
B071195	Total Phosphorus (P)	2023/08/15	100	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B071195	Total Potassium (K)	2023/08/15	99	80 - 120	98	80 - 120	<0.30	mg/L	0.53	20
B071195	Total Silicon (Si)	2023/08/15	98	80 - 120	98	80 - 120	<0.50	mg/L	2.2	20
B071195	Total Sodium (Na)	2023/08/15	96	80 - 120	94	80 - 120	<0.50	mg/L	0.65	20
B071195	Total Strontium (Sr)	2023/08/15	92	80 - 120	91	80 - 120	<0.020	mg/L	0.38	20
B071195	Total Sulphur (S)	2023/08/15	104	80 - 120	105	80 - 120	<0.20	mg/L	0.71	20
B071294	Total Aluminum (Al)	2023/08/15	113	80 - 120	107	80 - 120	<0.0030	mg/L	1.7	20
B071294	Total Antimony (Sb)	2023/08/15	113	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
B071294	Total Arsenic (As)	2023/08/15	101	80 - 120	98	80 - 120	<0.00020	mg/L	4.1	20
B071294	Total Beryllium (Be)	2023/08/15	109	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B071294	Total Chromium (Cr)	2023/08/15	101	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B071294	Total Cobalt (Co)	2023/08/15	102	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20
B071294	Total Copper (Cu)	2023/08/15	102	80 - 120	98	80 - 120	<0.0010	mg/L	3.0	20
B071294	Total Lead (Pb)	2023/08/15	109	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B071294	Total Molybdenum (Mo)	2023/08/15	110	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B071294	Total Nickel (Ni)	2023/08/15	100	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
B071294	Total Selenium (Se)	2023/08/15	107	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B071294	Total Silver (Ag)	2023/08/15	108	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B071294	Total Thallium (Tl)	2023/08/15	109	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B071294	Total Tin (Sn)	2023/08/15	110	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B071294	Total Titanium (Ti)	2023/08/15	102	80 - 120	98	80 - 120	<0.0010	mg/L	6.9	20
B071294	Total Uranium (U)	2023/08/15	107	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B071294	Total Vanadium (V)	2023/08/15	103	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B071294	Total Zinc (Zn)	2023/08/15	100	80 - 120	98	80 - 120	<0.0030	mg/L	NC	20
B071310	Total Barium (Ba)	2023/08/15	97	80 - 120	94	80 - 120	<0.010	mg/L	7.7	20
B071310	Total Boron (B)	2023/08/15	96	80 - 120	93	80 - 120	<0.020	mg/L	17	20
B071310	Total Calcium (Ca)	2023/08/15	97	80 - 120	95	80 - 120	<0.30	mg/L	2.7	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B071310	Total Iron (Fe)	2023/08/15	109	80 - 120	111	80 - 120	<0.060	mg/L	8.8	20
B071310	Total Lithium (Li)	2023/08/15	103	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B071310	Total Magnesium (Mg)	2023/08/15	99	80 - 120	96	80 - 120	<0.20	mg/L	2.6	20
B071310	Total Manganese (Mn)	2023/08/15	112	80 - 120	109	80 - 120	<0.0040	mg/L	3.8	20
B071310	Total Phosphorus (P)	2023/08/15	101	80 - 120	98	80 - 120	<0.10	mg/L	NC	20
B071310	Total Potassium (K)	2023/08/15	100	80 - 120	97	80 - 120	<0.30	mg/L	5.5	20
B071310	Total Silicon (Si)	2023/08/15	97	80 - 120	95	80 - 120	<0.50	mg/L	8.4	20
B071310	Total Sodium (Na)	2023/08/15	95	80 - 120	92	80 - 120	<0.50	mg/L	1.8	20
B071310	Total Strontium (Sr)	2023/08/15	92	80 - 120	89	80 - 120	<0.020	mg/L	3.4	20
B071310	Total Sulphur (S)	2023/08/15	109	80 - 120	106	80 - 120	<0.20	mg/L	4.9	20
B071694	Sulphate (SO4)	2023/08/15	91	80 - 120	98	80 - 120	<1.0	mg/L		
B071704	Sulphate (SO4)	2023/08/15	NC	80 - 120	98	80 - 120	<1.0	mg/L	0.90	20
B071707	Sulphate (SO4)	2023/08/15	91	80 - 120	98	80 - 120	<1.0	mg/L	3.1	20
B071743	Sulphate (SO4)	2023/08/15	97	80 - 120	97	80 - 120	<1.0	mg/L	NC	20
B072140	Alkalinity (PP as CaCO3)	2023/08/15					<1.0	mg/L	NC	20
B072140	Alkalinity (Total as CaCO3)	2023/08/15			102	80 - 120	<1.0	mg/L	0.16	20
B072140	Bicarbonate (HCO3)	2023/08/15					<1.0	mg/L	0.16	20
B072140	Carbonate (CO3)	2023/08/15					<1.0	mg/L	NC	20
B072140	Hydroxide (OH)	2023/08/15					<1.0	mg/L	NC	20
B072144	pH	2023/08/15			100	97 - 103			0.87	N/A
B072456	Total Organic Carbon (C)	2023/08/17	86	80 - 120	101	80 - 120	<0.50	mg/L	7.9	20
B072461	Total Organic Carbon (C)	2023/08/17	74 (1)	80 - 120	99	80 - 120	<0.50	mg/L	4.1	20
B072468	Total Organic Carbon (C)	2023/08/16	NC	80 - 120	101	80 - 120	<0.50	mg/L	0.84	20
B072501	Dissolved Organic Carbon (C)	2023/08/17	87	80 - 120	105	80 - 120	<0.50	mg/L	20	20
B072507	Dissolved Organic Carbon (C)	2023/08/17	88	80 - 120	103	80 - 120	<0.50	mg/L	13	20
B072514	Dissolved Organic Carbon (C)	2023/08/17	71 (1)	80 - 120	100	80 - 120	<0.50	mg/L	3.4	20
B072738	Total Suspended Solids	2023/08/16	NC	80 - 120	105	80 - 120	<1.0	mg/L	6.0	20
B072740	Total Suspended Solids	2023/08/16	103	80 - 120	98	80 - 120	<1.0	mg/L	6.1	20
B072741	Total Suspended Solids	2023/08/16	102	80 - 120	100	80 - 120	<1.0	mg/L	NC	20
B073902	Dissolved Aluminum (Al)	2023/08/16	102	80 - 120	110	80 - 120	<0.0030	mg/L	96 (1)	20
B073902	Dissolved Antimony (Sb)	2023/08/16	91	80 - 120	95	80 - 120	<0.00060	mg/L	NC	20
B073902	Dissolved Arsenic (As)	2023/08/16	90	80 - 120	90	80 - 120	<0.00020	mg/L	14	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B073902	Dissolved Beryllium (Be)	2023/08/16	93	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B073902	Dissolved Chromium (Cr)	2023/08/16	96	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B073902	Dissolved Cobalt (Co)	2023/08/16	94	80 - 120	98	80 - 120	<0.00030	mg/L	NC	20
B073902	Dissolved Copper (Cu)	2023/08/16	96	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B073902	Dissolved Lead (Pb)	2023/08/16	94	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B073902	Dissolved Molybdenum (Mo)	2023/08/16	98	80 - 120	103	80 - 120	<0.00020	mg/L	5.5	20
B073902	Dissolved Nickel (Ni)	2023/08/16	95	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
B073902	Dissolved Selenium (Se)	2023/08/16	90	80 - 120	86	80 - 120	<0.00020	mg/L	5.2	20
B073902	Dissolved Silver (Ag)	2023/08/16	92	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B073902	Dissolved Thallium (Tl)	2023/08/16	94	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B073902	Dissolved Tin (Sn)	2023/08/16	92	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B073902	Dissolved Titanium (Ti)	2023/08/16	97	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B073902	Dissolved Uranium (U)	2023/08/16	93	80 - 120	99	80 - 120	<0.00010	mg/L	8.5	20
B073902	Dissolved Vanadium (V)	2023/08/16	95	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B073902	Dissolved Zinc (Zn)	2023/08/16	90	80 - 120	87	80 - 120	<0.0030	mg/L	NC	20
B074224	Total Suspended Solids	2023/08/17	92	80 - 120	98	80 - 120	<1.0	mg/L	5.7	20
B075062	Dissolved Lead (Pb)	2023/08/17	103	80 - 120	101	80 - 120	<0.00020	mg/L		
B075062	Dissolved Nickel (Ni)	2023/08/17	101	80 - 120	99	80 - 120	<0.00050	mg/L		
B075139	Turbidity	2023/08/17			99	80 - 120	<0.10	NTU	0.34	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

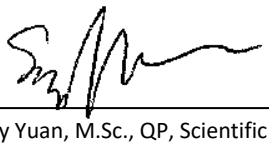
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

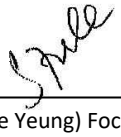
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Sandy Yuan, M.Sc., QP, Scientific Specialist



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #: 701930
Contact Name	Accounts Payable	Contact Name	Ed Collins ; Monika Niemczyk	P.O. #			
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name	OAM - Sherridon Mine Site	C#701930-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; mniemczyk@kgsgroup.com	Site #			
				Sampled By	RP, BP		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☑
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____ ☐
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	2023/08/09	11:15	surface water	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		SB-1		9:50				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		9:45				X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:55				X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		10:00				X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		10:05				X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		10:10				X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		10:25				X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		10:20				X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:30				X	X	X	X	X	X	X	X	X	X	4	

4/4

mcal-08-2218

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Pinkerton	2023/08/10	12:45	BM Brookman Thepert	23/08/10	12:45		☐	ACTR	☐ Yes ☐ No
			A TRAVERSE	2023/08/11	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

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White: Bureau Veritas Yellow: Client

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:
Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St, Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information
Company Name: KGS Group
Contact Name: Ed Collins; Monika Niemczyk
Address:
Phone: Fax:
Email: Ecollins@kgsgroup.com; mniemczyk@kgsgroup.com

Project Information
Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By: RP, BP

Laboratory Use Only
Bureau Veritas Job #: C362057
Bottle Order #: 701930
Chain Of Custody Record: C#701930-01-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	2023/08/09	11:15	surface water	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		SB-1		9:50				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		9:45				X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:55				X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		10:00				X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		10:05				X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		10:10				X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		10:25				X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		10:20				X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:30				X	X	X	X	X	X	X	X	X	X	4	

4/4

Turnaround Time (TAT) Required
Please provide advance notice for rush projects
Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Pollock	2023/08/10	12:45	BM Brooklyn Hebert	23/08/10	12:45	
			ASRAugraill	2023/08/14	08:30	

Lab Use Only
Time Sensitive: ☐
Temperature (°C) on Receipt: ACTR
Custody Seal Intact on Cooler? ☐ Yes ☐ No

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mcal-08-2218

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins *, Monika Niemczyk	P.O. #			701930
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#701930-02-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com; mniemczyk@kgsgroup.com	Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
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Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	2023/08/09	8:45	surface water	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		CL-3 BTM		8:50				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-7 SFC		8:55				X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		9:00				X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		8:35				X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		~~8:35~~ 8:40				X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		~~9:00~~ 9:05				X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		9:10				X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		8:25				X	X	X	X	X	X	X	X	✓	X	4	
10		CL-4 BTM	↓	8:30	↓	↓	↓	X	X	X	X	X	X	X	X	X	X	4	↓

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rahul Rollins	2023/08/10	12:45	~~BV~~ Brooklyn Hiebert	23/08/10	12:45	
			AJR BVA Grill	2023/08/10	8:30	

Lab Use Only		
Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
☐	ACTR	☐ Yes ☐ No

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White: Bureau Veritas Yellow: Client

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D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins ; Monika Niemczyk	P.O. #			701930
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#701930-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	2023/08/09	8:45	surface water	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		CL-3 BTM		8:50				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold time)
3		CL-7 SFC		8:55				X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		9:00				X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		8:35				X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		~~8:40~~ 9:05				X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		~~9:05~~ 8:40				X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		9:10				X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		8:25				X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		8:30				X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____ ☐
Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Kellett	2023/08/10	12:45	~~BV~~ Brooklyn Hiebert	23/08/10	12:45		☐	ACTR	☐ Yes ☐ No
			~~BV~~ AJ RUSH Crill	2023/08/10	8:30				

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Bureau Veritas Canada (2019) Inc.

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D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins ; Monika Niemczyk	P.O. #			701930
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#701930-03-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; mniemczyk@kgsgroup.com	Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

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(will be applied if Rush TAT is not specified)
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Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	2023/08/09	8:15	surface water	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		CL-5 BTM		8:20				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-6 SFC		8:05				X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:10				X	X	X	X	X	X	X	X	X	X	4	
5		SW-119		8:20				X	X	X	X	X	X	X	X	X	X	4	
6		SW-120		8:50				X	X	X	X	X	X	X	X	X	X	4	
7		SW-121		10:00				X	X	X	X	X	X	X	X	X	X	4	
8		TRIP BLANK		—	blank			X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Kuelin	2023/08/16	12:45	Brooklyn Hiebert	23/08/10	1245		☐	ACTR	☐ Yes ☐ No
			AJRAIRAJII	2023/08/11	08:30				

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See ACTR

White: Bureau Veritas Yellow: Client

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page ___ of ___	
Page ___ of ___	
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Page ___ of ___	

COOLER OBSERVATIONS: mced

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	4	4	4
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	5	6	6
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	7	7	6
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	3	4	4
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
	ATRAVERGill	2023/08/11	08:30

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #: 701930
Contact Name	Accounts Payable	Contact Name	Ed Collins ; Monika Niemczyk	P.O. #			
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#701930-03-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

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1		CL-5 SFC	2023/08/09	8:15	surface water	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC
2		CL-5 BTM		8:20				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-6 SFC		8:05				X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:10				X	X	X	X	X	X	X	X	X	X	4	
5		SW-119		8:20				X	X	X	X	X	X	X	X	X	X	4	
6		SW-120		8:50				X	X	X	X	X	X	X	X	X	X	4	
7		SW-121		10:00				X	X	X	X	X	X	X	X	X	X	4	
8		TRIP BLANK		—	blank			X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Kuhlen	2023/08/10	13:45	Brooklyn Hiebert	23/08/10	1245			ACTR	
			ATRAVELLER III	2023/08/11	08:30				Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS. See ACTR

White: Bureau Veritas Yellow: Client

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- [x] Calgary, AB: 4000 19th St. NE, T2E 6P8 Toll Free (800) 386-7247
- [ ] Edmonton, AB: 9331-48 St. T6B 2R4 Toll Free (800) 386-7247
- [ ] Winnipeg, MB: D-675 Berry St. R3H 1A7 Toll Free (866) 800-6208

CHAIN OF CUSTODY RECORD

ENV COC - 00013v3

Invoice Information		Report Information (if differs from invoice)		Project Information	
Invoice to (requires report)	☐				
Company :	Stantec Consulting Ltd.	Company:	Stantec Consulting Ltd.	Quotation #:	Sask Rates
Contact Name:	Brady Henderson	Contact Name:	Brady Henderson	P.O. #/ AFE#:	
Street Address:	100-75 24 St East	Street Address:	100-75 24 St East	Project #:	111476366.203
City: Saskatoon Prov: SK Postal Code:	S7K 0K3	City: Saskatoon Prov: SK Postal Code:	S7K 0K3	Site #:	FCL Asquith Gas Bar
Phone:	1-639-998-8414	Phone:	1-639-998-8414	Site Location:	Asquith
Email:	brady.henderson@stantec.com	Email:	brady.henderson@stantec.com	Site Location Province:	SK
Copies:	EDD@stantec.com	Copies:	EDD@stantec.com	Sampled By:	LP

LAB USE ONLY - PLACE STICKER HERE

Rush Confirmation #:

Regulatory Criteria

- [ ] AT1
- [x] CCME
- [ ] Drinking Water - Canada
- [ ] Drinking Water - Manitoba
- [x] Saskatchewan
- [ ] Drinking Water - Alberta
- [ ] Other _____

SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

Regular Turnaround Time (TAT)

- [x] 5 to 7 Day
- [ ] 10 Day

Rush Turnaround Time (TAT) Surcharges apply

- [ ] Same Day
- [ ] 1 Day
- [ ] 2 Day
- [ ] 3 Day
- [ ] 4 Day

Date Required: YY MM DD

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEX F1	5 VOCs	6 BTEX F1-F2	7 Bv2020	8 Routine water	9 Regulated metals - total	10 Regulated metals - dissolved	11 Mercury - total	12 Mercury - dissolved	13 Salinity 4	14 Sieve (75 micron)	15 Texture (% sand, silt, clay)	16 Basic class II landfill	17 Bioremediation	18	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE	Comments
1	BH201	23	08	10	08	00	Water - Ground						x											x				10		
2	BH202	23	08	10	08	50	Water - Ground						x											x				8		only 1 set of BTEX F1-F2 due to insufficient water
3	BH206A	23	08	09	08	45	Water - Ground						x															4		
4	BH206B	23	08	09	09	15	Water - Ground						x															4		
5	BH207	23	08	10	10	30	Water - Ground						x											x				10		
6	BH301	23	08	10	09	30	Water - Ground						x															4		
7	BH302	23	08	09	15	20	Water - Ground						x															4		
8	BH303	23	08	09	14	55	Water - Ground						x															4		
9	BH304	23	08	09	14	30	Water - Ground						x															4		
10	BH305	23	08	10	07	30	Water - Ground						x															4		
11	BH306	23	08	09	10	40	Water - Ground						x															4		
12	BH307	23	08	09	12	45	Water - Ground						x															4		

Received in Saskatoon
By: [illegible]
AUG 11 2023 (MST)
Temp: 5 / 7 / 7
5 / 4 / 5

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LAB USE ONLY	Yes	No	°C				Temperature reading by:
Seal present	✓						
Seal intact	✓						
Cooling media present	✓			6	6	6	
				1	2	3	

LAB USE ONLY	Yes	No	°C				Temperature reading by:
Seal present	✓						
Seal intact	✓						
Cooling media present	✓			5	4	5	
				1	2	3	

LAB USE ONLY	Yes	No	°C				Temperature reading by:
Seal present							
Seal intact							
Cooling media present							
				1	2	3	

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special instructions
1 Luc Pelletier Luc Pelletier	23	08	10	14	30	1 [illegible] AJRAURCIII	2023	08	11	08	30	
2						2						

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 703084-01-01, 703084-02-01, 703084-03-01

Report Date: 2023/08/30
Report #: R3388153
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C365918
Received: 2023/08/23, 11:30

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	28	N/A	2023/08/30	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	2	N/A	2023/08/28		Auto Calc
Cadmium - low level CCME - Dissolved (1)	26	N/A	2023/08/30		Auto Calc
Cadmium - low level CCME (Total) (1)	28	N/A	2023/08/28		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	2	N/A	2023/08/28	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	26	N/A	2023/08/29	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	28	N/A	2023/08/29	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	2	N/A	2023/08/28		Auto Calc
Hardness (1)	26	N/A	2023/08/30		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	28	N/A	2023/08/28	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	2	N/A	2023/08/27	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	26	N/A	2023/08/29	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	8	2023/08/27	2023/08/27	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	12	2023/08/27	2023/08/28	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	8	2023/08/28	2023/08/28	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	2	N/A	2023/08/28	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	20	N/A	2023/08/29	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	6	N/A	2023/08/30	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	20	2023/08/27	2023/08/27	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	8	2023/08/28	2023/08/28	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	28	N/A	2023/08/30	AB SOP-00005	SM 24 4500-H+B m
Carbon (Total Organic) (1, 7)	1	N/A	2023/08/28	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	27	N/A	2023/08/29	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	28	2023/08/29	2023/08/29	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/08/25	CAL SOP-00081	SM 24 2130 B m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 703084-01-01, 703084-02-01, 703084-03-01

Report Date: 2023/08/30
Report #: R3388153
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C365918
Received: 2023/08/23, 11:30

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 703084-01-01, 703084-02-01, 703084-03-01

Report Date: 2023/08/30
Report #: R3388153
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C365918
Received: 2023/08/23, 11:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM122	BXM123		BXM124			BXM124		
Sampling Date		2023/08/22 10:35	2023/08/22 09:35		2023/08/22 09:30			2023/08/22 09:30		
COC Number		703084-01-01	703084-01-01		703084-01-01			703084-01-01		
	UNITS	SC-1	SB-1	QC Batch	SB-2	RDL	QC Batch	SB-2 Lab-Dup	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.38	0.24	B083666	0.26	0.020	B083666			
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.023	0.0043	B088083	0.0058	0.0030	B088106	0.0044	0.0030	B088106
Dissolved Antimony (Sb)	mg/L	0.00069	<0.00060	B088083	<0.00060	0.00060	B088106	<0.00060	0.00060	B088106
Dissolved Arsenic (As)	mg/L	0.00053	0.00020	B088083	0.00026	0.00020	B088106	0.00024	0.00020	B088106
Dissolved Barium (Ba)	mg/L	<0.010	0.012	B088459	0.012	0.010	B088573			
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B088083	<0.0010	0.0010	B088106	<0.0010	0.0010	B088106
Dissolved Boron (B)	mg/L	<0.020	<0.020	B088459	<0.020	0.020	B088573			
Dissolved Calcium (Ca)	mg/L	10	46	B088459	47	0.30	B088573			
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B088083	<0.0010	0.0010	B088106	<0.0010	0.0010	B088106
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B088083	<0.00030	0.00030	B088106	<0.00030	0.00030	B088106
Dissolved Copper (Cu)	mg/L	0.015	0.0058	B088083	0.0061	0.0010	B088106	0.0057	0.0010	B088106
Dissolved Iron (Fe)	mg/L	0.19	0.30	B088459	0.22	0.060	B088573			
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B088083	<0.00020	0.00020	B088106	<0.00020	0.00020	B088106
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B088459	<0.020	0.020	B088573			
Dissolved Magnesium (Mg)	mg/L	3.2	7.2	B088459	7.6	0.20	B088573			
Dissolved Manganese (Mn)	mg/L	<0.0040	0.044	B088459	0.046	0.0040	B088573			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B088083	<0.00020	0.00020	B088106	<0.00020	0.00020	B088106
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00085	B088083	0.00082	0.00050	B088106	0.00084	0.00050	B088106
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B088459	<0.10	0.10	B088573			
Dissolved Potassium (K)	mg/L	1.5	3.9	B088459	4.1	0.30	B088573			
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B088083	<0.00020	0.00020	B088106	<0.00020	0.00020	B088106
Dissolved Silicon (Si)	mg/L	1.2	0.65	B088459	0.69	0.50	B088573			
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B088083	<0.00010	0.00010	B088106	<0.00010	0.00010	B088106
Dissolved Sodium (Na)	mg/L	1.9	2.9	B088459	2.9	0.50	B088573			
Dissolved Strontium (Sr)	mg/L	0.023	0.046	B088459	0.047	0.020	B088573			
Dissolved Sulphur (S)	mg/L	2.2	48	B088459	50	0.20	B088573			
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B088083	<0.00020	0.00020	B088106	<0.00020	0.00020	B088106
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B088083	<0.0010	0.0010	B088106	<0.0010	0.0010	B088106
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B088083	<0.0010	0.0010	B088106	<0.0010	0.0010	B088106
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B088083	<0.00010	0.00010	B088106	<0.00010	0.00010	B088106

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM122	BXM123		BXM124			BXM124		
Sampling Date		2023/08/22 10:35	2023/08/22 09:35		2023/08/22 09:30			2023/08/22 09:30		
COC Number		703084-01-01	703084-01-01		703084-01-01			703084-01-01		
	UNITS	**SC-1**	**SB-1**	**QC Batch**	**SB-2**	**RDL**	**QC Batch**	**SB-2 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B088083	<0.0010	0.0010	B088106	<0.0010	0.0010	B088106
Dissolved Zinc (Zn)	mg/L	0.18	0.064	B088083	0.073	0.0030	B088106	0.072	0.0030	B088106

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM125			BXM125			BXM126		
Sampling Date		2023/08/22 09:40			2023/08/22 09:40			2023/08/22 09:45		
COC Number		703084-01-01			703084-01-01			703084-01-01		
	UNITS	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch	CB-2	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.22	0.020	B083666				0.24	0.020	B083666
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0045	0.0030	B088083	0.0061	0.0030	B088083	0.0035	0.0030	B088083
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B088083	<0.00060	0.00060	B088083	<0.00060	0.00060	B088083
Dissolved Arsenic (As)	mg/L	0.00021	0.00020	B088083	<0.00020	0.00020	B088083	0.00029	0.00020	B088083
Dissolved Barium (Ba)	mg/L	0.013	0.010	B088459				0.015	0.010	B088459
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083
Dissolved Boron (B)	mg/L	<0.020	0.020	B088459				0.025	0.020	B088459
Dissolved Calcium (Ca)	mg/L	51	0.30	B088459				46	0.30	B088459
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B088083	<0.00030	0.00030	B088083	<0.00030	0.00030	B088083
Dissolved Copper (Cu)	mg/L	0.0055	0.0010	B088083	0.0064	0.0010	B088083	0.0058	0.0010	B088083
Dissolved Iron (Fe)	mg/L	0.41	0.060	B088459				0.21	0.060	B088459
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B088459				<0.020	0.020	B088459
Dissolved Magnesium (Mg)	mg/L	8.1	0.20	B088459				7.4	0.20	B088459
Dissolved Manganese (Mn)	mg/L	0.044	0.0040	B088459				0.043	0.0040	B088459
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083
Dissolved Nickel (Ni)	mg/L	0.00070	0.00050	B088083	0.00091	0.00050	B088083	0.00087	0.00050	B088083
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B088459				<0.10	0.10	B088459
Dissolved Potassium (K)	mg/L	4.4	0.30	B088459				4.0	0.30	B088459
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083
Dissolved Silicon (Si)	mg/L	0.66	0.50	B088459				0.68	0.50	B088459
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B088083	<0.00010	0.00010	B088083	<0.00010	0.00010	B088083
Dissolved Sodium (Na)	mg/L	3.3	0.50	B088459				2.9	0.50	B088459
Dissolved Strontium (Sr)	mg/L	0.049	0.020	B088459				0.048	0.020	B088459
Dissolved Sulphur (S)	mg/L	49	0.20	B088459				49	0.20	B088459
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083	<0.00020	0.00020	B088083
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B088083	<0.00010	0.00010	B088083	<0.00010	0.00010	B088083

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM125			BXM125			BXM126		
Sampling Date		2023/08/22 09:40			2023/08/22 09:40			2023/08/22 09:45		
COC Number		703084-01-01			703084-01-01			703084-01-01		
	UNITS	**CB-1**	**RDL**	**QC Batch**	**CB-1 Lab-Dup**	**RDL**	**QC Batch**	**CB-2**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083	<0.0010	0.0010	B088083
Dissolved Zinc (Zn)	mg/L	0.063	0.0030	B088083	0.070	0.0030	B088083	0.067	0.0030	B088083

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM126			BXM127	BXM128	BXM129		
Sampling Date		2023/08/22 09:45			2023/08/22 09:50	2023/08/22 09:55	2023/08/22 10:05		
COC Number		703084-01-01			703084-01-01	703084-01-01	703084-01-01		
	UNITS	CB-2 Lab-Dup	RDL	QC Batch	EB-1	EB-2	NB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.39	0.42	0.23	0.020	B083885
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L				0.012	0.0080	0.0046	0.0030	B088083
Dissolved Antimony (Sb)	mg/L				<0.00060	<0.00060	<0.00060	0.00060	B088083
Dissolved Arsenic (As)	mg/L				<0.00020	0.00025	0.00024	0.00020	B088083
Dissolved Barium (Ba)	mg/L	0.013	0.010	B088459	0.013	0.014	0.012	0.010	B088459
Dissolved Beryllium (Be)	mg/L				<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Boron (B)	mg/L	0.021	0.020	B088459	<0.020	0.020	<0.020	0.020	B088459
Dissolved Calcium (Ca)	mg/L	47	0.30	B088459	50	52	49	0.30	B088459
Dissolved Chromium (Cr)	mg/L				<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Cobalt (Co)	mg/L				<0.00030	<0.00030	<0.00030	0.00030	B088083
Dissolved Copper (Cu)	mg/L				0.0086	0.0070	0.0067	0.0010	B088083
Dissolved Iron (Fe)	mg/L	0.25	0.060	B088459	0.23	0.33	0.35	0.060	B088459
Dissolved Lead (Pb)	mg/L				<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B088459	<0.020	<0.020	<0.020	0.020	B088459
Dissolved Magnesium (Mg)	mg/L	7.5	0.20	B088459	7.8	8.0	7.7	0.20	B088459
Dissolved Manganese (Mn)	mg/L	0.042	0.0040	B088459	0.034	0.033	0.044	0.0040	B088459
Dissolved Molybdenum (Mo)	mg/L				<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Nickel (Ni)	mg/L				0.0012	0.0014	0.00069	0.00050	B088083
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B088459	<0.10	<0.10	<0.10	0.10	B088459
Dissolved Potassium (K)	mg/L	4.0	0.30	B088459	4.0	4.2	3.9	0.30	B088459
Dissolved Selenium (Se)	mg/L				<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Silicon (Si)	mg/L	0.65	0.50	B088459	0.54	0.53	0.66	0.50	B088459
Dissolved Silver (Ag)	mg/L				<0.00010	<0.00010	<0.00010	0.00010	B088083
Dissolved Sodium (Na)	mg/L	2.9	0.50	B088459	3.0	3.1	2.9	0.50	B088459
Dissolved Strontium (Sr)	mg/L	0.047	0.020	B088459	0.049	0.050	0.047	0.020	B088459
Dissolved Sulphur (S)	mg/L	48	0.20	B088459	55	55	52	0.20	B088459
Dissolved Thallium (Tl)	mg/L				<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Tin (Sn)	mg/L				<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Titanium (Ti)	mg/L				<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Uranium (U)	mg/L				<0.00010	<0.00010	<0.00010	0.00010	B088083

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM126			BXM127	BXM128	BXM129		
Sampling Date		2023/08/22 09:45			2023/08/22 09:50	2023/08/22 09:55	2023/08/22 10:05		
COC Number		703084-01-01			703084-01-01	703084-01-01	703084-01-01		
	UNITS	**CB-2 Lab-Dup**	**RDL**	**QC Batch**	**EB-1**	**EB-2**	**NB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L				<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Zinc (Zn)	mg/L				0.11	0.11	0.068	0.0030	B088083

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM130		BXM131		BXM133		BXM134		
Sampling Date		2023/08/22 10:00		2023/08/22 10:10		2023/08/22 08:40		2023/08/22 08:43		
COC Number		703084-01-01		703084-01-01		703084-02-01		703084-02-01		
	UNITS	NB-2	QC Batch	CLD	QC Batch	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.25	B083885	0.27	B083885	0.022	B083885	0.024	0.020	B083885
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0044	B088083	0.0047	B088083	0.012	B088083	0.012	0.0030	B088106
Dissolved Antimony (Sb)	mg/L	<0.00060	B088083	<0.00060	B088083	<0.00060	B088083	<0.00060	0.00060	B088106
Dissolved Arsenic (As)	mg/L	0.00024	B088083	0.00021	B088083	0.00046	B088083	0.00042	0.00020	B088106
Dissolved Barium (Ba)	mg/L	0.012	B088459	0.012	B088573	<0.010	B088459	<0.010	0.010	B088459
Dissolved Beryllium (Be)	mg/L	<0.0010	B088083	<0.0010	B088083	<0.0010	B088083	<0.0010	0.0010	B088106
Dissolved Boron (B)	mg/L	<0.020	B088459	0.021	B088573	<0.020	B088459	<0.020	0.020	B088459
Dissolved Calcium (Ca)	mg/L	49	B088459	49	B088573	13	B088459	13	0.30	B088459
Dissolved Chromium (Cr)	mg/L	<0.0010	B088083	<0.0010	B088083	<0.0010	B088083	<0.0010	0.0010	B088106
Dissolved Cobalt (Co)	mg/L	<0.00030	B088083	<0.00030	B088083	<0.00030	B088083	<0.00030	0.00030	B088106
Dissolved Copper (Cu)	mg/L	0.0068	B088083	0.0073	B088083	0.0047	B088083	0.0046	0.0010	B088106
Dissolved Iron (Fe)	mg/L	0.40	B088459	0.33	B088573	<0.060	B088459	0.070	0.060	B088459
Dissolved Lead (Pb)	mg/L	0.00034	B088083	<0.00020	B088083	0.00038	B088083	0.00031	0.00020	B088106
Dissolved Lithium (Li)	mg/L	<0.020	B088459	<0.020	B088573	<0.020	B088459	<0.020	0.020	B088459
Dissolved Magnesium (Mg)	mg/L	7.7	B088459	7.8	B088573	3.3	B088459	3.2	0.20	B088459
Dissolved Manganese (Mn)	mg/L	0.044	B088459	0.045	B088573	<0.0040	B088459	<0.0040	0.0040	B088459
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B088083	<0.00020	B088083	<0.00020	B088083	<0.00020	0.00020	B088106
Dissolved Nickel (Ni)	mg/L	0.00088	B088083	0.00096	B088083	0.00054	B088083	0.00051	0.00050	B088106
Dissolved Phosphorus (P)	mg/L	<0.10	B088459	<0.10	B088573	<0.10	B088459	<0.10	0.10	B088459
Dissolved Potassium (K)	mg/L	3.9	B088459	3.9	B088573	1.7	B088459	1.6	0.30	B088459
Dissolved Selenium (Se)	mg/L	<0.00020	B088083	<0.00020	B088083	<0.00020	B088083	<0.00020	0.00020	B088106
Dissolved Silicon (Si)	mg/L	0.66	B088459	0.66	B088573	0.60	B088459	0.66	0.50	B088459
Dissolved Silver (Ag)	mg/L	<0.00010	B088083	<0.00010	B088083	<0.00010	B088083	<0.00010	0.00010	B088106
Dissolved Sodium (Na)	mg/L	2.9	B088459	2.8	B088573	2.0	B088459	2.0	0.50	B088459
Dissolved Strontium (Sr)	mg/L	0.047	B088459	0.047	B088573	0.026	B088459	0.026	0.020	B088459
Dissolved Sulphur (S)	mg/L	52	B088459	53	B088573	7.3	B088459	8.1	0.20	B088459
Dissolved Thallium (Tl)	mg/L	<0.00020	B088083	<0.00020	B088083	<0.00020	B088083	<0.00020	0.00020	B088106
Dissolved Tin (Sn)	mg/L	<0.0010	B088083	<0.0010	B088083	<0.0010	B088083	<0.0010	0.0010	B088106
Dissolved Titanium (Ti)	mg/L	<0.0010	B088083	<0.0010	B088083	<0.0010	B088083	<0.0010	0.0010	B088106
Dissolved Uranium (U)	mg/L	<0.00010	B088083	<0.00010	B088083	<0.00010	B088083	<0.00010	0.00010	B088106
Dissolved Vanadium (V)	mg/L	<0.0010	B088083	<0.0010	B088083	<0.0010	B088083	<0.0010	0.0010	B088106

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM130		BXM131		BXM133		BXM134		
Sampling Date		2023/08/22 10:00		2023/08/22 10:10		2023/08/22 08:40		2023/08/22 08:43		
COC Number		703084-01-01		703084-01-01		703084-02-01		703084-02-01		
	UNITS	**NB-2**	**QC Batch**	**CLD**	**QC Batch**	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.069	B088083	0.073	B088083	0.0061	B088083	0.0082	0.0030	B088106
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM135		BXM136	BXM137		BXM138		
Sampling Date		2023/08/22 08:45		2023/08/22 08:47	2023/08/22 08:35		2023/08/22 08:37		
COC Number		703084-02-01		703084-02-01	703084-02-01		703084-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	CL-8 SFC	QC Batch	CL-8 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.026	B083885	<0.020	<0.020	B083885	<0.020	0.020	B083885
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.013	B088106	0.011	0.011	B086728	0.010	0.0030	B088106
Dissolved Antimony (Sb)	mg/L	<0.00060	B088106	<0.00060	<0.00060	B086728	<0.00060	0.00060	B088106
Dissolved Arsenic (As)	mg/L	0.00043	B088106	0.00033	0.00040	B086728	0.00044	0.00020	B088106
Dissolved Barium (Ba)	mg/L	<0.010	B088459	<0.010	<0.010	B086162	<0.010	0.010	B088459
Dissolved Beryllium (Be)	mg/L	<0.0010	B088106	<0.0010	<0.0010	B086728	<0.0010	0.0010	B088106
Dissolved Boron (B)	mg/L	<0.020	B088459	<0.020	<0.020	B086162	<0.020	0.020	B088459
Dissolved Calcium (Ca)	mg/L	12	B088459	12	13	B086162	12	0.30	B088459
Dissolved Chromium (Cr)	mg/L	<0.0010	B088106	<0.0010	<0.0010	B086728	<0.0010	0.0010	B088106
Dissolved Cobalt (Co)	mg/L	<0.00030	B088106	<0.00030	<0.00030	B086728	<0.00030	0.00030	B088106
Dissolved Copper (Cu)	mg/L	0.0048	B088106	0.0040	0.0038	B086728	0.0045	0.0010	B088106
Dissolved Iron (Fe)	mg/L	<0.060	B088459	0.077	0.070	B086162	<0.060	0.060	B088459
Dissolved Lead (Pb)	mg/L	<0.00020	B088106	<0.00020	<0.00020	B086728	<0.00020	0.00020	B088106
Dissolved Lithium (Li)	mg/L	<0.020	B088459	<0.020	<0.020	B086162	<0.020	0.020	B088459
Dissolved Magnesium (Mg)	mg/L	3.0	B088459	3.2	3.2	B086162	3.1	0.20	B088459
Dissolved Manganese (Mn)	mg/L	<0.0040	B088459	<0.0040	<0.0040	B086162	<0.0040	0.0040	B088459
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B088106	<0.00020	<0.00020	B086728	<0.00020	0.00020	B088106
Dissolved Nickel (Ni)	mg/L	0.00073	B088106	<0.00050	<0.00050	B086728	<0.00050	0.00050	B088106
Dissolved Phosphorus (P)	mg/L	<0.10	B088459	<0.10	<0.10	B086162	<0.10	0.10	B088459
Dissolved Potassium (K)	mg/L	1.6	B088459	1.6	1.6	B086162	1.5	0.30	B088459
Dissolved Selenium (Se)	mg/L	<0.00020	B088106	<0.00020	<0.00020	B086728	<0.00020	0.00020	B088106
Dissolved Silicon (Si)	mg/L	0.65	B088459	0.65	0.65	B086162	0.67	0.50	B088459
Dissolved Silver (Ag)	mg/L	<0.00010	B088106	<0.00010	<0.00010	B086728	<0.00010	0.00010	B088106
Dissolved Sodium (Na)	mg/L	1.9	B088459	2.0	2.0	B086162	1.9	0.50	B088459
Dissolved Strontium (Sr)	mg/L	0.025	B088459	0.026	0.027	B086162	0.026	0.020	B088459
Dissolved Sulphur (S)	mg/L	6.5	B088459	6.2	5.6	B086162	6.5	0.20	B088459
Dissolved Thallium (Tl)	mg/L	<0.00020	B088106	<0.00020	<0.00020	B086728	<0.00020	0.00020	B088106
Dissolved Tin (Sn)	mg/L	<0.0010	B088106	<0.0010	<0.0010	B086728	<0.0010	0.0010	B088106
Dissolved Titanium (Ti)	mg/L	<0.0010	B088106	<0.0010	<0.0010	B086728	<0.0010	0.0010	B088106
Dissolved Uranium (U)	mg/L	<0.00010	B088106	<0.00010	<0.00010	B086728	<0.00010	0.00010	B088106
Dissolved Vanadium (V)	mg/L	<0.0010	B088106	<0.0010	<0.0010	B086728	<0.0010	0.0010	B088106

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM135		BXM136	BXM137		BXM138		
Sampling Date		2023/08/22 08:45		2023/08/22 08:47	2023/08/22 08:35		2023/08/22 08:37		
COC Number		703084-02-01		703084-02-01	703084-02-01		703084-02-01		
	UNITS	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.0059	B088106	0.0069	0.0063	B086728	0.0059	0.0030	B088106
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM139		BXM140			BXM140		
Sampling Date		2023/08/22 08:50		2023/08/22 08:55			2023/08/22 08:55		
COC Number		703084-02-01		703084-02-01			703084-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch	CL-2 BTM Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.021	B083885	0.027	0.020	B083885			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.015	B088083	0.013	0.0030	B088106			
Dissolved Antimony (Sb)	mg/L	<0.00060	B088083	<0.00060	0.00060	B088106			
Dissolved Arsenic (As)	mg/L	0.00047	B088083	0.00040	0.00020	B088106			
Dissolved Barium (Ba)	mg/L	<0.010	B088573	0.011	0.010	B088573	<0.010	0.010	B088573
Dissolved Beryllium (Be)	mg/L	<0.0010	B088083	<0.0010	0.0010	B088106			
Dissolved Boron (B)	mg/L	<0.020	B088573	0.021	0.020	B088573	<0.020	0.020	B088573
Dissolved Calcium (Ca)	mg/L	12	B088573	12	0.30	B088573	12	0.30	B088573
Dissolved Chromium (Cr)	mg/L	<0.0010	B088083	<0.0010	0.0010	B088106			
Dissolved Cobalt (Co)	mg/L	<0.00030	B088083	<0.00030	0.00030	B088106			
Dissolved Copper (Cu)	mg/L	0.0047	B088083	0.0047	0.0010	B088106			
Dissolved Iron (Fe)	mg/L	0.077	B088573	0.093	0.060	B088573	0.091	0.060	B088573
Dissolved Lead (Pb)	mg/L	<0.00020	B088083	<0.00020	0.00020	B088106			
Dissolved Lithium (Li)	mg/L	<0.020	B088573	<0.020	0.020	B088573	<0.020	0.020	B088573
Dissolved Magnesium (Mg)	mg/L	3.1	B088573	3.1	0.20	B088573	3.0	0.20	B088573
Dissolved Manganese (Mn)	mg/L	<0.0040	B088573	<0.0040	0.0040	B088573	<0.0040	0.0040	B088573
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B088083	<0.00020	0.00020	B088106			
Dissolved Nickel (Ni)	mg/L	<0.00050	B088083	<0.00050	0.00050	B088106			
Dissolved Phosphorus (P)	mg/L	<0.10	B088573	<0.10	0.10	B088573	<0.10	0.10	B088573
Dissolved Potassium (K)	mg/L	1.6	B088573	1.6	0.30	B088573	1.6	0.30	B088573
Dissolved Selenium (Se)	mg/L	<0.00020	B088083	<0.00020	0.00020	B088106			
Dissolved Silicon (Si)	mg/L	0.71	B088573	0.77	0.50	B088573	0.81	0.50	B088573
Dissolved Silver (Ag)	mg/L	<0.00010	B088083	<0.00010	0.00010	B088106			
Dissolved Sodium (Na)	mg/L	1.9	B088573	1.9	0.50	B088573	1.9	0.50	B088573
Dissolved Strontium (Sr)	mg/L	0.026	B088573	0.026	0.020	B088573	0.026	0.020	B088573
Dissolved Sulphur (S)	mg/L	7.0	B088573	6.7	0.20	B088573	7.3	0.20	B088573
Dissolved Thallium (Tl)	mg/L	<0.00020	B088083	<0.00020	0.00020	B088106			
Dissolved Tin (Sn)	mg/L	<0.0010	B088083	<0.0010	0.0010	B088106			
Dissolved Titanium (Ti)	mg/L	<0.0010	B088083	<0.0010	0.0010	B088106			
Dissolved Uranium (U)	mg/L	<0.00010	B088083	<0.00010	0.00010	B088106			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM139		BXM140			BXM140		
Sampling Date		2023/08/22 08:50		2023/08/22 08:55			2023/08/22 08:55		
COC Number		703084-02-01		703084-02-01			703084-02-01		
	UNITS	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**RDL**	**QC Batch**	**CL-2 BTM Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B088083	<0.0010	0.0010	B088106			
Dissolved Zinc (Zn)	mg/L	0.0067	B088083	0.0076	0.0030	B088106			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM141		BXM142		BXM143	BXM144		
Sampling Date		2023/08/22 08:25		2023/08/22 08:30		2023/08/22 08:15	2023/08/22 08:20		
COC Number		703084-02-01		703084-02-01		703084-03-01	703084-03-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	CL-5 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B083885	<0.020	B083885	<0.020	<0.020	0.020	B083885
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.013	B088083	0.012	B088106	0.012	0.013	0.0030	B088083
Dissolved Antimony (Sb)	mg/L	<0.00060	B088083	<0.00060	B088106	<0.00060	<0.00060	0.00060	B088083
Dissolved Arsenic (As)	mg/L	0.00039	B088083	0.00040	B088106	0.00041	0.00039	0.00020	B088083
Dissolved Barium (Ba)	mg/L	<0.010	B088459	<0.010	B088573	<0.010	<0.010	0.010	B088459
Dissolved Beryllium (Be)	mg/L	<0.0010	B088083	<0.0010	B088106	<0.0010	<0.0010	0.0010	B088083
Dissolved Boron (B)	mg/L	<0.020	B088459	<0.020	B088573	<0.020	<0.020	0.020	B088459
Dissolved Calcium (Ca)	mg/L	12	B088459	12	B088573	11	12	0.30	B088459
Dissolved Chromium (Cr)	mg/L	<0.0010	B088083	<0.0010	B088106	<0.0010	<0.0010	0.0010	B088083
Dissolved Cobalt (Co)	mg/L	<0.00030	B088083	<0.00030	B088106	<0.00030	<0.00030	0.00030	B088083
Dissolved Copper (Cu)	mg/L	0.0039	B088083	0.0050	B088106	0.0041	0.0048	0.0010	B088083
Dissolved Iron (Fe)	mg/L	<0.060	B088459	0.10	B088573	<0.060	0.080	0.060	B088459
Dissolved Lead (Pb)	mg/L	<0.00020	B088083	<0.00020	B088106	<0.00020	<0.00020	0.00020	B088083
Dissolved Lithium (Li)	mg/L	<0.020	B088459	<0.020	B088573	<0.020	<0.020	0.020	B088459
Dissolved Magnesium (Mg)	mg/L	3.0	B088459	3.1	B088573	3.0	3.1	0.20	B088459
Dissolved Manganese (Mn)	mg/L	<0.0040	B088459	<0.0040	B088573	<0.0040	<0.0040	0.0040	B088459
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B088083	<0.00020	B088106	<0.00020	<0.00020	0.00020	B088083
Dissolved Nickel (Ni)	mg/L	<0.00050	B088083	<0.00050	B088106	<0.00050	<0.00050	0.00050	B088083
Dissolved Phosphorus (P)	mg/L	<0.10	B088459	<0.10	B088573	<0.10	<0.10	0.10	B088459
Dissolved Potassium (K)	mg/L	1.6	B088459	1.6	B088573	1.5	1.5	0.30	B088459
Dissolved Selenium (Se)	mg/L	<0.00020	B088083	<0.00020	B088106	<0.00020	<0.00020	0.00020	B088083
Dissolved Silicon (Si)	mg/L	0.66	B088459	0.77	B088573	0.61	0.72	0.50	B088459
Dissolved Silver (Ag)	mg/L	<0.00010	B088083	<0.00010	B088106	<0.00010	<0.00010	0.00010	B088083
Dissolved Sodium (Na)	mg/L	1.9	B088459	1.9	B088573	1.9	1.9	0.50	B088459
Dissolved Strontium (Sr)	mg/L	0.026	B088459	0.026	B088573	0.025	0.026	0.020	B088459
Dissolved Sulphur (S)	mg/L	6.3	B088459	6.5	B088573	6.0	6.6	0.20	B088459
Dissolved Thallium (Tl)	mg/L	<0.00020	B088083	<0.00020	B088106	<0.00020	<0.00020	0.00020	B088083
Dissolved Tin (Sn)	mg/L	<0.0010	B088083	<0.0010	B088106	<0.0010	<0.0010	0.0010	B088083
Dissolved Titanium (Ti)	mg/L	<0.0010	B088083	<0.0010	B088106	<0.0010	<0.0010	0.0010	B088083
Dissolved Uranium (U)	mg/L	<0.00010	B088083	<0.00010	B088106	<0.00010	<0.00010	0.00010	B088083
Dissolved Vanadium (V)	mg/L	<0.0010	B088083	<0.0010	B088106	<0.0010	<0.0010	0.0010	B088083
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM141		BXM142		BXM143	BXM144		
Sampling Date		2023/08/22 08:25		2023/08/22 08:30		2023/08/22 08:15	2023/08/22 08:20		
COC Number		703084-02-01		703084-02-01		703084-03-01	703084-03-01		
	UNITS	**CL-4 SFC**	**QC Batch**	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**CL-5 BTM**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.0039	B088083	0.0059	B088106	0.0040	0.0062	0.0030	B088083
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM145	BXM146	BXM147	BXM148	BXM149		
Sampling Date		2023/08/22 08:05	2023/08/22 08:10	2023/08/22 08:10	2023/08/22 08:45	2023/08/22 10:05		
COC Number		703084-03-01	703084-03-01	703084-03-01	703084-03-01	703084-03-01		
	UNITS	CL-6 SFC	CL-6 BTM	SW-122	SW-123	SW-124	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	<0.020	<0.020	<0.020	<0.020	0.24	0.020	B083885
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.010	0.013	0.0096	0.014	0.0050	0.0030	B088083
Dissolved Antimony (Sb)	mg/L	<0.00060	0.0010	<0.00060	<0.00060	<0.00060	0.00060	B088083
Dissolved Arsenic (As)	mg/L	0.00051	0.00054	0.00040	0.00041	0.00024	0.00020	B088083
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	<0.010	0.012	0.010	B088459
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B088459
Dissolved Calcium (Ca)	mg/L	11	11	12	12	49	0.30	B088459
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B088083
Dissolved Copper (Cu)	mg/L	0.0038	0.0038	0.0036	0.0043	0.0066	0.0010	B088083
Dissolved Iron (Fe)	mg/L	<0.060	<0.060	<0.060	<0.060	0.45	0.060	B088459
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B088459
Dissolved Magnesium (Mg)	mg/L	2.9	3.0	3.6	3.1	7.7	0.20	B088459
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	<0.0040	<0.0040	0.044	0.0040	B088459
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Nickel (Ni)	mg/L	0.00079	<0.00050	<0.00050	<0.00050	0.00081	0.00050	B088083
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B088459
Dissolved Potassium (K)	mg/L	1.5	1.5	1.7	1.5	3.9	0.30	B088459
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Silicon (Si)	mg/L	0.56	0.59	0.58	0.65	0.66	0.50	B088459
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B088083
Dissolved Sodium (Na)	mg/L	1.9	2.0	2.1	2.0	2.8	0.50	B088459
Dissolved Strontium (Sr)	mg/L	0.025	0.026	0.026	0.026	0.047	0.020	B088459
Dissolved Sulphur (S)	mg/L	5.3	5.2	5.3	6.5	53	0.20	B088459
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B088083
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B088083
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B088083
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B088083

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM145	BXM146	BXM147	BXM148	BXM149		
Sampling Date		2023/08/22 08:05	2023/08/22 08:10	2023/08/22 08:10	2023/08/22 08:45	2023/08/22 10:05		
COC Number		703084-03-01	703084-03-01	703084-03-01	703084-03-01	703084-03-01		
	UNITS	**CL-6 SFC**	**CL-6 BTM**	**SW-122**	**SW-123**	**SW-124**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	<0.0030	0.0033	<0.0030	0.0050	0.067	0.0030	B088083
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM150		
Sampling Date		2023/08/22		
COC Number		703084-03-01		
	UNITS	TRIP BLANK	RDL	QC Batch
Elements				
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	B083885
Lab Filtered Elements				
Dissolved Aluminum (Al)	mg/L	<0.0030	0.0030	B088083
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B088083
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B088083
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B088573
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B088083
Dissolved Boron (B)	mg/L	<0.020	0.020	B088573
Dissolved Calcium (Ca)	mg/L	<0.30	0.30	B088573
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B088083
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B088083
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	B088083
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B088573
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B088083
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B088573
Dissolved Magnesium (Mg)	mg/L	<0.20	0.20	B088573
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B088573
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B088083
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B088083
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B088573
Dissolved Potassium (K)	mg/L	<0.30	0.30	B088573
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B088083
Dissolved Silicon (Si)	mg/L	<0.50	0.50	B088573
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B088083
Dissolved Sodium (Na)	mg/L	<0.50	0.50	B088573
Dissolved Strontium (Sr)	mg/L	<0.020	0.020	B088573
Dissolved Sulphur (S)	mg/L	<0.20	0.20	B088573
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B088083
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B088083
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B088083
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B088083
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B088083
RDL = Reportable Detection Limit				

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BXM150		
Sampling Date		2023/08/22		
COC Number		703084-03-01		
	UNITS	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	<0.0030	0.0030	B088083
RDL = Reportable Detection Limit				

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM122		BXM123		BXM124	BXM125		
Sampling Date		2023/08/22 10:35		2023/08/22 09:35		2023/08/22 09:30	2023/08/22 09:40		
COC Number		703084-01-01		703084-01-01		703084-01-01	703084-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	CB-1	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.49	B083231	0.29	B083231	0.31	0.39	0.020	B083231
Total Aluminum (Al)	mg/L	0.053	B086261	0.032	B085960	0.031	0.038	0.0030	B086038
Total Antimony (Sb)	mg/L	<0.00060	B086261	<0.00060	B085960	<0.00060	<0.00060	0.00060	B086038
Total Arsenic (As)	mg/L	0.00049	B086261	0.00025	B085960	0.00023	0.00025	0.00020	B086038
Total Barium (Ba)	mg/L	<0.010	B086264	0.013	B085965	0.013	0.013	0.010	B086042
Total Beryllium (Be)	mg/L	<0.0010	B086261	<0.0010	B085960	<0.0010	<0.0010	0.0010	B086038
Total Boron (B)	mg/L	<0.020	B086264	<0.020	B085965	<0.020	<0.020	0.020	B086042
Total Calcium (Ca)	mg/L	9.6	B086264	49	B085965	50	51	0.30	B086042
Total Chromium (Cr)	mg/L	<0.0010	B086261	<0.0010	B085960	<0.0010	<0.0010	0.0010	B086038
Total Cobalt (Co)	mg/L	<0.00030	B086261	<0.00030	B085960	<0.00030	<0.00030	0.00030	B086038
Total Copper (Cu)	mg/L	0.018	B086261	0.0093	B085960	0.010	0.012	0.0010	B086038
Total Iron (Fe)	mg/L	0.40	B086264	2.6	B085965	2.7	2.6	0.060	B086042
Total Lead (Pb)	mg/L	<0.00020	B086261	<0.00020	B085960	<0.00020	<0.00020	0.00020	B086038
Total Lithium (Li)	mg/L	<0.020	B086264	<0.020	B085965	<0.020	<0.020	0.020	B086042
Total Magnesium (Mg)	mg/L	2.9	B086264	8.0	B085965	8.4	8.4	0.20	B086042
Total Manganese (Mn)	mg/L	0.062	B086264	0.052	B085965	0.053	0.051	0.0040	B086042
Total Molybdenum (Mo)	mg/L	<0.00020	B086261	<0.00020	B085960	<0.00020	<0.00020	0.00020	B086038
Total Nickel (Ni)	mg/L	0.00061	B086261	0.00066	B085960	0.00074	0.00089	0.00050	B086038
Total Phosphorus (P)	mg/L	<0.10	B086264	<0.10	B085965	<0.10	<0.10	0.10	B086042
Total Potassium (K)	mg/L	1.3	B086264	4.1	B085965	4.3	4.3	0.30	B086042
Total Selenium (Se)	mg/L	<0.00020	B086261	<0.00020	B085960	<0.00020	<0.00020	0.00020	B086038
Total Silicon (Si)	mg/L	1.4	B086264	0.85	B085965	0.87	0.85	0.50	B086042
Total Silver (Ag)	mg/L	<0.00010	B086261	<0.00010	B085960	<0.00010	<0.00010	0.00010	B086038
Total Sodium (Na)	mg/L	1.9	B086264	3.1	B085965	3.2	3.3	0.50	B086042
Total Strontium (Sr)	mg/L	0.024	B086264	0.048	B085965	0.049	0.050	0.020	B086042
Total Sulphur (S)	mg/L	2.3	B086264	49	B085965	50	51	0.20	B086042
Total Thallium (Tl)	mg/L	<0.00020	B086261	<0.00020	B085960	<0.00020	<0.00020	0.00020	B086038
Total Tin (Sn)	mg/L	<0.0010	B086261	<0.0010	B085960	<0.0010	<0.0010	0.0010	B086038
Total Titanium (Ti)	mg/L	0.0017	B086261	0.0011	B085960	0.0016	0.0013	0.0010	B086038
Total Uranium (U)	mg/L	<0.00010	B086261	<0.00010	B085960	<0.00010	<0.00010	0.00010	B086038
Total Vanadium (V)	mg/L	<0.0010	B086261	<0.0010	B085960	<0.0010	<0.0010	0.0010	B086038
Total Zinc (Zn)	mg/L	0.20	B086261	0.089	B085960	0.090	0.11	0.0030	B086038

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM126	BXM127	BXM128		BXM129	BXM130		
Sampling Date		2023/08/22 09:45	2023/08/22 09:50	2023/08/22 09:55		2023/08/22 10:05	2023/08/22 10:00		
COC Number		703084-01-01	703084-01-01	703084-01-01		703084-01-01	703084-01-01		
	UNITS	CB-2	EB-1	EB-2	QC Batch	NB-1	NB-2	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.37	0.57	0.47	B083231	0.45	0.35	0.020	B083886
Total Aluminum (Al)	mg/L	0.039	0.066	0.066	B086038	0.047	0.039	0.0030	B086261
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00064	B086038	<0.00060	<0.00060	0.00060	B086261
Total Arsenic (As)	mg/L	0.00032	0.00029	0.00023	B086038	0.00034	0.00031	0.00020	B086261
Total Barium (Ba)	mg/L	0.013	0.014	0.015	B086042	0.012	0.012	0.010	B086264
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	B086042	<0.020	<0.020	0.020	B086264
Total Calcium (Ca)	mg/L	50	54	57	B086042	55	53	0.30	B086264
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Cobalt (Co)	mg/L	<0.00030	0.00032	<0.00030	B086038	<0.00030	<0.00030	0.00030	B086261
Total Copper (Cu)	mg/L	0.012	0.017	0.011	B086038	0.017	0.013	0.0010	B086261
Total Iron (Fe)	mg/L	2.6	1.8	1.7	B086042	2.0	2.0	0.060	B086264
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B086038	<0.00020	0.00025	0.00020	B086261
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B086042	<0.020	<0.020	0.020	B086264
Total Magnesium (Mg)	mg/L	8.3	8.7	9.1	B086042	8.6	8.4	0.20	B086264
Total Manganese (Mn)	mg/L	0.050	0.038	0.039	B086042	0.054	0.052	0.0040	B086264
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B086038	<0.00020	<0.00020	0.00020	B086261
Total Nickel (Ni)	mg/L	0.00082	0.0021	0.0011	B086038	0.0011	0.0010	0.00050	B086261
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B086042	<0.10	<0.10	0.10	B086264
Total Potassium (K)	mg/L	4.2	4.4	4.6	B086042	4.3	4.1	0.30	B086264
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B086038	0.00020	<0.00020	0.00020	B086261
Total Silicon (Si)	mg/L	0.84	0.70	0.72	B086042	0.79	0.78	0.50	B086264
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B086038	<0.00010	<0.00010	0.00010	B086261
Total Sodium (Na)	mg/L	3.2	3.3	3.4	B086042	3.2	3.1	0.50	B086264
Total Strontium (Sr)	mg/L	0.050	0.050	0.052	B086042	0.057	0.055	0.020	B086264
Total Sulphur (S)	mg/L	51	55	57	B086042	52	51	0.20	B086264
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B086038	<0.00020	<0.00020	0.00020	B086261
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Titanium (Ti)	mg/L	0.0014	0.0017	0.0029	B086038	0.0010	<0.0010	0.0010	B086261
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B086038	<0.00010	<0.00010	0.00010	B086261
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Zinc (Zn)	mg/L	0.11	0.16	0.13	B086038	0.13	0.10	0.0030	B086261

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM131	BXM133		BXM134			BXM134		
Sampling Date		2023/08/22 10:10	2023/08/22 08:40		2023/08/22 08:43			2023/08/22 08:43		
COC Number		703084-01-01	703084-02-01		703084-02-01			703084-02-01		
	UNITS	CLD	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch	CL-3 BTM Lab-Dup	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.37	0.044	B083886	0.052	0.020	B083886			
Total Aluminum (Al)	mg/L	0.044	0.043	B086261	0.054	0.0030	B086038	0.046	0.0030	B086038
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	B086261	<0.00060	0.00060	B086038	<0.00060	0.00060	B086038
Total Arsenic (As)	mg/L	0.00031	0.00050	B086261	0.00056	0.00020	B086038	0.00052	0.00020	B086038
Total Barium (Ba)	mg/L	0.012	<0.010	B086264	0.010	0.010	B086042	0.010	0.010	B086042
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	B086261	<0.0010	0.0010	B086038	<0.0010	0.0010	B086038
Total Boron (B)	mg/L	<0.020	<0.020	B086264	<0.020	0.020	B086042	<0.020	0.020	B086042
Total Calcium (Ca)	mg/L	54	15	B086264	14	0.30	B086042	15	0.30	B086042
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	B086261	<0.0010	0.0010	B086038	<0.0010	0.0010	B086038
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	B086261	<0.00030	0.00030	B086038	<0.00030	0.00030	B086038
Total Copper (Cu)	mg/L	0.013	0.0051	B086261	0.0065	0.0010	B086038	0.0057	0.0010	B086038
Total Iron (Fe)	mg/L	2.0	0.28	B086264	0.31	0.060	B086042	0.31	0.060	B086042
Total Lead (Pb)	mg/L	<0.00020	<0.00020	B086261	<0.00020	0.00020	B086038	<0.00020	0.00020	B086038
Total Lithium (Li)	mg/L	<0.020	<0.020	B086264	<0.020	0.020	B086042	<0.020	0.020	B086042
Total Magnesium (Mg)	mg/L	8.4	3.7	B086264	3.6	0.20	B086042	3.7	0.20	B086042
Total Manganese (Mn)	mg/L	0.055	0.017	B086264	0.017	0.0040	B086042	0.018	0.0040	B086042
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B086261	<0.00020	0.00020	B086038	<0.00020	0.00020	B086038
Total Nickel (Ni)	mg/L	0.0012	<0.00050	B086261	<0.00050	0.00050	B086038	<0.00050	0.00050	B086038
Total Phosphorus (P)	mg/L	<0.10	<0.10	B086264	<0.10	0.10	B086042	<0.10	0.10	B086042
Total Potassium (K)	mg/L	4.1	1.8	B086264	1.7	0.30	B086042	1.8	0.30	B086042
Total Selenium (Se)	mg/L	<0.00020	<0.00020	B086261	<0.00020	0.00020	B086038	<0.00020	0.00020	B086038
Total Silicon (Si)	mg/L	0.80	0.83	B086264	0.85	0.50	B086042	0.88	0.50	B086042
Total Silver (Ag)	mg/L	<0.00010	<0.00010	B086261	<0.00010	0.00010	B086038	<0.00010	0.00010	B086038
Total Sodium (Na)	mg/L	3.1	2.3	B086264	2.1	0.50	B086042	2.2	0.50	B086042
Total Strontium (Sr)	mg/L	0.056	0.031	B086264	0.028	0.020	B086042	0.029	0.020	B086042
Total Sulphur (S)	mg/L	52	7.9	B086264	8.1	0.20	B086042	8.3	0.20	B086042
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	B086261	<0.00020	0.00020	B086038	<0.00020	0.00020	B086038
Total Tin (Sn)	mg/L	<0.0010	<0.0010	B086261	<0.0010	0.0010	B086038	<0.0010	0.0010	B086038
Total Titanium (Ti)	mg/L	0.0012	0.0013	B086261	0.0022	0.0010	B086038	0.0013	0.0010	B086038
Total Uranium (U)	mg/L	<0.00010	<0.00010	B086261	<0.00010	0.00010	B086038	<0.00010	0.00010	B086038
Total Vanadium (V)	mg/L	<0.0010	<0.0010	B086261	<0.0010	0.0010	B086038	<0.0010	0.0010	B086038

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM131	BXM133		BXM134			BXM134		
Sampling Date		2023/08/22 10:10	2023/08/22 08:40		2023/08/22 08:43			2023/08/22 08:43		
COC Number		703084-01-01	703084-02-01		703084-02-01			703084-02-01		
	UNITS	**CLD**	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**RDL**	**QC Batch**	**CL-3 BTM Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.11	0.015	B086261	0.018	0.0030	B086038	0.016	0.0030	B086038

RDL = Reportable Detection Limit
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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM135	BXM136		BXM137	BXM138		
Sampling Date		2023/08/22 08:45	2023/08/22 08:47		2023/08/22 08:35	2023/08/22 08:37		
COC Number		703084-02-01	703084-02-01		703084-02-01	703084-02-01		
	UNITS	CL-7 SFC	CL-7 BTM	QC Batch	CL-8 SFC	CL-8 BTM	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.028	0.028	B083886	0.042	0.032	0.020	B083886
Total Aluminum (Al)	mg/L	0.038	0.043	B086038	0.049	0.039	0.0030	B086261
Total Antimony (Sb)	mg/L	<0.00060	0.00087	B086038	<0.00060	<0.00060	0.00060	B086261
Total Arsenic (As)	mg/L	0.00046	0.00047	B086038	0.00057	0.00045	0.00020	B086261
Total Barium (Ba)	mg/L	0.010	0.011	B086042	<0.010	<0.010	0.010	B086264
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Boron (B)	mg/L	<0.020	<0.020	B086042	<0.020	<0.020	0.020	B086264
Total Calcium (Ca)	mg/L	13	14	B086042	13	13	0.30	B086264
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	B086038	<0.00030	<0.00030	0.00030	B086261
Total Copper (Cu)	mg/L	0.0052	0.0058	B086038	0.0065	0.0049	0.0010	B086261
Total Iron (Fe)	mg/L	0.25	0.28	B086042	0.22	0.22	0.060	B086264
Total Lead (Pb)	mg/L	0.0014	<0.00020	B086038	<0.00020	<0.00020	0.00020	B086261
Total Lithium (Li)	mg/L	<0.020	<0.020	B086042	<0.020	<0.020	0.020	B086264
Total Magnesium (Mg)	mg/L	3.5	3.7	B086042	3.4	3.4	0.20	B086264
Total Manganese (Mn)	mg/L	0.015	0.015	B086042	0.015	0.015	0.0040	B086264
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B086038	<0.00020	<0.00020	0.00020	B086261
Total Nickel (Ni)	mg/L	<0.00050	0.00072	B086038	0.00057	0.00060	0.00050	B086261
Total Phosphorus (P)	mg/L	<0.10	<0.10	B086042	<0.10	<0.10	0.10	B086264
Total Potassium (K)	mg/L	1.6	1.7	B086042	1.6	1.6	0.30	B086264
Total Selenium (Se)	mg/L	<0.00020	<0.00020	B086038	<0.00020	<0.00020	0.00020	B086261
Total Silicon (Si)	mg/L	0.85	0.89	B086042	0.81	0.80	0.50	B086264
Total Silver (Ag)	mg/L	<0.00010	<0.00010	B086038	<0.00010	<0.00010	0.00010	B086261
Total Sodium (Na)	mg/L	2.1	2.2	B086042	2.1	2.1	0.50	B086264
Total Strontium (Sr)	mg/L	0.028	0.029	B086042	0.029	0.028	0.020	B086264
Total Sulphur (S)	mg/L	6.8	7.2	B086042	6.4	6.3	0.20	B086264
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	B086038	<0.00020	<0.00020	0.00020	B086261
Total Tin (Sn)	mg/L	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Titanium (Ti)	mg/L	0.0015	0.0015	B086038	0.0018	<0.0010	0.0010	B086261
Total Uranium (U)	mg/L	<0.00010	<0.00010	B086038	<0.00010	<0.00010	0.00010	B086261
Total Vanadium (V)	mg/L	<0.0010	<0.0010	B086038	<0.0010	<0.0010	0.0010	B086261
Total Zinc (Zn)	mg/L	0.012	0.013	B086038	0.016	0.012	0.0030	B086261

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM139		BXM140	BXM141		BXM142		
Sampling Date		2023/08/22 08:50		2023/08/22 08:55	2023/08/22 08:25		2023/08/22 08:30		
COC Number		703084-02-01		703084-02-01	703084-02-01		703084-02-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	CL-4 SFC	QC Batch	CL-4 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.026	B083886	0.038	0.024	B083886	0.045	0.020	B083886
Total Aluminum (Al)	mg/L	0.033	B085960	0.044	0.045	B086038	0.059	0.0030	B086261
Total Antimony (Sb)	mg/L	<0.00060	B085960	<0.00060	<0.00060	B086038	<0.00060	0.00060	B086261
Total Arsenic (As)	mg/L	0.00040	B085960	0.00041	0.00046	B086038	0.00048	0.00020	B086261
Total Barium (Ba)	mg/L	0.010	B085965	0.010	0.011	B086042	0.010	0.010	B086264
Total Beryllium (Be)	mg/L	<0.0010	B085960	<0.0010	<0.0010	B086038	<0.0010	0.0010	B086261
Total Boron (B)	mg/L	<0.020	B085965	<0.020	<0.020	B086042	<0.020	0.020	B086264
Total Calcium (Ca)	mg/L	13	B085965	13	13	B086042	13	0.30	B086264
Total Chromium (Cr)	mg/L	<0.0010	B085960	<0.0010	<0.0010	B086038	<0.0010	0.0010	B086261
Total Cobalt (Co)	mg/L	<0.00030	B085960	<0.00030	<0.00030	B086038	<0.00030	0.00030	B086261
Total Copper (Cu)	mg/L	0.0044	B085960	0.0060	0.0049	B086038	0.0057	0.0010	B086261
Total Iron (Fe)	mg/L	0.30	B085965	0.36	0.21	B086042	0.42	0.060	B086264
Total Lead (Pb)	mg/L	<0.00020	B085960	<0.00020	<0.00020	B086038	<0.00020	0.00020	B086261
Total Lithium (Li)	mg/L	<0.020	B085965	<0.020	<0.020	B086042	<0.020	0.020	B086264
Total Magnesium (Mg)	mg/L	3.5	B085965	3.5	3.5	B086042	3.4	0.20	B086264
Total Manganese (Mn)	mg/L	0.014	B085965	0.025	0.014	B086042	0.043	0.0040	B086264
Total Molybdenum (Mo)	mg/L	<0.00020	B085960	<0.00020	<0.00020	B086038	<0.00020	0.00020	B086261
Total Nickel (Ni)	mg/L	<0.00050	B085960	0.0016	<0.00050	B086038	0.00052	0.00050	B086261
Total Phosphorus (P)	mg/L	<0.10	B085965	<0.10	<0.10	B086042	<0.10	0.10	B086264
Total Potassium (K)	mg/L	1.7	B085965	1.6	1.7	B086042	1.6	0.30	B086264
Total Selenium (Se)	mg/L	<0.00020	B085960	<0.00020	<0.00020	B086038	<0.00020	0.00020	B086261
Total Silicon (Si)	mg/L	0.91	B085965	0.97	0.87	B086042	0.94	0.50	B086264
Total Silver (Ag)	mg/L	<0.00010	B085960	<0.00010	<0.00010	B086038	<0.00010	0.00010	B086261
Total Sodium (Na)	mg/L	2.2	B085965	2.1	2.2	B086042	2.1	0.50	B086264
Total Strontium (Sr)	mg/L	0.028	B085965	0.027	0.028	B086042	0.029	0.020	B086264
Total Sulphur (S)	mg/L	7.1	B085965	7.1	6.6	B086042	6.4	0.20	B086264
Total Thallium (Tl)	mg/L	<0.00020	B085960	<0.00020	<0.00020	B086038	<0.00020	0.00020	B086261
Total Tin (Sn)	mg/L	<0.0010	B085960	<0.0010	<0.0010	B086038	<0.0010	0.0010	B086261
Total Titanium (Ti)	mg/L	0.0011	B085960	0.0016	0.0015	B086038	0.0016	0.0010	B086261
Total Uranium (U)	mg/L	<0.00010	B085960	<0.00010	<0.00010	B086038	<0.00010	0.00010	B086261
Total Vanadium (V)	mg/L	<0.0010	B085960	<0.0010	<0.0010	B086038	<0.0010	0.0010	B086261
Total Zinc (Zn)	mg/L	0.011	B085960	0.013	0.012	B086038	0.016	0.0030	B086261

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM143	BXM144	BXM145	BXM146	BXM147	BXM148		
Sampling Date		2023/08/22 08:15	2023/08/22 08:20	2023/08/22 08:05	2023/08/22 08:10	2023/08/22 08:10	2023/08/22 08:45		
COC Number		703084-03-01	703084-03-01	703084-03-01	703084-03-01	703084-03-01	703084-03-01		
	UNITS	CL-5 SFC	CL-5 BTM	CL-6 SFC	CL-6 BTM	SW-122	SW-123	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.024	0.048	0.022	0.022	0.026	0.031	0.020	B083886
Total Aluminum (Al)	mg/L	0.046	0.094	0.057	0.055	0.059	0.040	0.0030	B086038
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B086038
Total Arsenic (As)	mg/L	0.00048	0.00062	0.00049	0.00050	0.00059	0.00047	0.00020	B086038
Total Barium (Ba)	mg/L	0.010	0.011	0.011	0.010	0.011	0.010	0.010	B086042
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B086038
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B086042
Total Calcium (Ca)	mg/L	13	14	12	12	12	13	0.30	B086042
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B086038
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B086038
Total Copper (Cu)	mg/L	0.0042	0.0066	0.0041	0.0046	0.0045	0.0056	0.0010	B086038
Total Iron (Fe)	mg/L	0.22	0.35	0.17	0.20	0.21	0.25	0.060	B086042
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B086038
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B086042
Total Magnesium (Mg)	mg/L	3.5	3.6	3.3	3.3	3.5	3.5	0.20	B086042
Total Manganese (Mn)	mg/L	0.015	0.024	0.015	0.019	0.019	0.014	0.0040	B086042
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B086038
Total Nickel (Ni)	mg/L	<0.00050	0.0010	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	B086038
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B086042
Total Potassium (K)	mg/L	1.6	1.7	1.6	1.6	1.7	1.7	0.30	B086042
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B086038
Total Silicon (Si)	mg/L	0.86	0.99	0.84	0.82	0.88	0.81	0.50	B086042
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B086038
Total Sodium (Na)	mg/L	2.2	2.2	2.1	2.1	2.2	2.2	0.50	B086042
Total Strontium (Sr)	mg/L	0.028	0.029	0.028	0.027	0.028	0.028	0.020	B086042
Total Sulphur (S)	mg/L	6.4	7.1	5.5	5.4	5.6	6.6	0.20	B086042
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B086038
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B086038
Total Titanium (Ti)	mg/L	0.0018	0.0020	0.0021	0.0023	0.0025	0.0015	0.0010	B086038
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B086038
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B086038
Total Zinc (Zn)	mg/L	0.0092	0.018	0.0081	0.010	0.0098	0.013	0.0030	B086038

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BXM149	BXM150		
Sampling Date		2023/08/22 10:05	2023/08/22		
COC Number		703084-03-01	703084-03-01		
	UNITS	SW-124	TRIP BLANK	RDL	QC Batch
Elements					
Total Cadmium (Cd)	ug/L	0.35	<0.020	0.020	B083886
Total Aluminum (Al)	mg/L	0.033	<0.0030	0.0030	B086038
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B086038
Total Arsenic (As)	mg/L	0.00031	<0.00020	0.00020	B086038
Total Barium (Ba)	mg/L	0.012	<0.010	0.010	B086042
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B086038
Total Boron (B)	mg/L	<0.020	<0.020	0.020	B086042
Total Calcium (Ca)	mg/L	52	<0.30	0.30	B086042
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B086038
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B086038
Total Copper (Cu)	mg/L	0.012	<0.0010	0.0010	B086038
Total Iron (Fe)	mg/L	2.1	<0.060	0.060	B086042
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B086038
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B086042
Total Magnesium (Mg)	mg/L	8.3	<0.20	0.20	B086042
Total Manganese (Mn)	mg/L	0.051	<0.0040	0.0040	B086042
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B086038
Total Nickel (Ni)	mg/L	0.00075	<0.00050	0.00050	B086038
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B086042
Total Potassium (K)	mg/L	4.1	<0.30	0.30	B086042
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B086038
Total Silicon (Si)	mg/L	0.80	<0.50	0.50	B086042
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B086038
Total Sodium (Na)	mg/L	3.1	<0.50	0.50	B086042
Total Strontium (Sr)	mg/L	0.047	<0.020	0.020	B086042
Total Sulphur (S)	mg/L	52	<0.20	0.20	B086042
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B086038
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B086038
Total Titanium (Ti)	mg/L	<0.0010	<0.0010	0.0010	B086038
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B086038
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B086038
Total Zinc (Zn)	mg/L	0.10	<0.0030	0.0030	B086038
RDL = Reportable Detection Limit					

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM122			BXM122			BXM123		
Sampling Date		2023/08/22 10:35			2023/08/22 10:35			2023/08/22 09:35		
COC Number		703084-01-01			703084-01-01			703084-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	38	0.50	B083853				140	0.50	B083853
Total Hardness (CaCO3)	mg/L	36.1	0.50	B083241				154	0.50	B083894
Misc. Inorganics										
pH	pH	6.20	N/A	B088452				5.83	N/A	B088150
Total Organic Carbon (C)	mg/L	12	0.50	B086810	12	0.50	B086810	6.8	0.50	B086810
Total Suspended Solids	mg/L	1.1	1.0	B087570				2.2	1.0	B087570
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12 (1)	0.50	B088066				7.0 (1)	0.50	B088090
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B088449				<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L	31	1.0	B088449				7.3	1.0	B088133
Bicarbonate (HCO3)	mg/L	38	1.0	B088449				8.8	1.0	B088133
Carbonate (CO3)	mg/L	<1.0	1.0	B088449				<1.0	1.0	B088133
Hydroxide (OH)	mg/L	<1.0	1.0	B088449				<1.0	1.0	B088133
Sulphate (SO4)	mg/L	6.1	1.0	B088065				140	5.0	B088068
Physical Properties										
Turbidity	NTU	3.1	0.10	B085346				14	0.10	B084844

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM124			BXM125			BXM125		
Sampling Date		2023/08/22 09:30			2023/08/22 09:40			2023/08/22 09:40		
COC Number		703084-01-01			703084-01-01			703084-01-01		
	UNITS	SB-2	RDL	QC Batch	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	150	0.50	B083853	160	0.50	B083853			
Total Hardness (CaCO3)	mg/L	159	0.50	B083894	162	0.50	B083894			
Misc. Inorganics										
pH	pH	5.79	N/A	B088150	5.81	N/A	B088452			
Total Organic Carbon (C)	mg/L	7.7	0.50	B086810	7.6	0.50	B086810			
Total Suspended Solids	mg/L	2.8	0.99	B087570	2.7	1.0	B087575	2.5	1.0	B087575
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.4 (1)	0.50	B088090	7.5 (1)	0.50	B088066			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088449			
Alkalinity (Total as CaCO3)	mg/L	6.8	1.0	B088133	8.0	1.0	B088449			
Bicarbonate (HCO3)	mg/L	8.3	1.0	B088133	9.7	1.0	B088449			
Carbonate (CO3)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088449			
Hydroxide (OH)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088449			
Sulphate (SO4)	mg/L	150	5.0	B088064	140	5.0	B088065			
Physical Properties										
Turbidity	NTU	13	0.10	B085346	12	0.10	B085346			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM126			BXM126			BXM127		
Sampling Date		2023/08/22 09:45			2023/08/22 09:45			2023/08/22 09:50		
COC Number		703084-01-01			703084-01-01			703084-01-01		
	UNITS	CB-2	RDL	QC Batch	CB-2 Lab-Dup	RDL	QC Batch	EB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	140	0.50	B083853				160	0.50	B083853
Total Hardness (CaCO3)	mg/L	159	0.50	B083894				171	0.50	B083894
Misc. Inorganics										
pH	pH	5.76	N/A	B088150	5.80	N/A	B088150	5.82	N/A	B088150
Total Organic Carbon (C)	mg/L	7.9	0.50	B086880				6.9	0.50	B086880
Total Suspended Solids	mg/L	2.1	0.99	B087575				1.4	1.0	B087575
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.4 (1)	0.50	B088066				6.6 (1)	0.50	B088090
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088133	<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L	7.2	1.0	B088133	7.2	1.0	B088133	6.9	1.0	B088133
Bicarbonate (HCO3)	mg/L	8.8	1.0	B088133	8.8	1.0	B088133	8.4	1.0	B088133
Carbonate (CO3)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088133	<1.0	1.0	B088133
Hydroxide (OH)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088133	<1.0	1.0	B088133
Sulphate (SO4)	mg/L	150	5.0	B088065				160	5.0	B088068
Physical Properties										
Turbidity	NTU	12	0.10	B085346				8.5	0.10	B084844

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM128		BXM129		BXM130		BXM131		
Sampling Date		2023/08/22 09:55		2023/08/22 10:05		2023/08/22 10:00		2023/08/22 10:10		
COC Number		703084-01-01		703084-01-01		703084-01-01		703084-01-01		
	UNITS	EB-2	QC Batch	NB-1	QC Batch	NB-2	QC Batch	CLD	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	160	B083853	150	B083853	150	B083853	160	0.50	B083853
Total Hardness (CaCO3)	mg/L	179	B083894	172	B083894	166	B083894	170	0.50	B083894
Misc. Inorganics										
pH	pH	5.80	B088150	5.82	B088150	5.83	B088150	5.83	N/A	B088150
Total Organic Carbon (C)	mg/L	7.2	B086810	7.3	B086880	7.3	B086810	7.4	0.50	B086810
Total Suspended Solids	mg/L	<1.0	B087575	<1.0	B087575	1.3	B087575	2.3	1.0	B087575
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.3 (1)	B088066	7.4 (1)	B088066	7.3 (1)	B088066	5.1 (1)	0.50	B088090
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B088133	<1.0	B088133	<1.0	B088133	<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L	6.8	B088133	7.0	B088133	7.1	B088133	7.6	1.0	B088133
Bicarbonate (HCO3)	mg/L	8.3	B088133	8.5	B088133	8.6	B088133	9.3	1.0	B088133
Carbonate (CO3)	mg/L	<1.0	B088133	<1.0	B088133	<1.0	B088133	<1.0	1.0	B088133
Hydroxide (OH)	mg/L	<1.0	B088133	<1.0	B088133	<1.0	B088133	<1.0	1.0	B088133
Sulphate (SO4)	mg/L	160	B088068	160	B088065	150	B088065	160	5.0	B088064
Physical Properties										
Turbidity	NTU	8.1	B084844	9.2	B084844	8.8	B085346	9.6	0.10	B084844

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM133			BXM133			BXM134		
Sampling Date		2023/08/22 08:40			2023/08/22 08:40			2023/08/22 08:43		
COC Number		703084-02-01			703084-02-01			703084-02-01		
	UNITS	CL-3 SFC	RDL	QC Batch	CL-3 SFC Lab-Dup	RDL	QC Batch	CL-3 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	46	0.50	B083853				46	0.50	B083853
Total Hardness (CaCO3)	mg/L	53.2	0.50	B083894				50.5	0.50	B083894
Misc. Inorganics										
pH	pH	6.18	N/A	B088452				6.22	N/A	B088150
Total Organic Carbon (C)	mg/L	8.0	0.50	B086880				9.8	0.50	B086880
Total Suspended Solids	mg/L	1.1	1.0	B087575				<1.0	1.0	B087575
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.6 (1)	0.50	B088090				8.5 (1)	0.50	B088090
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B088449				<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L	31	1.0	B088449				28	1.0	B088133
Bicarbonate (HCO3)	mg/L	38	1.0	B088449				34	1.0	B088133
Carbonate (CO3)	mg/L	<1.0	1.0	B088449				<1.0	1.0	B088133
Hydroxide (OH)	mg/L	<1.0	1.0	B088449				<1.0	1.0	B088133
Sulphate (SO4)	mg/L	27	1.0	B088068				27	1.0	B088068
Physical Properties										
Turbidity	NTU	2.4	0.10	B085346	2.4	0.10	B085346	1.1	0.10	B085346

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM135		BXM136		BXM137		BXM138		
Sampling Date		2023/08/22 08:45		2023/08/22 08:47		2023/08/22 08:35		2023/08/22 08:37		
COC Number		703084-02-01		703084-02-01		703084-02-01		703084-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	QC Batch	CL-8 SFC	QC Batch	CL-8 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	42	B083853	44	B083853	45	B083853	42	0.50	B083853
Total Hardness (CaCO3)	mg/L	46.6	B083894	48.8	B083894	46.8	B083894	45.9	0.50	B083894
Misc. Inorganics										
pH	pH	6.23	B088150	6.18	B088452	6.19	B088452	6.22	N/A	B088150
Total Organic Carbon (C)	mg/L	9.7	B086810	10	B086810	9.7	B086880	9.6	0.50	B086880
Total Suspended Solids	mg/L	<1.0	B087575	1.3	B087575	<1.0	B087575	<1.0	1.0	B087575
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.2 (1)	B088090	11 (1)	B086968	10 (1)	B086968	9.7 (1)	0.50	B088090
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B088133	<1.0	B088449	<1.0	B088449	<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L	29	B088133	30	B088449	30	B088449	29	1.0	B088133
Bicarbonate (HCO3)	mg/L	35	B088133	37	B088449	36	B088449	35	1.0	B088133
Carbonate (CO3)	mg/L	<1.0	B088133	<1.0	B088449	<1.0	B088449	<1.0	1.0	B088133
Hydroxide (OH)	mg/L	<1.0	B088133	<1.0	B088449	<1.0	B088449	<1.0	1.0	B088133
Sulphate (SO4)	mg/L	21	B088068	22	B086724	21	B086724	21	1.0	B088068
Physical Properties										
Turbidity	NTU	1.4	B084844	2.0	B084844	1.3	B085346	1.2	0.10	B085346

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM138			BXM139		BXM140		BXM141		
Sampling Date		2023/08/22 08:37			2023/08/22 08:50		2023/08/22 08:55		2023/08/22 08:25		
COC Number		703084-02-01			703084-02-01		703084-02-01		703084-02-01		
	UNITS	CL-8 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	QC Batch	CL-2 BTM	QC Batch	CL-4 SFC	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L				43	B083853	44	B083853	41	0.50	B083853
Total Hardness (CaCO3)	mg/L				47.9	B083894	47.7	B083894	47.2	0.50	B083894
Misc. Inorganics											
pH	pH				6.20	B088150	6.20	B088150	6.23	N/A	B088150
Total Organic Carbon (C)	mg/L				9.6	B086880	9.7	B086810	9.3	0.50	B086810
Total Suspended Solids	mg/L				<1.0	B087575	1.6	B087575	1.6	1.0	B087575
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L				6.7 (1)	B088090	8.7 (1)	B088090	8.5 (2)	0.50	B088090
Anions											
Alkalinity (PP as CaCO3)	mg/L				<1.0	B088133	<1.0	B088133	<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L				28	B088133	27	B088133	29	1.0	B088133
Bicarbonate (HCO3)	mg/L				35	B088133	33	B088133	35	1.0	B088133
Carbonate (CO3)	mg/L				<1.0	B088133	<1.0	B088133	<1.0	1.0	B088133
Hydroxide (OH)	mg/L				<1.0	B088133	<1.0	B088133	<1.0	1.0	B088133
Sulphate (SO4)	mg/L	22	1.0	B088068	23	B088064	24	B088064	21	1.0	B088065
Physical Properties											
Turbidity	NTU				1.1	B084844	3.2	B084844	1.6	0.10	B084844

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Sample filtered and preserved past method specified hold time

Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM141			BXM142		BXM143		
Sampling Date		2023/08/22 08:25			2023/08/22 08:30		2023/08/22 08:15		
COC Number		703084-02-01			703084-02-01		703084-03-01		
	UNITS	CL-4 SFC Lab-Dup	RDL	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				43	B083853	41	0.50	B083892
Total Hardness (CaCO3)	mg/L				47.2	B083894	46.3	0.50	B083894
Misc. Inorganics									
pH	pH				6.22	B088150	6.24	N/A	B088150
Total Organic Carbon (C)	mg/L				9.1	B086810	9.5	0.50	B086810
Total Suspended Solids	mg/L				2.0	B087575	<1.0	1.0	B087575
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.3	0.50	B088090	8.8 (1)	B088090	9.0 (1)	0.50	B088090
Anions									
Alkalinity (PP as CaCO3)	mg/L				<1.0	B088133	<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L				30	B088133	29	1.0	B088133
Bicarbonate (HCO3)	mg/L				36	B088133	36	1.0	B088133
Carbonate (CO3)	mg/L				<1.0	B088133	<1.0	1.0	B088133
Hydroxide (OH)	mg/L				<1.0	B088133	<1.0	1.0	B088133
Sulphate (SO4)	mg/L				21	B088064	20	1.0	B088068
Physical Properties									
Turbidity	NTU				4.5	B084844	1.5	0.10	B084844

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM144		BXM145		BXM146			BXM146		
Sampling Date		2023/08/22 08:20		2023/08/22 08:05		2023/08/22 08:10			2023/08/22 08:10		
COC Number		703084-03-01		703084-03-01		703084-03-01			703084-03-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	RDL	QC Batch	CL-6 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L	43	B083893	39	B083893	40	0.50	B083893			
Total Hardness (CaCO3)	mg/L	48.7	B083894	43.4	B083894	43.5	0.50	B083894			
Misc. Inorganics											
pH	pH	6.18	B088452	6.20	B088452	6.21	N/A	B088452			
Total Organic Carbon (C)	mg/L	9.4	B086810	9.3	B086810	9.8	0.50	B086810			
Total Suspended Solids	mg/L	<1.0	B087575	<1.0	B087575	1.8	1.0	B087579	1.3	1.0	B087579
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	9.0 (1)	B088090	9.8 (1)	B088066	9.9 (1)	0.50	B088066			
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	B088449	<1.0	B088449	<1.0	1.0	B088449			
Alkalinity (Total as CaCO3)	mg/L	29	B088449	30	B088449	29	1.0	B088449			
Bicarbonate (HCO3)	mg/L	35	B088449	37	B088449	36	1.0	B088449			
Carbonate (CO3)	mg/L	<1.0	B088449	<1.0	B088449	<1.0	1.0	B088449			
Hydroxide (OH)	mg/L	<1.0	B088449	<1.0	B088449	<1.0	1.0	B088449			
Sulphate (SO4)	mg/L	20	B088068	17	B088065	16	1.0	B088068			
Physical Properties											
Turbidity	NTU	3.4	B084844	2.8	B084844	2.3	0.10	B084844			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM147		BXM148			BXM148		
Sampling Date		2023/08/22 08:10		2023/08/22 08:45			2023/08/22 08:45		
COC Number		703084-03-01		703084-03-01			703084-03-01		
	UNITS	SW-122	QC Batch	SW-123	RDL	QC Batch	SW-123 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	45	B083893	42	0.50	B083893			
Total Hardness (CaCO3)	mg/L	45.0	B083894	47.0	0.50	B083894			
Misc. Inorganics									
pH	pH	6.22	B088150	6.23	N/A	B088150			
Total Organic Carbon (C)	mg/L	9.4	B086810	9.0	0.50	B086799	9.2	0.50	B086799
Total Suspended Solids	mg/L	1.9	B087579	1.4	1.0	B087579			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.1 (1)	B088090	9.5 (1)	0.50	B088066			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B088133	<1.0	1.0	B088133			
Alkalinity (Total as CaCO3)	mg/L	32	B088133	28	1.0	B088133			
Bicarbonate (HCO3)	mg/L	39	B088133	34	1.0	B088133			
Carbonate (CO3)	mg/L	<1.0	B088133	<1.0	1.0	B088133			
Hydroxide (OH)	mg/L	<1.0	B088133	<1.0	1.0	B088133			
Sulphate (SO4)	mg/L	18	B088064	22	1.0	B088068			
Physical Properties									
Turbidity	NTU	2.4	B084844	2.5	0.10	B085346			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BXM149			BXM150		
Sampling Date		2023/08/22 10:05			2023/08/22		
COC Number		703084-03-01			703084-03-01		
	UNITS	SW-124	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Calculated Parameters							
Hardness (CaCO3)	mg/L	150	0.50	B083893	<0.50	0.50	B083893
Total Hardness (CaCO3)	mg/L	163	0.50	B083894	<0.50	0.50	B083894
Misc. Inorganics							
pH	pH	5.82	N/A	B088150	4.64	N/A	B088150
Total Organic Carbon (C)	mg/L	7.4	0.50	B086810	<0.50	0.50	B086880
Total Suspended Solids	mg/L	2.3	1.0	B087579	<1.0	1.0	B087579
Lab Filtered Inorganics							
Dissolved Organic Carbon (C)	mg/L	6.8 (1)	0.50	B088066	<0.50 (1)	0.50	B088090
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088133
Alkalinity (Total as CaCO3)	mg/L	6.8	1.0	B088133	<1.0	1.0	B088133
Bicarbonate (HCO3)	mg/L	8.3	1.0	B088133	<1.0	1.0	B088133
Carbonate (CO3)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088133
Hydroxide (OH)	mg/L	<1.0	1.0	B088133	<1.0	1.0	B088133
Sulphate (SO4)	mg/L	150	5.0	B088065	1.3	1.0	B088064
Physical Properties							
Turbidity	NTU	9.3	0.10	B085346	<0.10	0.10	B084844

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.2°C
Package 2	0.5°C
Package 3	0.8°C
Package 4	1.1°C

Results relate only to the items tested.

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B084844	Turbidity	2023/08/25			99	80 - 120	<0.10	NTU	3.5	20
B085346	Turbidity	2023/08/25			99	80 - 120	<0.10	NTU	2.1	20
B085960	Total Aluminum (Al)	2023/08/27	101	80 - 120	104	80 - 120	<0.0030	mg/L	7.6	20
B085960	Total Antimony (Sb)	2023/08/27	111	80 - 120	112	80 - 120	<0.00060	mg/L	NC	20
B085960	Total Arsenic (As)	2023/08/27	94	80 - 120	94	80 - 120	<0.00020	mg/L	9.4	20
B085960	Total Beryllium (Be)	2023/08/27	98	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B085960	Total Chromium (Cr)	2023/08/27	94	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B085960	Total Cobalt (Co)	2023/08/27	94	80 - 120	96	80 - 120	<0.00030	mg/L	NC	20
B085960	Total Copper (Cu)	2023/08/27	91	80 - 120	95	80 - 120	<0.0010	mg/L	7.5	20
B085960	Total Lead (Pb)	2023/08/27	97	80 - 120	100	80 - 120	<0.00020	mg/L	15	20
B085960	Total Molybdenum (Mo)	2023/08/27	102	80 - 120	102	80 - 120	<0.00020	mg/L	14	20
B085960	Total Nickel (Ni)	2023/08/27	92	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20
B085960	Total Selenium (Se)	2023/08/27	99	80 - 120	98	80 - 120	<0.00020	mg/L	1.4	20
B085960	Total Silver (Ag)	2023/08/27	100	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B085960	Total Thallium (Tl)	2023/08/27	98	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B085960	Total Tin (Sn)	2023/08/27	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B085960	Total Titanium (Ti)	2023/08/27	97	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B085960	Total Uranium (U)	2023/08/27	97	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B085960	Total Vanadium (V)	2023/08/27	96	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B085960	Total Zinc (Zn)	2023/08/27	94	80 - 120	96	80 - 120	<0.0030	mg/L	8.7	20
B085965	Total Barium (Ba)	2023/08/27	104	80 - 120	104	80 - 120	<0.010	mg/L	1.6	20
B085965	Total Boron (B)	2023/08/27	102	80 - 120	100	80 - 120	<0.020	mg/L	NC	20
B085965	Total Calcium (Ca)	2023/08/27	106	80 - 120	101	80 - 120	<0.30	mg/L	3.5	20
B085965	Total Iron (Fe)	2023/08/27	107	80 - 120	106	80 - 120	<0.060	mg/L	NC	20
B085965	Total Lithium (Li)	2023/08/27	104	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B085965	Total Magnesium (Mg)	2023/08/27	107	80 - 120	105	80 - 120	<0.20	mg/L	3.4	20
B085965	Total Manganese (Mn)	2023/08/27	104	80 - 120	104	80 - 120	<0.0040	mg/L	0.56	20
B085965	Total Phosphorus (P)	2023/08/27	104	80 - 120	103	80 - 120	<0.10	mg/L	NC	20
B085965	Total Potassium (K)	2023/08/27	101	80 - 120	100	80 - 120	<0.30	mg/L	9.8	20
B085965	Total Silicon (Si)	2023/08/27	100	80 - 120	100	80 - 120	<0.50	mg/L	2.3	20
B085965	Total Sodium (Na)	2023/08/27	NC	80 - 120	100	80 - 120	<0.50	mg/L	3.4	20
B085965	Total Strontium (Sr)	2023/08/27	101	80 - 120	100	80 - 120	<0.020	mg/L	1.1	20
B085965	Total Sulphur (S)	2023/08/27	101	80 - 120	99	80 - 120	<0.20	mg/L	2.0	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B086038	Total Aluminum (Al)	2023/08/27	113	80 - 120	101	80 - 120	<0.0030	mg/L	17	20
B086038	Total Antimony (Sb)	2023/08/27	118	80 - 120	106	80 - 120	<0.00060	mg/L	NC	20
B086038	Total Arsenic (As)	2023/08/27	100	80 - 120	94	80 - 120	<0.00020	mg/L	6.7	20
B086038	Total Beryllium (Be)	2023/08/27	104	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B086038	Total Chromium (Cr)	2023/08/27	104	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B086038	Total Cobalt (Co)	2023/08/27	106	80 - 120	98	80 - 120	<0.00030	mg/L	NC	20
B086038	Total Copper (Cu)	2023/08/27	104	80 - 120	97	80 - 120	<0.0010	mg/L	13	20
B086038	Total Lead (Pb)	2023/08/27	109	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B086038	Total Molybdenum (Mo)	2023/08/27	112	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B086038	Total Nickel (Ni)	2023/08/27	104	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
B086038	Total Selenium (Se)	2023/08/27	108	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B086038	Total Silver (Ag)	2023/08/27	112	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B086038	Total Thallium (Tl)	2023/08/27	111	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B086038	Total Tin (Sn)	2023/08/27	112	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B086038	Total Titanium (Ti)	2023/08/27	106	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B086038	Total Uranium (U)	2023/08/27	108	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B086038	Total Vanadium (V)	2023/08/27	106	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B086038	Total Zinc (Zn)	2023/08/27	103	80 - 120	95	80 - 120	<0.0030	mg/L	12	20
B086042	Total Barium (Ba)	2023/08/28	105	80 - 120	103	80 - 120	<0.010	mg/L	0.78	20
B086042	Total Boron (B)	2023/08/28	102	80 - 120	100	80 - 120	<0.020	mg/L	NC	20
B086042	Total Calcium (Ca)	2023/08/28	103	80 - 120	99	80 - 120	<0.30	mg/L	1.8	20
B086042	Total Iron (Fe)	2023/08/28	109	80 - 120	107	80 - 120	<0.060	mg/L	1.4	20
B086042	Total Lithium (Li)	2023/08/28	107	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B086042	Total Magnesium (Mg)	2023/08/28	106	80 - 120	104	80 - 120	<0.20	mg/L	1.5	20
B086042	Total Manganese (Mn)	2023/08/28	106	80 - 120	105	80 - 120	<0.0040	mg/L	6.0	20
B086042	Total Phosphorus (P)	2023/08/28	106	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
B086042	Total Potassium (K)	2023/08/28	102	80 - 120	97	80 - 120	<0.30	mg/L	3.1	20
B086042	Total Silicon (Si)	2023/08/28	101	80 - 120	101	80 - 120	<0.50	mg/L	3.2	20
B086042	Total Sodium (Na)	2023/08/28	102	80 - 120	98	80 - 120	<0.50	mg/L	2.7	20
B086042	Total Strontium (Sr)	2023/08/28	102	80 - 120	100	80 - 120	<0.020	mg/L	2.3	20
B086042	Total Sulphur (S)	2023/08/28	101	80 - 120	100	80 - 120	<0.20	mg/L	3.1	20
B086162	Dissolved Barium (Ba)	2023/08/27	93	80 - 120	95	80 - 120	<0.010	mg/L		
B086162	Dissolved Boron (B)	2023/08/27	96	80 - 120	94	80 - 120	<0.020	mg/L		

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B086162	Dissolved Calcium (Ca)	2023/08/27	100	80 - 120	101	80 - 120	<0.30	mg/L	1.2	20
B086162	Dissolved Iron (Fe)	2023/08/27	100	80 - 120	108	80 - 120	<0.060	mg/L	0.34	20
B086162	Dissolved Lithium (Li)	2023/08/27	106	80 - 120	106	80 - 120	<0.020	mg/L		
B086162	Dissolved Magnesium (Mg)	2023/08/27	101	80 - 120	99	80 - 120	<0.20	mg/L	0.82	20
B086162	Dissolved Manganese (Mn)	2023/08/27	103	80 - 120	110	80 - 120	<0.0040	mg/L	NC	20
B086162	Dissolved Phosphorus (P)	2023/08/27	96	80 - 120	97	80 - 120	<0.10	mg/L		
B086162	Dissolved Potassium (K)	2023/08/27	106	80 - 120	106	80 - 120	<0.30	mg/L	0.85	20
B086162	Dissolved Silicon (Si)	2023/08/27	81	80 - 120	95	80 - 120	<0.50	mg/L		
B086162	Dissolved Sodium (Na)	2023/08/27	97	80 - 120	99	80 - 120	<0.50	mg/L	0.95	20
B086162	Dissolved Strontium (Sr)	2023/08/27	89	80 - 120	91	80 - 120	<0.020	mg/L		
B086162	Dissolved Sulphur (S)	2023/08/27	99	80 - 120	96	80 - 120	<0.20	mg/L		
B086261	Total Aluminum (Al)	2023/08/28	NC	80 - 120	111	80 - 120	<0.0030	mg/L		
B086261	Total Antimony (Sb)	2023/08/28	111	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B086261	Total Arsenic (As)	2023/08/28	98	80 - 120	101	80 - 120	<0.00020	mg/L	3.0	20
B086261	Total Beryllium (Be)	2023/08/28	102	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B086261	Total Chromium (Cr)	2023/08/28	101	80 - 120	106	80 - 120	<0.0010	mg/L	5.6	20
B086261	Total Cobalt (Co)	2023/08/28	101	80 - 120	105	80 - 120	<0.00030	mg/L	4.2	20
B086261	Total Copper (Cu)	2023/08/28	100	80 - 120	105	80 - 120	<0.0010	mg/L	2.3	20
B086261	Total Lead (Pb)	2023/08/28	103	80 - 120	108	80 - 120	<0.00020	mg/L	7.8	20
B086261	Total Molybdenum (Mo)	2023/08/28	107	80 - 120	108	80 - 120	<0.00020	mg/L	3.0	20
B086261	Total Nickel (Ni)	2023/08/28	100	80 - 120	105	80 - 120	<0.00050	mg/L	4.9	20
B086261	Total Selenium (Se)	2023/08/28	100	80 - 120	104	80 - 120	<0.00020	mg/L	14	20
B086261	Total Silver (Ag)	2023/08/28	104	80 - 120	109	80 - 120	<0.00010	mg/L	NC	20
B086261	Total Thallium (Tl)	2023/08/28	104	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B086261	Total Tin (Sn)	2023/08/28	105	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B086261	Total Titanium (Ti)	2023/08/28	99	80 - 120	105	80 - 120	<0.0010	mg/L	4.0	20
B086261	Total Uranium (U)	2023/08/28	103	80 - 120	106	80 - 120	<0.00010	mg/L	1.6	20
B086261	Total Vanadium (V)	2023/08/28	102	80 - 120	106	80 - 120	<0.0010	mg/L	6.2	20
B086261	Total Zinc (Zn)	2023/08/28	97	80 - 120	102	80 - 120	<0.0030	mg/L	1.6	20
B086264	Total Barium (Ba)	2023/08/28	99	80 - 120	97	80 - 120	<0.010	mg/L		
B086264	Total Boron (B)	2023/08/28	101	80 - 120	99	80 - 120	<0.020	mg/L	8.1	20
B086264	Total Calcium (Ca)	2023/08/28	105	80 - 120	103	80 - 120	<0.30	mg/L		
B086264	Total Iron (Fe)	2023/08/28	101	80 - 120	100	80 - 120	<0.060	mg/L	1.8	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B086264	Total Lithium (Li)	2023/08/28	107	80 - 120	106	80 - 120	<0.020	mg/L		
B086264	Total Magnesium (Mg)	2023/08/28	102	80 - 120	101	80 - 120	<0.20	mg/L		
B086264	Total Manganese (Mn)	2023/08/28	108	80 - 120	106	80 - 120	<0.0040	mg/L	0.53	20
B086264	Total Phosphorus (P)	2023/08/28	98	80 - 120	97	80 - 120	<0.10	mg/L		
B086264	Total Potassium (K)	2023/08/28	102	80 - 120	101	80 - 120	<0.30	mg/L		
B086264	Total Silicon (Si)	2023/08/28	97	80 - 120	96	80 - 120	<0.50	mg/L		
B086264	Total Sodium (Na)	2023/08/28	102	80 - 120	101	80 - 120	<0.50	mg/L		
B086264	Total Strontium (Sr)	2023/08/28	96	80 - 120	95	80 - 120	<0.020	mg/L		
B086264	Total Sulphur (S)	2023/08/28	99	80 - 120	97	80 - 120	<0.20	mg/L		
B086724	Sulphate (SO4)	2023/08/28	NC	80 - 120	106	80 - 120	<1.0	mg/L	1.3	20
B086728	Dissolved Aluminum (Al)	2023/08/28	109	80 - 120	113	80 - 120	<0.0030	mg/L	14	20
B086728	Dissolved Antimony (Sb)	2023/08/28	104	80 - 120	100	80 - 120	<0.00060	mg/L	NC	20
B086728	Dissolved Arsenic (As)	2023/08/28	97	80 - 120	90	80 - 120	<0.00020	mg/L	NC	20
B086728	Dissolved Beryllium (Be)	2023/08/28	97	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B086728	Dissolved Chromium (Cr)	2023/08/28	99	80 - 120	94	80 - 120	<0.0010	mg/L	9.9	20
B086728	Dissolved Cobalt (Co)	2023/08/28	99	80 - 120	94	80 - 120	<0.00030	mg/L	NC	20
B086728	Dissolved Copper (Cu)	2023/08/28	99	80 - 120	95	80 - 120	<0.0010	mg/L	14	20
B086728	Dissolved Lead (Pb)	2023/08/28	99	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B086728	Dissolved Molybdenum (Mo)	2023/08/28	100	80 - 120	94	80 - 120	<0.00020	mg/L	14	20
B086728	Dissolved Nickel (Ni)	2023/08/28	99	80 - 120	94	80 - 120	<0.00050	mg/L	16	20
B086728	Dissolved Selenium (Se)	2023/08/28	102	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
B086728	Dissolved Silver (Ag)	2023/08/28	98	80 - 120	94	80 - 120	<0.00010	mg/L	NC	20
B086728	Dissolved Thallium (Tl)	2023/08/28	101	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B086728	Dissolved Tin (Sn)	2023/08/28	97	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B086728	Dissolved Titanium (Ti)	2023/08/28	98	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B086728	Dissolved Uranium (U)	2023/08/28	99	80 - 120	95	80 - 120	<0.00010	mg/L	NC	20
B086728	Dissolved Vanadium (V)	2023/08/28	100	80 - 120	97	80 - 120	<0.0010	mg/L	17	20
B086728	Dissolved Zinc (Zn)	2023/08/28	100	80 - 120	92	80 - 120	<0.0030	mg/L	NC	20
B086799	Total Organic Carbon (C)	2023/08/28	82	80 - 120	99	80 - 120	<0.50	mg/L	2.3	20
B086810	Total Organic Carbon (C)	2023/08/29	NC	80 - 120	100	80 - 120	<0.50	mg/L	0.25	20
B086880	Total Organic Carbon (C)	2023/08/29	98	80 - 120	105	80 - 120	<0.50	mg/L	3.8	20
B086968	Dissolved Organic Carbon (C)	2023/08/29	NC	80 - 120	114	80 - 120	<0.50	mg/L	4.4	20
B087570	Total Suspended Solids	2023/08/29	99	80 - 120	95	80 - 120	<1.0	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B087575	Total Suspended Solids	2023/08/29	98	80 - 120	96	80 - 120	<1.0	mg/L	10	20
B087579	Total Suspended Solids	2023/08/29	105	80 - 120	100	80 - 120	<1.0	mg/L	NC	20
B088064	Sulphate (SO4)	2023/08/29	NC	80 - 120	102	80 - 120	<1.0	mg/L		
B088065	Sulphate (SO4)	2023/08/29	NC	80 - 120	103	80 - 120	<1.0	mg/L		
B088066	Dissolved Organic Carbon (C)	2023/08/29	85	80 - 120	100	80 - 120	<0.50	mg/L	5.5	20
B088068	Sulphate (SO4)	2023/08/29	105	80 - 120	106	80 - 120	<1.0	mg/L	6.1	20
B088083	Dissolved Aluminum (Al)	2023/08/29	123 (1)	80 - 120	107	80 - 120	<0.0030	mg/L	NC	20
B088083	Dissolved Antimony (Sb)	2023/08/29	109	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
B088083	Dissolved Arsenic (As)	2023/08/29	101	80 - 120	97	80 - 120	<0.00020	mg/L	7.2	20
B088083	Dissolved Beryllium (Be)	2023/08/29	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B088083	Dissolved Chromium (Cr)	2023/08/29	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B088083	Dissolved Cobalt (Co)	2023/08/29	101	80 - 120	98	80 - 120	<0.00030	mg/L	NC	20
B088083	Dissolved Copper (Cu)	2023/08/29	100	80 - 120	98	80 - 120	<0.0010	mg/L	14	20
B088083	Dissolved Lead (Pb)	2023/08/29	103	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B088083	Dissolved Molybdenum (Mo)	2023/08/29	106	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B088083	Dissolved Nickel (Ni)	2023/08/29	101	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20
B088083	Dissolved Selenium (Se)	2023/08/29	102	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B088083	Dissolved Silver (Ag)	2023/08/29	104	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B088083	Dissolved Thallium (Tl)	2023/08/29	106	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B088083	Dissolved Tin (Sn)	2023/08/29	107	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B088083	Dissolved Titanium (Ti)	2023/08/29	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B088083	Dissolved Uranium (U)	2023/08/29	103	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B088083	Dissolved Vanadium (V)	2023/08/29	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B088083	Dissolved Zinc (Zn)	2023/08/29	NC	80 - 120	93	80 - 120	<0.0030	mg/L	11	20
B088090	Dissolved Organic Carbon (C)	2023/08/29	78 (1)	80 - 120	104	80 - 120	<0.50	mg/L	8.4	20
B088106	Dissolved Aluminum (Al)	2023/08/30	121 (1)	80 - 120	122 (1)	80 - 120	<0.0030	mg/L	NC	20
B088106	Dissolved Antimony (Sb)	2023/08/30	109	80 - 120	111	80 - 120	<0.00060	mg/L	NC	20
B088106	Dissolved Arsenic (As)	2023/08/30	103	80 - 120	104	80 - 120	<0.00020	mg/L	11	20
B088106	Dissolved Beryllium (Be)	2023/08/30	100	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B088106	Dissolved Chromium (Cr)	2023/08/30	101	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B088106	Dissolved Cobalt (Co)	2023/08/30	99	80 - 120	100	80 - 120	<0.00030	mg/L	NC	20
B088106	Dissolved Copper (Cu)	2023/08/30	99	80 - 120	100	80 - 120	<0.0010	mg/L	7.1	20
B088106	Dissolved Lead (Pb)	2023/08/30	101	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B088106	Dissolved Molybdenum (Mo)	2023/08/30	104	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B088106	Dissolved Nickel (Ni)	2023/08/30	99	80 - 120	98	80 - 120	<0.00050	mg/L	1.9	20
B088106	Dissolved Selenium (Se)	2023/08/30	111	80 - 120	113	80 - 120	<0.00020	mg/L	NC	20
B088106	Dissolved Silver (Ag)	2023/08/30	103	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B088106	Dissolved Thallium (Tl)	2023/08/30	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B088106	Dissolved Tin (Sn)	2023/08/30	105	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B088106	Dissolved Titanium (Ti)	2023/08/30	102	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B088106	Dissolved Uranium (U)	2023/08/30	101	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B088106	Dissolved Vanadium (V)	2023/08/30	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B088106	Dissolved Zinc (Zn)	2023/08/30	NC	80 - 120	105	80 - 120	<0.0030	mg/L	1.4	20
B088133	Alkalinity (PP as CaCO3)	2023/08/30					<1.0	mg/L	NC	20
B088133	Alkalinity (Total as CaCO3)	2023/08/30			104	80 - 120	<1.0	mg/L	0.12	20
B088133	Bicarbonate (HCO3)	2023/08/30					<1.0	mg/L	0.12	20
B088133	Carbonate (CO3)	2023/08/30					<1.0	mg/L	NC	20
B088133	Hydroxide (OH)	2023/08/30					<1.0	mg/L	NC	20
B088150	pH	2023/08/30			100	97 - 103			0.58	N/A
B088449	Alkalinity (PP as CaCO3)	2023/08/30					<1.0	mg/L	NC	20
B088449	Alkalinity (Total as CaCO3)	2023/08/30			104	80 - 120	<1.0	mg/L	0.99	20
B088449	Bicarbonate (HCO3)	2023/08/30					<1.0	mg/L	0.99	20
B088449	Carbonate (CO3)	2023/08/30					<1.0	mg/L	NC	20
B088449	Hydroxide (OH)	2023/08/30					<1.0	mg/L	NC	20
B088452	pH	2023/08/30			100	97 - 103			1.1	N/A
B088459	Dissolved Barium (Ba)	2023/08/29	100	80 - 120	106	80 - 120	<0.010	mg/L	17	20
B088459	Dissolved Boron (B)	2023/08/29	100	80 - 120	98	80 - 120	<0.020	mg/L	16	20
B088459	Dissolved Calcium (Ca)	2023/08/29	104	80 - 120	106	80 - 120	<0.30	mg/L	2.1	20
B088459	Dissolved Iron (Fe)	2023/08/29	114	80 - 120	107	80 - 120	<0.060	mg/L	NC	20
B088459	Dissolved Lithium (Li)	2023/08/29	96	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B088459	Dissolved Magnesium (Mg)	2023/08/29	108	80 - 120	111	80 - 120	<0.20	mg/L	2.1	20
B088459	Dissolved Manganese (Mn)	2023/08/29	104	80 - 120	107	80 - 120	<0.0040	mg/L	2.5	20
B088459	Dissolved Phosphorus (P)	2023/08/29	108	80 - 120	108	80 - 120	<0.10	mg/L	NC	20
B088459	Dissolved Potassium (K)	2023/08/29	99	80 - 120	104	80 - 120	<0.30	mg/L	0.45	20
B088459	Dissolved Silicon (Si)	2023/08/29	91	80 - 120	103	80 - 120	<0.50	mg/L	4.6	20
B088459	Dissolved Sodium (Na)	2023/08/29	98	80 - 120	102	80 - 120	<0.50	mg/L	0.87	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B088459	Dissolved Strontium (Sr)	2023/08/29	95	80 - 120	100	80 - 120	<0.020	mg/L	0.70	20
B088459	Dissolved Sulphur (S)	2023/08/29	117	80 - 120	104	80 - 120	<0.20	mg/L	1.7	20
B088573	Dissolved Barium (Ba)	2023/08/29	99	80 - 120	105	80 - 120	<0.010	mg/L	11	20
B088573	Dissolved Boron (B)	2023/08/29	98	80 - 120	96	80 - 120	<0.020	mg/L	7.1	20
B088573	Dissolved Calcium (Ca)	2023/08/29	101	80 - 120	105	80 - 120	<0.30	mg/L	2.2	20
B088573	Dissolved Iron (Fe)	2023/08/29	103	80 - 120	106	80 - 120	<0.060	mg/L	1.7	20
B088573	Dissolved Lithium (Li)	2023/08/29	94	80 - 120	101	80 - 120	<0.020	mg/L	NC	20
B088573	Dissolved Magnesium (Mg)	2023/08/29	107	80 - 120	111	80 - 120	<0.20	mg/L	3.2	20
B088573	Dissolved Manganese (Mn)	2023/08/29	102	80 - 120	106	80 - 120	<0.0040	mg/L	NC	20
B088573	Dissolved Phosphorus (P)	2023/08/29	106	80 - 120	108	80 - 120	<0.10	mg/L	NC	20
B088573	Dissolved Potassium (K)	2023/08/29	98	80 - 120	102	80 - 120	<0.30	mg/L	4.0	20
B088573	Dissolved Silicon (Si)	2023/08/29	88	80 - 120	102	80 - 120	<0.50	mg/L	5.9	20
B088573	Dissolved Sodium (Na)	2023/08/29	96	80 - 120	100	80 - 120	<0.50	mg/L	1.6	20
B088573	Dissolved Strontium (Sr)	2023/08/29	95	80 - 120	100	80 - 120	<0.020	mg/L	2.4	20
B088573	Dissolved Sulphur (S)	2023/08/29	109	80 - 120	104	80 - 120	<0.20	mg/L	7.4	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

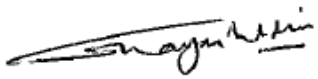
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

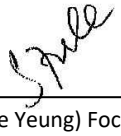
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins ; Monika Niemczyk	P.O. #		C365918	703084
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	3rd Floor 865 Waverley St. Winnipeg MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	(204) 896-1209 Fax:	Project Name		C#703084-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; MNiemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	AL/RP		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ✓
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/08/29	10:35	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC ASAP to meet hold times.
2		SB-1		9:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
3		SB-2		9:30		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:40		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		9:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		9:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		9:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		10:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		10:00		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:10		N	N	X	X	X	X	X	X	X	X	X	X	4	

mcal-08-3421 5/5

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Victoria Ainsleigh Loria	23/08/23	11:20	BA Brooklyn Hiebert	23/08/23	11:30			ACTR	Yes / No
			AJRAUCH	23/08/24	0830				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

See ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins ; Monika Niemczyk	P.O. #		C365918	703084
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	3rd Floor Waverley St. Winnipeg, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	(204) 896-1209 Fax:	Project Name		C#703084-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; MNiemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	AL/RP		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/08/22	8:40	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-3 BTM		8:43		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-7 SFC		8:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		8:47		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		8:35		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		8:37		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		8:50		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		8:55		N	N	X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		8:25		N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		8:30		N	N	X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ✓
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
A. Loria Ainsleigh Loria	23/08/22	11:20	BH Brooklyn Hebert	23/08/23	11:30	
			ATRAVER Cill	23/08/24	09:30	

Lab Use Only: Time Sensitive ☐ | Temperature (ºC) on Receipt: ACTR | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS. See ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C365918	703084
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	3rd Floor 865 Waverley St Winnipeg, MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	(204) 896-1209 Fax:	Project Name		C#703084-03-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	AL/RP		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ✓
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/08/22	8:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-5 BTM		8:20		N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times.
3		CL-6 SFC		8:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SW-122		8:10		N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SW-123		8:45		N	N	X	X	X	X	X	X	X	X	X	X	4	
7		SW-124		10:05		N	N	X	X	X	X	X	X	X	X	X	X	4	
8		Trip blank	↓	—	↓	N	N	X	X	X	X	X	X	X	X	X	X	4	↓
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Alexia Ainsleigh Loria	23/08/23	11:30	BIA Brooklyn Hiebert	23/08/23	11:30			ACTR	Yes / No
			ATRAVER CHU	2023/08/24	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS. See ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 704364-01-01, 704364-02-01, 704364-03-01

Report Date: 2023/09/15
Report #: R3396117
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C370816
Received: 2023/09/07, 12:05

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	27	N/A	2023/09/12	AB SOP-00005	SM 24 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	1	N/A	2023/09/13	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	4	N/A	2023/09/12		Auto Calc
Cadmium - low level CCME - Dissolved (1)	24	N/A	2023/09/14		Auto Calc
Cadmium - low level CCME (Total) (1)	13	N/A	2023/09/10		Auto Calc
Cadmium - low level CCME (Total) (1)	15	N/A	2023/09/11		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	1	N/A	2023/09/11	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	26	N/A	2023/09/12	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	23	N/A	2023/09/12	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	4	N/A	2023/09/13	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	27	N/A	2023/09/13		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	2	N/A	2023/09/10	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	25	N/A	2023/09/11	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	24	N/A	2023/09/12	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	4	N/A	2023/09/13	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	28	2023/09/10	2023/09/10	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	4	N/A	2023/09/11	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	20	N/A	2023/09/13	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	4	N/A	2023/09/14	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	27	2023/09/10	2023/09/10	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	1	2023/09/10	2023/09/11	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	27	N/A	2023/09/12	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (1, 6)	1	N/A	2023/09/13	AB SOP-00005	SM 24 4500-H+B m
Carbon (Total Organic) (1, 7)	6	N/A	2023/09/12	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	21	N/A	2023/09/13	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	1	2023/09/11	2023/09/11	AB SOP-00061	SM 24 2540 D m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 704364-01-01, 704364-02-01, 704364-03-01

Report Date: 2023/09/15
Report #: R3396117
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C370816
Received: 2023/09/07, 12:05

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Suspended Solids (NFR) (1)	8	2023/09/12	2023/09/13	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	18	2023/09/13	2023/09/13	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	1	2023/09/14	2023/09/14	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	27	N/A	2023/09/09	CAL SOP-00081	SM 24 2130 B m
Turbidity (1)	1	N/A	2023/09/14	CAL SOP-00081	SM 24 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8

(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.

(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 704364-01-01, 704364-02-01, 704364-03-01

Report Date: 2023/09/15
Report #: R3396117
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C370816

Received: 2023/09/07, 12:05

(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO065		BYO066		BYO067	BYO068		
Sampling Date		2023/09/06 10:15		2023/09/06 09:20		2023/09/06 09:15	2023/09/06 09:25		
COC Number		704364-01-01		704364-01-01		704364-01-01	704364-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	CB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.45	B100068	0.22	B100068	0.25	0.26	0.020	B100068
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.024	B104430	<0.0030	B103347	<0.0030	<0.0030	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	B104430	<0.00060	B103347	<0.00060	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	0.00047	B104430	<0.00020	B103347	0.00023	<0.00020	0.00020	B104430
Dissolved Barium (Ba)	mg/L	<0.010	B104277	0.013	B103730	0.012	0.012	0.010	B104277
Dissolved Beryllium (Be)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	B104277	<0.020	B103730	<0.020	<0.020	0.020	B104277
Dissolved Calcium (Ca)	mg/L	9.2	B104277	53	B103730	47	48	0.30	B104277
Dissolved Chromium (Cr)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	B104430	<0.00030	B103347	<0.00030	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.021	B104430	0.0066	B103347	0.0052	0.0051	0.0010	B104430
Dissolved Iron (Fe)	mg/L	0.21	B104277	0.13	B103730	0.15	0.11	0.060	B104277
Dissolved Lead (Pb)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	B104277	<0.020	B103730	<0.020	<0.020	0.020	B104277
Dissolved Magnesium (Mg)	mg/L	2.9	B104277	8.6	B103730	7.6	8.0	0.20	B104277
Dissolved Manganese (Mn)	mg/L	0.0097	B104277	0.054	B103730	0.052	0.048	0.0040	B104277
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L	0.00066	B104430	0.00065	B103347	0.00092	0.00094	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	B104277	<0.10	B103730	<0.10	<0.10	0.10	B104277
Dissolved Potassium (K)	mg/L	1.4	B104277	4.5	B103730	4.1	4.0	0.30	B104277
Dissolved Selenium (Se)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	1.2	B104277	0.67	B103730	0.63	0.57	0.50	B104277
Dissolved Silver (Ag)	mg/L	<0.00010	B104430	<0.00010	B103347	<0.00010	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	1.9	B104277	3.4	B103730	3.0	3.0	0.50	B104277
Dissolved Strontium (Sr)	mg/L	0.023	B104277	0.052	B103730	0.048	0.047	0.020	B104277
Dissolved Sulphur (S)	mg/L	3.0	B104277	48	B103730	52	49	0.20	B104277
Dissolved Thallium (Tl)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	B104430	<0.00010	B103347	<0.00010	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO065		BYO066		BYO067	BYO068		
Sampling Date		2023/09/06 10:15		2023/09/06 09:20		2023/09/06 09:15	2023/09/06 09:25		
COC Number		704364-01-01		704364-01-01		704364-01-01	704364-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**QC Batch**	**SB-2**	**CB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.25	B104430	0.054	B103347	0.068	0.069	0.0030	B104430
RDL = Reportable Detection Limit									

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO069		BYO070	BYO071		BYO072		
Sampling Date		2023/09/06 09:30		2023/09/06 09:35	2023/09/06 09:40		2023/09/06 09:50		
COC Number		704364-01-01		704364-01-01	704364-01-01		704364-01-01		
	UNITS	CB-2	QC Batch	EB-1	EB-2	QC Batch	NB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.21	B100068	0.42	0.42	B100068	0.27	0.020	B100068
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	<0.0030	B107358	0.0036	0.0046	B104430	0.0040	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	B107358	<0.00060	<0.00060	B104430	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	<0.00020	B107358	0.00023	0.00023	B104430	0.00043	0.00020	B104430
Dissolved Barium (Ba)	mg/L	0.013	B104277	0.014	0.014	B104277	0.012	0.010	B104277
Dissolved Beryllium (Be)	mg/L	<0.0010	B107358	<0.0010	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	B104277	<0.020	<0.020	B104277	<0.020	0.020	B104277
Dissolved Calcium (Ca)	mg/L	50	B104277	57	55	B104277	50	0.30	B104277
Dissolved Chromium (Cr)	mg/L	<0.0010	B107358	<0.0010	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	B107358	<0.00030	<0.00030	B104430	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.0045	B107358	0.0085	0.0071	B104430	0.0057	0.0010	B104430
Dissolved Iron (Fe)	mg/L	0.069	B104277	0.11	0.13	B104277	0.085	0.060	B104277
Dissolved Lead (Pb)	mg/L	<0.00020	B107358	<0.00020	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	B104277	<0.020	<0.020	B104277	<0.020	0.020	B104277
Dissolved Magnesium (Mg)	mg/L	8.1	B104277	9.2	8.7	B104277	7.7	0.20	B104277
Dissolved Manganese (Mn)	mg/L	0.049	B104277	0.038	0.043	B104277	0.061	0.0040	B104277
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B107358	<0.00020	<0.00020	B104430	<0.00020	0.00020	B103744
Dissolved Nickel (Ni)	mg/L	0.00074	B107358	0.0013	0.0013	B104430	0.0012	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	B104277	<0.10	<0.10	B104277	<0.10	0.10	B104277
Dissolved Potassium (K)	mg/L	4.3	B104277	4.5	4.4	B104277	4.0	0.30	B104277
Dissolved Selenium (Se)	mg/L	<0.00020	B107358	<0.00020	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	0.62	B104277	<0.50	0.51	B104277	0.65	0.50	B104277
Dissolved Silver (Ag)	mg/L	<0.00010	B107358	<0.00010	<0.00010	B104430	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	3.1	B104277	3.4	3.3	B104277	2.9	0.50	B104277
Dissolved Strontium (Sr)	mg/L	0.049	B104277	0.053	0.051	B104277	0.048	0.020	B104277
Dissolved Sulphur (S)	mg/L	54	B104277	58	62	B104277	60	0.20	B104277
Dissolved Thallium (Tl)	mg/L	<0.00020	B107358	<0.00020	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	B107358	<0.0010	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	B107358	<0.0010	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	B107358	<0.00010	<0.00010	B104430	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO069		BYO070	BYO071		BYO072		
Sampling Date		2023/09/06 09:30		2023/09/06 09:35	2023/09/06 09:40		2023/09/06 09:50		
COC Number		704364-01-01		704364-01-01	704364-01-01		704364-01-01		
	UNITS	**CB-2**	**QC Batch**	**EB-1**	**EB-2**	**QC Batch**	**NB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B107358	<0.0010	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.062	B107358	0.13	0.12	B104430	0.076	0.0030	B104430
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO073	BYO074		BYO075	BYO076		
Sampling Date		2023/09/06 09:45	2023/09/06 09:55		2023/09/06 08:45	2023/09/06 08:50		
COC Number		704364-01-01	704364-01-01		704364-02-01	704364-02-01		
	UNITS	NB-2	CLD	QC Batch	CL-3 SFC	CL-3 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.26	0.28	B100068	<0.020	<0.020	0.020	B100068
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	<0.0030	<0.0030	B103347	0.010	0.010	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B103347	<0.00060	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	<0.00020	<0.00020	B103347	0.00039	0.00039	0.00020	B104430
Dissolved Barium (Ba)	mg/L	0.012	0.013	B103730	<0.010	<0.010	0.010	B104277
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	<0.020	B103730	<0.020	<0.020	0.020	B104277
Dissolved Calcium (Ca)	mg/L	54	58	B103730	12	12	0.30	B104277
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B103347	<0.00030	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.0077	0.0079	B103347	0.0045	0.0045	0.0010	B104430
Dissolved Iron (Fe)	mg/L	0.18	0.16	B103730	0.43	0.069	0.060	B104277
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B103730	<0.020	<0.020	0.020	B104277
Dissolved Magnesium (Mg)	mg/L	8.7	8.9	B103730	3.2	3.1	0.20	B104277
Dissolved Manganese (Mn)	mg/L	0.051	0.051	B103730	<0.0040	<0.0040	0.0040	B104277
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L	0.00072	0.00082	B103347	0.00060	<0.00050	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B103730	<0.10	<0.10	0.10	B104277
Dissolved Potassium (K)	mg/L	4.3	4.4	B103730	1.6	1.5	0.30	B104277
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	0.69	0.58	B103730	0.69	0.66	0.50	B104277
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B103347	<0.00010	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	3.2	3.2	B103730	2.1	2.0	0.50	B104277
Dissolved Strontium (Sr)	mg/L	0.050	0.052	B103730	0.026	0.026	0.020	B104277
Dissolved Sulphur (S)	mg/L	58	49	B103730	6.6	6.4	0.20	B104277
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B103347	<0.00010	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO073	BYO074		BYO075	BYO076		
Sampling Date		2023/09/06 09:45	2023/09/06 09:55		2023/09/06 08:45	2023/09/06 08:50		
COC Number		704364-01-01	704364-01-01		704364-02-01	704364-02-01		
	UNITS	**NB-2**	**CLD**	**QC Batch**	**CL-3 SFC**	**CL-3 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.069	0.071	B103347	0.0066	0.0077	0.0030	B104430
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO077		BYO078		BYO079	BYO080		
Sampling Date		2023/09/06 08:55		2023/09/06 09:00		2023/09/06 08:35	2023/09/06 08:40		
COC Number		704364-02-01		704364-02-01		704364-02-01	704364-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	QC Batch	CL-8 SFC	CL-8 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B100068	<0.020	B100068	<0.020	<0.020	0.020	B100135
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0098	B104430	0.0090	B103347	0.011	0.012	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	B104430	<0.00060	B103347	<0.00060	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	0.00038	B104430	0.00031	B103347	0.00035	0.00045	0.00020	B104430
Dissolved Barium (Ba)	mg/L	<0.010	B105261	0.011	B103730	<0.010	0.013	0.010	B104277
Dissolved Beryllium (Be)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	B105261	<0.020	B103730	<0.020	<0.020	0.020	B104277
Dissolved Calcium (Ca)	mg/L	13	B105261	13	B103730	12	14	0.30	B104277
Dissolved Chromium (Cr)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	B104430	<0.00030	B103347	<0.00030	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.0054	B104430	0.0058	B103347	0.0046	0.0047	0.0010	B104430
Dissolved Iron (Fe)	mg/L	0.078	B105261	0.13	B103730	0.076	0.086	0.060	B104277
Dissolved Lead (Pb)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	B105261	<0.020	B103730	<0.020	<0.020	0.020	B104277
Dissolved Magnesium (Mg)	mg/L	3.1	B105261	3.5	B103730	3.3	4.1	0.20	B104277
Dissolved Manganese (Mn)	mg/L	<0.0040	B105261	<0.0040	B103730	<0.0040	<0.0040	0.0040	B104277
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L	<0.00050	B104430	<0.00050	B103347	<0.00050	<0.00050	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	B105261	<0.10	B103730	<0.10	<0.10	0.10	B104277
Dissolved Potassium (K)	mg/L	1.5	B105261	1.7	B103730	1.6	1.8	0.30	B104277
Dissolved Selenium (Se)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	0.60	B105261	0.81	B103730	0.68	0.67	0.50	B104277
Dissolved Silver (Ag)	mg/L	<0.00010	B104430	<0.00010	B103347	<0.00010	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	1.9	B105261	2.2	B103730	2.1	2.4	0.50	B104277
Dissolved Strontium (Sr)	mg/L	0.026	B105261	0.028	B103730	0.027	0.029	0.020	B104277
Dissolved Sulphur (S)	mg/L	5.8	B105261	7.1	B103730	6.6	6.4	0.20	B104277
Dissolved Thallium (Tl)	mg/L	<0.00020	B104430	<0.00020	B103347	<0.00020	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	B104430	<0.00010	B103347	<0.00010	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO077		BYO078		BYO079	BYO080		
Sampling Date		2023/09/06 08:55		2023/09/06 09:00		2023/09/06 08:35	2023/09/06 08:40		
COC Number		704364-02-01		704364-02-01		704364-02-01	704364-02-01		
	UNITS	**CL-7 SFC**	**QC Batch**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**CL-8 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B104430	<0.0010	B103347	<0.0010	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.0063	B104430	0.0048	B103347	0.0070	0.0088	0.0030	B104430
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO080			BYO081		BYO082		
Sampling Date		2023/09/06 08:40			2023/09/06 09:05		2023/09/06 09:10		
COC Number		704364-02-01			704364-02-01		704364-02-01		
	UNITS	CL-8 BTM Lab-Dup	RDL	QC Batch	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				<0.020	B100135	0.022	0.020	B100135
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L				0.0090	B107358	0.011	0.0030	B104430
Dissolved Antimony (Sb)	mg/L				<0.00060	B107358	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L				0.00041	B107358	0.00035	0.00020	B104430
Dissolved Barium (Ba)	mg/L	0.010	0.010	B104277	<0.010	B104277	<0.010	0.010	B105261
Dissolved Beryllium (Be)	mg/L				<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	0.020	B104277	<0.020	B104277	<0.020	0.020	B105261
Dissolved Calcium (Ca)	mg/L	13	0.30	B104277	12	B104277	14	0.30	B105261
Dissolved Chromium (Cr)	mg/L				<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L				<0.00030	B107358	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L				0.0041	B107358	0.0054	0.0010	B104430
Dissolved Iron (Fe)	mg/L	0.081	0.060	B104277	0.096	B104277	0.10	0.060	B105261
Dissolved Lead (Pb)	mg/L				<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B104277	<0.020	B104277	<0.020	0.020	B105261
Dissolved Magnesium (Mg)	mg/L	3.6	0.20	B104277	3.3	B104277	3.6	0.20	B105261
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B104277	<0.0040	B104277	<0.0040	0.0040	B105261
Dissolved Molybdenum (Mo)	mg/L				<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L				<0.00050	B107358	<0.00050	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B104277	<0.10	B104277	<0.10	0.10	B105261
Dissolved Potassium (K)	mg/L	1.7	0.30	B104277	1.6	B104277	1.7	0.30	B105261
Dissolved Selenium (Se)	mg/L				<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	0.66	0.50	B104277	0.71	B104277	0.74	0.50	B105261
Dissolved Silver (Ag)	mg/L				<0.00010	B107358	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	2.2	0.50	B104277	2.0	B104277	2.1	0.50	B105261
Dissolved Strontium (Sr)	mg/L	0.027	0.020	B104277	0.026	B104277	0.028	0.020	B105261
Dissolved Sulphur (S)	mg/L	6.5	0.20	B104277	6.5	B104277	6.2	0.20	B105261
Dissolved Thallium (Tl)	mg/L				<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L				<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L				<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L				<0.00010	B107358	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO080			BYO081		BYO082		
Sampling Date		2023/09/06 08:40			2023/09/06 09:05		2023/09/06 09:10		
COC Number		704364-02-01			704364-02-01		704364-02-01		
	UNITS	**CL-8 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L				<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L				0.0064	B107358	0.0075	0.0030	B104430

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO083		BYO084		BYO085		
Sampling Date		2023/09/06 08:25		2023/09/06 08:30		2023/09/06 08:15		
COC Number		704364-02-01		704364-02-01		704364-03-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	<0.020	B100135	<0.020	B100135	<0.020	0.020	B100135
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.0097	B104430	0.0078	B107358	0.0099	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	B104430	<0.00060	B107358	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	0.00045	B104430	0.00045	B107358	0.00046	0.00020	B104430
Dissolved Barium (Ba)	mg/L	<0.010	B104277	<0.010	B104277	<0.010	0.010	B105261
Dissolved Beryllium (Be)	mg/L	<0.0010	B104430	<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	B104277	<0.020	B104277	<0.020	0.020	B105261
Dissolved Calcium (Ca)	mg/L	12	B104277	12	B104277	13	0.30	B105261
Dissolved Chromium (Cr)	mg/L	<0.0010	B104430	<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	B104430	<0.00030	B107358	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.0048	B104430	0.0037	B107358	0.0048	0.0010	B104430
Dissolved Iron (Fe)	mg/L	0.068	B104277	<0.060	B104277	<0.060	0.060	B105261
Dissolved Lead (Pb)	mg/L	<0.00020	B104430	<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	B104277	<0.020	B104277	<0.020	0.020	B105261
Dissolved Magnesium (Mg)	mg/L	3.2	B104277	3.2	B104277	3.3	0.20	B105261
Dissolved Manganese (Mn)	mg/L	<0.0040	B104277	<0.0040	B104277	<0.0040	0.0040	B105261
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B104430	<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L	<0.00050	B104430	<0.00050	B107358	<0.00050	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	B104277	<0.10	B104277	<0.10	0.10	B105261
Dissolved Potassium (K)	mg/L	1.6	B104277	1.6	B104277	1.6	0.30	B105261
Dissolved Selenium (Se)	mg/L	<0.00020	B104430	<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	0.67	B104277	0.66	B104277	0.62	0.50	B105261
Dissolved Silver (Ag)	mg/L	<0.00010	B104430	<0.00010	B107358	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	2.0	B104277	2.1	B104277	2.1	0.50	B105261
Dissolved Strontium (Sr)	mg/L	0.026	B104277	0.026	B104277	0.027	0.020	B105261
Dissolved Sulphur (S)	mg/L	6.5	B104277	6.2	B104277	5.5	0.20	B105261
Dissolved Thallium (Tl)	mg/L	<0.00020	B104430	<0.00020	B107358	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	B104430	<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	B104430	<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	B104430	<0.00010	B107358	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO083		BYO084		BYO085		
Sampling Date		2023/09/06 08:25		2023/09/06 08:30		2023/09/06 08:15		
COC Number		704364-02-01		704364-02-01		704364-03-01		
	UNITS	**CL-4 SFC**	**QC Batch**	**CL-4 BTM**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B104430	<0.0010	B107358	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.0064	B104430	0.0063	B107358	0.0055	0.0030	B104430
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO085			BYO086	BYO087		BYO088		
Sampling Date		2023/09/06 08:15			2023/09/06 08:20	2023/09/06 08:05		2023/09/06 08:10		
COC Number		704364-03-01			704364-03-01	704364-03-01		704364-03-01		
	UNITS	CL-5 SFC Lab-Dup	RDL	QC Batch	CL-5 BTM	CL-6 SFC	QC Batch	CL-6 BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L				<0.020	<0.020	B100135	<0.020	0.020	B100135
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0087	0.0030	B104430	0.0090	0.0086	B104430	0.0079	0.0030	B107358
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B104430	<0.00060	<0.00060	B104430	<0.00060	0.00060	B107358
Dissolved Arsenic (As)	mg/L	0.00041	0.00020	B104430	0.00037	0.00049	B104430	0.00044	0.00020	B107358
Dissolved Barium (Ba)	mg/L				<0.010	<0.010	B104277	<0.010	0.010	B104277
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B104430	<0.0010	<0.0010	B104430	<0.0010	0.0010	B107358
Dissolved Boron (B)	mg/L				<0.020	<0.020	B104277	<0.020	0.020	B104277
Dissolved Calcium (Ca)	mg/L				13	11	B104277	11	0.30	B104277
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B104430	<0.0010	<0.0010	B104430	<0.0010	0.0010	B107358
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B104430	<0.00030	<0.00030	B104430	<0.00030	0.00030	B107358
Dissolved Copper (Cu)	mg/L	0.0043	0.0010	B104430	0.0044	0.0036	B104430	0.0032	0.0010	B107358
Dissolved Iron (Fe)	mg/L				<0.060	<0.060	B104277	<0.060	0.060	B104277
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B104430	<0.00020	<0.00020	B104430	<0.00020	0.00020	B107358
Dissolved Lithium (Li)	mg/L				<0.020	<0.020	B104277	<0.020	0.020	B104277
Dissolved Magnesium (Mg)	mg/L				3.5	3.0	B104277	3.1	0.20	B104277
Dissolved Manganese (Mn)	mg/L				<0.0040	<0.0040	B104277	<0.0040	0.0040	B104277
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B104430	<0.00020	<0.00020	B104430	<0.00020	0.00020	B107358
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B104430	<0.00050	<0.00050	B104430	<0.00050	0.00050	B107358
Dissolved Phosphorus (P)	mg/L				<0.10	<0.10	B104277	<0.10	0.10	B104277
Dissolved Potassium (K)	mg/L				1.7	1.4	B104277	1.5	0.30	B104277
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B104430	<0.00020	<0.00020	B104430	<0.00020	0.00020	B107358
Dissolved Silicon (Si)	mg/L				0.61	0.52	B104277	0.51	0.50	B104277
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B104430	<0.00010	<0.00010	B104430	<0.00010	0.00010	B107358
Dissolved Sodium (Na)	mg/L				2.3	2.0	B104277	2.1	0.50	B104277
Dissolved Strontium (Sr)	mg/L				0.027	0.025	B104277	0.026	0.020	B104277
Dissolved Sulphur (S)	mg/L				5.8	5.1	B104277	5.0	0.20	B104277
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B104430	<0.00020	<0.00020	B104430	<0.00020	0.00020	B107358
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B104430	<0.0010	<0.0010	B104430	<0.0010	0.0010	B107358
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B104430	<0.0010	<0.0010	B104430	<0.0010	0.0010	B107358
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B104430	<0.00010	<0.00010	B104430	<0.00010	0.00010	B107358

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO085			BYO086	BYO087		BYO088		
Sampling Date		2023/09/06 08:15			2023/09/06 08:20	2023/09/06 08:05		2023/09/06 08:10		
COC Number		704364-03-01			704364-03-01	704364-03-01		704364-03-01		
	UNITS	**CL-5 SFC Lab-Dup**	**RDL**	**QC Batch**	**CL-5 BTM**	**CL-6 SFC**	**QC Batch**	**CL-6 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B104430	<0.0010	<0.0010	B104430	<0.0010	0.0010	B107358
Dissolved Zinc (Zn)	mg/L	0.0057	0.0030	B104430	0.0059	0.0050	B104430	0.0050	0.0030	B107358

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO088			BYO089		BYO090		
Sampling Date		2023/09/06 08:10			2023/09/06 00:00		2023/09/06 00:00		
COC Number		704364-03-01			704364-03-01		704364-03-01		
	UNITS	CL-6 BTM Lab-Dup	RDL	QC Batch	SW-125	QC Batch	SW-126	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.28	B100135	<0.020	0.020	B100135
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0073	0.0030	B107358	<0.0030	B104430	0.010	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B107358	<0.00060	B104430	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	0.00044	0.00020	B107358	0.00022	B104430	0.00037	0.00020	B104430
Dissolved Barium (Ba)	mg/L				0.012	B104277	<0.010	0.010	B105261
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B107358	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L				<0.020	B104277	<0.020	0.020	B105261
Dissolved Calcium (Ca)	mg/L				51	B104277	14	0.30	B105261
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B107358	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B107358	<0.00030	B104430	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.0033	0.0010	B107358	0.0057	B104430	0.0046	0.0010	B104430
Dissolved Iron (Fe)	mg/L				0.11	B104277	0.10	0.060	B105261
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B107358	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L				<0.020	B104277	<0.020	0.020	B105261
Dissolved Magnesium (Mg)	mg/L				8.1	B104277	3.4	0.20	B105261
Dissolved Manganese (Mn)	mg/L				0.059	B104277	<0.0040	0.0040	B105261
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B107358	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B107358	0.00086	B104430	0.00056	0.00050	B104430
Dissolved Phosphorus (P)	mg/L				<0.10	B104277	<0.10	0.10	B105261
Dissolved Potassium (K)	mg/L				4.1	B104277	1.6	0.30	B105261
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B107358	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L				0.61	B104277	0.71	0.50	B105261
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B107358	<0.00010	B104430	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L				3.0	B104277	2.1	0.50	B105261
Dissolved Strontium (Sr)	mg/L				0.047	B104277	0.028	0.020	B105261
Dissolved Sulphur (S)	mg/L				57	B104277	6.4	0.20	B105261
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B107358	<0.00020	B104430	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B107358	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B107358	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B107358	<0.00010	B104430	<0.00010	0.00010	B104430

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO088			BYO089		BYO090		
Sampling Date		2023/09/06 08:10			2023/09/06 00:00		2023/09/06 00:00		
COC Number		704364-03-01			704364-03-01		704364-03-01		
	UNITS	CL-6 BTM Lab-Dup	RDL	QC Batch	SW-125	QC Batch	SW-126	RDL	QC Batch
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B107358	<0.0010	B104430	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.0052	0.0030	B107358	0.077	B104430	0.0068	0.0030	B104430

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO091	BYO092		
Sampling Date		2023/09/06 00:00	2023/09/06 00:00		
COC Number		704364-03-01	704364-03-01		
	UNITS	SW-127	TRIP BLANK	RDL	QC Batch
Elements					
Dissolved Cadmium (Cd)	ug/L	<0.020	<0.020	0.020	B100135
Lab Filtered Elements					
Dissolved Aluminum (Al)	mg/L	0.0083	<0.0030	0.0030	B104430
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B104430
Dissolved Arsenic (As)	mg/L	0.00046	<0.00020	0.00020	B104430
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	0.010	B104277
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B104430
Dissolved Boron (B)	mg/L	<0.020	<0.020	0.020	B104277
Dissolved Calcium (Ca)	mg/L	9.8	<0.30	0.30	B104277
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B104430
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B104430
Dissolved Copper (Cu)	mg/L	0.0034	<0.0010	0.0010	B104430
Dissolved Iron (Fe)	mg/L	<0.060	<0.060	0.060	B104277
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B104430
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	0.020	B104277
Dissolved Magnesium (Mg)	mg/L	2.7	<0.20	0.20	B104277
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	0.0040	B104277
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B104430
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	0.00050	B104430
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B104277
Dissolved Potassium (K)	mg/L	1.3	<0.30	0.30	B104277
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B104430
Dissolved Silicon (Si)	mg/L	0.51	<0.50	0.50	B104277
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B104430
Dissolved Sodium (Na)	mg/L	1.8	<0.50	0.50	B104277
Dissolved Strontium (Sr)	mg/L	0.024	<0.020	0.020	B104277
Dissolved Sulphur (S)	mg/L	5.1	<0.20	0.20	B104277
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B104430
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B104430
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	0.0010	B104430
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B104430
RDL = Reportable Detection Limit					

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BYO091	BYO092		
Sampling Date		2023/09/06 00:00	2023/09/06 00:00		
COC Number		704364-03-01	704364-03-01		
	UNITS	**SW-127**	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B104430
Dissolved Zinc (Zn)	mg/L	0.0054	<0.0030	0.0030	B104430
RDL = Reportable Detection Limit					

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO065	BYO066	BYO067	BYO068	BYO069		
Sampling Date		2023/09/06 10:15	2023/09/06 09:20	2023/09/06 09:15	2023/09/06 09:25	2023/09/06 09:30		
COC Number		704364-01-01	704364-01-01	704364-01-01	704364-01-01	704364-01-01		
	UNITS	SC-1	SB-1	SB-2	CB-1	CB-2	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.89	0.44	0.50	0.45	0.33	0.020	B099752
Total Aluminum (Al)	mg/L	0.078	0.050	0.061	0.042	0.039	0.0030	B101591
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B101591
Total Arsenic (As)	mg/L	0.00068	0.00036	0.00040	0.00036	0.00024	0.00020	B101591
Total Barium (Ba)	mg/L	<0.010	0.013	0.012	0.013	0.012	0.010	B101593
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B101593
Total Calcium (Ca)	mg/L	9.9	52	51	52	52	0.30	B101593
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Cobalt (Co)	mg/L	0.00032	0.00033	0.00035	<0.00030	<0.00030	0.00030	B101591
Total Copper (Cu)	mg/L	0.036	0.012	0.014	0.013	0.0088	0.0010	B101591
Total Iron (Fe)	mg/L	0.44	2.4	2.3	2.4	2.0	0.060	B101593
Total Lead (Pb)	mg/L	<0.00020	0.00026	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B101593
Total Magnesium (Mg)	mg/L	3.1	8.4	8.2	8.5	8.3	0.20	B101593
Total Manganese (Mn)	mg/L	0.062	0.060	0.061	0.061	0.057	0.0040	B101593
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Nickel (Ni)	mg/L	0.0011	0.0015	0.0016	0.0015	0.0010	0.00050	B101591
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B101593
Total Potassium (K)	mg/L	1.6	4.5	4.5	4.6	4.6	0.30	B101593
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Silicon (Si)	mg/L	1.4	0.74	0.76	0.71	0.74	0.50	B101593
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B101591
Total Sodium (Na)	mg/L	2.0	3.2	3.1	3.2	3.1	0.50	B101593
Total Strontium (Sr)	mg/L	0.025	0.056	0.056	0.058	0.056	0.020	B101593
Total Sulphur (S)	mg/L	3.1	52	52	53	53	0.20	B101593
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Titanium (Ti)	mg/L	0.0014	0.0019	0.0019	0.0012	0.0013	0.0010	B101591
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B101591
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Zinc (Zn)	mg/L	0.38	0.13	0.14	0.13	0.091	0.0030	B101591

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO070		BYO071			BYO071		
Sampling Date		2023/09/06 09:35		2023/09/06 09:40			2023/09/06 09:40		
COC Number		704364-01-01		704364-01-01			704364-01-01		
	UNITS	EB-1	QC Batch	EB-2	RDL	QC Batch	EB-2 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.47	B099752	0.59	0.020	B099752			
Total Aluminum (Al)	mg/L	0.045	B101588	0.058	0.0030	B101591	0.066	0.0030	B101591
Total Antimony (Sb)	mg/L	<0.00060	B101588	<0.00060	0.00060	B101591	<0.00060	0.00060	B101591
Total Arsenic (As)	mg/L	0.00024	B101588	0.00030	0.00020	B101591	0.00037	0.00020	B101591
Total Barium (Ba)	mg/L	0.014	B101589	0.014	0.010	B101593	0.014	0.010	B101593
Total Beryllium (Be)	mg/L	<0.0010	B101588	<0.0010	0.0010	B101591	<0.0010	0.0010	B101591
Total Boron (B)	mg/L	<0.020	B101589	<0.020	0.020	B101593	<0.020	0.020	B101593
Total Calcium (Ca)	mg/L	58	B101589	57	0.30	B101593	60	0.30	B101593
Total Chromium (Cr)	mg/L	<0.0010	B101588	<0.0010	0.0010	B101591	<0.0010	0.0010	B101591
Total Cobalt (Co)	mg/L	<0.00030	B101588	0.00034	0.00030	B101591	0.00039	0.00030	B101591
Total Copper (Cu)	mg/L	0.012	B101588	0.012	0.0010	B101591	0.015	0.0010	B101591
Total Iron (Fe)	mg/L	1.3	B101589	1.4	0.060	B101593	1.4	0.060	B101593
Total Lead (Pb)	mg/L	<0.00020	B101588	<0.00020	0.00020	B101591	<0.00020	0.00020	B101591
Total Lithium (Li)	mg/L	<0.020	B101589	<0.020	0.020	B101593	<0.020	0.020	B101593
Total Magnesium (Mg)	mg/L	9.2	B101589	8.9	0.20	B101593	9.3	0.20	B101593
Total Manganese (Mn)	mg/L	0.046	B101589	0.047	0.0040	B101593	0.049	0.0040	B101593
Total Molybdenum (Mo)	mg/L	<0.00020	B101588	<0.00020	0.00020	B101591	<0.00020	0.00020	B101591
Total Nickel (Ni)	mg/L	0.0012	B101588	0.0017	0.00050	B101591	0.0019	0.00050	B101591
Total Phosphorus (P)	mg/L	<0.10	B101589	<0.10	0.10	B101593	<0.10	0.10	B101593
Total Potassium (K)	mg/L	4.9	B101589	4.7	0.30	B101593	4.9	0.30	B101593
Total Selenium (Se)	mg/L	<0.00020	B101588	<0.00020	0.00020	B101591	0.00021	0.00020	B101591
Total Silicon (Si)	mg/L	0.55	B101589	0.57	0.50	B101593	0.59	0.50	B101593
Total Silver (Ag)	mg/L	<0.00010	B101588	<0.00010	0.00010	B101591	<0.00010	0.00010	B101591
Total Sodium (Na)	mg/L	3.4	B101589	3.3	0.50	B101593	3.4	0.50	B101593
Total Strontium (Sr)	mg/L	0.064	B101589	0.060	0.020	B101593	0.063	0.020	B101593
Total Sulphur (S)	mg/L	58	B101589	57	0.20	B101593	60	0.20	B101593
Total Thallium (Tl)	mg/L	<0.00020	B101588	<0.00020	0.00020	B101591	<0.00020	0.00020	B101591
Total Tin (Sn)	mg/L	<0.0010	B101588	<0.0010	0.0010	B101591	<0.0010	0.0010	B101591
Total Titanium (Ti)	mg/L	<0.0010	B101588	0.0011	0.0010	B101591	0.0017	0.0010	B101591
Total Uranium (U)	mg/L	<0.00010	B101588	<0.00010	0.00010	B101591	<0.00010	0.00010	B101591
Total Vanadium (V)	mg/L	<0.0010	B101588	<0.0010	0.0010	B101591	<0.0010	0.0010	B101591

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO070		BYO071			BYO071		
Sampling Date		2023/09/06 09:35		2023/09/06 09:40			2023/09/06 09:40		
COC Number		704364-01-01		704364-01-01			704364-01-01		
	UNITS	**EB-1**	**QC Batch**	**EB-2**	**RDL**	**QC Batch**	**EB-2 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.14	B101588	0.16	0.0030	B101591	0.19	0.0030	B101591

RDL = Reportable Detection Limit
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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO072	BYO073	BYO074	BYO075	BYO076	BYO077		
Sampling Date		2023/09/06 09:50	2023/09/06 09:45	2023/09/06 09:55	2023/09/06 08:45	2023/09/06 08:50	2023/09/06 08:55		
COC Number		704364-01-01	704364-01-01	704364-01-01	704364-02-01	704364-02-01	704364-02-01		
	UNITS	NB-1	NB-2	CLD	CL-3 SFC	CL-3 BTM	CL-7 SFC	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.40	0.46	0.46	0.051	0.036	0.050	0.020	B099752
Total Aluminum (Al)	mg/L	0.035	0.046	0.055	0.066	0.058	0.074	0.0030	B101591
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B101591
Total Arsenic (As)	mg/L	0.00034	0.00036	0.00035	0.00066	0.00051	0.00066	0.00020	B101591
Total Barium (Ba)	mg/L	0.013	0.012	0.013	<0.010	0.010	<0.010	0.010	B101593
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B101593
Total Calcium (Ca)	mg/L	58	57	60	13	13	13	0.30	B101593
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B101591
Total Copper (Cu)	mg/L	0.012	0.014	0.015	0.0081	0.0057	0.0074	0.0010	B101591
Total Iron (Fe)	mg/L	2.5	1.8	2.6	0.37	0.39	0.39	0.060	B101593
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B101593
Total Magnesium (Mg)	mg/L	9.2	9.1	9.1	3.5	3.5	3.2	0.20	B101593
Total Manganese (Mn)	mg/L	0.066	0.057	0.064	0.020	0.021	0.019	0.0040	B101593
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Nickel (Ni)	mg/L	0.0014	0.0014	0.0013	0.00073	0.00053	0.00071	0.00050	B101591
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B101593
Total Potassium (K)	mg/L	4.7	4.6	4.6	1.7	1.7	1.6	0.30	B101593
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Silicon (Si)	mg/L	0.71	0.72	0.73	0.82	0.88	0.81	0.50	B101593
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B101591
Total Sodium (Na)	mg/L	3.2	3.2	3.2	2.1	2.1	2.0	0.50	B101593
Total Strontium (Sr)	mg/L	0.060	0.060	0.060	0.030	0.030	0.028	0.020	B101593
Total Sulphur (S)	mg/L	56	57	58	7.0	7.0	6.7	0.20	B101593
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101591
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Titanium (Ti)	mg/L	<0.0010	0.0014	0.0014	0.0018	0.0018	0.0023	0.0010	B101591
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B101591
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101591
Total Zinc (Zn)	mg/L	0.11	0.13	0.14	0.017	0.014	0.016	0.0030	B101591

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO078	BYO079	BYO080		BYO081	BYO082		
Sampling Date		2023/09/06 09:00	2023/09/06 08:35	2023/09/06 08:40		2023/09/06 09:05	2023/09/06 09:10		
COC Number		704364-02-01	704364-02-01	704364-02-01		704364-02-01	704364-02-01		
	UNITS	CL-7 BTM	CL-8 SFC	CL-8 BTM	QC Batch	CL-2 SFC	CL-2 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.041	0.045	0.037	B099752	0.039	0.055	0.020	B099752
Total Aluminum (Al)	mg/L	0.050	0.055	0.045	B101588	0.050	0.068	0.0030	B101591
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B101588	<0.00060	<0.00060	0.00060	B101591
Total Arsenic (As)	mg/L	0.00052	0.00059	0.00042	B101588	0.00038	0.00072	0.00020	B101591
Total Barium (Ba)	mg/L	0.010	<0.010	<0.010	B101589	0.010	<0.010	0.010	B101593
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B101588	<0.0010	<0.0010	0.0010	B101591
Total Boron (B)	mg/L	<0.020	0.031	<0.020	B101589	<0.020	<0.020	0.020	B101593
Total Calcium (Ca)	mg/L	13	12	13	B101589	13	13	0.30	B101593
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B101588	<0.0010	<0.0010	0.0010	B101591
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B101588	<0.00030	<0.00030	0.00030	B101591
Total Copper (Cu)	mg/L	0.0057	0.0066	0.0054	B101588	0.0055	0.0088	0.0010	B101591
Total Iron (Fe)	mg/L	0.40	0.32	0.35	B101589	0.37	0.37	0.060	B101593
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B101588	<0.00020	<0.00020	0.00020	B101591
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B101589	<0.020	<0.020	0.020	B101593
Total Magnesium (Mg)	mg/L	3.5	3.2	3.4	B101589	3.5	3.4	0.20	B101593
Total Manganese (Mn)	mg/L	0.019	0.020	0.020	B101589	0.026	0.026	0.0040	B101593
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B101588	<0.00020	<0.00020	0.00020	B101591
Total Nickel (Ni)	mg/L	0.00056	0.00071	0.00051	B101588	0.00073	0.00096	0.00050	B101591
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B101589	<0.10	<0.10	0.10	B101593
Total Potassium (K)	mg/L	1.7	1.6	1.7	B101589	1.7	1.7	0.30	B101593
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B101588	<0.00020	<0.00020	0.00020	B101591
Total Silicon (Si)	mg/L	0.83	0.76	0.83	B101589	0.92	0.86	0.50	B101593
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B101588	<0.00010	<0.00010	0.00010	B101591
Total Sodium (Na)	mg/L	2.1	2.1	2.1	B101589	2.1	2.1	0.50	B101593
Total Strontium (Sr)	mg/L	0.030	0.032	0.030	B101589	0.030	0.029	0.020	B101593
Total Sulphur (S)	mg/L	7.0	6.4	6.8	B101589	6.7	6.7	0.20	B101593
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B101588	<0.00020	<0.00020	0.00020	B101591
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B101588	<0.0010	<0.0010	0.0010	B101591
Total Titanium (Ti)	mg/L	0.0013	0.0014	0.0012	B101588	0.0013	0.0021	0.0010	B101591
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B101588	<0.00010	<0.00010	0.00010	B101591
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B101588	<0.0010	<0.0010	0.0010	B101591
Total Zinc (Zn)	mg/L	0.013	0.014	0.012	B101588	0.012	0.022	0.0030	B101591

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO083		BYO084		BYO085	BYO086		
Sampling Date		2023/09/06 08:25		2023/09/06 08:30		2023/09/06 08:15	2023/09/06 08:20		
COC Number		704364-02-01		704364-02-01		704364-03-01	704364-03-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	CL-5 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.039	B099752	0.053	B099752	0.031	0.050	0.020	B099752
Total Aluminum (Al)	mg/L	0.052	B101588	0.073	B101591	0.055	0.084	0.0030	B101588
Total Antimony (Sb)	mg/L	<0.00060	B101588	<0.00060	B101591	<0.00060	<0.00060	0.00060	B101588
Total Arsenic (As)	mg/L	0.00041	B101588	0.00077	B101591	0.00047	0.00085	0.00020	B101588
Total Barium (Ba)	mg/L	<0.010	B101589	<0.010	B101593	<0.010	<0.010	0.010	B101589
Total Beryllium (Be)	mg/L	<0.0010	B101588	<0.0010	B101591	<0.0010	<0.0010	0.0010	B101588
Total Boron (B)	mg/L	<0.020	B101589	<0.020	B101593	<0.020	<0.020	0.020	B101589
Total Calcium (Ca)	mg/L	12	B101589	13	B101593	12	12	0.30	B101589
Total Chromium (Cr)	mg/L	<0.0010	B101588	<0.0010	B101591	<0.0010	<0.0010	0.0010	B101588
Total Cobalt (Co)	mg/L	<0.00030	B101588	<0.00030	B101591	<0.00030	<0.00030	0.00030	B101588
Total Copper (Cu)	mg/L	0.0055	B101588	0.0083	B101591	0.0050	0.0088	0.0010	B101588
Total Iron (Fe)	mg/L	0.32	B101589	0.32	B101593	0.25	0.27	0.060	B101589
Total Lead (Pb)	mg/L	<0.00020	B101588	<0.00020	B101591	<0.00020	<0.00020	0.00020	B101588
Total Lithium (Li)	mg/L	<0.020	B101589	<0.020	B101593	<0.020	<0.020	0.020	B101589
Total Magnesium (Mg)	mg/L	3.3	B101589	3.5	B101593	3.3	3.3	0.20	B101589
Total Manganese (Mn)	mg/L	0.022	B101589	0.021	B101593	0.021	0.024	0.0040	B101589
Total Molybdenum (Mo)	mg/L	<0.00020	B101588	<0.00020	B101591	<0.00020	<0.00020	0.00020	B101588
Total Nickel (Ni)	mg/L	0.00063	B101588	0.00095	B101591	<0.00050	0.0011	0.00050	B101588
Total Phosphorus (P)	mg/L	<0.10	B101589	<0.10	B101593	<0.10	<0.10	0.10	B101589
Total Potassium (K)	mg/L	1.7	B101589	1.7	B101593	1.6	1.7	0.30	B101589
Total Selenium (Se)	mg/L	<0.00020	B101588	<0.00020	B101591	<0.00020	<0.00020	0.00020	B101588
Total Silicon (Si)	mg/L	0.79	B101589	0.82	B101593	0.76	0.80	0.50	B101589
Total Silver (Ag)	mg/L	<0.00010	B101588	<0.00010	B101591	<0.00010	<0.00010	0.00010	B101588
Total Sodium (Na)	mg/L	2.0	B101589	2.1	B101593	2.1	2.1	0.50	B101589
Total Strontium (Sr)	mg/L	0.029	B101589	0.029	B101593	0.030	0.029	0.020	B101589
Total Sulphur (S)	mg/L	6.3	B101589	6.3	B101593	5.9	6.1	0.20	B101589
Total Thallium (Tl)	mg/L	<0.00020	B101588	<0.00020	B101591	<0.00020	<0.00020	0.00020	B101588
Total Tin (Sn)	mg/L	<0.0010	B101588	<0.0010	B101591	<0.0010	<0.0010	0.0010	B101588
Total Titanium (Ti)	mg/L	0.0015	B101588	0.0022	B101591	0.0017	0.0034	0.0010	B101588
Total Uranium (U)	mg/L	<0.00010	B101588	<0.00010	B101591	<0.00010	<0.00010	0.00010	B101588
Total Vanadium (V)	mg/L	<0.0010	B101588	<0.0010	B101591	<0.0010	<0.0010	0.0010	B101588
Total Zinc (Zn)	mg/L	0.013	B101588	0.018	B101591	0.0095	0.018	0.0030	B101588

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO087	BYO088	BYO089	BYO090	BYO091	BYO092		
Sampling Date		2023/09/06 08:05	2023/09/06 08:10	2023/09/06 00:00	2023/09/06 00:00	2023/09/06 00:00	2023/09/06 00:00		
COC Number		704364-03-01	704364-03-01	704364-03-01	704364-03-01	704364-03-01	704364-03-01		
	UNITS	CL-6 SFC	CL-6 BTM	SW-125	SW-126	SW-127	TRIP BLANK	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.026	0.033	0.32	0.042	0.029	<0.020	0.020	B100136
Total Aluminum (Al)	mg/L	0.057	0.063	0.026	0.044	0.062	<0.0030	0.0030	B101588
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.0013	0.00079	<0.00060	0.00060	B101588
Total Arsenic (As)	mg/L	0.00061	0.00072	0.00021	0.00034	0.00055	<0.00020	0.00020	B101588
Total Barium (Ba)	mg/L	0.010	0.010	0.012	0.011	0.010	<0.010	0.010	B101589
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101588
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B101589
Total Calcium (Ca)	mg/L	12	12	56	13	12	<0.30	0.30	B101589
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101588
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B101588
Total Copper (Cu)	mg/L	0.0048	0.0054	0.0097	0.0072	0.0048	<0.0010	0.0010	B101588
Total Iron (Fe)	mg/L	0.20	0.19	2.4	0.36	0.18	<0.060	0.060	B101589
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101588
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B101589
Total Magnesium (Mg)	mg/L	3.2	3.3	8.9	3.4	3.3	<0.20	0.20	B101589
Total Manganese (Mn)	mg/L	0.023	0.021	0.067	0.020	0.019	<0.0040	0.0040	B101589
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	0.00021	<0.00020	0.00020	B101588
Total Nickel (Ni)	mg/L	0.00087	0.0010	0.0011	0.0011	0.00099	<0.00050	0.00050	B101588
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B101589
Total Potassium (K)	mg/L	1.6	1.7	4.6	1.7	1.6	<0.30	0.30	B101589
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101588
Total Silicon (Si)	mg/L	0.64	0.68	0.69	0.87	0.73	<0.50	0.50	B101589
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B101588
Total Sodium (Na)	mg/L	2.0	2.1	3.1	2.1	2.1	<0.50	0.50	B101589
Total Strontium (Sr)	mg/L	0.028	0.029	0.059	0.030	0.029	<0.020	0.020	B101589
Total Sulphur (S)	mg/L	5.3	5.4	56	6.9 (1)	5.2	<0.20	0.20	B101589
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B101588
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101588
Total Titanium (Ti)	mg/L	0.0024	0.0027	<0.0010	0.0011	0.0023	<0.0010	0.0010	B101588
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B101588
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B101588

RDL = Reportable Detection Limit

(1) Matrix Spike exceeds acceptance limits due to matrix interference. Reanalysis yields similar results.

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BYO087	BYO088	BYO089	BYO090	BYO091	BYO092		
Sampling Date		2023/09/06 08:05	2023/09/06 08:10	2023/09/06 00:00	2023/09/06 00:00	2023/09/06 00:00	2023/09/06 00:00		
COC Number		704364-03-01	704364-03-01	704364-03-01	704364-03-01	704364-03-01	704364-03-01		
	UNITS	**CL-6 SFC**	**CL-6 BTM**	**SW-125**	**SW-126**	**SW-127**	**TRIP BLANK**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.011	0.014	0.095	0.012	0.010	0.0042	0.0030	B101588
RDL = Reportable Detection Limit									

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO065			BYO066		BYO067		
Sampling Date		2023/09/06 10:15			2023/09/06 09:20		2023/09/06 09:15		
COC Number		704364-01-01			704364-01-01		704364-01-01		
	UNITS	SC-1	RDL	QC Batch	SB-1	QC Batch	SB-2	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	35	0.50	B100000	170	B100000	150	0.50	B100000
Total Hardness (CaCO3)	mg/L	37.5	0.50	B099455	163	B099455	161	0.50	B099455
Misc. Inorganics									
pH	pH	6.32	N/A	B104712	5.92	B104717	5.96	N/A	B104712
Total Organic Carbon (C)	mg/L	12	0.50	B104479	7.1	B105224	7.3	0.50	B105224
Total Suspended Solids	mg/L	<1.0	1.0	B104387	2.7	B104387	2.5	1.0	B104387
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	10 (1)	0.50	B104218	5.2 (1)	B103740	6.4 (1)	0.50	B104504
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B104710	<1.0	B104715	<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B104710	6.8	B104715	6.5	1.0	B104710
Bicarbonate (HCO3)	mg/L	37	1.0	B104710	8.3	B104715	8.0	1.0	B104710
Carbonate (CO3)	mg/L	<1.0	1.0	B104710	<1.0	B104715	<1.0	1.0	B104710
Hydroxide (OH)	mg/L	<1.0	1.0	B104710	<1.0	B104715	<1.0	1.0	B104710
Sulphate (SO4)	mg/L	7.8	1.0	B104405	160	B103132	150	5.0	B104405
Physical Properties									
Turbidity	NTU	1.7	0.10	B100934	16	B100934	15	0.10	B100934

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO067			BYO068			BYO069		
Sampling Date		2023/09/06 09:15			2023/09/06 09:25			2023/09/06 09:30		
COC Number		704364-01-01			704364-01-01			704364-01-01		
	UNITS	SB-2 Lab-Dup	RDL	QC Batch	CB-1	RDL	QC Batch	CB-2	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				150	0.50	B100138	160	0.50	B100138
Total Hardness (CaCO3)	mg/L				165	0.50	B099455	163	0.50	B099455
Misc. Inorganics										
pH	pH				5.94	N/A	B104712	5.98	N/A	B104712
Total Organic Carbon (C)	mg/L				5.9	0.50	B105224	6.7	0.50	B104479
Total Suspended Solids	mg/L				2.9	0.99	B104387	2.6	1.0	B104387
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.2	0.50	B104504	4.9 (1)	0.50	B104218	6.1 (1)	0.50	B104504
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B104710	<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L				6.3	1.0	B104710	7.2	1.0	B104710
Bicarbonate (HCO3)	mg/L				7.7	1.0	B104710	8.8	1.0	B104710
Carbonate (CO3)	mg/L				<1.0	1.0	B104710	<1.0	1.0	B104710
Hydroxide (OH)	mg/L				<1.0	1.0	B104710	<1.0	1.0	B104710
Sulphate (SO4)	mg/L				150	5.0	B104405	150	5.0	B104405
Physical Properties										
Turbidity	NTU				14	0.10	B100934	11	0.10	B100934

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C370816
Report Date: 2023/09/15

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO070		BYO071		BYO072		BYO073		
Sampling Date		2023/09/06 09:35		2023/09/06 09:40		2023/09/06 09:50		2023/09/06 09:45		
COC Number		704364-01-01		704364-01-01		704364-01-01		704364-01-01		
	UNITS	**EB-1**	**QC Batch**	**EB-2**	**QC Batch**	**NB-1**	**QC Batch**	**NB-2**	**RDL**	**QC Batch**
Calculated Parameters										
Hardness (CaCO3)	mg/L	180	B100138	170	B100138	160	B100138	170	0.50	B100138
Total Hardness (CaCO3)	mg/L	183	B099455	178	B099455	182	B099455	180	0.50	B099455
Misc. Inorganics										
pH	pH	5.90	B104717	5.93	B104712	5.90	B104712	5.93	N/A	B104717
Total Organic Carbon (C)	mg/L	6.8	B104511	6.1	B104511	6.7	B105224	6.4 (1)	0.50	B104511
Total Suspended Solids	mg/L	<1.0	B104387	1.6	B104387	2.3 (2)	B107030	1.9	1.0	B104387
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.5 (3)	B104218	5.6 (3)	B104218	4.9 (3)	B104218	6.2 (3)	0.50	B103740
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B104715	<1.0	B104710	<1.0	B104710	<1.0	1.0	B104715
Alkalinity (Total as CaCO3)	mg/L	6.4	B104715	6.3	B104710	5.3	B104710	7.1	1.0	B104715
Bicarbonate (HCO3)	mg/L	7.8	B104715	7.7	B104710	6.5	B104710	8.6	1.0	B104715
Carbonate (CO3)	mg/L	<1.0	B104715	<1.0	B104710	<1.0	B104710	<1.0	1.0	B104715
Hydroxide (OH)	mg/L	<1.0	B104715	<1.0	B104710	<1.0	B104710	<1.0	1.0	B104715
Sulphate (SO4)	mg/L	180	B104382	170	B104382	160	B104405	170	5.0	B103132
Physical Properties										
Turbidity	NTU	8.0	B100934	8.6	B100934	15	B107794	9.8	0.10	B100934

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.
(2) Sample was originally processed within hold time. Data quality required investigation. Re-analysis was completed past recommended hold time.
(3) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO073			BYO074			BYO074		
Sampling Date		2023/09/06 09:45			2023/09/06 09:55			2023/09/06 09:55		
COC Number		704364-01-01			704364-01-01			704364-01-01		
	UNITS	NB-2 Lab-Dup	RDL	QC Batch	CLD	RDL	QC Batch	CLD Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				180	0.50	B100138			
Total Hardness (CaCO3)	mg/L				186	0.50	B099455			
Misc. Inorganics										
pH	pH				5.92	N/A	B104717			
Total Organic Carbon (C)	mg/L	6.2 (1)	0.50	B104511	7.5	0.50	B104479			
Total Suspended Solids	mg/L				5.0	1.0	B104939			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				6.5 (2)	0.50	B103740			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B104715			
Alkalinity (Total as CaCO3)	mg/L				7.0	1.0	B104715			
Bicarbonate (HCO3)	mg/L				8.5	1.0	B104715			
Carbonate (CO3)	mg/L				<1.0	1.0	B104715			
Hydroxide (OH)	mg/L				<1.0	1.0	B104715			
Sulphate (SO4)	mg/L				170	5.0	B102282	170	5.0	B102282
Physical Properties										
Turbidity	NTU				14	0.10	B100934			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.
(2) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO075		BYO076			BYO076		
Sampling Date		2023/09/06 08:45		2023/09/06 08:50			2023/09/06 08:50		
COC Number		704364-02-01		704364-02-01			704364-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch	CL-3 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	44	B100138	42	0.50	B100138			
Total Hardness (CaCO3)	mg/L	48.0	B100141	48.0	0.50	B100141			
Misc. Inorganics									
pH	pH	6.34	B104712	6.30	N/A	B104717			
Total Organic Carbon (C)	mg/L	9.4	B105224	8.5	0.50	B105224			
Total Suspended Solids	mg/L	<1.0	B104939	<1.0	1.0	B104939			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.7 (1)	B104218	8.3 (2)	0.50	B104218	8.3	0.50	B104218
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B104710	<1.0	1.0	B104715			
Alkalinity (Total as CaCO3)	mg/L	26	B104710	35	1.0	B104715			
Bicarbonate (HCO3)	mg/L	31	B104710	43	1.0	B104715			
Carbonate (CO3)	mg/L	<1.0	B104710	<1.0	1.0	B104715			
Hydroxide (OH)	mg/L	<1.0	B104710	<1.0	1.0	B104715			
Sulphate (SO4)	mg/L	21	B104405	24	1.0	B104382			
Physical Properties									
Turbidity	NTU	2.2	B100934	2.1	0.10	B100934			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time
(2) Sample filtered and preserved past method specified hold time

Matrix spike exceeds acceptance limits due to probable matrix interference.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C370816
Report Date: 2023/09/15

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO077		BYO078			BYO078		
Sampling Date		2023/09/06 08:55		2023/09/06 09:00			2023/09/06 09:00		
COC Number		704364-02-01		704364-02-01			704364-02-01		
	UNITS	CL-7 SFC	QC Batch	CL-7 BTM	RDL	QC Batch	CL-7 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	44	B100138	47	0.50	B100138			
Total Hardness (CaCO3)	mg/L	44.6	B100141	47.6	0.50	B100141			
Misc. Inorganics									
pH	pH	6.30	B104717	6.32	N/A	B104717			
Total Organic Carbon (C)	mg/L	9.4	B105224	8.6	0.50	B104479			
Total Suspended Solids	mg/L	2.0	B104939	1.9	1.0	B104939			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.5 (1)	B104218	8.6 (1)	0.50	B103740			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B104715	<1.0	1.0	B104715			
Alkalinity (Total as CaCO3)	mg/L	29	B104715	30	1.0	B104715			
Bicarbonate (HCO3)	mg/L	35	B104715	36	1.0	B104715			
Carbonate (CO3)	mg/L	<1.0	B104715	<1.0	1.0	B104715			
Hydroxide (OH)	mg/L	<1.0	B104715	<1.0	1.0	B104715			
Sulphate (SO4)	mg/L	20	B104382	23	1.0	B103132	22	1.0	B103132
Physical Properties									
Turbidity	NTU	2.2	B100934	2.3	0.10	B100934			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO079			BYO079			BYO080		
Sampling Date		2023/09/06 08:35			2023/09/06 08:35			2023/09/06 08:40		
COC Number		704364-02-01			704364-02-01			704364-02-01		
	UNITS	CL-8 SFC	RDL	QC Batch	CL-8 SFC Lab-Dup	RDL	QC Batch	CL-8 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	45	0.50	B100138				53	0.50	B100138
Total Hardness (CaCO3)	mg/L	43.8	0.50	B100141				46.9	0.50	B100141
Misc. Inorganics										
pH	pH	6.35	N/A	B104712				6.30	N/A	B104717
Total Organic Carbon (C)	mg/L	8.5	0.50	B104511				8.5	0.50	B104511
Total Suspended Solids	mg/L	1.5	1.0	B104939	1.4	1.0	B104939	1.4	1.0	B104939
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.6 (1)	0.50	B104218				7.3 (1)	0.50	B104218
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104715
Alkalinity (Total as CaCO3)	mg/L	31	1.0	B104710				26	1.0	B104715
Bicarbonate (HCO3)	mg/L	37	1.0	B104710				32	1.0	B104715
Carbonate (CO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104715
Hydroxide (OH)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104715
Sulphate (SO4)	mg/L	23	1.0	B104382				21	1.0	B104382
Physical Properties										
Turbidity	NTU	2.1	0.10	B100934				2.1	0.10	B100934

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO081			BYO081			BYO082		
Sampling Date		2023/09/06 09:05			2023/09/06 09:05			2023/09/06 09:10		
COC Number		704364-02-01			704364-02-01			704364-02-01		
	UNITS	CL-2 SFC	RDL	QC Batch	CL-2 SFC Lab-Dup	RDL	QC Batch	CL-2 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	44	0.50	B100138				50	0.50	B100138
Total Hardness (CaCO3)	mg/L	47.0	0.50	B100141				46.4	0.50	B100141
Misc. Inorganics										
pH	pH	6.35	N/A	B104712				6.34	N/A	B104712
Total Organic Carbon (C)	mg/L	9.3	0.50	B104511				9.3	0.50	B105224
Total Suspended Solids	mg/L	1.0	1.0	B104939				1.2	1.0	B104939
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	7.6 (1)	0.50	B104218				9.7 (1)	0.50	B104218
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L	26	1.0	B104710				27	1.0	B104710
Bicarbonate (HCO3)	mg/L	32	1.0	B104710				33	1.0	B104710
Carbonate (CO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Hydroxide (OH)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Sulphate (SO4)	mg/L	20	1.0	B104405				21	1.0	B104382
Physical Properties										
Turbidity	NTU	2.0	0.10	B100936	2.4	0.10	B100936	2.3	0.10	B100936

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C370816
Report Date: 2023/09/15

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO082			BYO083			BYO083		
Sampling Date		2023/09/06 09:10			2023/09/06 08:25			2023/09/06 08:25		
COC Number		704364-02-01			704364-02-01			704364-02-01		
	UNITS	CL-2 BTM Lab-Dup	RDL	QC Batch	CL-4 SFC	RDL	QC Batch	CL-4 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				43	0.50	B100138			
Total Hardness (CaCO3)	mg/L				44.6	0.50	B100141			
Misc. Inorganics										
pH	pH				6.35	N/A	B104712			
Total Organic Carbon (C)	mg/L	9.6	0.50	B105224	9.0	0.50	B104479	9.6	0.50	B104479
Total Suspended Solids	mg/L				1.3	1.0	B104939			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				8.6 (1)	0.50	B104218			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B104710			
Alkalinity (Total as CaCO3)	mg/L				29	1.0	B104710			
Bicarbonate (HCO3)	mg/L				36	1.0	B104710			
Carbonate (CO3)	mg/L				<1.0	1.0	B104710			
Hydroxide (OH)	mg/L				<1.0	1.0	B104710			
Sulphate (SO4)	mg/L				20	1.0	B104382			
Physical Properties										
Turbidity	NTU				2.1	0.10	B100936			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO084			BYO084			BYO085		
Sampling Date		2023/09/06 08:30			2023/09/06 08:30			2023/09/06 08:15		
COC Number		704364-02-01			704364-02-01			704364-03-01		
	UNITS	CL-4 BTM	RDL	QC Batch	CL-4 BTM Lab-Dup	RDL	QC Batch	CL-5 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	44	0.50	B100138				46	0.50	B100138
Total Hardness (CaCO3)	mg/L	46.6	0.50	B100141				43.8	0.50	B100141
Misc. Inorganics										
pH	pH	6.35	N/A	B104712				6.34	N/A	B104712
Total Organic Carbon (C)	mg/L	9.4	0.50	B104479				8.1	0.50	B104511
Total Suspended Solids	mg/L	2.4	1.0	B104939				1.9	1.0	B104939
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.6 (1)	0.50	B104504				8.9 (1)	0.50	B104218
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B104710				28	1.0	B104710
Bicarbonate (HCO3)	mg/L	35	1.0	B104710				34	1.0	B104710
Carbonate (CO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Hydroxide (OH)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Sulphate (SO4)	mg/L	21	1.0	B104405	19	1.0	B104405	18	1.0	B104382
Physical Properties										
Turbidity	NTU	2.1	0.10	B100936				1.8	0.10	B100936

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Bureau Veritas Job #: C370816
Report Date: 2023/09/15

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO086			BYO086			BYO087		
Sampling Date		2023/09/06 08:20			2023/09/06 08:20			2023/09/06 08:05		
COC Number		704364-03-01			704364-03-01			704364-03-01		
	UNITS	CL-5 BTM	RDL	QC Batch	CL-5 BTM Lab-Dup	RDL	QC Batch	CL-6 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L							39	0.50	B100138
Total Hardness (CaCO3)	mg/L							42.1	0.50	B100141
Misc. Inorganics										
pH	pH	6.33	N/A	B104712				6.35	N/A	B104712
Total Organic Carbon (C)	mg/L							8.9	0.50	B104479
Total Suspended Solids	mg/L	1.2	1.0	B102820	1.3	1.0	B102820	<1.0	1.0	B104939
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L							8.7 (1)	0.50	B104218
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B104710				29	1.0	B104710
Bicarbonate (HCO3)	mg/L	35	1.0	B104710				35	1.0	B104710
Carbonate (CO3)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Hydroxide (OH)	mg/L	<1.0	1.0	B104710				<1.0	1.0	B104710
Sulphate (SO4)	mg/L							16	1.0	B104382
Physical Properties										
Turbidity	NTU	2.2	0.10	B100936				1.7	0.10	B100936

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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Bureau Veritas Job #: C370816
Report Date: 2023/09/15

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO088			BYO088			BYO089		
Sampling Date		2023/09/06 08:10			2023/09/06 08:10			2023/09/06 00:00		
COC Number		704364-03-01			704364-03-01			704364-03-01		
	UNITS	CL-6 BTM	RDL	QC Batch	CL-6 BTM Lab-Dup	RDL	QC Batch	SW-125	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	40	0.50	B100138				160	0.50	B100138
Total Hardness (CaCO3)	mg/L	43.3	0.50	B100141				177	0.50	B100141
Misc. Inorganics										
pH	pH	6.30	N/A	B104712	6.34	N/A	B104712	5.89	N/A	B104712
Total Organic Carbon (C)	mg/L	8.8	0.50	B105224				6.7	0.50	B105224
Total Suspended Solids	mg/L	1.7	1.0	B104939				2.3	1.0	B104939
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.0 (1)	0.50	B104218				6.0 (1)	0.50	B104218
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B104710	<1.0	1.0	B104710	<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B104710	28	1.0	B104710	5.5	1.0	B104710
Bicarbonate (HCO3)	mg/L	36	1.0	B104710	34	1.0	B104710	6.7	1.0	B104710
Carbonate (CO3)	mg/L	<1.0	1.0	B104710	<1.0	1.0	B104710	<1.0	1.0	B104710
Hydroxide (OH)	mg/L	<1.0	1.0	B104710	<1.0	1.0	B104710	<1.0	1.0	B104710
Sulphate (SO4)	mg/L	17	1.0	B104405				170	5.0	B104405
Physical Properties										
Turbidity	NTU	2.2	0.10	B100936				14	0.10	B100936

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BYO090		BYO091	BYO092		
Sampling Date		2023/09/06 00:00		2023/09/06 00:00	2023/09/06 00:00		
COC Number		704364-03-01		704364-03-01	704364-03-01		
	UNITS	**SW-126**	**QC Batch**	**SW-127**	**TRIP BLANK**	**RDL**	**QC Batch**
Calculated Parameters							
Hardness (CaCO3)	mg/L	48	B100138	36	<0.50	0.50	B100138
Total Hardness (CaCO3)	mg/L	46.3	B100141	42.5	<0.50	0.50	B100141
Misc. Inorganics							
pH	pH	6.36	B104712	6.35	4.99	N/A	B104712
Total Organic Carbon (C)	mg/L	8.9	B105224	8.1	<0.50	0.50	B105224
Total Suspended Solids	mg/L	1.2	B104939	1.5	<1.0	1.0	B104939
Lab Filtered Inorganics							
Dissolved Organic Carbon (C)	mg/L	6.6 (1)	B104218	8.4 (1)	<0.50 (1)	0.50	B104218
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	B104710	<1.0	<1.0	1.0	B104710
Alkalinity (Total as CaCO3)	mg/L	27	B104710	28	<1.0	1.0	B104710
Bicarbonate (HCO3)	mg/L	33	B104710	34	<1.0	1.0	B104710
Carbonate (CO3)	mg/L	<1.0	B104710	<1.0	<1.0	1.0	B104710
Hydroxide (OH)	mg/L	<1.0	B104710	<1.0	<1.0	1.0	B104710
Sulphate (SO4)	mg/L	21	B104382	16	<1.0	1.0	B104405
Physical Properties							
Turbidity	NTU	2.7	B100936	1.7	0.13	0.10	B100936

RDL = Reportable Detection Limit
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(1) Sample filtered and preserved past method specified hold time

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.9°C
Package 2	1.5°C
Package 3	0.6°C
Package 4	0.4°C

Sample BYO072 [NB-1] : Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Turbidity.

REGULATED METALS (CCME/AT1) - TOTAL Comments

Sample BYO090 [SW-126] Elements by ICP - Total: Matrix Spike exceeds acceptance limits due to matrix interference. Reanalysis yields similar results.

Sample BYO072, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B100934	Turbidity	2023/09/09			99	80 - 120	<0.10	NTU	6.8	20
B100936	Turbidity	2023/09/09			100	80 - 120	<0.10	NTU	19	20
B101588	Total Aluminum (Al)	2023/09/10	110	80 - 120	113	80 - 120	<0.0030	mg/L	2.6	20
B101588	Total Antimony (Sb)	2023/09/10	101	80 - 120	114	80 - 120	<0.00060	mg/L		
B101588	Total Arsenic (As)	2023/09/10	100	80 - 120	112	80 - 120	<0.00020	mg/L		
B101588	Total Beryllium (Be)	2023/09/10	101	80 - 120	109	80 - 120	<0.0010	mg/L		
B101588	Total Chromium (Cr)	2023/09/10	102	80 - 120	114	80 - 120	<0.0010	mg/L		
B101588	Total Cobalt (Co)	2023/09/10	103	80 - 120	114	80 - 120	<0.00030	mg/L		
B101588	Total Copper (Cu)	2023/09/10	101	80 - 120	114	80 - 120	<0.0010	mg/L		
B101588	Total Lead (Pb)	2023/09/10	102	80 - 120	114	80 - 120	<0.00020	mg/L		
B101588	Total Molybdenum (Mo)	2023/09/10	104	80 - 120	115	80 - 120	<0.00020	mg/L		
B101588	Total Nickel (Ni)	2023/09/10	102	80 - 120	113	80 - 120	<0.00050	mg/L		
B101588	Total Selenium (Se)	2023/09/10	104	80 - 120	113	80 - 120	<0.00020	mg/L		
B101588	Total Silver (Ag)	2023/09/10	102	80 - 120	114	80 - 120	<0.00010	mg/L		
B101588	Total Thallium (Tl)	2023/09/10	102	80 - 120	115	80 - 120	<0.00020	mg/L		
B101588	Total Tin (Sn)	2023/09/10	102	80 - 120	112	80 - 120	<0.0010	mg/L		
B101588	Total Titanium (Ti)	2023/09/10	101	80 - 120	113	80 - 120	<0.0010	mg/L		
B101588	Total Uranium (U)	2023/09/10	103	80 - 120	115	80 - 120	<0.00010	mg/L		
B101588	Total Vanadium (V)	2023/09/10	102	80 - 120	114	80 - 120	<0.0010	mg/L		
B101588	Total Zinc (Zn)	2023/09/10	99	80 - 120	110	80 - 120	<0.0030	mg/L	18	20
B101589	Total Barium (Ba)	2023/09/10	103	80 - 120	101	80 - 120	<0.010	mg/L		
B101589	Total Boron (B)	2023/09/10	93	80 - 120	94	80 - 120	<0.020	mg/L		
B101589	Total Calcium (Ca)	2023/09/10	102	80 - 120	100	80 - 120	<0.30	mg/L	3.7	20
B101589	Total Iron (Fe)	2023/09/10	106	80 - 120	107	80 - 120	<0.060	mg/L		
B101589	Total Lithium (Li)	2023/09/10	107	80 - 120	104	80 - 120	<0.020	mg/L		
B101589	Total Magnesium (Mg)	2023/09/10	103	80 - 120	100	80 - 120	<0.20	mg/L	3.4	20
B101589	Total Manganese (Mn)	2023/09/10	106	80 - 120	107	80 - 120	<0.0040	mg/L		
B101589	Total Phosphorus (P)	2023/09/10	103	80 - 120	104	80 - 120	<0.10	mg/L		
B101589	Total Potassium (K)	2023/09/10	108	80 - 120	105	80 - 120	<0.30	mg/L		
B101589	Total Silicon (Si)	2023/09/10	103	80 - 120	103	80 - 120	<0.50	mg/L		
B101589	Total Sodium (Na)	2023/09/10	103	80 - 120	100	80 - 120	<0.50	mg/L		
B101589	Total Strontium (Sr)	2023/09/10	100	80 - 120	99	80 - 120	<0.020	mg/L		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B101589	Total Sulphur (S)	2023/09/10	70 (1)	80 - 120	97	80 - 120	<0.20	mg/L		
B101591	Total Aluminum (Al)	2023/09/10	103	80 - 120	105	80 - 120	<0.0030	mg/L	12	20
B101591	Total Antimony (Sb)	2023/09/10	110	80 - 120	105	80 - 120	<0.00060	mg/L	NC	20
B101591	Total Arsenic (As)	2023/09/10	101	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B101591	Total Beryllium (Be)	2023/09/10	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B101591	Total Chromium (Cr)	2023/09/10	102	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B101591	Total Cobalt (Co)	2023/09/10	104	80 - 120	97	80 - 120	<0.00030	mg/L	14	20
B101591	Total Copper (Cu)	2023/09/10	103	80 - 120	96	80 - 120	<0.0010	mg/L	17	20
B101591	Total Lead (Pb)	2023/09/10	105	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B101591	Total Molybdenum (Mo)	2023/09/10	106	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B101591	Total Nickel (Ni)	2023/09/10	103	80 - 120	97	80 - 120	<0.00050	mg/L	14	20
B101591	Total Selenium (Se)	2023/09/10	107	80 - 120	103	80 - 120	<0.00020	mg/L	5.2	20
B101591	Total Silver (Ag)	2023/09/10	106	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B101591	Total Thallium (Tl)	2023/09/10	107	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B101591	Total Tin (Sn)	2023/09/10	104	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B101591	Total Titanium (Ti)	2023/09/10	103	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B101591	Total Uranium (U)	2023/09/10	104	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B101591	Total Vanadium (V)	2023/09/10	104	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B101591	Total Zinc (Zn)	2023/09/10	103	80 - 120	95	80 - 120	<0.0030	mg/L	17	20
B101593	Total Barium (Ba)	2023/09/10	100	80 - 120	96	80 - 120	<0.010	mg/L	4.3	20
B101593	Total Boron (B)	2023/09/10	93	80 - 120	89	80 - 120	<0.020	mg/L	NC	20
B101593	Total Calcium (Ca)	2023/09/10	NC	80 - 120	96	80 - 120	<0.30	mg/L	5.1	20
B101593	Total Iron (Fe)	2023/09/10	NC	80 - 120	103	80 - 120	<0.060	mg/L	4.3	20
B101593	Total Lithium (Li)	2023/09/10	110	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B101593	Total Magnesium (Mg)	2023/09/10	104	80 - 120	97	80 - 120	<0.20	mg/L	4.8	20
B101593	Total Manganese (Mn)	2023/09/10	109	80 - 120	105	80 - 120	<0.0040	mg/L	4.6	20
B101593	Total Phosphorus (P)	2023/09/10	103	80 - 120	98	80 - 120	<0.10	mg/L	NC	20
B101593	Total Potassium (K)	2023/09/10	109	80 - 120	102	80 - 120	<0.30	mg/L	4.4	20
B101593	Total Silicon (Si)	2023/09/10	102	80 - 120	98	80 - 120	<0.50	mg/L	3.4	20
B101593	Total Sodium (Na)	2023/09/10	102	80 - 120	96	80 - 120	<0.50	mg/L	5.3	20
B101593	Total Strontium (Sr)	2023/09/10	97	80 - 120	93	80 - 120	<0.020	mg/L	4.8	20
B101593	Total Sulphur (S)	2023/09/10	NC	80 - 120	95	80 - 120	<0.20	mg/L	4.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B102282	Sulphate (SO4)	2023/09/11	NC	80 - 120	100	80 - 120	<1.0	mg/L	0.98	20
B102820	Total Suspended Solids	2023/09/11	116	80 - 120	98	80 - 120	<1.0	mg/L	11	20
B103132	Sulphate (SO4)	2023/09/12	100	80 - 120	98	80 - 120	<1.0	mg/L	1.3	20
B103347	Dissolved Aluminum (Al)	2023/09/11	107	80 - 120	114	80 - 120	<0.0030	mg/L	NC	20
B103347	Dissolved Antimony (Sb)	2023/09/11	107	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
B103347	Dissolved Arsenic (As)	2023/09/11	97	80 - 120	100	80 - 120	<0.00020	mg/L	2.5	20
B103347	Dissolved Beryllium (Be)	2023/09/11	93	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B103347	Dissolved Chromium (Cr)	2023/09/11	91	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B103347	Dissolved Cobalt (Co)	2023/09/11	93	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20
B103347	Dissolved Copper (Cu)	2023/09/11	89	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B103347	Dissolved Lead (Pb)	2023/09/11	95	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B103347	Dissolved Molybdenum (Mo)	2023/09/11	99	80 - 120	100	80 - 120	<0.00020	mg/L	0.38	20
B103347	Dissolved Nickel (Ni)	2023/09/11	92	80 - 120	96	80 - 120	<0.00050	mg/L	2.2	20
B103347	Dissolved Selenium (Se)	2023/09/11	107	80 - 120	111	80 - 120	<0.00020	mg/L	12	20
B103347	Dissolved Silver (Ag)	2023/09/11	94	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B103347	Dissolved Thallium (Tl)	2023/09/11	96	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B103347	Dissolved Tin (Sn)	2023/09/11	100	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B103347	Dissolved Titanium (Ti)	2023/09/11	95	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B103347	Dissolved Uranium (U)	2023/09/11	95	80 - 120	97	80 - 120	<0.00010	mg/L	2.6	20
B103347	Dissolved Vanadium (V)	2023/09/11	96	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B103347	Dissolved Zinc (Zn)	2023/09/11	98	80 - 120	102	80 - 120	<0.0030	mg/L	NC	20
B103730	Dissolved Barium (Ba)	2023/09/12	94	80 - 120	100	80 - 120	<0.010	mg/L		
B103730	Dissolved Boron (B)	2023/09/12	93	80 - 120	97	80 - 120	<0.020	mg/L		
B103730	Dissolved Calcium (Ca)	2023/09/12	93	80 - 120	101	80 - 120	<0.30	mg/L	1.9	20
B103730	Dissolved Iron (Fe)	2023/09/12	99	80 - 120	102	80 - 120	<0.060	mg/L	NC	20
B103730	Dissolved Lithium (Li)	2023/09/12	94	80 - 120	101	80 - 120	<0.020	mg/L		
B103730	Dissolved Magnesium (Mg)	2023/09/12	100	80 - 120	108	80 - 120	<0.20	mg/L	1.2	20
B103730	Dissolved Manganese (Mn)	2023/09/12	97	80 - 120	99	80 - 120	<0.0040	mg/L	0.75	20
B103730	Dissolved Phosphorus (P)	2023/09/12	99	80 - 120	103	80 - 120	<0.10	mg/L		
B103730	Dissolved Potassium (K)	2023/09/12	94	80 - 120	101	80 - 120	<0.30	mg/L	6.0	20
B103730	Dissolved Silicon (Si)	2023/09/12	95	80 - 120	100	80 - 120	<0.50	mg/L		
B103730	Dissolved Sodium (Na)	2023/09/12	95	80 - 120	102	80 - 120	<0.50	mg/L	2.3	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B103730	Dissolved Strontium (Sr)	2023/09/12	90	80 - 120	98	80 - 120	<0.020	mg/L		
B103730	Dissolved Sulphur (S)	2023/09/12	102	80 - 120	99	80 - 120	<0.20	mg/L		
B103740	Dissolved Organic Carbon (C)	2023/09/12	87	80 - 120	98	80 - 120	<0.50	mg/L	NC	20
B103744	Dissolved Molybdenum (Mo)	2023/09/12	103	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B104218	Dissolved Organic Carbon (C)	2023/09/13	76 (1)	80 - 120	100	80 - 120	<0.50	mg/L	0.11	20
B104277	Dissolved Barium (Ba)	2023/09/12	100	80 - 120	103	80 - 120	<0.010	mg/L	NC	20
B104277	Dissolved Boron (B)	2023/09/12	101	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B104277	Dissolved Calcium (Ca)	2023/09/12	98	80 - 120	103	80 - 120	<0.30	mg/L	8.8	20
B104277	Dissolved Iron (Fe)	2023/09/12	108	80 - 120	107	80 - 120	<0.060	mg/L	5.4	20
B104277	Dissolved Lithium (Li)	2023/09/12	98	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B104277	Dissolved Magnesium (Mg)	2023/09/12	106	80 - 120	111	80 - 120	<0.20	mg/L	14	20
B104277	Dissolved Manganese (Mn)	2023/09/12	104	80 - 120	102	80 - 120	<0.0040	mg/L	NC	20
B104277	Dissolved Phosphorus (P)	2023/09/12	107	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
B104277	Dissolved Potassium (K)	2023/09/12	100	80 - 120	103	80 - 120	<0.30	mg/L	8.7	20
B104277	Dissolved Silicon (Si)	2023/09/12	102	80 - 120	101	80 - 120	<0.50	mg/L	1.6	20
B104277	Dissolved Sodium (Na)	2023/09/12	98	80 - 120	104	80 - 120	<0.50	mg/L	9.7	20
B104277	Dissolved Strontium (Sr)	2023/09/12	103	80 - 120	100	80 - 120	<0.020	mg/L	4.8	20
B104277	Dissolved Sulphur (S)	2023/09/12	109	80 - 120	101	80 - 120	<0.20	mg/L	1.5	20
B104382	Sulphate (SO4)	2023/09/12	108	80 - 120	100	80 - 120	<1.0	mg/L		
B104387	Total Suspended Solids	2023/09/13	106	80 - 120	99	80 - 120	<1.0	mg/L	5.6	20
B104405	Sulphate (SO4)	2023/09/12	96	80 - 120	98	80 - 120	<1.0	mg/L	9.4	20
B104430	Dissolved Aluminum (Al)	2023/09/13	117	80 - 120	129 (1)	80 - 120	<0.0030	mg/L	13	20
B104430	Dissolved Antimony (Sb)	2023/09/13	107	80 - 120	107	80 - 120	<0.00060	mg/L	NC	20
B104430	Dissolved Arsenic (As)	2023/09/13	99	80 - 120	100	80 - 120	<0.00020	mg/L	11	20
B104430	Dissolved Beryllium (Be)	2023/09/13	102	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B104430	Dissolved Chromium (Cr)	2023/09/13	102	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B104430	Dissolved Cobalt (Co)	2023/09/13	104	80 - 120	103	80 - 120	<0.00030	mg/L	NC	20
B104430	Dissolved Copper (Cu)	2023/09/13	100	80 - 120	103	80 - 120	<0.0010	mg/L	11	20
B104430	Dissolved Lead (Pb)	2023/09/13	104	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B104430	Dissolved Molybdenum (Mo)	2023/09/13	105	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B104430	Dissolved Nickel (Ni)	2023/09/13	102	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
B104430	Dissolved Selenium (Se)	2023/09/13	102	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B104430	Dissolved Silver (Ag)	2023/09/13	102	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B104430	Dissolved Thallium (Tl)	2023/09/13	104	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B104430	Dissolved Tin (Sn)	2023/09/13	103	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B104430	Dissolved Titanium (Ti)	2023/09/13	107	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B104430	Dissolved Uranium (U)	2023/09/13	103	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B104430	Dissolved Vanadium (V)	2023/09/13	103	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B104430	Dissolved Zinc (Zn)	2023/09/13	100	80 - 120	98	80 - 120	<0.0030	mg/L	4.0	20
B104479	Total Organic Carbon (C)	2023/09/13	85	80 - 120	99	80 - 120	<0.50	mg/L	6.1	20
B104504	Dissolved Organic Carbon (C)	2023/09/13	NC	80 - 120	100	80 - 120	<0.50	mg/L	2.8	20
B104511	Total Organic Carbon (C)	2023/09/13	67 (1)	80 - 120	92	80 - 120	<0.50	mg/L	3.7 (2)	20
B104710	Alkalinity (PP as CaCO3)	2023/09/12					<1.0	mg/L	NC	20
B104710	Alkalinity (Total as CaCO3)	2023/09/12			99	80 - 120	<1.0	mg/L	6.3	20
B104710	Bicarbonate (HCO3)	2023/09/12					<1.0	mg/L	6.3	20
B104710	Carbonate (CO3)	2023/09/12					<1.0	mg/L	NC	20
B104710	Hydroxide (OH)	2023/09/12					<1.0	mg/L	NC	20
B104712	pH	2023/09/12			100	97 - 103			0.70	N/A
B104715	Alkalinity (PP as CaCO3)	2023/09/12					<1.0	mg/L	NC	20
B104715	Alkalinity (Total as CaCO3)	2023/09/12			99	80 - 120	<1.0	mg/L	2.1	20
B104715	Bicarbonate (HCO3)	2023/09/12					<1.0	mg/L	2.1	20
B104715	Carbonate (CO3)	2023/09/12					<1.0	mg/L	NC	20
B104715	Hydroxide (OH)	2023/09/12					<1.0	mg/L	NC	20
B104717	pH	2023/09/12			100	97 - 103			0.57	N/A
B104939	Total Suspended Solids	2023/09/13	102	80 - 120	98	80 - 120	<1.0	mg/L	9.1	20
B105224	Total Organic Carbon (C)	2023/09/13	83	80 - 120	102	80 - 120	<0.50	mg/L	2.5	20
B105261	Dissolved Barium (Ba)	2023/09/13	107	80 - 120	105	80 - 120	<0.010	mg/L		
B105261	Dissolved Boron (B)	2023/09/13	96	80 - 120	97	80 - 120	<0.020	mg/L		
B105261	Dissolved Calcium (Ca)	2023/09/13	110	80 - 120	108	80 - 120	<0.30	mg/L	9.7	20
B105261	Dissolved Iron (Fe)	2023/09/13	105	80 - 120	101	80 - 120	<0.060	mg/L	NC	20
B105261	Dissolved Lithium (Li)	2023/09/13	102	80 - 120	105	80 - 120	<0.020	mg/L		
B105261	Dissolved Magnesium (Mg)	2023/09/13	108	80 - 120	109	80 - 120	<0.20	mg/L	9.2	20
B105261	Dissolved Manganese (Mn)	2023/09/13	104	80 - 120	100	80 - 120	<0.0040	mg/L	10	20
B105261	Dissolved Phosphorus (P)	2023/09/13	109	80 - 120	100	80 - 120	<0.10	mg/L		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B105261	Dissolved Potassium (K)	2023/09/13	99	80 - 120	101	80 - 120	<0.30	mg/L	11	20
B105261	Dissolved Silicon (Si)	2023/09/13	100	80 - 120	96	80 - 120	<0.50	mg/L		
B105261	Dissolved Sodium (Na)	2023/09/13	NC	80 - 120	103	80 - 120	<0.50	mg/L	1.9	20
B105261	Dissolved Strontium (Sr)	2023/09/13	98	80 - 120	100	80 - 120	<0.020	mg/L		
B105261	Dissolved Sulphur (S)	2023/09/13	103	80 - 120	96	80 - 120	<0.20	mg/L		
B107030	Total Suspended Solids	2023/09/14	108	80 - 120	97	80 - 120	<1.0	mg/L	NC	20
B107358	Dissolved Aluminum (Al)	2023/09/14	106	80 - 120	118	80 - 120	<0.0030	mg/L	7.8	20
B107358	Dissolved Antimony (Sb)	2023/09/14	103	80 - 120	113	80 - 120	<0.00060	mg/L	NC	20
B107358	Dissolved Arsenic (As)	2023/09/14	95	80 - 120	105	80 - 120	<0.00020	mg/L	0.023	20
B107358	Dissolved Beryllium (Be)	2023/09/14	96	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B107358	Dissolved Chromium (Cr)	2023/09/14	95	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B107358	Dissolved Cobalt (Co)	2023/09/14	95	80 - 120	106	80 - 120	<0.00030	mg/L	NC	20
B107358	Dissolved Copper (Cu)	2023/09/14	95	80 - 120	106	80 - 120	<0.0010	mg/L	1.8	20
B107358	Dissolved Lead (Pb)	2023/09/14	97	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B107358	Dissolved Molybdenum (Mo)	2023/09/14	97	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B107358	Dissolved Nickel (Ni)	2023/09/14	94	80 - 120	103	80 - 120	<0.00050	mg/L	NC	20
B107358	Dissolved Selenium (Se)	2023/09/14	101	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B107358	Dissolved Silver (Ag)	2023/09/14	94	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B107358	Dissolved Thallium (Tl)	2023/09/14	97	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B107358	Dissolved Tin (Sn)	2023/09/14	95	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B107358	Dissolved Titanium (Ti)	2023/09/14	98	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B107358	Dissolved Uranium (U)	2023/09/14	98	80 - 120	108	80 - 120	<0.00010	mg/L	NC	20
B107358	Dissolved Vanadium (V)	2023/09/14	96	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B107358	Dissolved Zinc (Zn)	2023/09/14	100	80 - 120	110	80 - 120	<0.0030	mg/L	4.0	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B107794	Turbidity	2023/09/14			103	80 - 120	<0.10	NTU	6.0	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Matrix spike exceeds acceptance limits due to probable matrix interference.

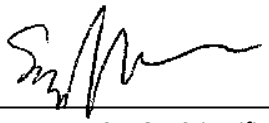
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			704364
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#704364-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mriecork@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	ED AFA		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/09/06	10:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		SB-1		9:20	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		9:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:25	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		9:30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		9:35	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		9:40	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		9:50	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		9:45	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CLD		9:55	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	

4/4

mcal-09-569

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck	23/09/07	12:00	Ashton Raitt AJRAUSE CIH	2023/09/07 2023/09/08	12:05 08:30			AETR	Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

mcal - see ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			704364
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#704364-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mwiebe@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RED, AFA		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/09/06	8:45	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and
2		CL-3 BTM		8:50	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	DOC ASAP to meet hold
3		CL-7 SFC		8:55	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	times
4		CL-7 BTM		9:00	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		8:35	SW	N	N	X	X	X	X	X	X	X	Y	X	X	4	
6		CL-8 BTM		8:40	SW	N	N	X	X	X	X	X	X	X	X	X	Y	4	
7		CL-2 SFC		9:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		9:10	SW	N	N	X	X	X	X	X	X	X	X	X	Y	4	
9		CL-4 SFC		8:25	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		8:30	SW	N	N	X	X	X	Y	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/09/07	12:00	Ashton Raitt AR ATRAUZR Cill	2023/09/07 2023/09/08	12:05 08:30			ACTR	Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

mcal – See ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			704364
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#704364-03-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com MMcmzy116@kgsgroup.com	Sampled By	RED, AFA		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/09/06	8:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity and DOC
2		CL-5 BTM		8:20	SW	N	N	X	X	X	X	X							ASAP to meet hold times
3		CL-6 SFC		8:05	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:10	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
5		SW-125		AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
6		SW-126		AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
7		SW-127		AM	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
8		TRIP BLANK		—	—	—	—	X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/09/07	12:00	Ashton Rault HR ATRAUER CSII	2023/09/07 2023/09/08	12:05 08:30			ACTR	Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

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see ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

WINNIPEG ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page 1 of 3	C#704 364-01-01
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Page 3 of 3	↓ -03-01
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RECEIPT OBSERVATIONS:

	YES	NO				
CUSTODY SEAL PRESENT			COOLER ID 1			
CUSTODY SEAL INTACT			TEMP	0.8 (1)	1.1 (2)	0.8 (3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 2			
CUSTODY SEAL INTACT			TEMP	0.6 (1)	1.2 (2)	0.8 (3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 3			
CUSTODY SEAL INTACT			TEMP	0.6 (1)	0.6 (2)	0.6 (3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 4			
CUSTODY SEAL INTACT			TEMP	0.3 (1)	0.6 (2)	0.4 (3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 5			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 6			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 7			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 8			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 9			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 10			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						

BUREAU VERITAS JOB#

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
Katrina Schindel		Sept 7/2023	12:05

BUREAU VERITAS

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page ___ of ___	
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COOLER OBSERVATIONS: mcel

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		TEMP 4 (1) 4 (2) 5 (3)
ICE PRESENT	/		

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		TEMP 4 (1) 4 (2) 3 (3)
ICE PRESENT	/		

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		TEMP 4 (1) 5 (2) 6 (3)
ICE PRESENT	/		

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT	/		
INTACT	/		TEMP 6 (1) 6 (2) 5 (3)
ICE PRESENT	/		

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

CUSTODY SEAL	YES	NO	COOLER ID
PRESENT			
INTACT			TEMP (1) (2) (3)
ICE PRESENT			

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
	AJRAURRCill	2023/09/08	08:30

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE
Your C.O.C. #: 7056253-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/10/02
Report #: R3403940
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C375441
Received: 2023/09/20, 11:45

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	23	N/A	2023/09/29	AB SOP-00005	SM 24 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	5	N/A	2023/09/30	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/09/28		Auto Calc
Cadmium - low level CCME (Total) (1)	5	N/A	2023/09/27		Auto Calc
Cadmium - low level CCME (Total) (1)	23	N/A	2023/09/28		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	27	N/A	2023/09/27	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	1	N/A	2023/09/28	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	27	N/A	2023/09/27	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	1	N/A	2023/09/28	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	28	N/A	2023/09/28		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	17	N/A	2023/09/27	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	11	N/A	2023/09/28	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	27	N/A	2023/09/27	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	1	N/A	2023/09/28	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	2	2023/09/26	2023/09/26	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/09/26	2023/09/27	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/09/26	2023/09/28	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	17	2023/09/27	2023/09/27	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/09/27	2023/09/28	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	27	N/A	2023/09/27	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	1	N/A	2023/09/28	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	8	2023/09/26	2023/09/27	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	12	2023/09/27	2023/09/27	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	8	2023/09/27	2023/09/28	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	23	N/A	2023/09/29	AB SOP-00005	SM 24 4500-H+B m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE
Your C.O.C. #: 7056253-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/10/02
Report #: R3403940
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C375441
Received: 2023/09/20, 11:45

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
pH @25°C (1, 6)	5	N/A	2023/09/30	AB SOP-00005	SM 24 4500-H+B m
Carbon (Total Organic) (1, 7)	28	N/A	2023/09/27	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	27	2023/09/26	2023/09/27	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	1	2023/09/30	2023/09/30	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/09/22	CAL SOP-00081	SM 24 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE
Your C.O.C. #: 7056253-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/10/02
Report #: R3403940
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C375441

Received: 2023/09/20, 11:45

(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS555			BZS555			BZS556		
Sampling Date		2023/09/19 10:15			2023/09/19 10:15			2023/09/19 09:25		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.29	0.020	B118960				0.24	0.020	B118960
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.017	0.0030	B128681	0.017	0.0030	B128681	<0.0030	0.0030	B127614
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B128681	<0.00060	0.00060	B128681	<0.00060	0.00060	B127614
Dissolved Arsenic (As)	mg/L	0.00040	0.00020	B128681	0.00037	0.00020	B128681	0.00023	0.00020	B127614
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B128880				0.014	0.010	B126842
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B128681	<0.0010	0.0010	B128681	<0.0010	0.0010	B127614
Dissolved Boron (B)	mg/L	<0.020	0.020	B128880				<0.020	0.020	B126842
Dissolved Calcium (Ca)	mg/L	9.7	0.30	B128880				57	0.30	B126842
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B128681	<0.0010	0.0010	B128681	<0.0010	0.0010	B127614
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B128681	<0.00030	0.00030	B128681	<0.00030	0.00030	B127614
Dissolved Copper (Cu)	mg/L	0.013	0.0010	B128681	0.012	0.0010	B128681	0.0046	0.0010	B127614
Dissolved Iron (Fe)	mg/L	0.14	0.060	B128880				0.087	0.060	B126842
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B128681	<0.00020	0.00020	B128681	<0.00020	0.00020	B127614
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B128880				<0.020	0.020	B126842
Dissolved Magnesium (Mg)	mg/L	2.7	0.20	B128880				9.4	0.20	B126842
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B128880				0.061	0.0040	B126842
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B128681	<0.00020	0.00020	B128681	<0.00020	0.00020	B127614
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B128681	0.00051	0.00050	B128681	0.00095	0.00050	B127614
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B128880				<0.10	0.10	B126842
Dissolved Potassium (K)	mg/L	1.6	0.30	B128880				4.8	0.30	B126842
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B128681	<0.00020	0.00020	B128681	<0.00020	0.00020	B127614
Dissolved Silicon (Si)	mg/L	1.4	0.50	B128880				0.67	0.50	B126842
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B128681	<0.00010	0.00010	B128681	<0.00010	0.00010	B127614
Dissolved Sodium (Na)	mg/L	2.0	0.50	B128880				3.4	0.50	B126842
Dissolved Strontium (Sr)	mg/L	0.021	0.020	B128880				0.059	0.020	B126842
Dissolved Sulphur (S)	mg/L	2.7	0.20	B128880				55	0.20	B126842
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B128681	<0.00020	0.00020	B128681	<0.00020	0.00020	B127614
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B128681	<0.0010	0.0010	B128681	<0.0010	0.0010	B127614
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B128681	<0.0010	0.0010	B128681	<0.0010	0.0010	B127614
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B128681	<0.00010	0.00010	B128681	<0.00010	0.00010	B127614

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS555			BZS555			BZS556		
Sampling Date		2023/09/19 10:15			2023/09/19 10:15			2023/09/19 09:25		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	**SC-1**	**RDL**	**QC Batch**	**SC-1 Lab-Dup**	**RDL**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B128681	<0.0010	0.0010	B128681	<0.0010	0.0010	B127614
Dissolved Zinc (Zn)	mg/L	0.15	0.0030	B128681	0.15	0.0030	B128681	0.064	0.0030	B127614

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS556			BZS557		BZS558		
Sampling Date		2023/09/19 09:25			2023/09/19 09:20		2023/09/19 09:30		
COC Number		7056253-01-01			7056253-01-01		7056253-01-01		
	UNITS	SB-1 Lab-Dup	RDL	QC Batch	SB-2	QC Batch	CB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				0.25	B118960	0.23	0.020	B118930
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	<0.0030	0.0030	B127614	<0.0030	B126901	<0.0030	0.0030	B127118
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B127614	<0.00060	B126901	<0.00060	0.00060	B127118
Dissolved Arsenic (As)	mg/L	0.00025	0.00020	B127614	0.00021	B126901	0.00022	0.00020	B127118
Dissolved Barium (Ba)	mg/L				0.021	B126842	0.014	0.010	B126842
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B127614	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Boron (B)	mg/L				<0.020	B126842	<0.020	0.020	B126842
Dissolved Calcium (Ca)	mg/L				56	B126842	57	0.30	B126842
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B127614	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B127614	<0.00030	B126901	<0.00030	0.00030	B127118
Dissolved Copper (Cu)	mg/L	0.0046	0.0010	B127614	0.0031	B126901	0.0047	0.0010	B127118
Dissolved Iron (Fe)	mg/L				<0.060	B126842	<0.060	0.060	B126842
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B127614	0.00028	B126901	0.00052	0.00020	B127118
Dissolved Lithium (Li)	mg/L				<0.020	B126842	<0.020	0.020	B126842
Dissolved Magnesium (Mg)	mg/L				9.3	B126842	9.4	0.20	B126842
Dissolved Manganese (Mn)	mg/L				0.071	B126842	0.061	0.0040	B126842
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B127614	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Nickel (Ni)	mg/L	0.0011	0.00050	B127614	0.00082	B126901	0.00091	0.00050	B127118
Dissolved Phosphorus (P)	mg/L				<0.10	B126842	<0.10	0.10	B126842
Dissolved Potassium (K)	mg/L				4.8	B126842	4.8	0.30	B126842
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B127614	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Silicon (Si)	mg/L				0.67	B126842	0.65	0.50	B126842
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B127614	<0.00010	B126901	<0.00010	0.00010	B127118
Dissolved Sodium (Na)	mg/L				3.4	B126842	3.4	0.50	B126842
Dissolved Strontium (Sr)	mg/L				0.059	B126842	0.060	0.020	B126842
Dissolved Sulphur (S)	mg/L				54	B126842	55	0.20	B126842
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B127614	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B127614	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B127614	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B127614	<0.00010	B126901	<0.00010	0.00010	B127118

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS556			BZS557		BZS558		
Sampling Date		2023/09/19 09:25			2023/09/19 09:20		2023/09/19 09:30		
COC Number		7056253-01-01			7056253-01-01		7056253-01-01		
	UNITS	**SB-1 Lab-Dup**	**RDL**	**QC Batch**	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B127614	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Zinc (Zn)	mg/L	0.077	0.0030	B127614	0.060	B126901	0.062	0.0030	B127118

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS559	BZS560		BZS561		BZS562		
Sampling Date		2023/09/19 09:35	2023/09/19 09:40		2023/09/19 09:45		2023/09/19 09:55		
COC Number		7056253-01-01	7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CB-2	EB-1	QC Batch	EB-2	QC Batch	NB-1	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.23	0.38	B118930	0.43	B118930	0.27	0.020	B118930
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	<0.0030	<0.0030	B127118	<0.0030	B126901	<0.0030	0.0030	B127118
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B127118	<0.00060	B126901	<0.00060	0.00060	B127118
Dissolved Arsenic (As)	mg/L	0.00020	0.00022	B127118	<0.00020	B126901	0.00022	0.00020	B127118
Dissolved Barium (Ba)	mg/L	0.014	0.015	B126836	0.015	B126842	0.013	0.010	B126836
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B127118	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Boron (B)	mg/L	<0.020	<0.020	B126836	<0.020	B126842	<0.020	0.020	B126836
Dissolved Calcium (Ca)	mg/L	57	63	B126836	63	B126842	63	0.30	B126836
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B127118	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B127118	<0.00030	B126901	<0.00030	0.00030	B127118
Dissolved Copper (Cu)	mg/L	0.0065	0.0065	B127118	0.0055	B126901	0.0052	0.0010	B127118
Dissolved Iron (Fe)	mg/L	<0.060	0.075	B126836	<0.060	B126842	<0.060	0.060	B126836
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B127118	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B126836	<0.020	B126842	<0.020	0.020	B126836
Dissolved Magnesium (Mg)	mg/L	9.4	10	B126836	10	B126842	10	0.20	B126836
Dissolved Manganese (Mn)	mg/L	0.054	0.042	B126836	0.044	B126842	0.066	0.0040	B126836
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B127118	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Nickel (Ni)	mg/L	0.00096	0.0013	B127118	0.0013	B126901	0.00084	0.00050	B127118
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B126836	<0.10	B126842	<0.10	0.10	B126836
Dissolved Potassium (K)	mg/L	4.9	5.1	B126836	5.0	B126842	4.8	0.30	B126836
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B127118	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Silicon (Si)	mg/L	0.63	<0.50	B126836	<0.50	B126842	0.63	0.50	B126836
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B127118	<0.00010	B126901	<0.00010	0.00010	B127118
Dissolved Sodium (Na)	mg/L	3.4	3.6	B126836	3.6	B126842	3.4	0.50	B126836
Dissolved Strontium (Sr)	mg/L	0.060	0.064	B126836	0.063	B126842	0.062	0.020	B126836
Dissolved Sulphur (S)	mg/L	55	59	B126836	61	B126842	60	0.20	B126836
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B127118	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B127118	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B127118	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B127118	<0.00010	B126901	<0.00010	0.00010	B127118
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B127118	<0.0010	B126901	<0.0010	0.0010	B127118

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS559	BZS560		BZS561		BZS562		
Sampling Date		2023/09/19 09:35	2023/09/19 09:40		2023/09/19 09:45		2023/09/19 09:55		
COC Number		7056253-01-01	7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CB-2	EB-1	QC Batch	EB-2	QC Batch	NB-1	RDL	QC Batch
Dissolved Zinc (Zn)	mg/L	0.063	0.12	B127118	0.12	B126901	0.072	0.0030	B127118
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS563	BZS564			BZS564		
Sampling Date		2023/09/19 09:50	2023/09/19 10:00			2023/09/19 10:00		
COC Number		7056253-01-01	7056253-01-01			7056253-01-01		
	UNITS	NB-2	CLD	RDL	QC Batch	CLD Lab-Dup	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.26	0.26	0.020	B118930			
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	<0.0030	<0.0030	0.0030	B127118			
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B127118			
Dissolved Arsenic (As)	mg/L	0.00023	0.00023	0.00020	B127118			
Dissolved Barium (Ba)	mg/L	0.013	0.016	0.010	B126836	0.014	0.010	B126836
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B127118			
Dissolved Boron (B)	mg/L	<0.020	<0.020	0.020	B126836	<0.020	0.020	B126836
Dissolved Calcium (Ca)	mg/L	63	64	0.30	B126836	63	0.30	B126836
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B127118			
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B127118			
Dissolved Copper (Cu)	mg/L	0.0055	0.0071	0.0010	B127118			
Dissolved Iron (Fe)	mg/L	<0.060	0.11	0.060	B126836	0.066	0.060	B126836
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B127118			
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	0.020	B126836	<0.020	0.020	B126836
Dissolved Magnesium (Mg)	mg/L	10	10	0.20	B126836	10	0.20	B126836
Dissolved Manganese (Mn)	mg/L	0.059	0.064	0.0040	B126836	0.063	0.0040	B126836
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B127118			
Dissolved Nickel (Ni)	mg/L	0.00088	0.00089	0.00050	B127118			
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B126836	<0.10	0.10	B126836
Dissolved Potassium (K)	mg/L	4.8	4.8	0.30	B126836	4.7	0.30	B126836
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B127118			
Dissolved Silicon (Si)	mg/L	0.62	0.69	0.50	B126836	0.66	0.50	B126836
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B127118			
Dissolved Sodium (Na)	mg/L	3.4	3.4	0.50	B126836	3.3	0.50	B126836
Dissolved Strontium (Sr)	mg/L	0.062	0.063	0.020	B126836	0.062	0.020	B126836
Dissolved Sulphur (S)	mg/L	60	60	0.20	B126836	62	0.20	B126836
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B127118			
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B127118			
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	0.0010	B127118			
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B127118			

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS563	BZS564			BZS564		
Sampling Date		2023/09/19 09:50	2023/09/19 10:00			2023/09/19 10:00		
COC Number		7056253-01-01	7056253-01-01			7056253-01-01		
	UNITS	NB-2	CLD	RDL	QC Batch	CLD Lab-Dup	RDL	QC Batch
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B127118			
Dissolved Zinc (Zn)	mg/L	0.072	0.072	0.0030	B127118			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS565		BZS566		BZS567		
Sampling Date		2023/09/19 08:30		2023/09/19 08:38		2023/09/19 08:20		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	QC Batch	CL-4 SFC	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	<0.020	B118930	<0.020	B118930	<0.020	0.020	B118930
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.0083	B126901	0.0090	B127118	0.0086	0.0030	B126901
Dissolved Antimony (Sb)	mg/L	<0.00060	B126901	<0.00060	B127118	<0.00060	0.00060	B126901
Dissolved Arsenic (As)	mg/L	0.00036	B126901	0.00037	B127118	0.00041	0.00020	B126901
Dissolved Barium (Ba)	mg/L	<0.010	B126842	<0.010	B126836	<0.010	0.010	B126842
Dissolved Beryllium (Be)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	0.0010	B126901
Dissolved Boron (B)	mg/L	<0.020	B126842	<0.020	B126836	<0.020	0.020	B126842
Dissolved Calcium (Ca)	mg/L	13	B126842	13	B126836	13	0.30	B126842
Dissolved Chromium (Cr)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	0.0010	B126901
Dissolved Cobalt (Co)	mg/L	<0.00030	B126901	<0.00030	B127118	<0.00030	0.00030	B126901
Dissolved Copper (Cu)	mg/L	0.0034	B126901	0.0047	B127118	0.0035	0.0010	B126901
Dissolved Iron (Fe)	mg/L	0.085	B126842	0.089	B126836	0.070	0.060	B126842
Dissolved Lead (Pb)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	0.00020	B126901
Dissolved Lithium (Li)	mg/L	<0.020	B126842	<0.020	B126836	<0.020	0.020	B126842
Dissolved Magnesium (Mg)	mg/L	3.7	B126842	3.7	B126836	3.7	0.20	B126842
Dissolved Manganese (Mn)	mg/L	<0.0040	B126842	<0.0040	B126836	<0.0040	0.0040	B126842
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	0.00020	B126901
Dissolved Nickel (Ni)	mg/L	<0.00050	B126901	<0.00050	B127118	0.00057	0.00050	B126901
Dissolved Phosphorus (P)	mg/L	<0.10	B126842	<0.10	B126836	<0.10	0.10	B126842
Dissolved Potassium (K)	mg/L	1.7	B126842	1.7	B126836	1.7	0.30	B126842
Dissolved Selenium (Se)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	0.00020	B126901
Dissolved Silicon (Si)	mg/L	0.74	B126842	0.75	B126836	0.71	0.50	B126842
Dissolved Silver (Ag)	mg/L	<0.00010	B126901	<0.00010	B127118	<0.00010	0.00010	B126901
Dissolved Sodium (Na)	mg/L	2.1	B126842	2.2	B126836	2.2	0.50	B126842
Dissolved Strontium (Sr)	mg/L	0.029	B126842	0.029	B126836	0.029	0.020	B126842
Dissolved Sulphur (S)	mg/L	6.6	B126842	6.6	B126836	6.2	0.20	B126842
Dissolved Thallium (Tl)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	0.00020	B126901
Dissolved Tin (Sn)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	0.0010	B126901
Dissolved Titanium (Ti)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	0.0010	B126901
Dissolved Uranium (U)	mg/L	<0.00010	B126901	<0.00010	B127118	<0.00010	0.00010	B126901
Dissolved Vanadium (V)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	0.0010	B126901
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS565		BZS566		BZS567		
Sampling Date		2023/09/19 08:30		2023/09/19 08:38		2023/09/19 08:20		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**QC Batch**	**CL-4 SFC**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.0063	B126901	0.0050	B127118	0.0053	0.0030	B126901
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS568		BZS569	BZS570		BZS571		
Sampling Date		2023/09/19 09:25		2023/09/19 15:00	2023/09/19 14:00		2023/09/19 13:00		
COC Number		7056253-01-01		7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	C-L4 BTM	QC Batch	SW-128	SW-129	QC Batch	SW-130	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B118930	0.26	<0.020	B118930	<0.020	0.020	B118930
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.010	B127118	<0.0030	0.0079	B126901	0.0080	0.0030	B126901
Dissolved Antimony (Sb)	mg/L	<0.00060	B127118	<0.00060	<0.00060	B126901	<0.00060	0.00060	B126901
Dissolved Arsenic (As)	mg/L	0.00039	B127118	<0.00020	0.00040	B126901	0.00035	0.00020	B126901
Dissolved Barium (Ba)	mg/L	<0.010	B126836	0.014	<0.010	B126842	<0.010	0.010	B126842
Dissolved Beryllium (Be)	mg/L	<0.0010	B127118	<0.0010	<0.0010	B126901	<0.0010	0.0010	B126901
Dissolved Boron (B)	mg/L	<0.020	B126836	<0.020	<0.020	B126842	<0.020	0.020	B126842
Dissolved Calcium (Ca)	mg/L	14	B126836	57	14	B126842	13	0.30	B126842
Dissolved Chromium (Cr)	mg/L	<0.0010	B127118	<0.0010	<0.0010	B126901	<0.0010	0.0010	B126901
Dissolved Cobalt (Co)	mg/L	<0.00030	B127118	<0.00030	<0.00030	B126901	<0.00030	0.00030	B126901
Dissolved Copper (Cu)	mg/L	0.0048	B127118	0.0037	0.0041	B126901	0.0035	0.0010	B126901
Dissolved Iron (Fe)	mg/L	0.12	B126836	<0.060	0.090	B126842	<0.060	0.060	B126842
Dissolved Lead (Pb)	mg/L	<0.00020	B127118	<0.00020	<0.00020	B126901	<0.00020	0.00020	B126901
Dissolved Lithium (Li)	mg/L	<0.020	B126836	<0.020	<0.020	B126842	<0.020	0.020	B126842
Dissolved Magnesium (Mg)	mg/L	3.7	B126836	9.4	3.7	B126842	3.7	0.20	B126842
Dissolved Manganese (Mn)	mg/L	<0.0040	B126836	0.057	<0.0040	B126842	<0.0040	0.0040	B126842
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B127118	<0.00020	<0.00020	B126901	<0.00020	0.00020	B128813
Dissolved Nickel (Ni)	mg/L	<0.00050	B127118	0.00093	<0.00050	B126901	<0.00050	0.00050	B126901
Dissolved Phosphorus (P)	mg/L	<0.10	B126836	<0.10	<0.10	B126842	<0.10	0.10	B126842
Dissolved Potassium (K)	mg/L	1.7	B126836	4.9	1.7	B126842	1.7	0.30	B126842
Dissolved Selenium (Se)	mg/L	<0.00020	B127118	<0.00020	<0.00020	B126901	<0.00020	0.00020	B126901
Dissolved Silicon (Si)	mg/L	0.79	B126836	0.62	0.73	B126842	0.68	0.50	B126842
Dissolved Silver (Ag)	mg/L	<0.00010	B127118	<0.00010	<0.00010	B126901	<0.00010	0.00010	B126901
Dissolved Sodium (Na)	mg/L	2.2	B126836	3.4	2.2	B126842	2.2	0.50	B126842
Dissolved Strontium (Sr)	mg/L	0.029	B126836	0.060	0.029	B126842	0.029	0.020	B126842
Dissolved Sulphur (S)	mg/L	6.6	B126836	55	6.7	B126842	5.9	0.20	B126842
Dissolved Thallium (Tl)	mg/L	<0.00020	B127118	<0.00020	<0.00020	B126901	<0.00020	0.00020	B126901
Dissolved Tin (Sn)	mg/L	<0.0010	B127118	<0.0010	<0.0010	B126901	<0.0010	0.0010	B126901
Dissolved Titanium (Ti)	mg/L	<0.0010	B127118	<0.0010	<0.0010	B126901	<0.0010	0.0010	B126901
Dissolved Uranium (U)	mg/L	<0.00010	B127118	<0.00010	<0.00010	B126901	<0.00010	0.00010	B126901
Dissolved Vanadium (V)	mg/L	<0.0010	B127118	<0.0010	<0.0010	B126901	<0.0010	0.0010	B126901

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS568		BZS569	BZS570		BZS571		
Sampling Date		2023/09/19 09:25		2023/09/19 15:00	2023/09/19 14:00		2023/09/19 13:00		
COC Number		7056253-01-01		7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	**C-L4 BTM**	**QC Batch**	**SW-128**	**SW-129**	**QC Batch**	**SW-130**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.0050	B127118	0.063	0.0051	B126901	0.0049	0.0030	B126901
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS572		BZS573		BZS574	BZS575		
Sampling Date		2023/09/19		2023/09/19 08:10		2023/09/19 08:15	2023/09/19 08:00		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01	7056253-01-01		
	UNITS	TRIP BLANK	QC Batch	CL-5 SFC	QC Batch	CL-5 BTM	CL-6 SFC	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B118930	<0.020	B118930	<0.020	<0.020	0.020	B118930
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	<0.0030	B126901	0.0088	B127118	0.011	0.012	0.0030	B127118
Dissolved Antimony (Sb)	mg/L	0.00068	B126901	<0.00060	B127118	<0.00060	<0.00060	0.00060	B127118
Dissolved Arsenic (As)	mg/L	<0.00020	B126901	0.00045	B127118	0.00047	0.00045	0.00020	B127118
Dissolved Barium (Ba)	mg/L	<0.010	B126842	<0.010	B126836	<0.010	<0.010	0.010	B126836
Dissolved Beryllium (Be)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	<0.0010	0.0010	B127118
Dissolved Boron (B)	mg/L	<0.020	B126842	<0.020	B126836	<0.020	<0.020	0.020	B126836
Dissolved Calcium (Ca)	mg/L	<0.30	B126842	13	B126836	13	12	0.30	B126836
Dissolved Chromium (Cr)	mg/L	<0.0010	B126901	<0.0010	B128813	<0.0010	<0.0010	0.0010	B127118
Dissolved Cobalt (Co)	mg/L	<0.00030	B126901	<0.00030	B127118	<0.00030	<0.00030	0.00030	B127118
Dissolved Copper (Cu)	mg/L	<0.0010	B126901	0.0056	B127118	0.0047	0.0040	0.0010	B127118
Dissolved Iron (Fe)	mg/L	<0.060	B126842	0.068	B126836	0.12	<0.060	0.060	B126836
Dissolved Lead (Pb)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	<0.00020	0.00020	B127118
Dissolved Lithium (Li)	mg/L	<0.020	B126842	<0.020	B126836	<0.020	<0.020	0.020	B126836
Dissolved Magnesium (Mg)	mg/L	<0.20	B126842	3.6	B126836	3.7	3.5	0.20	B126836
Dissolved Manganese (Mn)	mg/L	<0.0040	B126842	<0.0040	B126836	<0.0040	<0.0040	0.0040	B126836
Dissolved Molybdenum (Mo)	mg/L	0.00030	B126901	<0.00020	B127118	<0.00020	<0.00020	0.00020	B127118
Dissolved Nickel (Ni)	mg/L	<0.00050	B126901	0.0011	B127118	<0.00050	0.00053	0.00050	B127118
Dissolved Phosphorus (P)	mg/L	<0.10	B126842	<0.10	B126836	<0.10	<0.10	0.10	B126836
Dissolved Potassium (K)	mg/L	<0.30	B126842	1.7	B126836	1.7	1.6	0.30	B126836
Dissolved Selenium (Se)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	<0.00020	0.00020	B127118
Dissolved Silicon (Si)	mg/L	<0.50	B126842	0.68	B126836	0.78	0.60	0.50	B126836
Dissolved Silver (Ag)	mg/L	<0.00010	B126901	<0.00010	B127118	<0.00010	<0.00010	0.00010	B127118
Dissolved Sodium (Na)	mg/L	<0.50	B126842	2.2	B126836	2.2	2.1	0.50	B126836
Dissolved Strontium (Sr)	mg/L	<0.020	B126842	0.029	B126836	0.029	0.028	0.020	B126836
Dissolved Sulphur (S)	mg/L	<0.20	B126842	5.8	B126836	6.2	5.4	0.20	B126836
Dissolved Thallium (Tl)	mg/L	<0.00020	B126901	<0.00020	B127118	<0.00020	<0.00020	0.00020	B127118
Dissolved Tin (Sn)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	<0.0010	0.0010	B127118
Dissolved Titanium (Ti)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	<0.0010	0.0010	B127118
Dissolved Uranium (U)	mg/L	<0.00010	B126901	<0.00010	B127118	<0.00010	<0.00010	0.00010	B127118
Dissolved Vanadium (V)	mg/L	<0.0010	B126901	<0.0010	B127118	<0.0010	<0.0010	0.0010	B127118

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS572		BZS573		BZS574	BZS575		
Sampling Date		2023/09/19		2023/09/19 08:10		2023/09/19 08:15	2023/09/19 08:00		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01	7056253-01-01		
	UNITS	TRIP BLANK	QC Batch	CL-5 SFC	QC Batch	CL-5 BTM	CL-6 SFC	RDL	QC Batch
Dissolved Zinc (Zn)	mg/L	<0.0030	B126901	0.0043	B128813	0.0052	0.0051	0.0030	B127118
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS576	BZS577	BZS578		BZS579		
Sampling Date		2023/09/19 08:05	2023/09/19 08:40	2023/09/19 08:45		2023/09/19 08:30		
COC Number		7056253-01-01	7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	CL-6 BTM	CL-7 SFC	CL-7 BTM	QC Batch	CL-8 SFC	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	<0.020	<0.020	<0.020	B118930	<0.020	0.020	B118930
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.0074	0.0085	0.0092	B126901	0.0091	0.0030	B127118
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B126901	<0.00060	0.00060	B127118
Dissolved Arsenic (As)	mg/L	0.00044	0.00038	0.00040	B126901	0.00045	0.00020	B127118
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	<0.010	B126842	<0.010	0.010	B126836
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	B126842	<0.020	0.020	B126836
Dissolved Calcium (Ca)	mg/L	12	13	13	B126842	13	0.30	B126836
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B126901	<0.00030	0.00030	B127118
Dissolved Copper (Cu)	mg/L	0.0030	0.0031	0.0034	B126901	0.0048	0.0010	B127118
Dissolved Iron (Fe)	mg/L	<0.060	0.078	0.084	B126842	0.094	0.060	B126836
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B126842	<0.020	0.020	B126836
Dissolved Magnesium (Mg)	mg/L	3.6	3.7	3.7	B126842	3.8	0.20	B126836
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	<0.0040	B126842	<0.0040	0.0040	B126836
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	B126901	<0.00050	0.00050	B127118
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B126842	<0.10	0.10	B126836
Dissolved Potassium (K)	mg/L	1.6	1.7	1.7	B126842	1.7	0.30	B126836
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Silicon (Si)	mg/L	0.58	0.73	0.73	B126842	0.74	0.50	B126836
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B126901	<0.00010	0.00010	B127118
Dissolved Sodium (Na)	mg/L	2.2	2.2	2.2	B126842	2.2	0.50	B126836
Dissolved Strontium (Sr)	mg/L	0.029	0.029	0.029	B126842	0.029	0.020	B126836
Dissolved Sulphur (S)	mg/L	5.2	6.7	6.8	B126842	6.4	0.20	B126836
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B126901	<0.00020	0.00020	B127118
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	B126901	<0.0010	0.0010	B127118
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B126901	<0.00010	0.00010	B127118
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B126901	<0.0010	0.0010	B127118

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS576	BZS577	BZS578		BZS579		
Sampling Date		2023/09/19 08:05	2023/09/19 08:40	2023/09/19 08:45		2023/09/19 08:30		
COC Number		7056253-01-01	7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	**CL-6 BTM**	**CL-7 SFC**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.0040	0.0047	0.0053	B126901	0.0047	0.0030	B127118
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS580	BZS581	BZS604		
Sampling Date		2023/09/19 09:33	2023/09/19 08:50	2023/09/19 08:55		
COC Number		7056253-01-01	7056253-01-01	7056253-01-01		
	UNITS	CL-8 BTM	CL-2 SFC	CL-2 BTM	RDL	QC Batch
Elements						
Dissolved Cadmium (Cd)	ug/L	<0.020	<0.020	<0.020	0.020	B118930
Lab Filtered Elements						
Dissolved Aluminum (Al)	mg/L	0.0098	0.0091	0.0075	0.0030	B126901
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	0.00060	B126901
Dissolved Arsenic (As)	mg/L	0.00034	0.00032	0.00037	0.00020	B126901
Dissolved Barium (Ba)	mg/L	<0.010	0.010	<0.010	0.010	B126842
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B126901
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	0.020	B126842
Dissolved Calcium (Ca)	mg/L	13	14	14	0.30	B126842
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B126901
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	0.00030	B126901
Dissolved Copper (Cu)	mg/L	0.0035	0.0034	0.0038	0.0010	B126901
Dissolved Iron (Fe)	mg/L	0.085	0.11	0.087	0.060	B126842
Dissolved Lead (Pb)	mg/L	0.00025	<0.00020	0.00039	0.00020	B126901
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	0.020	B126842
Dissolved Magnesium (Mg)	mg/L	3.7	3.7	3.7	0.20	B126842
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	<0.0040	0.0040	B126842
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B126901
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	B126901
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	0.10	B126842
Dissolved Potassium (K)	mg/L	1.7	1.7	1.7	0.30	B126842
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B126901
Dissolved Silicon (Si)	mg/L	0.73	0.81	0.77	0.50	B126842
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B126901
Dissolved Sodium (Na)	mg/L	2.2	2.2	2.2	0.50	B126842
Dissolved Strontium (Sr)	mg/L	0.029	0.029	0.029	0.020	B126842
Dissolved Sulphur (S)	mg/L	6.5	6.8	6.7	0.20	B126842
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	0.00020	B126901
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B126901
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B126901
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	0.00010	B126901
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	B126901
RDL = Reportable Detection Limit						

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		BZS580	BZS581	BZS604		
Sampling Date		2023/09/19 09:33	2023/09/19 08:50	2023/09/19 08:55		
COC Number		7056253-01-01	7056253-01-01	7056253-01-01		
	UNITS	**CL-8 BTM**	**CL-2 SFC**	**CL-2 BTM**	**RDL**	**QC Batch**
Dissolved Zinc (Zn)	mg/L	0.0053	0.0055	0.0048	0.0030	B126901
RDL = Reportable Detection Limit						

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS555		BZS556			BZS556		
Sampling Date		2023/09/19 10:15		2023/09/19 09:25			2023/09/19 09:25		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	SC-1	QC Batch	SB-1	RDL	QC Batch	SB-1 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.41	B118962	0.30	0.020	B118962			
Total Aluminum (Al)	mg/L	0.044	B126627	0.029	0.0030	B124627	0.030	0.0030	B124627
Total Antimony (Sb)	mg/L	<0.00060	B126627	<0.00060	0.00060	B124627	<0.00060	0.00060	B124627
Total Arsenic (As)	mg/L	0.00043	B126627	0.00025	0.00020	B124627	0.00023	0.00020	B124627
Total Barium (Ba)	mg/L	<0.010	B126662	0.013	0.010	B124632	0.013	0.010	B124632
Total Beryllium (Be)	mg/L	<0.0010	B126627	<0.0010	0.0010	B124627	<0.0010	0.0010	B124627
Total Boron (B)	mg/L	<0.020	B126662	<0.020	0.020	B124632	<0.020	0.020	B124632
Total Calcium (Ca)	mg/L	9.1	B126662	53	0.30	B124632	52	0.30	B124632
Total Chromium (Cr)	mg/L	<0.0010	B126627	<0.0010	0.0010	B124627	<0.0010	0.0010	B124627
Total Cobalt (Co)	mg/L	<0.00030	B126627	<0.00030	0.00030	B124627	<0.00030	0.00030	B124627
Total Copper (Cu)	mg/L	0.016	B126627	0.0075	0.0010	B124627	0.0079	0.0010	B124627
Total Iron (Fe)	mg/L	0.33	B126662	2.6	0.060	B124632	2.5	0.060	B124632
Total Lead (Pb)	mg/L	<0.00020	B126627	<0.00020	0.00020	B124627	<0.00020	0.00020	B124627
Total Lithium (Li)	mg/L	<0.020	B126662	<0.020	0.020	B124632	<0.020	0.020	B124632
Total Magnesium (Mg)	mg/L	2.8	B126662	8.8	0.20	B124632	8.6	0.20	B124632
Total Manganese (Mn)	mg/L	0.049	B126662	0.063	0.0040	B124632	0.062	0.0040	B124632
Total Molybdenum (Mo)	mg/L	<0.00020	B126627	<0.00020	0.00020	B124627	<0.00020	0.00020	B124627
Total Nickel (Ni)	mg/L	0.00081	B126627	0.0010	0.00050	B124627	0.0013	0.00050	B124627
Total Phosphorus (P)	mg/L	<0.10	B126662	<0.10	0.10	B124632	<0.10	0.10	B124632
Total Potassium (K)	mg/L	1.4	B126662	4.5	0.30	B124632	4.4	0.30	B124632
Total Selenium (Se)	mg/L	<0.00020	B126627	<0.00020	0.00020	B124627	<0.00020	0.00020	B124627
Total Silicon (Si)	mg/L	1.4	B126662	0.71	0.50	B124632	0.69	0.50	B124632
Total Silver (Ag)	mg/L	<0.00010	B126627	<0.00010	0.00010	B124627	<0.00010	0.00010	B124627
Total Sodium (Na)	mg/L	2.0	B126662	3.3	0.50	B124632	3.2	0.50	B124632
Total Strontium (Sr)	mg/L	0.022	B126662	0.057	0.020	B124632	0.056	0.020	B124632
Total Sulphur (S)	mg/L	2.3	B126662	54	0.20	B124632	53	0.20	B124632
Total Thallium (Tl)	mg/L	<0.00020	B126627	<0.00020	0.00020	B124627	<0.00020	0.00020	B124627
Total Tin (Sn)	mg/L	<0.0010	B126627	<0.0010	0.0010	B124627	<0.0010	0.0010	B124627
Total Titanium (Ti)	mg/L	<0.0010	B126627	0.0010	0.0010	B124627	0.0011	0.0010	B124627
Total Uranium (U)	mg/L	<0.00010	B126627	<0.00010	0.00010	B124627	<0.00010	0.00010	B124627
Total Vanadium (V)	mg/L	<0.0010	B126627	<0.0010	0.0010	B124627	<0.0010	0.0010	B124627

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS555		BZS556			BZS556		
Sampling Date		2023/09/19 10:15		2023/09/19 09:25			2023/09/19 09:25		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**	**SB-1 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.18	B126627	0.082	0.0030	B124627	0.080	0.0030	B124627

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS557		BZS558			BZS558		
Sampling Date		2023/09/19 09:20		2023/09/19 09:30			2023/09/19 09:30		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	SB-2	QC Batch	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.37	B118962	0.35	0.020	B118962			
Total Aluminum (Al)	mg/L	0.042	B126140	0.043	0.0030	B126176	0.040	0.0030	B126176
Total Antimony (Sb)	mg/L	<0.00060	B126140	<0.00060	0.00060	B126176	<0.00060	0.00060	B126176
Total Arsenic (As)	mg/L	0.00023	B126140	0.00029	0.00020	B126176	0.00027	0.00020	B126176
Total Barium (Ba)	mg/L	0.013	B126146	0.013	0.010	B126183	0.013	0.010	B126183
Total Beryllium (Be)	mg/L	<0.0010	B126140	<0.0010	0.0010	B126176	<0.0010	0.0010	B126176
Total Boron (B)	mg/L	<0.020	B126146	<0.020	0.020	B126183	<0.020	0.020	B126183
Total Calcium (Ca)	mg/L	52	B126146	54	0.30	B126183	54	0.30	B126183
Total Chromium (Cr)	mg/L	<0.0010	B126140	<0.0010	0.0010	B126176	<0.0010	0.0010	B126176
Total Cobalt (Co)	mg/L	<0.00030	B126140	<0.00030	0.00030	B126176	<0.00030	0.00030	B126176
Total Copper (Cu)	mg/L	0.0084	B126140	0.014 (1)	0.0010	B126176	0.0083 (2)	0.0010	B126176
Total Iron (Fe)	mg/L	2.6	B126146	2.4	0.060	B126183	2.4	0.060	B126183
Total Lead (Pb)	mg/L	0.00065	B126140	<0.00020	0.00020	B126176	0.00043	0.00020	B126176
Total Lithium (Li)	mg/L	<0.020	B126146	<0.020	0.020	B126183	<0.020	0.020	B126183
Total Magnesium (Mg)	mg/L	8.9	B126146	8.6	0.20	B126183	8.6	0.20	B126183
Total Manganese (Mn)	mg/L	0.062	B126146	0.061	0.0040	B126183	0.061	0.0040	B126183
Total Molybdenum (Mo)	mg/L	<0.00020	B126140	<0.00020	0.00020	B126176	<0.00020	0.00020	B126176
Total Nickel (Ni)	mg/L	0.0013	B126140	0.0026	0.00050	B126176	0.0033	0.00050	B126176
Total Phosphorus (P)	mg/L	<0.10	B126146	<0.10	0.10	B126183	<0.10	0.10	B126183
Total Potassium (K)	mg/L	4.5	B126146	4.5	0.30	B126183	4.5	0.30	B126183
Total Selenium (Se)	mg/L	<0.00020	B126140	<0.00020	0.00020	B126176	<0.00020	0.00020	B126176
Total Silicon (Si)	mg/L	0.81	B126146	0.80	0.50	B126183	0.79	0.50	B126183
Total Silver (Ag)	mg/L	<0.00010	B126140	<0.00010	0.00010	B126176	<0.00010	0.00010	B126176
Total Sodium (Na)	mg/L	3.2	B126146	3.3	0.50	B126183	3.3	0.50	B126183
Total Strontium (Sr)	mg/L	0.057	B126146	0.057	0.020	B126183	0.058	0.020	B126183
Total Sulphur (S)	mg/L	53	B126146	55	0.20	B126183	55	0.20	B126183
Total Thallium (Tl)	mg/L	<0.00020	B126140	<0.00020	0.00020	B126176	<0.00020	0.00020	B126176
Total Tin (Sn)	mg/L	<0.0010	B126140	<0.0010	0.0010	B126176	<0.0010	0.0010	B126176

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Duplicate exceeds acceptance criteria due to sample non homogeneity. Reanalysis yields similar results.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS557		BZS558			BZS558		
Sampling Date		2023/09/19 09:20		2023/09/19 09:30			2023/09/19 09:30		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**	**CB-1 Lab-Dup**	**RDL**	**QC Batch**
Total Titanium (Ti)	mg/L	0.0015	B126140	0.0011	0.0010	B126176	0.0014	0.0010	B126176
Total Uranium (U)	mg/L	<0.00010	B126140	<0.00010	0.00010	B126176	<0.00010	0.00010	B126176
Total Vanadium (V)	mg/L	<0.0010	B126140	<0.0010	0.0010	B126176	<0.0010	0.0010	B126176
Total Zinc (Zn)	mg/L	0.10	B126140	0.10	0.0030	B126176	0.092	0.0030	B126176

RDL = Reportable Detection Limit
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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS559		BZS560		BZS561		
Sampling Date		2023/09/19 09:35		2023/09/19 09:40		2023/09/19 09:45		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CB-2	QC Batch	EB-1	QC Batch	EB-2	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.31	B118962	0.49	B118962	0.66	0.020	B118962
Total Aluminum (Al)	mg/L	0.051	B126176	0.052	B125176	0.069	0.0030	B126140
Total Antimony (Sb)	mg/L	<0.00060	B126176	<0.00060	B125176	<0.00060	0.00060	B126140
Total Arsenic (As)	mg/L	0.00024	B126176	0.00026	B125176	0.00034	0.00020	B126140
Total Barium (Ba)	mg/L	0.014	B126183	0.015	B125179	0.015	0.010	B126146
Total Beryllium (Be)	mg/L	<0.0010	B126176	<0.0010	B125176	<0.0010	0.0010	B126140
Total Boron (B)	mg/L	<0.020	B126183	0.021	B125179	<0.020	0.020	B126146
Total Calcium (Ca)	mg/L	56	B126183	63	B125179	60	0.30	B126146
Total Chromium (Cr)	mg/L	<0.0010	B126176	<0.0010	B125176	<0.0010	0.0010	B126140
Total Cobalt (Co)	mg/L	<0.00030	B126176	<0.00030	B125176	0.00038	0.00030	B126140
Total Copper (Cu)	mg/L	0.0074	B126176	0.0097	B125176	0.013	0.0010	B126140
Total Iron (Fe)	mg/L	2.3	B126183	1.5	B125179	1.4	0.060	B126146
Total Lead (Pb)	mg/L	0.00047	B126176	<0.00020	B125176	0.00030	0.00020	B126140
Total Lithium (Li)	mg/L	<0.020	B126183	<0.020	B125179	<0.020	0.020	B126146
Total Magnesium (Mg)	mg/L	8.8	B126183	10	B125179	9.6	0.20	B126146
Total Manganese (Mn)	mg/L	0.062	B126183	0.045	B125179	0.048	0.0040	B126146
Total Molybdenum (Mo)	mg/L	<0.00020	B126176	<0.00020	B125176	<0.00020	0.00020	B126140
Total Nickel (Ni)	mg/L	0.0013	B126176	0.0013	B125176	0.0018	0.00050	B126140
Total Phosphorus (P)	mg/L	<0.10	B126183	<0.10	B125179	<0.10	0.10	B126146
Total Potassium (K)	mg/L	4.6	B126183	4.7	B125179	4.8	0.30	B126146
Total Selenium (Se)	mg/L	<0.00020	B126176	<0.00020	B125176	<0.00020	0.00020	B126140
Total Silicon (Si)	mg/L	0.84	B126183	0.64	B125179	0.65	0.50	B126146
Total Silver (Ag)	mg/L	<0.00010	B126176	<0.00010	B125176	<0.00010	0.00010	B126140
Total Sodium (Na)	mg/L	3.4	B126183	3.7	B125179	3.4	0.50	B126146
Total Strontium (Sr)	mg/L	0.059	B126183	0.057	B125179	0.063	0.020	B126146
Total Sulphur (S)	mg/L	57	B126183	62	B125179	60	0.20	B126146
Total Thallium (Tl)	mg/L	<0.00020	B126176	<0.00020	B125176	<0.00020	0.00020	B126140
Total Tin (Sn)	mg/L	<0.0010	B126176	<0.0010	B125176	<0.0010	0.0010	B126140
Total Titanium (Ti)	mg/L	0.0012	B126176	0.0015	B125176	0.0017	0.0010	B126140
Total Uranium (U)	mg/L	<0.00010	B126176	<0.00010	B125176	<0.00010	0.00010	B126140
Total Vanadium (V)	mg/L	<0.0010	B126176	<0.0010	B125176	<0.0010	0.0010	B126140

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS559		BZS560		BZS561		
Sampling Date		2023/09/19 09:35		2023/09/19 09:40		2023/09/19 09:45		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	**CB-2**	**QC Batch**	**EB-1**	**QC Batch**	**EB-2**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.087	B126176	0.14	B125176	0.20	0.0030	B126140
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS562		BZS563		BZS564		
Sampling Date		2023/09/19 09:55		2023/09/19 09:50		2023/09/19 10:00		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	NB-1	QC Batch	NB-2	QC Batch	CLD	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.35	B118962	0.33	B118962	0.32	0.020	B118962
Total Aluminum (Al)	mg/L	0.034	B126627	0.034	B126202	0.038	0.0030	B124627
Total Antimony (Sb)	mg/L	<0.00060	B126627	0.0012	B126202	<0.00060	0.00060	B124627
Total Arsenic (As)	mg/L	0.00025	B126627	0.00028	B126202	0.00030	0.00020	B124627
Total Barium (Ba)	mg/L	0.013	B126662	0.013	B126203	0.015	0.010	B124632
Total Beryllium (Be)	mg/L	<0.0010	B126627	<0.0010	B126202	<0.0010	0.0010	B124627
Total Boron (B)	mg/L	0.022	B126662	<0.020	B126203	0.023	0.020	B124632
Total Calcium (Ca)	mg/L	60	B126662	59	B126203	64	0.30	B124632
Total Chromium (Cr)	mg/L	<0.0010	B126627	<0.0010	B126202	<0.0010	0.0010	B124627
Total Cobalt (Co)	mg/L	<0.00030	B126627	<0.00030	B126202	<0.00030	0.00030	B124627
Total Copper (Cu)	mg/L	0.0086	B126627	0.0087	B126202	0.0097	0.0010	B124627
Total Iron (Fe)	mg/L	2.2	B126662	2.0	B126203	2.3	0.060	B124632
Total Lead (Pb)	mg/L	<0.00020	B126627	<0.00020	B126202	<0.00020	0.00020	B124627
Total Lithium (Li)	mg/L	<0.020	B126662	<0.020	B126203	<0.020	0.020	B124632
Total Magnesium (Mg)	mg/L	9.5	B126662	9.4	B126203	10	0.20	B124632
Total Manganese (Mn)	mg/L	0.064	B126662	0.058	B126203	0.073	0.0040	B124632
Total Molybdenum (Mo)	mg/L	<0.00020	B126627	<0.00020	B126202	<0.00020	0.00020	B124627
Total Nickel (Ni)	mg/L	0.0010	B126627	0.0012	B126202	0.0013	0.00050	B124627
Total Phosphorus (P)	mg/L	<0.10	B126662	<0.10	B126203	<0.10	0.10	B124632
Total Potassium (K)	mg/L	4.4	B126662	4.4	B126203	4.8	0.30	B124632
Total Selenium (Se)	mg/L	<0.00020	B126627	<0.00020	B126202	<0.00020	0.00020	B124627
Total Silicon (Si)	mg/L	0.75	B126662	0.69	B126203	0.81	0.50	B124632
Total Silver (Ag)	mg/L	<0.00010	B126627	<0.00010	B126202	<0.00010	0.00010	B124627
Total Sodium (Na)	mg/L	3.4	B126662	3.4	B126203	3.6	0.50	B124632
Total Strontium (Sr)	mg/L	0.053	B126662	0.052	B126203	0.064	0.020	B124632
Total Sulphur (S)	mg/L	62	B126662	60	B126203	65	0.20	B124632
Total Thallium (Tl)	mg/L	<0.00020	B126627	<0.00020	B126202	<0.00020	0.00020	B124627
Total Tin (Sn)	mg/L	<0.0010	B126627	<0.0010	B126202	<0.0010	0.0010	B124627
Total Titanium (Ti)	mg/L	<0.0010	B126627	<0.0010	B126202	0.0014	0.0010	B124627
Total Uranium (U)	mg/L	<0.00010	B126627	<0.00010	B126202	<0.00010	0.00010	B124627
Total Vanadium (V)	mg/L	<0.0010	B126627	<0.0010	B126202	<0.0010	0.0010	B124627

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS562		BZS563		BZS564		
Sampling Date		2023/09/19 09:55		2023/09/19 09:50		2023/09/19 10:00		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	**NB-1**	**QC Batch**	**NB-2**	**QC Batch**	**CLD**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.10	B126627	0.091	B126202	0.094	0.0030	B124627
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS565			BZS565			BZS566		
Sampling Date		2023/09/19 08:30			2023/09/19 08:30			2023/09/19 08:38		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	CL-3 SFC	RDL	QC Batch	CL-3 SFC Lab-Dup	RDL	QC Batch	CL-3 BTM	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.033	0.020	B118962				0.041	0.020	B118962
Total Aluminum (Al)	mg/L	0.058	0.0030	B126140	0.049	0.0030	B126140	0.054	0.0030	B126140
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B126140	<0.00060	0.00060	B126140	<0.00060	0.00060	B126140
Total Arsenic (As)	mg/L	0.00050	0.00020	B126140	0.00049	0.00020	B126140	0.00048	0.00020	B126140
Total Barium (Ba)	mg/L	0.011	0.010	B126146	0.011	0.010	B126146	0.010	0.010	B126146
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140
Total Boron (B)	mg/L	<0.020	0.020	B126146	<0.020	0.020	B126146	<0.020	0.020	B126146
Total Calcium (Ca)	mg/L	13	0.30	B126146	13	0.30	B126146	13	0.30	B126146
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B126140	<0.00030	0.00030	B126140	<0.00030	0.00030	B126140
Total Copper (Cu)	mg/L	0.0060	0.0010	B126140	0.0052	0.0010	B126140	0.0061	0.0010	B126140
Total Iron (Fe)	mg/L	0.37	0.060	B126146	0.36	0.060	B126146	0.37	0.060	B126146
Total Lead (Pb)	mg/L	0.00022	0.00020	B126140	0.00040	0.00020	B126140	<0.00020	0.00020	B126140
Total Lithium (Li)	mg/L	<0.020	0.020	B126146	<0.020	0.020	B126146	<0.020	0.020	B126146
Total Magnesium (Mg)	mg/L	3.7	0.20	B126146	3.7	0.20	B126146	3.6	0.20	B126146
Total Manganese (Mn)	mg/L	0.023	0.0040	B126146	0.022	0.0040	B126146	0.023	0.0040	B126146
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B126140	<0.00020	0.00020	B126140	<0.00020	0.00020	B126140
Total Nickel (Ni)	mg/L	0.00068	0.00050	B126140	0.00059	0.00050	B126140	0.00051	0.00050	B126140
Total Phosphorus (P)	mg/L	<0.10	0.10	B126146	<0.10	0.10	B126146	<0.10	0.10	B126146
Total Potassium (K)	mg/L	1.7	0.30	B126146	1.6	0.30	B126146	1.6	0.30	B126146
Total Selenium (Se)	mg/L	<0.00020	0.00020	B126140	<0.00020	0.00020	B126140	<0.00020	0.00020	B126140
Total Silicon (Si)	mg/L	0.95	0.50	B126146	0.92	0.50	B126146	1.0	0.50	B126146
Total Silver (Ag)	mg/L	<0.00010	0.00010	B126140	<0.00010	0.00010	B126140	<0.00010	0.00010	B126140
Total Sodium (Na)	mg/L	2.2	0.50	B126146	2.1	0.50	B126146	2.2	0.50	B126146
Total Strontium (Sr)	mg/L	0.030	0.020	B126146	0.030	0.020	B126146	0.030	0.020	B126146
Total Sulphur (S)	mg/L	6.8	0.20	B126146	6.6	0.20	B126146	6.6	0.20	B126146
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B126140	<0.00020	0.00020	B126140	<0.00020	0.00020	B126140
Total Tin (Sn)	mg/L	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140
Total Titanium (Ti)	mg/L	0.0011	0.0010	B126140	0.0013	0.0010	B126140	0.0016	0.0010	B126140
Total Uranium (U)	mg/L	<0.00010	0.00010	B126140	<0.00010	0.00010	B126140	<0.00010	0.00010	B126140
Total Vanadium (V)	mg/L	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140	<0.0010	0.0010	B126140

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS565			BZS565			BZS566		
Sampling Date		2023/09/19 08:30			2023/09/19 08:30			2023/09/19 08:38		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	CL-3 SFC	RDL	QC Batch	CL-3 SFC Lab-Dup	RDL	QC Batch	CL-3 BTM	RDL	QC Batch
Total Zinc (Zn)	mg/L	0.020	0.0030	B126140	0.016	0.0030	B126140	0.013	0.0030	B126140

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS567		BZS568		BZS569		
Sampling Date		2023/09/19 08:20		2023/09/19 09:25		2023/09/19 15:00		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CL-4 SFC	QC Batch	C-L4 BTM	QC Batch	SW-128	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.036	B118962	0.042	B118962	0.36	0.020	B118962
Total Aluminum (Al)	mg/L	0.052	B126140	0.060	B125176	0.046	0.0030	B126202
Total Antimony (Sb)	mg/L	0.00060	B126140	<0.00060	B125176	<0.00060	0.00060	B126202
Total Arsenic (As)	mg/L	0.00045	B126140	0.00049	B125176	0.00023	0.00020	B126202
Total Barium (Ba)	mg/L	0.010	B126146	0.010	B125179	0.013	0.010	B126203
Total Beryllium (Be)	mg/L	<0.0010	B126140	<0.0010	B125176	<0.0010	0.0010	B126202
Total Boron (B)	mg/L	<0.020	B126146	<0.020	B125179	<0.020	0.020	B126203
Total Calcium (Ca)	mg/L	13	B126146	13	B125179	55	0.30	B126203
Total Chromium (Cr)	mg/L	<0.0010	B126140	0.0012	B125176	<0.0010	0.0010	B126202
Total Cobalt (Co)	mg/L	<0.00030	B126140	<0.00030	B125176	<0.00030	0.00030	B126202
Total Copper (Cu)	mg/L	0.0058	B126140	0.0056	B125176	0.014	0.0010	B126202
Total Iron (Fe)	mg/L	0.33	B126146	0.52	B125179	2.2	0.060	B126203
Total Lead (Pb)	mg/L	<0.00020	B126140	0.012	B125176	0.00024	0.00020	B126202
Total Lithium (Li)	mg/L	<0.020	B126146	<0.020	B125179	<0.020	0.020	B126203
Total Magnesium (Mg)	mg/L	3.5	B126146	3.4	B125179	8.8	0.20	B126203
Total Manganese (Mn)	mg/L	0.020	B126146	0.036	B125179	0.056	0.0040	B126203
Total Molybdenum (Mo)	mg/L	<0.00020	B126140	<0.00020	B125176	<0.00020	0.00020	B126202
Total Nickel (Ni)	mg/L	0.00077	B126140	0.00086	B125176	0.0024	0.00050	B126202
Total Phosphorus (P)	mg/L	<0.10	B126146	<0.10	B125179	<0.10	0.10	B126203
Total Potassium (K)	mg/L	1.6	B126146	1.6	B125179	4.5	0.30	B126203
Total Selenium (Se)	mg/L	<0.00020	B126140	<0.00020	B125176	<0.00020	0.00020	B126202
Total Silicon (Si)	mg/L	0.89	B126146	0.99	B125179	0.75	0.50	B126203
Total Silver (Ag)	mg/L	<0.00010	B126140	<0.00010	B125176	<0.00010	0.00010	B126202
Total Sodium (Na)	mg/L	2.1	B126146	2.2	B125179	3.4	0.50	B126203
Total Strontium (Sr)	mg/L	0.029	B126146	0.028	B125179	0.051	0.020	B126203
Total Sulphur (S)	mg/L	6.2	B126146	6.7	B125179	54	0.20	B126203
Total Thallium (Tl)	mg/L	<0.00020	B126140	<0.00020	B125176	<0.00020	0.00020	B126202
Total Tin (Sn)	mg/L	<0.0010	B126140	<0.0010	B125176	<0.0010	0.0010	B126202
Total Titanium (Ti)	mg/L	0.0012	B126140	0.0012	B125176	0.0012	0.0010	B126202
Total Uranium (U)	mg/L	<0.00010	B126140	<0.00010	B125176	<0.00010	0.00010	B126202
Total Vanadium (V)	mg/L	<0.0010	B126140	<0.0010	B125176	<0.0010	0.0010	B126202

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS567		BZS568		BZS569		
Sampling Date		2023/09/19 08:20		2023/09/19 09:25		2023/09/19 15:00		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	**CL-4 SFC**	**QC Batch**	**C-L4 BTM**	**QC Batch**	**SW-128**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.010	B126140	0.012	B125176	0.099	0.0030	B126202
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS570	BZS571	BZS572		BZS573		
Sampling Date		2023/09/19 14:00	2023/09/19 13:00	2023/09/19		2023/09/19 08:10		
COC Number		7056253-01-01	7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	SW-129	SW-130	TRIP BLANK	QC Batch	CL-5 SFC	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.040	0.033	<0.020	B118962	0.031	0.020	B118961
Total Aluminum (Al)	mg/L	0.059	0.054	<0.0030	B126140	0.055	0.0030	B126140
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B126140	<0.00060	0.00060	B126140
Total Arsenic (As)	mg/L	0.00059	0.00050	<0.00020	B126140	0.00044	0.00020	B126140
Total Barium (Ba)	mg/L	0.010	0.011	<0.010	B126146	0.010	0.010	B126146
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B126140	<0.0010	0.0010	B126140
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	B126146	<0.020	0.020	B126146
Total Calcium (Ca)	mg/L	13	13	<0.30	B126146	12	0.30	B126146
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B126140	<0.0010	0.0010	B126140
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B126140	<0.00030	0.00030	B126140
Total Copper (Cu)	mg/L	0.0065	0.0047	<0.0010	B126140	0.0053	0.0010	B126140
Total Iron (Fe)	mg/L	0.38	0.31	<0.060	B126146	0.30	0.060	B126146
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	B126140	0.0043	0.00020	B126140
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B126146	<0.020	0.020	B126146
Total Magnesium (Mg)	mg/L	3.6	3.6	<0.20	B126146	3.5	0.20	B126146
Total Manganese (Mn)	mg/L	0.022	0.019	<0.0040	B126146	0.017	0.0040	B126146
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B126140	0.00027	0.00020	B126140
Total Nickel (Ni)	mg/L	0.00079	0.00057	<0.00050	B126140	0.00071	0.00050	B126140
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B126146	<0.10	0.10	B126146
Total Potassium (K)	mg/L	1.6	1.6	<0.30	B126146	1.6	0.30	B126146
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B126140	<0.00020	0.00020	B126140
Total Silicon (Si)	mg/L	0.94	0.90	<0.50	B126146	0.86	0.50	B126146
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B126140	<0.00010	0.00010	B126140
Total Sodium (Na)	mg/L	2.1	2.2	<0.50	B126146	2.1	0.50	B126146
Total Strontium (Sr)	mg/L	0.029	0.030	<0.020	B126146	0.029	0.020	B126146
Total Sulphur (S)	mg/L	6.7	6.1	<0.20	B126146	5.9	0.20	B126146
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B126140	<0.00020	0.00020	B126140
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B126140	<0.0010	0.0010	B126140
Total Titanium (Ti)	mg/L	0.0018	0.0017	<0.0010	B126140	0.0016	0.0010	B126140
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B126140	<0.00010	0.00010	B126140
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B126140	<0.0010	0.0010	B126140

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS570	BZS571	BZS572		BZS573		
Sampling Date		2023/09/19 14:00	2023/09/19 13:00	2023/09/19		2023/09/19 08:10		
COC Number		7056253-01-01	7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	**SW-129**	**SW-130**	**TRIP BLANK**	**QC Batch**	**CL-5 SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.014	0.0099	<0.0030	B126140	0.0097	0.0030	B126140
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS574		BZS575		BZS576		
Sampling Date		2023/09/19 08:15		2023/09/19 08:00		2023/09/19 08:05		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CL-5 BTM	QC Batch	CL-6 SFC	QC Batch	CL-6 BTM	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.045	B118962	0.025	B118961	0.032	0.020	B117254
Total Aluminum (Al)	mg/L	0.076	B126140	0.058	B126202	0.078	0.0030	B126176
Total Antimony (Sb)	mg/L	<0.00060	B126140	<0.00060	B126202	<0.00060	0.00060	B126176
Total Arsenic (As)	mg/L	0.00056	B126140	0.00053	B126202	0.00054	0.00020	B126176
Total Barium (Ba)	mg/L	0.011	B126146	<0.010	B126203	<0.010	0.010	B126183
Total Beryllium (Be)	mg/L	<0.0010	B126140	<0.0010	B126202	<0.0010	0.0010	B126176
Total Boron (B)	mg/L	<0.020	B126146	<0.020	B126203	<0.020	0.020	B126183
Total Calcium (Ca)	mg/L	13	B126146	12	B126203	11	0.30	B126183
Total Chromium (Cr)	mg/L	<0.0010	B126140	<0.0010	B126202	<0.0010	0.0010	B126176
Total Cobalt (Co)	mg/L	<0.00030	B126140	<0.00030	B126202	<0.00030	0.00030	B126176
Total Copper (Cu)	mg/L	0.0062	B126140	0.0042	B126202	0.0057	0.0010	B126176
Total Iron (Fe)	mg/L	0.54	B126146	0.19	B126203	0.22	0.060	B126183
Total Lead (Pb)	mg/L	0.00025	B126140	0.00051	B126202	<0.00020	0.00020	B126176
Total Lithium (Li)	mg/L	<0.020	B126146	<0.020	B126203	<0.020	0.020	B126183
Total Magnesium (Mg)	mg/L	3.6	B126146	3.4	B126203	3.2	0.20	B126183
Total Manganese (Mn)	mg/L	0.035	B126146	0.014	B126203	0.015	0.0040	B126183
Total Molybdenum (Mo)	mg/L	<0.00020	B126140	<0.00020	B126202	<0.00020	0.00020	B126176
Total Nickel (Ni)	mg/L	0.00083	B126140	0.00052	B126202	0.00082	0.00050	B126176
Total Phosphorus (P)	mg/L	<0.10	B126146	<0.10	B126203	<0.10	0.10	B126183
Total Potassium (K)	mg/L	1.6	B126146	1.6	B126203	1.4	0.30	B126183
Total Selenium (Se)	mg/L	<0.00020	B126140	<0.00020	B126202	<0.00020	0.00020	B126176
Total Silicon (Si)	mg/L	1.1	B126146	0.76	B126203	0.77	0.50	B126183
Total Silver (Ag)	mg/L	<0.00010	B126140	<0.00010	B126202	<0.00010	0.00010	B126176
Total Sodium (Na)	mg/L	2.1	B126146	2.2	B126203	2.1	0.50	B126183
Total Strontium (Sr)	mg/L	0.030	B126146	0.026	B126203	0.027	0.020	B126183
Total Sulphur (S)	mg/L	6.3	B126146	5.2	B126203	5.2	0.20	B126183
Total Thallium (Tl)	mg/L	<0.00020	B126140	<0.00020	B126202	<0.00020	0.00020	B126176
Total Tin (Sn)	mg/L	<0.0010	B126140	<0.0010	B126202	<0.0010	0.0010	B126176
Total Titanium (Ti)	mg/L	0.0024	B126140	0.0019	B126202	0.0027	0.0010	B126176
Total Uranium (U)	mg/L	<0.00010	B126140	<0.00010	B126202	<0.00010	0.00010	B126176
Total Vanadium (V)	mg/L	<0.0010	B126140	<0.0010	B126202	<0.0010	0.0010	B126176

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS574		BZS575		BZS576		
Sampling Date		2023/09/19 08:15		2023/09/19 08:00		2023/09/19 08:05		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	**CL-5 BTM**	**QC Batch**	**CL-6 SFC**	**QC Batch**	**CL-6 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.015	B126140	0.0087	B126202	0.012	0.0030	B126176
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS577	BZS578		BZS579	BZS580		
Sampling Date		2023/09/19 08:40	2023/09/19 08:45		2023/09/19 08:30	2023/09/19 09:33		
COC Number		7056253-01-01	7056253-01-01		7056253-01-01	7056253-01-01		
	UNITS	CL-7 SFC	CL-7 BTM	QC Batch	CL-8 SFC	CL-8 BTM	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.041	0.049	B117254	0.034	0.041	0.020	B117254
Total Aluminum (Al)	mg/L	0.055	0.055	B126140	0.056	0.048	0.0030	B126202
Total Antimony (Sb)	mg/L	<0.00060	0.0012	B126140	<0.00060	<0.00060	0.00060	B126202
Total Arsenic (As)	mg/L	0.00053	0.00052	B126140	0.00042	0.00057	0.00020	B126202
Total Barium (Ba)	mg/L	0.010	0.010	B126146	<0.010	0.010	0.010	B126203
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	B126140	<0.0010	<0.0010	0.0010	B126202
Total Boron (B)	mg/L	<0.020	<0.020	B126146	<0.020	<0.020	0.020	B126203
Total Calcium (Ca)	mg/L	13	13	B126146	13	13	0.30	B126203
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	B126140	<0.0010	<0.0010	0.0010	B126202
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	B126140	<0.00030	<0.00030	0.00030	B126202
Total Copper (Cu)	mg/L	0.0064	0.0057	B126140	0.0049	0.0073	0.0010	B126202
Total Iron (Fe)	mg/L	0.38	0.40	B126146	0.34	0.38	0.060	B126203
Total Lead (Pb)	mg/L	<0.00020	<0.00020	B126140	<0.00020	<0.00020	0.00020	B126202
Total Lithium (Li)	mg/L	<0.020	<0.020	B126146	<0.020	<0.020	0.020	B126203
Total Magnesium (Mg)	mg/L	3.5	3.6	B126146	3.4	3.5	0.20	B126203
Total Manganese (Mn)	mg/L	0.023	0.024	B126146	0.025	0.022	0.0040	B126203
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B126140	<0.00020	<0.00020	0.00020	B126202
Total Nickel (Ni)	mg/L	0.00087	0.00054	B126140	0.00055	0.00079	0.00050	B126202
Total Phosphorus (P)	mg/L	<0.10	<0.10	B126146	<0.10	<0.10	0.10	B126203
Total Potassium (K)	mg/L	1.6	1.6	B126146	1.6	1.7	0.30	B126203
Total Selenium (Se)	mg/L	<0.00020	<0.00020	B126140	<0.00020	<0.00020	0.00020	B126202
Total Silicon (Si)	mg/L	0.88	0.96	B126146	0.87	0.93	0.50	B126203
Total Silver (Ag)	mg/L	<0.00010	<0.00010	B126140	<0.00010	<0.00010	0.00010	B126202
Total Sodium (Na)	mg/L	2.1	2.1	B126146	2.2	2.2	0.50	B126203
Total Strontium (Sr)	mg/L	0.029	0.029	B126146	0.027	0.027	0.020	B126203
Total Sulphur (S)	mg/L	6.6	6.7	B126146	6.5	6.4	0.20	B126203
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	B126140	<0.00020	<0.00020	0.00020	B126202
Total Tin (Sn)	mg/L	<0.0010	<0.0010	B126140	<0.0010	<0.0010	0.0010	B126202
Total Titanium (Ti)	mg/L	0.0011	0.0012	B126140	0.0012	0.0015	0.0010	B126202
Total Uranium (U)	mg/L	<0.00010	<0.00010	B126140	<0.00010	<0.00010	0.00010	B126202
Total Vanadium (V)	mg/L	<0.0010	<0.0010	B126140	<0.0010	<0.0010	0.0010	B126202

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS577	BZS578		BZS579	BZS580		
Sampling Date		2023/09/19 08:40	2023/09/19 08:45		2023/09/19 08:30	2023/09/19 09:33		
COC Number		7056253-01-01	7056253-01-01		7056253-01-01	7056253-01-01		
	UNITS	**CL-7 SFC**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**CL-8 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.014	0.016	B126140	0.0097	0.013	0.0030	B126202
RDL = Reportable Detection Limit								

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS581		BZS604		
Sampling Date		2023/09/19 08:50		2023/09/19 08:55		
COC Number		7056253-01-01		7056253-01-01		
	UNITS	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch
Elements						
Total Cadmium (Cd)	ug/L	0.035	B117254	0.045	0.020	B117254
Total Aluminum (Al)	mg/L	0.043	B125176	0.045	0.0030	B126202
Total Antimony (Sb)	mg/L	<0.00060	B125176	<0.00060	0.00060	B126202
Total Arsenic (As)	mg/L	0.00048	B125176	0.00051	0.00020	B126202
Total Barium (Ba)	mg/L	0.011	B125179	<0.010	0.010	B126203
Total Beryllium (Be)	mg/L	<0.0010	B125176	<0.0010	0.0010	B126202
Total Boron (B)	mg/L	<0.020	B125179	<0.020	0.020	B126203
Total Calcium (Ca)	mg/L	14	B125179	13	0.30	B126203
Total Chromium (Cr)	mg/L	<0.0010	B125176	<0.0010	0.0010	B126202
Total Cobalt (Co)	mg/L	<0.00030	B125176	<0.00030	0.00030	B126202
Total Copper (Cu)	mg/L	0.0053	B125176	0.0074	0.0010	B126202
Total Iron (Fe)	mg/L	0.38	B125179	0.38	0.060	B126203
Total Lead (Pb)	mg/L	<0.00020	B125176	0.00037	0.00020	B126202
Total Lithium (Li)	mg/L	<0.020	B125179	<0.020	0.020	B126203
Total Magnesium (Mg)	mg/L	3.6	B125179	3.3	0.20	B126203
Total Manganese (Mn)	mg/L	0.029	B125179	0.029	0.0040	B126203
Total Molybdenum (Mo)	mg/L	<0.00020	B125176	<0.00020	0.00020	B126202
Total Nickel (Ni)	mg/L	<0.00050	B125176	0.00091	0.00050	B126202
Total Phosphorus (P)	mg/L	<0.10	B125179	<0.10	0.10	B126203
Total Potassium (K)	mg/L	1.7	B125179	1.6	0.30	B126203
Total Selenium (Se)	mg/L	<0.00020	B125176	<0.00020	0.00020	B126202
Total Silicon (Si)	mg/L	0.96	B125179	0.93	0.50	B126203
Total Silver (Ag)	mg/L	<0.00010	B125176	<0.00010	0.00010	B126202
Total Sodium (Na)	mg/L	2.3	B125179	2.2	0.50	B126203
Total Strontium (Sr)	mg/L	0.029	B125179	0.026	0.020	B126203
Total Sulphur (S)	mg/L	6.7	B125179	6.7	0.20	B126203
Total Thallium (Tl)	mg/L	<0.00020	B125176	<0.00020	0.00020	B126202
Total Tin (Sn)	mg/L	<0.0010	B125176	<0.0010	0.0010	B126202
Total Titanium (Ti)	mg/L	<0.0010	B125176	0.0015	0.0010	B126202
Total Uranium (U)	mg/L	<0.00010	B125176	<0.00010	0.00010	B126202
Total Vanadium (V)	mg/L	<0.0010	B125176	<0.0010	0.0010	B126202

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BZS581		BZS604		
Sampling Date		2023/09/19 08:50		2023/09/19 08:55		
COC Number		7056253-01-01		7056253-01-01		
	UNITS	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.011	B125176	0.013	0.0030	B126202
RDL = Reportable Detection Limit						

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Bureau Veritas Job #: C375441
Report Date: 2023/10/02

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS555			BZS555			BZS556		
Sampling Date		2023/09/19 10:15			2023/09/19 10:15			2023/09/19 09:25		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	35	0.50	B118965				180	0.50	B118965
Total Hardness (CaCO3)	mg/L	34.5	0.50	B118968				169	0.50	B118968
Misc. Inorganics										
pH	pH	6.29	N/A	B128890				6.06	N/A	B127330
Total Organic Carbon (C)	mg/L	12	0.50	B124125				7.1	0.50	B124125
Total Suspended Solids	mg/L	1.1	0.99	B123923				2.5	1.0	B123923
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12 (1)	0.50	B127638	13	0.50	B127638	6.5 (1)	0.50	B126651
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B128887				<1.0	1.0	B127324
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B128887				4.8	1.0	B127324
Bicarbonate (HCO3)	mg/L	36	1.0	B128887				5.8	1.0	B127324
Carbonate (CO3)	mg/L	<1.0	1.0	B128887				<1.0	1.0	B127324
Hydroxide (OH)	mg/L	<1.0	1.0	B128887				<1.0	1.0	B127324
Sulphate (SO4)	mg/L	7.0	1.0	B128533				190	5.0	B127115
Physical Properties										
Turbidity	NTU	1.6	0.10	B120760				20	0.10	B120760

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS557			BZS558			BZS558		
Sampling Date		2023/09/19 09:20			2023/09/19 09:30			2023/09/19 09:30		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	SB-2	RDL	QC Batch	CB-1	RDL	QC Batch	CB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	180	0.50	B118965	180	0.50	B118965			
Total Hardness (CaCO3)	mg/L	167	0.50	B118968	171	0.50	B118968			
Misc. Inorganics										
pH	pH	5.97	N/A	B127330	6.02	N/A	B127339			
Total Organic Carbon (C)	mg/L	7.4	0.50	B124193	6.6	0.50	B124125			
Total Suspended Solids	mg/L	4.4	0.99	B123923	2.7	1.0	B123923			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.8 (1)	0.50	B126651	6.6 (1)	0.50	B126651	6.8	0.50	B126651
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B127324	<1.0	1.0	B127335			
Alkalinity (Total as CaCO3)	mg/L	5.6	1.0	B127324	4.5	1.0	B127335			
Bicarbonate (HCO3)	mg/L	6.9	1.0	B127324	5.5	1.0	B127335			
Carbonate (CO3)	mg/L	<1.0	1.0	B127324	<1.0	1.0	B127335			
Hydroxide (OH)	mg/L	<1.0	1.0	B127324	<1.0	1.0	B127335			
Sulphate (SO4)	mg/L	170	5.0	B127144	170	5.0	B127144			
Physical Properties										
Turbidity	NTU	23	0.10	B120760	18	0.10	B120760			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS559		BZS560			BZS560		
Sampling Date		2023/09/19 09:35		2023/09/19 09:40			2023/09/19 09:40		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	CB-2	QC Batch	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	180	B118965	200	0.50	B118965			
Total Hardness (CaCO3)	mg/L	176	B118968	198	0.50	B118346			
Misc. Inorganics									
pH	pH	6.04	B127339	6.05	N/A	B127339			
Total Organic Carbon (C)	mg/L	7.0	B124193	7.0	0.50	B124125			
Total Suspended Solids	mg/L	4.3	B132284	2.7	1.0	B123931	3.1	1.0	B123931
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	6.3 (1)	B126645	6.4 (1)	0.50	B126645			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B127335	<1.0	1.0	B127335			
Alkalinity (Total as CaCO3)	mg/L	4.5	B127335	5.4	1.0	B127335			
Bicarbonate (HCO3)	mg/L	5.5	B127335	6.5	1.0	B127335			
Carbonate (CO3)	mg/L	<1.0	B127335	<1.0	1.0	B127335			
Hydroxide (OH)	mg/L	<1.0	B127335	<1.0	1.0	B127335			
Sulphate (SO4)	mg/L	180	B127148	190	5.0	B127148			
Physical Properties									
Turbidity	NTU	17	B120760	12	0.10	B120760			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS561		BZS562			BZS562		
Sampling Date		2023/09/19 09:45		2023/09/19 09:55			2023/09/19 09:55		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	EB-2	QC Batch	NB-1	RDL	QC Batch	NB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	200	B118965	200	0.50	B118965			
Total Hardness (CaCO3)	mg/L	189	B118346	189	0.50	B118346			
Misc. Inorganics									
pH	pH	6.04	B127330	5.97	N/A	B127330			
Total Organic Carbon (C)	mg/L	6.4	B124193	6.4	0.50	B124125			
Total Suspended Solids	mg/L	1.7	B123931	2.6	1.0	B123931			
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	6.5 (1)	B126651	6.4 (1)	0.50	B126645			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B127324	<1.0	1.0	B127324			
Alkalinity (Total as CaCO3)	mg/L	4.6	B127324	3.9	1.0	B127324			
Bicarbonate (HCO3)	mg/L	5.6	B127324	4.7	1.0	B127324			
Carbonate (CO3)	mg/L	<1.0	B127324	<1.0	1.0	B127324			
Hydroxide (OH)	mg/L	<1.0	B127324	<1.0	1.0	B127324			
Sulphate (SO4)	mg/L	190	B127144	200	5.0	B127144			
Physical Properties									
Turbidity	NTU	11	B120760	15	0.10	B120761	15	0.10	B120761

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS563		BZS564			BZS565		
Sampling Date		2023/09/19 09:50		2023/09/19 10:00			2023/09/19 08:30		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	NB-2	QC Batch	CLD	RDL	QC Batch	CL-3 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	200	B118965	200	0.50	B118965	48	0.50	B118965
Total Hardness (CaCO3)	mg/L	187	B118346	201	0.50	B118346	48.8	0.50	B118346
Misc. Inorganics									
pH	pH	6.02	B127339	6.00	N/A	B127339	6.28	N/A	B127232
Total Organic Carbon (C)	mg/L	6.1	B124125	6.9	0.50	B124193	9.7	0.50	B124193
Total Suspended Solids	mg/L	2.8	B123931	2.9	1.0	B123931	<1.0	1.0	B123931
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	6.3 (1)	B126645	6.4 (1)	0.50	B126645	9.9 (1)	0.50	B126651
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B127335	<1.0	1.0	B127335	<1.0	1.0	B127212
Alkalinity (Total as CaCO3)	mg/L	4.1	B127335	4.1	1.0	B127335	29	1.0	B127212
Bicarbonate (HCO3)	mg/L	5.0	B127335	5.1	1.0	B127335	35	1.0	B127212
Carbonate (CO3)	mg/L	<1.0	B127335	<1.0	1.0	B127335	<1.0	1.0	B127212
Hydroxide (OH)	mg/L	<1.0	B127335	<1.0	1.0	B127335	<1.0	1.0	B127212
Sulphate (SO4)	mg/L	190	B127148	190	5.0	B127148	23	1.0	B127115
Physical Properties									
Turbidity	NTU	15	B120761	15	0.10	B120761	2.1	0.10	B120761

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS566		BZS567		BZS568		
Sampling Date		2023/09/19 08:38		2023/09/19 08:20		2023/09/19 09:25		
COC Number		7056253-01-01		7056253-01-01		7056253-01-01		
	UNITS	CL-3 BTM	QC Batch	CL-4 SFC	QC Batch	C-L4 BTM	RDL	QC Batch
Calculated Parameters								
Hardness (CaCO3)	mg/L	49	B118965	48	B118965	49	0.50	B118965
Total Hardness (CaCO3)	mg/L	47.9	B118346	46.1	B118346	46.1	0.50	B118346
Misc. Inorganics								
pH	pH	6.44	B127330	6.52	B127330	6.51	N/A	B127330
Total Organic Carbon (C)	mg/L	9.1	B124125	9.2	B124125	9.3	0.50	B124125
Total Suspended Solids	mg/L	1.4	B123931	<1.0	B123931	1.4	1.0	B123931
Lab Filtered Inorganics								
Dissolved Organic Carbon (C)	mg/L	9.2 (1)	B126645	9.4 (1)	B126651	9.4 (1)	0.50	B126645
Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	B127324	<1.0	B127324	<1.0	1.0	B127324
Alkalinity (Total as CaCO3)	mg/L	29	B127324	28	B127324	27	1.0	B127324
Bicarbonate (HCO3)	mg/L	36	B127324	35	B127324	33	1.0	B127324
Carbonate (CO3)	mg/L	<1.0	B127324	<1.0	B127324	<1.0	1.0	B127324
Hydroxide (OH)	mg/L	<1.0	B127324	<1.0	B127324	<1.0	1.0	B127324
Sulphate (SO4)	mg/L	22	B127144	20	B127115	22	1.0	B127481
Physical Properties								
Turbidity	NTU	2.5	B120761	2.5	B120761	2.9	0.10	B120761

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C375441
Report Date: 2023/10/02

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS568			BZS569			BZS570		
Sampling Date		2023/09/19 09:25			2023/09/19 15:00			2023/09/19 14:00		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	C-L4 BTM Lab-Dup	RDL	QC Batch	SW-128	RDL	QC Batch	SW-129	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				180	0.50	B118965	49	0.50	B118965
Total Hardness (CaCO3)	mg/L				173	0.50	B118346	47.0	0.50	B118346
Misc. Inorganics										
pH	pH				6.06	N/A	B127330	6.29	N/A	B127232
Total Organic Carbon (C)	mg/L				7.3	0.50	B124193	9.2	0.50	B124125
Total Suspended Solids	mg/L				3.7	1.0	B123931	<1.0	1.0	B123931
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L				6.6 (1)	0.50	B126651	9.5 (1)	0.50	B126651
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B127324	<1.0	1.0	B127212
Alkalinity (Total as CaCO3)	mg/L				4.6	1.0	B127324	33	1.0	B127212
Bicarbonate (HCO3)	mg/L				5.7	1.0	B127324	40	1.0	B127212
Carbonate (CO3)	mg/L				<1.0	1.0	B127324	<1.0	1.0	B127212
Hydroxide (OH)	mg/L				<1.0	1.0	B127324	<1.0	1.0	B127212
Sulphate (SO4)	mg/L	22	1.0	B127481	170	5.0	B127144	23	1.0	B127115
Physical Properties										
Turbidity	NTU				16	0.10	B120761	2.4	0.10	B120761

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C375441
Report Date: 2023/10/02

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS571			BZS571			BZS572		
Sampling Date		2023/09/19 13:00			2023/09/19 13:00			2023/09/19		
COC Number		7056253-01-01			7056253-01-01			7056253-01-01		
	UNITS	SW-130	RDL	QC Batch	SW-130 Lab-Dup	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	48	0.50	B118965				<0.50	0.50	B118965
Total Hardness (CaCO3)	mg/L	47.0	0.50	B118346				<0.50	0.50	B118346
Misc. Inorganics										
pH	pH	6.28	N/A	B127232				4.96	N/A	B127330
Total Organic Carbon (C)	mg/L	9.0	0.50	B124193	9.3	0.50	B124193	<0.50	0.50	B124193
Total Suspended Solids	mg/L	<1.0	1.0	B123931				<1.0	1.0	B123931
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.4 (1)	0.50	B126651				<0.50 (1)	0.50	B126651
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B127212				<1.0	1.0	B127324
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B127212				<1.0	1.0	B127324
Bicarbonate (HCO3)	mg/L	35	1.0	B127212				<1.0	1.0	B127324
Carbonate (CO3)	mg/L	<1.0	1.0	B127212				<1.0	1.0	B127324
Hydroxide (OH)	mg/L	<1.0	1.0	B127212				<1.0	1.0	B127324
Sulphate (SO4)	mg/L	19	1.0	B127115				<1.0	1.0	B127144
Physical Properties										
Turbidity	NTU	2.2	0.10	B120761				<0.10	0.10	B120761

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS573		BZS574			BZS575		
Sampling Date		2023/09/19 08:10		2023/09/19 08:15			2023/09/19 08:00		
COC Number		7056253-01-01		7056253-01-01			7056253-01-01		
	UNITS	CL-5 SFC	QC Batch	CL-5 BTM	RDL	QC Batch	CL-6 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	47	B118965	48	0.50	B118965	45	0.50	B118965
Total Hardness (CaCO3)	mg/L	45.1	B118346	46.6	0.50	B118346	43.3	0.50	B118346
Misc. Inorganics									
pH	pH	6.53	B127330	6.50	N/A	B127339	6.52	N/A	B127330
Total Organic Carbon (C)	mg/L	9.3	B124193	9.5	0.50	B124125	9.3	0.50	B124193
Total Suspended Solids	mg/L	1.3	B123931	1.1	1.0	B123931	<0.99	0.99	B123931
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	9.8 (1)	B126645	9.4 (1)	0.50	B126645	7.9 (1)	0.50	B126645
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B127324	<1.0	1.0	B127335	<1.0	1.0	B127324
Alkalinity (Total as CaCO3)	mg/L	29	B127324	29	1.0	B127335	29	1.0	B127324
Bicarbonate (HCO3)	mg/L	35	B127324	36	1.0	B127335	35	1.0	B127324
Carbonate (CO3)	mg/L	<1.0	B127324	<1.0	1.0	B127335	<1.0	1.0	B127324
Hydroxide (OH)	mg/L	<1.0	B127324	<1.0	1.0	B127335	<1.0	1.0	B127324
Sulphate (SO4)	mg/L	20	B127148	20	1.0	B127144	16	1.0	B127148
Physical Properties									
Turbidity	NTU	2.2	B120761	3.7	0.10	B120761	2.3	0.10	B120761

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C375441
Report Date: 2023/10/02

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS576			BZS577	BZS578		BZS579		
Sampling Date		2023/09/19 08:05			2023/09/19 08:40	2023/09/19 08:45		2023/09/19 08:30		
COC Number		7056253-01-01			7056253-01-01	7056253-01-01		7056253-01-01		
	UNITS	**CL-6 BTM**	**RDL**	**QC Batch**	**CL-7 SFC**	**CL-7 BTM**	**QC Batch**	**CL-8 SFC**	**RDL**	**QC Batch**
Calculated Parameters										
Hardness (CaCO3)	mg/L	45	0.50	B118374	48	49	B118965	49	0.50	B118965
Total Hardness (CaCO3)	mg/L	41.1	0.50	B118346	46.5	47.4	B118346	46.0	0.50	B118346
Misc. Inorganics										
pH	pH	6.52	N/A	B127330	6.27	6.28	B127232	6.38	N/A	B127330
Total Organic Carbon (C)	mg/L	9.0	0.50	B124193	8.8	9.9	B124193	9.2	0.50	B124193
Total Suspended Solids	mg/L	1.5	1.0	B123931	1.2	1.5	B123931	<1.0	1.0	B123931
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.5 (1)	0.50	B126651	9.2 (1)	9.3 (1)	B126651	9.3 (1)	0.50	B126645
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B127324	<1.0	<1.0	B127212	<1.0	1.0	B127324
Alkalinity (Total as CaCO3)	mg/L	28	1.0	B127324	30	31	B127212	28	1.0	B127324
Bicarbonate (HCO3)	mg/L	34	1.0	B127324	36	37	B127212	34	1.0	B127324
Carbonate (CO3)	mg/L	<1.0	1.0	B127324	<1.0	<1.0	B127212	<1.0	1.0	B127324
Hydroxide (OH)	mg/L	<1.0	1.0	B127324	<1.0	<1.0	B127212	<1.0	1.0	B127324
Chloride (Cl)	mg/L	<1.0	1.0	B127144						
Sulphate (SO4)	mg/L	17	1.0	B127144	22	23	B127115	21	1.0	B127148
Physical Properties										
Turbidity	NTU	1.6	0.10	B120761	2.4	2.5	B120761	2.5	0.10	B120761

RDL = Reportable Detection Limit
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS579			BZS580		BZS581		
Sampling Date		2023/09/19 08:30			2023/09/19 09:33		2023/09/19 08:50		
COC Number		7056253-01-01			7056253-01-01		7056253-01-01		
	UNITS	CL-8 SFC Lab-Dup	RDL	QC Batch	CL-8 BTM	QC Batch	CL-2 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L				49	B118374	49	0.50	B118374
Total Hardness (CaCO3)	mg/L				46.8	B118346	48.7	0.50	B118346
Misc. Inorganics									
pH	pH	6.43	N/A	B127330	6.52	B127330	6.51	N/A	B127330
Total Organic Carbon (C)	mg/L				8.9	B124125	9.8	0.50	B124125
Total Suspended Solids	mg/L				1.0	B123935	<1.0	1.0	B123935
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L				9.5 (1)	B126651	9.3 (1)	0.50	B126651
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B127324	<1.0	B127324	<1.0	1.0	B127324
Alkalinity (Total as CaCO3)	mg/L	31	1.0	B127324	28	B127324	27	1.0	B127324
Bicarbonate (HCO3)	mg/L	37	1.0	B127324	34	B127324	33	1.0	B127324
Carbonate (CO3)	mg/L	<1.0	1.0	B127324	<1.0	B127324	<1.0	1.0	B127324
Hydroxide (OH)	mg/L	<1.0	1.0	B127324	<1.0	B127324	<1.0	1.0	B127324
Sulphate (SO4)	mg/L				22	B127144	22	1.0	B127115
Physical Properties									
Turbidity	NTU				2.5	B120761	2.2	0.10	B120761

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BZS604			BZS604		
Sampling Date		2023/09/19 08:55			2023/09/19 08:55		
COC Number		7056253-01-01			7056253-01-01		
	UNITS	CL-2 BTM	RDL	QC Batch	CL-2 BTM Lab-Dup	RDL	QC Batch
Calculated Parameters							
Hardness (CaCO3)	mg/L	50	0.50	B118374			
Total Hardness (CaCO3)	mg/L	45.7	0.50	B118346			
Misc. Inorganics							
pH	pH	6.53	N/A	B127330			
Total Organic Carbon (C)	mg/L	9.1	0.50	B124193			
Total Suspended Solids	mg/L	<1.0	1.0	B123935			
Lab Filtered Inorganics							
Dissolved Organic Carbon (C)	mg/L	9.4 (1)	0.50	B126651			
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B127324			
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B127324			
Bicarbonate (HCO3)	mg/L	36	1.0	B127324			
Carbonate (CO3)	mg/L	<1.0	1.0	B127324			
Hydroxide (OH)	mg/L	<1.0	1.0	B127324			
Sulphate (SO4)	mg/L	22	1.0	B127144			
Physical Properties							
Turbidity	NTU	2.1	0.10	B120762	2.1	0.10	B120762

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.0°C
Package 2	1.4°C
Package 3	1.0°C
Package 4	0.6°C

Sample BZS559 [CB-2] : Sample was analyzed past method specified hold time for Turbidity. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR).

Sample BZS571, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BZS573, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B120760	Turbidity	2023/09/22			103	80 - 120	<0.10	NTU	1.3	20
B120761	Turbidity	2023/09/22			103	80 - 120	<0.10	NTU	1.3	20
B120762	Turbidity	2023/09/22			103	80 - 120	<0.10	NTU	1.9	20
B123923	Total Suspended Solids	2023/09/27	NC	80 - 120	103	80 - 120	<1.0	mg/L	3.8	20
B123931	Total Suspended Solids	2023/09/27	92	80 - 120	102	80 - 120	<1.0	mg/L	16	20
B123935	Total Suspended Solids	2023/09/27	95	80 - 120	93	80 - 120	<1.0	mg/L	7.1	20
B124125	Total Organic Carbon (C)	2023/09/27	NC	80 - 120	101	80 - 120	<0.50	mg/L	11	20
B124193	Total Organic Carbon (C)	2023/09/27	102	80 - 120	92	80 - 120	<0.50	mg/L	3.8	20
B124627	Total Aluminum (Al)	2023/09/27	97	80 - 120	97	80 - 120	<0.0030	mg/L	3.4	20
B124627	Total Antimony (Sb)	2023/09/27	97	80 - 120	98	80 - 120	<0.00060	mg/L	NC	20
B124627	Total Arsenic (As)	2023/09/27	93	80 - 120	95	80 - 120	<0.00020	mg/L	7.3	20
B124627	Total Beryllium (Be)	2023/09/27	93	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B124627	Total Chromium (Cr)	2023/09/27	93	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B124627	Total Cobalt (Co)	2023/09/27	95	80 - 120	97	80 - 120	<0.00030	mg/L	NC	20
B124627	Total Copper (Cu)	2023/09/27	94	80 - 120	97	80 - 120	<0.0010	mg/L	4.7	20
B124627	Total Lead (Pb)	2023/09/27	97	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B124627	Total Molybdenum (Mo)	2023/09/27	99	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B124627	Total Nickel (Ni)	2023/09/27	94	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20
B124627	Total Selenium (Se)	2023/09/27	94	80 - 120	95	80 - 120	<0.00020	mg/L	NC	20
B124627	Total Silver (Ag)	2023/09/27	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B124627	Total Thallium (Tl)	2023/09/27	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B124627	Total Tin (Sn)	2023/09/27	98	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B124627	Total Titanium (Ti)	2023/09/27	92	80 - 120	92	80 - 120	<0.0010	mg/L	4.0	20
B124627	Total Uranium (U)	2023/09/27	95	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20
B124627	Total Vanadium (V)	2023/09/27	94	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B124627	Total Zinc (Zn)	2023/09/27	90	80 - 120	93	80 - 120	<0.0030	mg/L	1.9	20
B124632	Total Barium (Ba)	2023/09/26	95	80 - 120	95	80 - 120	<0.010	mg/L	0.77	20
B124632	Total Boron (B)	2023/09/26	96	80 - 120	95	80 - 120	<0.020	mg/L	NC	20
B124632	Total Calcium (Ca)	2023/09/26	99	80 - 120	96	80 - 120	<0.30	mg/L	1.2	20
B124632	Total Iron (Fe)	2023/09/26	101	80 - 120	102	80 - 120	<0.060	mg/L	1.5	20
B124632	Total Lithium (Li)	2023/09/26	97	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
B124632	Total Magnesium (Mg)	2023/09/26	101	80 - 120	100	80 - 120	<0.20	mg/L	2.3	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B124632	Total Manganese (Mn)	2023/09/26	103	80 - 120	102	80 - 120	<0.0040	mg/L	1.9	20
B124632	Total Phosphorus (P)	2023/09/26	98	80 - 120	96	80 - 120	<0.10	mg/L	NC	20
B124632	Total Potassium (K)	2023/09/26	99	80 - 120	97	80 - 120	<0.30	mg/L	1.7	20
B124632	Total Silicon (Si)	2023/09/26	97	80 - 120	95	80 - 120	<0.50	mg/L	2.9	20
B124632	Total Sodium (Na)	2023/09/26	NC	80 - 120	98	80 - 120	<0.50	mg/L	3.6	20
B124632	Total Strontium (Sr)	2023/09/26	92	80 - 120	92	80 - 120	<0.020	mg/L	0.71	20
B124632	Total Sulphur (S)	2023/09/26	95	80 - 120	93	80 - 120	<0.20	mg/L	2.5	20
B125176	Total Aluminum (Al)	2023/09/27	115	80 - 120	100	80 - 120	<0.0030	mg/L	14	20
B125176	Total Antimony (Sb)	2023/09/27	114	80 - 120	103	80 - 120	<0.00060	mg/L	NC	20
B125176	Total Arsenic (As)	2023/09/27	108	80 - 120	100	80 - 120	<0.00020	mg/L	1.4	20
B125176	Total Beryllium (Be)	2023/09/27	109	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B125176	Total Chromium (Cr)	2023/09/27	108	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B125176	Total Cobalt (Co)	2023/09/27	109	80 - 120	99	80 - 120	<0.00030	mg/L	NC	20
B125176	Total Copper (Cu)	2023/09/27	109	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B125176	Total Lead (Pb)	2023/09/27	111	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B125176	Total Molybdenum (Mo)	2023/09/27	113	80 - 120	100	80 - 120	<0.00020	mg/L	0.87	20
B125176	Total Nickel (Ni)	2023/09/27	107	80 - 120	98	80 - 120	<0.00050	mg/L	1.2	20
B125176	Total Selenium (Se)	2023/09/27	110	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B125176	Total Silver (Ag)	2023/09/27	111	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B125176	Total Thallium (Tl)	2023/09/27	112	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B125176	Total Tin (Sn)	2023/09/27	111	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B125176	Total Titanium (Ti)	2023/09/27	109	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B125176	Total Uranium (U)	2023/09/27	110	80 - 120	98	80 - 120	<0.00010	mg/L	1.9	20
B125176	Total Vanadium (V)	2023/09/27	109	80 - 120	99	80 - 120	<0.0010	mg/L	1.0	20
B125176	Total Zinc (Zn)	2023/09/27	106	80 - 120	98	80 - 120	<0.0030	mg/L	1.2	20
B125179	Total Barium (Ba)	2023/09/27	101	80 - 120	103	80 - 120	<0.010	mg/L	2.3	20
B125179	Total Boron (B)	2023/09/27	100	80 - 120	94	80 - 120	<0.020	mg/L	3.5	20
B125179	Total Calcium (Ca)	2023/09/27	NC	80 - 120	98	80 - 120	<0.30	mg/L	2.5	20
B125179	Total Iron (Fe)	2023/09/27	NC	80 - 120	97	80 - 120	<0.060	mg/L	NC	20
B125179	Total Lithium (Li)	2023/09/27	102	80 - 120	101	80 - 120	<0.020	mg/L	9.9	20
B125179	Total Magnesium (Mg)	2023/09/27	101	80 - 120	104	80 - 120	<0.20	mg/L	3.3	20
B125179	Total Manganese (Mn)	2023/09/27	101	80 - 120	97	80 - 120	<0.0040	mg/L	2.7	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B125179	Total Phosphorus (P)	2023/09/27	105	80 - 120	98	80 - 120	<0.10	mg/L	11	20
B125179	Total Potassium (K)	2023/09/27	96	80 - 120	94	80 - 120	<0.30	mg/L	3.3	20
B125179	Total Silicon (Si)	2023/09/27	98	80 - 120	93	80 - 120	<0.50	mg/L	1.8	20
B125179	Total Sodium (Na)	2023/09/27	99	80 - 120	98	80 - 120	<0.50	mg/L	2.2	20
B125179	Total Strontium (Sr)	2023/09/27	97	80 - 120	98	80 - 120	<0.020	mg/L	0.67	20
B125179	Total Sulphur (S)	2023/09/27	NC	80 - 120	92	80 - 120	<0.20	mg/L	3.7	20
B126140	Total Aluminum (Al)	2023/09/27	117	80 - 120	114	80 - 120	<0.0030	mg/L	18	20
B126140	Total Antimony (Sb)	2023/09/27	111	80 - 120	118	80 - 120	<0.00060	mg/L	NC	20
B126140	Total Arsenic (As)	2023/09/27	116	80 - 120	111	80 - 120	<0.00020	mg/L	2.9	20
B126140	Total Beryllium (Be)	2023/09/27	113	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B126140	Total Chromium (Cr)	2023/09/27	115	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B126140	Total Cobalt (Co)	2023/09/27	114	80 - 120	110	80 - 120	<0.00030	mg/L	NC	20
B126140	Total Copper (Cu)	2023/09/27	114	80 - 120	110	80 - 120	<0.0010	mg/L	13	20
B126140	Total Lead (Pb)	2023/09/27	115	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B126140	Total Molybdenum (Mo)	2023/09/27	111	80 - 120	115	80 - 120	<0.00020	mg/L	NC	20
B126140	Total Nickel (Ni)	2023/09/27	113	80 - 120	109	80 - 120	<0.00050	mg/L	14	20
B126140	Total Selenium (Se)	2023/09/27	114	80 - 120	111	80 - 120	<0.00020	mg/L	NC	20
B126140	Total Silver (Ag)	2023/09/27	117	80 - 120	111	80 - 120	<0.00010	mg/L	NC	20
B126140	Total Thallium (Tl)	2023/09/27	114	80 - 120	110	80 - 120	<0.00020	mg/L	NC	20
B126140	Total Tin (Sn)	2023/09/27	119	80 - 120	113	80 - 120	<0.0010	mg/L	NC	20
B126140	Total Titanium (Ti)	2023/09/27	116	80 - 120	114	80 - 120	<0.0010	mg/L	13	20
B126140	Total Uranium (U)	2023/09/27	116	80 - 120	109	80 - 120	<0.00010	mg/L	NC	20
B126140	Total Vanadium (V)	2023/09/27	116	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B126140	Total Zinc (Zn)	2023/09/27	113	80 - 120	108	80 - 120	<0.0030	mg/L	NC	20
B126146	Total Barium (Ba)	2023/09/27	100	80 - 120	97	80 - 120	<0.010	mg/L	1.9	20
B126146	Total Boron (B)	2023/09/27	99	80 - 120	95	80 - 120	<0.020	mg/L	NC	20
B126146	Total Calcium (Ca)	2023/09/27	96	80 - 120	95	80 - 120	<0.30	mg/L	1.8	20
B126146	Total Iron (Fe)	2023/09/27	97	80 - 120	100	80 - 120	<0.060	mg/L	2.8	20
B126146	Total Lithium (Li)	2023/09/27	96	80 - 120	93	80 - 120	<0.020	mg/L	NC	20
B126146	Total Magnesium (Mg)	2023/09/27	102	80 - 120	100	80 - 120	<0.20	mg/L	1.8	20
B126146	Total Manganese (Mn)	2023/09/27	103	80 - 120	103	80 - 120	<0.0040	mg/L	3.1	20
B126146	Total Phosphorus (P)	2023/09/27	96	80 - 120	94	80 - 120	<0.10	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B126146	Total Potassium (K)	2023/09/27	100	80 - 120	98	80 - 120	<0.30	mg/L	3.3	20
B126146	Total Silicon (Si)	2023/09/27	96	80 - 120	94	80 - 120	<0.50	mg/L	3.0	20
B126146	Total Sodium (Na)	2023/09/27	98	80 - 120	95	80 - 120	<0.50	mg/L	1.5	20
B126146	Total Strontium (Sr)	2023/09/27	95	80 - 120	92	80 - 120	<0.020	mg/L	0.67	20
B126146	Total Sulphur (S)	2023/09/27	94	80 - 120	92	80 - 120	<0.20	mg/L	3.5	20
B126176	Total Aluminum (Al)	2023/09/27	123 (1)	80 - 120	105	80 - 120	<0.0030	mg/L	8.0	20
B126176	Total Antimony (Sb)	2023/09/27	102	80 - 120	88	80 - 120	<0.00060	mg/L	NC	20
B126176	Total Arsenic (As)	2023/09/27	108	80 - 120	98	80 - 120	<0.00020	mg/L	5.8	20
B126176	Total Beryllium (Be)	2023/09/27	110	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B126176	Total Chromium (Cr)	2023/09/27	107	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B126176	Total Cobalt (Co)	2023/09/27	107	80 - 120	98	80 - 120	<0.00030	mg/L	NC	20
B126176	Total Copper (Cu)	2023/09/27	103	80 - 120	98	80 - 120	<0.0010	mg/L	54 (1)	20
B126176	Total Lead (Pb)	2023/09/27	109	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B126176	Total Molybdenum (Mo)	2023/09/27	107	80 - 120	89	80 - 120	<0.00020	mg/L	NC	20
B126176	Total Nickel (Ni)	2023/09/27	104	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20
B126176	Total Selenium (Se)	2023/09/27	104	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B126176	Total Silver (Ag)	2023/09/27	111	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B126176	Total Thallium (Tl)	2023/09/27	110	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B126176	Total Tin (Sn)	2023/09/27	105	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
B126176	Total Titanium (Ti)	2023/09/27	102	80 - 120	86	80 - 120	<0.0010	mg/L	19	20
B126176	Total Uranium (U)	2023/09/27	110	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B126176	Total Vanadium (V)	2023/09/27	109	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B126176	Total Zinc (Zn)	2023/09/27	101	80 - 120	94	80 - 120	<0.0030	mg/L	10	20
B126183	Total Barium (Ba)	2023/09/28	97	80 - 120	98	80 - 120	<0.010	mg/L	0	20
B126183	Total Boron (B)	2023/09/28	98	80 - 120	98	80 - 120	<0.020	mg/L	NC	20
B126183	Total Calcium (Ca)	2023/09/28	NC	80 - 120	100	80 - 120	<0.30	mg/L	0.41	20
B126183	Total Iron (Fe)	2023/09/28	NC	80 - 120	107	80 - 120	<0.060	mg/L	0.50	20
B126183	Total Lithium (Li)	2023/09/28	96	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B126183	Total Magnesium (Mg)	2023/09/28	98	80 - 120	99	80 - 120	<0.20	mg/L	0.25	20
B126183	Total Manganese (Mn)	2023/09/28	105	80 - 120	107	80 - 120	<0.0040	mg/L	0.33	20
B126183	Total Phosphorus (P)	2023/09/28	98	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B126183	Total Potassium (K)	2023/09/28	99	80 - 120	98	80 - 120	<0.30	mg/L	0.30	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B126183	Total Silicon (Si)	2023/09/28	97	80 - 120	98	80 - 120	<0.50	mg/L	0.88	20
B126183	Total Sodium (Na)	2023/09/28	101	80 - 120	101	80 - 120	<0.50	mg/L	0.14	20
B126183	Total Strontium (Sr)	2023/09/28	92	80 - 120	95	80 - 120	<0.020	mg/L	0.70	20
B126183	Total Sulphur (S)	2023/09/28	NC	80 - 120	95	80 - 120	<0.20	mg/L	0.77	20
B126202	Total Aluminum (Al)	2023/09/28	NC	80 - 120	105	80 - 120	<0.0030	mg/L	5.2	20
B126202	Total Antimony (Sb)	2023/09/28	102	80 - 120	100	80 - 120	<0.00060	mg/L	NC	20
B126202	Total Arsenic (As)	2023/09/28	98	80 - 120	99	80 - 120	<0.00020	mg/L	6.4	20
B126202	Total Beryllium (Be)	2023/09/28	98	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B126202	Total Chromium (Cr)	2023/09/28	97	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B126202	Total Cobalt (Co)	2023/09/28	96	80 - 120	97	80 - 120	<0.00030	mg/L	NC	20
B126202	Total Copper (Cu)	2023/09/28	95	80 - 120	99	80 - 120	<0.0010	mg/L	12	20
B126202	Total Lead (Pb)	2023/09/28	99	80 - 120	101	80 - 120	<0.00020	mg/L	9.6	20
B126202	Total Molybdenum (Mo)	2023/09/28	102	80 - 120	99	80 - 120	<0.00020	mg/L	2.8	20
B126202	Total Nickel (Ni)	2023/09/28	96	80 - 120	97	80 - 120	<0.00050	mg/L	18	20
B126202	Total Selenium (Se)	2023/09/28	97	80 - 120	99	80 - 120	<0.00020	mg/L	14	20
B126202	Total Silver (Ag)	2023/09/28	99	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B126202	Total Thallium (Tl)	2023/09/28	99	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B126202	Total Tin (Sn)	2023/09/28	102	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B126202	Total Titanium (Ti)	2023/09/28	97	80 - 120	96	80 - 120	<0.0010	mg/L	8.3	20
B126202	Total Uranium (U)	2023/09/28	99	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B126202	Total Vanadium (V)	2023/09/28	98	80 - 120	97	80 - 120	<0.0010	mg/L	14	20
B126202	Total Zinc (Zn)	2023/09/28	94	80 - 120	96	80 - 120	<0.0030	mg/L	1.7	20
B126203	Total Barium (Ba)	2023/09/27	104	80 - 120	102	80 - 120	<0.010	mg/L	17	20
B126203	Total Boron (B)	2023/09/27	98	80 - 120	97	80 - 120	<0.020	mg/L	4.0	20
B126203	Total Calcium (Ca)	2023/09/27	NC	80 - 120	103	80 - 120	<0.30	mg/L	5.4	20
B126203	Total Iron (Fe)	2023/09/27	NC	80 - 120	105	80 - 120	<0.060	mg/L	3.4	20
B126203	Total Lithium (Li)	2023/09/27	105	80 - 120	106	80 - 120	<0.020	mg/L	10	20
B126203	Total Magnesium (Mg)	2023/09/27	107	80 - 120	107	80 - 120	<0.20	mg/L	4.7	20
B126203	Total Manganese (Mn)	2023/09/27	102	80 - 120	103	80 - 120	<0.0040	mg/L	3.1	20
B126203	Total Phosphorus (P)	2023/09/27	103	80 - 120	104	80 - 120	<0.10	mg/L	NC	20
B126203	Total Potassium (K)	2023/09/27	100	80 - 120	100	80 - 120	<0.30	mg/L	7.8	20
B126203	Total Silicon (Si)	2023/09/27	98	80 - 120	99	80 - 120	<0.50	mg/L	3.2	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B126203	Total Sodium (Na)	2023/09/27	104	80 - 120	104	80 - 120	<0.50	mg/L	5.4	20
B126203	Total Strontium (Sr)	2023/09/27	100	80 - 120	98	80 - 120	<0.020	mg/L	3.2	20
B126203	Total Sulphur (S)	2023/09/27	NC	80 - 120	98	80 - 120	<0.20	mg/L	3.3	20
B126627	Total Aluminum (Al)	2023/09/28	119	80 - 120	110	80 - 120	<0.0030	mg/L	2.3	20
B126627	Total Antimony (Sb)	2023/09/28	119	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B126627	Total Arsenic (As)	2023/09/28	116	80 - 120	113	80 - 120	<0.00020	mg/L	NC	20
B126627	Total Beryllium (Be)	2023/09/28	113	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B126627	Total Chromium (Cr)	2023/09/28	113	80 - 120	111	80 - 120	<0.0010	mg/L	2.7	20
B126627	Total Cobalt (Co)	2023/09/28	113	80 - 120	111	80 - 120	<0.00030	mg/L	NC	20
B126627	Total Copper (Cu)	2023/09/28	113	80 - 120	111	80 - 120	<0.0010	mg/L	15	20
B126627	Total Lead (Pb)	2023/09/28	117	80 - 120	113	80 - 120	<0.00020	mg/L	12	20
B126627	Total Molybdenum (Mo)	2023/09/28	118	80 - 120	113	80 - 120	<0.00020	mg/L	15	20
B126627	Total Nickel (Ni)	2023/09/28	112	80 - 120	109	80 - 120	<0.00050	mg/L	NC	20
B126627	Total Selenium (Se)	2023/09/28	119	80 - 120	115	80 - 120	<0.00020	mg/L	2.3	20
B126627	Total Silver (Ag)	2023/09/28	115	80 - 120	111	80 - 120	<0.00010	mg/L	NC	20
B126627	Total Thallium (Tl)	2023/09/28	116	80 - 120	113	80 - 120	<0.00020	mg/L	NC	20
B126627	Total Tin (Sn)	2023/09/28	119	80 - 120	114	80 - 120	<0.0010	mg/L	NC	20
B126627	Total Titanium (Ti)	2023/09/28	114	80 - 120	110	80 - 120	<0.0010	mg/L	8.6	20
B126627	Total Uranium (U)	2023/09/28	114	80 - 120	111	80 - 120	<0.00010	mg/L	3.9	20
B126627	Total Vanadium (V)	2023/09/28	113	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B126627	Total Zinc (Zn)	2023/09/28	116	80 - 120	111	80 - 120	<0.0030	mg/L	NC	20
B126645	Dissolved Organic Carbon (C)	2023/09/27	91	80 - 120	98	80 - 120	<0.50	mg/L	16	20
B126651	Dissolved Organic Carbon (C)	2023/09/27	95	80 - 120	99	80 - 120	<0.50	mg/L	3.5	20
B126662	Total Barium (Ba)	2023/09/27	104	80 - 120	103	80 - 120	<0.010	mg/L	0.63	20
B126662	Total Boron (B)	2023/09/27	99	80 - 120	98	80 - 120	<0.020	mg/L	3.3	20
B126662	Total Calcium (Ca)	2023/09/27	NC	80 - 120	102	80 - 120	<0.30	mg/L	0.16	20
B126662	Total Iron (Fe)	2023/09/27	NC	80 - 120	104	80 - 120	<0.060	mg/L	2.6	20
B126662	Total Lithium (Li)	2023/09/27	106	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B126662	Total Magnesium (Mg)	2023/09/27	109	80 - 120	106	80 - 120	<0.20	mg/L	2.1	20
B126662	Total Manganese (Mn)	2023/09/27	104	80 - 120	103	80 - 120	<0.0040	mg/L	0.24	20
B126662	Total Phosphorus (P)	2023/09/27	105	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
B126662	Total Potassium (K)	2023/09/27	100	80 - 120	98	80 - 120	<0.30	mg/L	1.4	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B126662	Total Silicon (Si)	2023/09/27	100	80 - 120	100	80 - 120	<0.50	mg/L	3.6	20
B126662	Total Sodium (Na)	2023/09/27	104	80 - 120	102	80 - 120	<0.50	mg/L	0.79	20
B126662	Total Strontium (Sr)	2023/09/27	99	80 - 120	99	80 - 120	<0.020	mg/L	1.1	20
B126662	Total Sulphur (S)	2023/09/27	NC	80 - 120	98	80 - 120	<0.20	mg/L	3.1	20
B126836	Dissolved Barium (Ba)	2023/09/27	97	80 - 120	99	80 - 120	<0.010	mg/L	13	20
B126836	Dissolved Boron (B)	2023/09/27	94	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B126836	Dissolved Calcium (Ca)	2023/09/27	NC	80 - 120	100	80 - 120	<0.30	mg/L	0.65	20
B126836	Dissolved Iron (Fe)	2023/09/27	92	80 - 120	101	80 - 120	<0.060	mg/L	NC	20
B126836	Dissolved Lithium (Li)	2023/09/27	91	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
B126836	Dissolved Magnesium (Mg)	2023/09/27	98	80 - 120	104	80 - 120	<0.20	mg/L	0.77	20
B126836	Dissolved Manganese (Mn)	2023/09/27	97	80 - 120	106	80 - 120	<0.0040	mg/L	1.7	20
B126836	Dissolved Phosphorus (P)	2023/09/27	92	80 - 120	98	80 - 120	<0.10	mg/L	NC	20
B126836	Dissolved Potassium (K)	2023/09/27	97	80 - 120	103	80 - 120	<0.30	mg/L	2.0	20
B126836	Dissolved Silicon (Si)	2023/09/27	87	80 - 120	96	80 - 120	<0.50	mg/L	5.4	20
B126836	Dissolved Sodium (Na)	2023/09/27	95	80 - 120	100	80 - 120	<0.50	mg/L	0.69	20
B126836	Dissolved Strontium (Sr)	2023/09/27	88	80 - 120	95	80 - 120	<0.020	mg/L	1.4	20
B126836	Dissolved Sulphur (S)	2023/09/27	NC	N/A	98	80 - 120	<0.20	mg/L	1.8	20
B126842	Dissolved Barium (Ba)	2023/09/27	96	80 - 120	98	80 - 120	<0.010	mg/L		
B126842	Dissolved Boron (B)	2023/09/27	97	80 - 120	99	80 - 120	<0.020	mg/L		
B126842	Dissolved Calcium (Ca)	2023/09/27	94	80 - 120	99	80 - 120	<0.30	mg/L	0.24	20
B126842	Dissolved Iron (Fe)	2023/09/27	94	80 - 120	100	80 - 120	<0.060	mg/L	NC	20
B126842	Dissolved Lithium (Li)	2023/09/27	95	80 - 120	97	80 - 120	<0.020	mg/L		
B126842	Dissolved Magnesium (Mg)	2023/09/27	102	80 - 120	104	80 - 120	<0.20	mg/L	0.43	20
B126842	Dissolved Manganese (Mn)	2023/09/27	100	80 - 120	105	80 - 120	<0.0040	mg/L	NC	20
B126842	Dissolved Phosphorus (P)	2023/09/27	95	80 - 120	97	80 - 120	<0.10	mg/L		
B126842	Dissolved Potassium (K)	2023/09/27	101	80 - 120	103	80 - 120	<0.30	mg/L	1.0	20
B126842	Dissolved Silicon (Si)	2023/09/27	88	80 - 120	96	80 - 120	<0.50	mg/L		
B126842	Dissolved Sodium (Na)	2023/09/27	98	80 - 120	99	80 - 120	<0.50	mg/L	0.026	20
B126842	Dissolved Strontium (Sr)	2023/09/27	91	80 - 120	93	80 - 120	<0.020	mg/L		
B126842	Dissolved Sulphur (S)	2023/09/27	99	80 - 120	98	80 - 120	<0.20	mg/L		
B126901	Dissolved Aluminum (Al)	2023/09/27	115	80 - 120	113	80 - 120	<0.0030	mg/L		
B126901	Dissolved Antimony (Sb)	2023/09/27	105	80 - 120	96	80 - 120	<0.00060	mg/L		

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B126901	Dissolved Arsenic (As)	2023/09/27	101	80 - 120	90	80 - 120	<0.00020	mg/L		
B126901	Dissolved Beryllium (Be)	2023/09/27	99	80 - 120	92	80 - 120	<0.0010	mg/L		
B126901	Dissolved Chromium (Cr)	2023/09/27	100	80 - 120	93	80 - 120	<0.0010	mg/L		
B126901	Dissolved Cobalt (Co)	2023/09/27	99	80 - 120	96	80 - 120	<0.00030	mg/L		
B126901	Dissolved Copper (Cu)	2023/09/27	98	80 - 120	95	80 - 120	<0.0010	mg/L		
B126901	Dissolved Lead (Pb)	2023/09/27	100	80 - 120	95	80 - 120	<0.00020	mg/L		
B126901	Dissolved Molybdenum (Mo)	2023/09/27	104	80 - 120	96	80 - 120	<0.00020	mg/L		
B126901	Dissolved Nickel (Ni)	2023/09/27	97	80 - 120	94	80 - 120	<0.00050	mg/L		
B126901	Dissolved Selenium (Se)	2023/09/27	107	80 - 120	91	80 - 120	<0.00020	mg/L		
B126901	Dissolved Silver (Ag)	2023/09/27	99	80 - 120	94	80 - 120	<0.00010	mg/L		
B126901	Dissolved Thallium (Tl)	2023/09/27	102	80 - 120	97	80 - 120	<0.00020	mg/L		
B126901	Dissolved Tin (Sn)	2023/09/27	101	80 - 120	94	80 - 120	<0.0010	mg/L		
B126901	Dissolved Titanium (Ti)	2023/09/27	101	80 - 120	95	80 - 120	<0.0010	mg/L		
B126901	Dissolved Uranium (U)	2023/09/27	100	80 - 120	94	80 - 120	<0.00010	mg/L		
B126901	Dissolved Vanadium (V)	2023/09/27	101	80 - 120	95	80 - 120	<0.0010	mg/L		
B126901	Dissolved Zinc (Zn)	2023/09/27	NC	80 - 120	91	80 - 120	<0.0030	mg/L	5.6	20
B127115	Sulphate (SO4)	2023/09/27	NC	80 - 120	106	80 - 120	<1.0	mg/L		
B127118	Dissolved Aluminum (Al)	2023/09/27	NC	80 - 120	116	80 - 120	<0.0030	mg/L	23 (1)	20
B127118	Dissolved Antimony (Sb)	2023/09/27	96	80 - 120	97	80 - 120	<0.00060	mg/L	NC	20
B127118	Dissolved Arsenic (As)	2023/09/27	101	80 - 120	99	80 - 120	<0.00020	mg/L	10	20
B127118	Dissolved Beryllium (Be)	2023/09/27	109	80 - 120	111	80 - 120	<0.0010	mg/L	NC	20
B127118	Dissolved Chromium (Cr)	2023/09/27	105	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B127118	Dissolved Cobalt (Co)	2023/09/27	106	80 - 120	106	80 - 120	<0.00030	mg/L	NC	20
B127118	Dissolved Copper (Cu)	2023/09/27	107	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B127118	Dissolved Lead (Pb)	2023/09/27	105	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B127118	Dissolved Molybdenum (Mo)	2023/09/27	101	80 - 120	100	80 - 120	<0.00020	mg/L	4.7	20
B127118	Dissolved Nickel (Ni)	2023/09/27	105	80 - 120	106	80 - 120	<0.00050	mg/L	NC	20
B127118	Dissolved Selenium (Se)	2023/09/27	112	80 - 120	108	80 - 120	<0.00020	mg/L	4.3	20
B127118	Dissolved Silver (Ag)	2023/09/27	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B127118	Dissolved Thallium (Tl)	2023/09/27	103	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B127118	Dissolved Tin (Sn)	2023/09/27	93	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B127118	Dissolved Titanium (Ti)	2023/09/27	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B127118	Dissolved Uranium (U)	2023/09/27	98	80 - 120	98	80 - 120	<0.00010	mg/L	5.3	20
B127118	Dissolved Vanadium (V)	2023/09/27	106	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B127118	Dissolved Zinc (Zn)	2023/09/27	103	80 - 120	101	80 - 120	<0.0030	mg/L	NC	20
B127144	Chloride (Cl)	2023/09/27	NC	80 - 120	98	80 - 120	<1.0	mg/L	1.3	20
B127144	Sulphate (SO4)	2023/09/27	NC	80 - 120	107	80 - 120	<1.0	mg/L		
B127148	Sulphate (SO4)	2023/09/27	106	80 - 120	109	80 - 120	<1.0	mg/L	7.7	20
B127212	Alkalinity (PP as CaCO3)	2023/09/30					<1.0	mg/L	13	20
B127212	Alkalinity (Total as CaCO3)	2023/09/30			100	80 - 120	<1.0	mg/L	0.97	20
B127212	Bicarbonate (HCO3)	2023/09/30					<1.0	mg/L	1.7	20
B127212	Carbonate (CO3)	2023/09/30					<1.0	mg/L	13	20
B127212	Hydroxide (OH)	2023/09/30					<1.0	mg/L	NC	20
B127232	pH	2023/09/30			100	97 - 103			0.43	N/A
B127324	Alkalinity (PP as CaCO3)	2023/09/29					<1.0	mg/L	NC	20
B127324	Alkalinity (Total as CaCO3)	2023/09/29			99	80 - 120	<1.0	mg/L	8.5	20
B127324	Bicarbonate (HCO3)	2023/09/29					<1.0	mg/L	8.5	20
B127324	Carbonate (CO3)	2023/09/29					<1.0	mg/L	NC	20
B127324	Hydroxide (OH)	2023/09/29					<1.0	mg/L	NC	20
B127330	pH	2023/09/29			100	97 - 103			0.86	N/A
B127335	Alkalinity (PP as CaCO3)	2023/09/29					<1.0	mg/L	NC	20
B127335	Alkalinity (Total as CaCO3)	2023/09/29			99	80 - 120	<1.0	mg/L	3.2	20
B127335	Bicarbonate (HCO3)	2023/09/29					<1.0	mg/L	3.2	20
B127335	Carbonate (CO3)	2023/09/29					<1.0	mg/L	NC	20
B127335	Hydroxide (OH)	2023/09/29					<1.0	mg/L	NC	20
B127339	pH	2023/09/29			100	97 - 103			2.8	N/A
B127481	Sulphate (SO4)	2023/09/27	95	80 - 120	107	80 - 120	<1.0	mg/L	1.3	20
B127614	Dissolved Aluminum (Al)	2023/09/27	118	80 - 120	118	80 - 120	<0.0030	mg/L	NC	20
B127614	Dissolved Antimony (Sb)	2023/09/27	99	80 - 120	97	80 - 120	<0.00060	mg/L	NC	20
B127614	Dissolved Arsenic (As)	2023/09/27	108	80 - 120	105	80 - 120	<0.00020	mg/L	6.9	20
B127614	Dissolved Beryllium (Be)	2023/09/27	113	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20
B127614	Dissolved Chromium (Cr)	2023/09/27	113	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20
B127614	Dissolved Cobalt (Co)	2023/09/27	112	80 - 120	111	80 - 120	<0.00030	mg/L	NC	20
B127614	Dissolved Copper (Cu)	2023/09/27	114	80 - 120	113	80 - 120	<0.0010	mg/L	0.15	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B127614	Dissolved Lead (Pb)	2023/09/27	110	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B127614	Dissolved Molybdenum (Mo)	2023/09/27	104	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B127614	Dissolved Nickel (Ni)	2023/09/27	111	80 - 120	111	80 - 120	<0.00050	mg/L	14	20
B127614	Dissolved Selenium (Se)	2023/09/27	117	80 - 120	115	80 - 120	<0.00020	mg/L	NC	20
B127614	Dissolved Silver (Ag)	2023/09/27	103	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B127614	Dissolved Thallium (Tl)	2023/09/27	109	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B127614	Dissolved Tin (Sn)	2023/09/27	100	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B127614	Dissolved Titanium (Ti)	2023/09/27	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B127614	Dissolved Uranium (U)	2023/09/27	103	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B127614	Dissolved Vanadium (V)	2023/09/27	111	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B127614	Dissolved Zinc (Zn)	2023/09/27	NC	80 - 120	109	80 - 120	<0.0030	mg/L	19	20
B127638	Dissolved Organic Carbon (C)	2023/09/28	NC	80 - 120	96	80 - 120	<0.50	mg/L	6.4	20
B128533	Sulphate (SO4)	2023/09/28	112	80 - 120	97	80 - 120	<1.0	mg/L	NC (2)	20
B128681	Dissolved Aluminum (Al)	2023/09/28	95	80 - 120	121 (1)	80 - 120	<0.0030	mg/L	0.34	20
B128681	Dissolved Antimony (Sb)	2023/09/28	94	80 - 120	112	80 - 120	<0.00060	mg/L	NC	20
B128681	Dissolved Arsenic (As)	2023/09/28	88	80 - 120	107	80 - 120	<0.00020	mg/L	8.4	20
B128681	Dissolved Beryllium (Be)	2023/09/28	88	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B128681	Dissolved Chromium (Cr)	2023/09/28	88	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B128681	Dissolved Cobalt (Co)	2023/09/28	87	80 - 120	108	80 - 120	<0.00030	mg/L	NC	20
B128681	Dissolved Copper (Cu)	2023/09/28	84	80 - 120	108	80 - 120	<0.0010	mg/L	3.9	20
B128681	Dissolved Lead (Pb)	2023/09/28	88	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B128681	Dissolved Molybdenum (Mo)	2023/09/28	90	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B128681	Dissolved Nickel (Ni)	2023/09/28	87	80 - 120	106	80 - 120	<0.00050	mg/L	2.3	20
B128681	Dissolved Selenium (Se)	2023/09/28	95	80 - 120	113	80 - 120	<0.00020	mg/L	NC	20
B128681	Dissolved Silver (Ag)	2023/09/28	87	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B128681	Dissolved Thallium (Tl)	2023/09/28	89	80 - 120	107	80 - 120	<0.00020	mg/L	NC	20
B128681	Dissolved Tin (Sn)	2023/09/28	90	80 - 120	109	80 - 120	<0.0010	mg/L	NC	20
B128681	Dissolved Titanium (Ti)	2023/09/28	88	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B128681	Dissolved Uranium (U)	2023/09/28	88	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20
B128681	Dissolved Vanadium (V)	2023/09/28	90	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
B128681	Dissolved Zinc (Zn)	2023/09/28	NC	80 - 120	110	80 - 120	<0.0030	mg/L	3.0	20
B128813	Dissolved Chromium (Cr)	2023/09/28	104	80 - 120	100	80 - 120	<0.0010	mg/L		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B128813	Dissolved Molybdenum (Mo)	2023/09/28	105	80 - 120	102	80 - 120	<0.00020	mg/L		
B128813	Dissolved Zinc (Zn)	2023/09/28	NC	80 - 120	103	80 - 120	<0.0030	mg/L	5.4	20
B128880	Dissolved Barium (Ba)	2023/09/28	97	80 - 120	98	80 - 120	<0.010	mg/L		
B128880	Dissolved Boron (B)	2023/09/28	98	80 - 120	98	80 - 120	<0.020	mg/L		
B128880	Dissolved Calcium (Ca)	2023/09/28	104	80 - 120	106	80 - 120	<0.30	mg/L	NC	20
B128880	Dissolved Iron (Fe)	2023/09/28	108	80 - 120	109	80 - 120	<0.060	mg/L	NC	20
B128880	Dissolved Lithium (Li)	2023/09/28	93	80 - 120	98	80 - 120	<0.020	mg/L		
B128880	Dissolved Magnesium (Mg)	2023/09/28	99	80 - 120	105	80 - 120	<0.20	mg/L	NC	20
B128880	Dissolved Manganese (Mn)	2023/09/28	108	80 - 120	109	80 - 120	<0.0040	mg/L	NC	20
B128880	Dissolved Phosphorus (P)	2023/09/28	107	80 - 120	110	80 - 120	<0.10	mg/L		
B128880	Dissolved Potassium (K)	2023/09/28	103	80 - 120	104	80 - 120	<0.30	mg/L	NC	20
B128880	Dissolved Silicon (Si)	2023/09/28	104	80 - 120	107	80 - 120	<0.50	mg/L		
B128880	Dissolved Sodium (Na)	2023/09/28	96	80 - 120	99	80 - 120	<0.50	mg/L	NC	20
B128880	Dissolved Strontium (Sr)	2023/09/28	93	80 - 120	93	80 - 120	<0.020	mg/L		
B128880	Dissolved Sulphur (S)	2023/09/28	109	80 - 120	107	80 - 120	<0.20	mg/L		
B128887	Alkalinity (PP as CaCO3)	2023/09/29					<1.0	mg/L	NC	20
B128887	Alkalinity (Total as CaCO3)	2023/09/29			100	80 - 120	<1.0	mg/L	1.6	20
B128887	Bicarbonate (HCO3)	2023/09/29					<1.0	mg/L	1.6	20
B128887	Carbonate (CO3)	2023/09/29					<1.0	mg/L	NC	20
B128887	Hydroxide (OH)	2023/09/29					<1.0	mg/L	NC	20
B128890	pH	2023/09/29			100	97 - 103			1.2	N/A

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B132284	Total Suspended Solids	2023/09/30	99	80 - 120	89	80 - 120	<1.0	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Detection limits raised due to matrix interference.

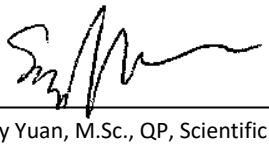
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas Proprietary Software
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Automated Statchk

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:
Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St, Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information
Company Name: KGS Group
Contact Name: Ed Collins
Address: 3rd Floor 865 Waverley St, Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: Ecollins@kgsgroup.com

Project Information
Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By: AL / AA

Laboratory Use Only
Bureau Veritas Job #: C375144
Bottle Order #: 705623
Chain Of Custody Record: C#705623-01-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) - Lab Filtered	# of Bottles	Comments
1		SC-1	23/09/19	10:15	SW	N	N	X	✓	X	X	X	X	X	X	X	X	4	Analyze turbidity + DOC
2		SB-1		9:25				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		SB-2		9:20				X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		9:30				X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		9:35				X	X	X	X	X	X	X	✓	X	X	4	
6		EB-1		9:40				X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		9:45				X	✓	✓	X	X	X	X	X	X	X	4	
8		NB-1		9:55				X	X	X	X	X	X	X	X	X	✓	4	
9		NB-2		9:50				X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:00	✓	✓	✓	✓	X	X	X	X	X	X	X	✓	✓	4	

4/4

Regular (Standard) TAT (will be applied if Rush TAT is not specified) ✓
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Please provide advance notice for rush projects
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Adonia Ainsleigh Loria	23/09/20	11:40	BA Brooklyn Hiebert	23/09/20	1145	
			AL AURA GILL	2023/09/21	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt: ACTR | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

See ACTR

White: Bureau Veritas Yellow: Client

mcal-09-1830

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

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Laboratory Use Only
Bureau Veritas Job #:
Bottle Order #: 705623
Chain Of Custody Record: C#705623-05-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required
Please provide advance notice for rush projects
Regular (Standard) TAT (X)
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/09/19	8:35	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity + DOC
2		CL-3 BTM		8:38				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-4 SFC		8:20				X	X	X	X	X	X	X	X	X	X	4	
4		CL-4 BTM		8:25				X	X	X	X	X	X	X	X	X	X	4	
5		SW-128		15:00				X	X	X	X	X	X	X	X	X	X	4	
6		SW-129		14:00				X	X	X	X	X	X	X	X	X	X	4	
7		SW-130		13:00				X	X	X	X	X	X	X	X	X	X	4	
8		TRIP BLANK		—				X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Victoria Ainsleigh Lovia	23/09/20	11:40	Brookwyn Hiebert @ AIRAS CI11	23/09/20 2023/09/24	1145 08:30			ACTR	Yes / No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

See ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			705623
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	3rd floor 865 Waverley St. Winnipeg MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	(204) 896-1209 Fax:	Project Name		C#705623-03-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	AL/AA		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/09/19	8:10	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity + DOC
2		CL-5 BTM		8:15				X	X	X	X	X	X	X	X	X	X	4	ASAP to meet hold times
3		CL-6 SFC		8:00				X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:05				X	X	X	X	X	X	X	X	X	X	4	
5		CL-7 SFC		8:40				X	X	X	X	X	X	X	X	X	X	4	
6		CL-7 BTM		8:45				X	X	X	X	X	X	X	X	X	X	4	
7		CL-8 SFC		8:30				X	X	X	X	X	X	X	X	X	X	4	
8		CL-8 BTM		8:33				X	X	X	X	X	X	X	X	X	X	4	
9		CL-2 SFC		8:50				X	X	X	X	X	X	X	X	X	X	4	
10		CL-2 BTM		8:55				X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ Time Required: _____
Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Aglonia Rinsleigh Loria	23/09/20	11:40	Brooklyn Hiebert	23/09/20	1145			ACTE	Yes / No
			AJRAUER C11	2023/09/21	08:30				

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See ACTR

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE
Your C.O.C. #: 1/1

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/10/18
Report #: R3412071
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380927
Received: 2023/10/05, 12:15

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	6	N/A	2023/10/17	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	6	N/A	2023/10/13		Auto Calc
Cadmium - low level CCME (Total) (1)	6	N/A	2023/10/13		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	6	N/A	2023/10/12	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	6	N/A	2023/10/13	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	6	N/A	2023/10/13		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	3	N/A	2023/10/13	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	3	N/A	2023/10/14	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	6	N/A	2023/10/13	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/10/12	2023/10/12	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	3	2023/10/12	2023/10/13	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	6	N/A	2023/10/13	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	6	2023/10/12	2023/10/12	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	6	N/A	2023/10/17	AB SOP-00005	SM 24 4500-H+B m
Carbon (Total Organic) (1, 7)	5	N/A	2023/10/12	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	1	N/A	2023/10/13	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	2	2023/10/10	2023/10/10	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	4	2023/10/10	2023/10/11	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	6	N/A	2023/10/06	CAL SOP-00081	SM 24 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE
Your C.O.C. #: 1/1

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/10/18
Report #: R3412071
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380927
Received: 2023/10/05, 12:15

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

HARDNESS - LAB FILTERED (WATER)

Bureau Veritas ID		CBG255	CBG256	CBG257	CBG258	CBG259	CBG260		
Sampling Date		2023/10/03 12:10	2023/10/03 12:00	2023/10/03 11:45	2023/10/03 12:20	2023/10/03 09:05	2023/10/03		
COC Number		1/1	1/1	1/1	1/1	1/1	1/1		
	UNITS	**SC-2**	**SC-3**	**SC-4**	**SC-5**	**SC-6**	**SW-134**	**RDL**	**QC Batch**
Calculated Parameters									
Hardness (CaCO3)	mg/L	45	38	33	32	37	33	0.50	B143202
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG255			CBG256	CBG257		
Sampling Date		2023/10/03 12:10			2023/10/03 12:00	2023/10/03 11:45		
COC Number		1/1			1/1	1/1		
	UNITS	SC-2	RDL	QC Batch	SC-3	SC-4	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.51	0.020	B143114	0.42	<0.020	0.020	B143114
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.027	0.0030	B150068	0.028	0.0088	0.0030	B150068
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B150068	<0.00060	<0.00060	0.00060	B150068
Dissolved Arsenic (As)	mg/L	0.00047	0.00020	B150068	0.00047	0.00046	0.00020	B150068
Dissolved Barium (Ba)	mg/L	<0.050	0.050	B150619	<0.010	<0.010	0.010	B152078
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B150068	<0.0010	<0.0010	0.0010	B150068
Dissolved Boron (B)	mg/L	<0.10	0.10	B150619	<0.020	<0.020	0.020	B152078
Dissolved Calcium (Ca)	mg/L	13	1.5	B150619	10	8.6	0.30	B152078
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B150068	<0.0010	<0.0010	0.0010	B150068
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B150068	<0.00030	<0.00030	0.00030	B150068
Dissolved Copper (Cu)	mg/L	0.016	0.0010	B150068	0.011	0.0018	0.0010	B150068
Dissolved Iron (Fe)	mg/L	<0.30	0.30	B150619	0.18	0.13	0.060	B152078
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B150068	<0.00020	<0.00020	0.00020	B150068
Dissolved Lithium (Li)	mg/L	<0.10	0.10	B150619	<0.020	<0.020	0.020	B152078
Dissolved Magnesium (Mg)	mg/L	3.3	1.0	B150619	3.1	2.7	0.20	B152078
Dissolved Manganese (Mn)	mg/L	<0.020	0.020	B150619	0.023	<0.0040	0.0040	B152078
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150068	<0.00020	<0.00020	0.00020	B150068
Dissolved Nickel (Ni)	mg/L	0.00064	0.00050	B150068	0.00051	<0.00050	0.00050	B150068
Dissolved Phosphorus (P)	mg/L	<0.50	0.50	B150619	<0.10	<0.10	0.10	B152078
Dissolved Potassium (K)	mg/L	1.9	1.5	B150619	1.7	1.5	0.30	B152078
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B150068	<0.00020	<0.00020	0.00020	B150068
Dissolved Silicon (Si)	mg/L	<2.5	2.5	B150619	1.5	1.3	0.50	B152078
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B150068	<0.00010	<0.00010	0.00010	B150068
Dissolved Sodium (Na)	mg/L	<2.5	2.5	B150619	2.4	1.8	0.50	B152078
Dissolved Strontium (Sr)	mg/L	<0.10	0.10	B150619	0.025	0.023	0.020	B152078
Dissolved Sulphur (S)	mg/L	3.7	1.0	B150619	3.1	1.2	0.20	B152078
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B150068	<0.00020	<0.00020	0.00020	B150068
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B150068	<0.0010	<0.0010	0.0010	B150068
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B150068	<0.0010	<0.0010	0.0010	B150068
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B150068	<0.00010	<0.00010	0.00010	B150068
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B150068	<0.0010	<0.0010	0.0010	B150068
Dissolved Zinc (Zn)	mg/L	0.28	0.0030	B150068	0.21	<0.0030	0.0030	B150068
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG258			CBG259			CBG260		
Sampling Date		2023/10/03 12:20			2023/10/03 09:05			2023/10/03		
COC Number		1/1			1/1			1/1		
	UNITS	SC-5	RDL	QC Batch	SC-6	RDL	QC Batch	SW-134	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	B143114	<0.020	0.020	B143114	<0.020	0.020	B143114
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0092	0.0030	B150068	0.0073	0.0030	B150068	0.011	0.0030	B150068
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B150068	<0.00060	0.00060	B150068	<0.00060	0.00060	B150068
Dissolved Arsenic (As)	mg/L	0.00034	0.00020	B150068	0.00048	0.00020	B150068	0.00039	0.00020	B150068
Dissolved Barium (Ba)	mg/L	<0.050	0.050	B150619	<0.010	0.010	B152078	<0.050	0.050	B150619
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068
Dissolved Boron (B)	mg/L	<0.10	0.10	B150619	<0.020	0.020	B152078	<0.10	0.10	B150619
Dissolved Calcium (Ca)	mg/L	8.5	1.5	B150619	9.4	0.30	B152078	9.0	1.5	B150619
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B150068	<0.00030	0.00030	B150068	<0.00030	0.00030	B150068
Dissolved Copper (Cu)	mg/L	0.0013	0.0010	B150068	0.0014	0.0010	B150068	0.0016	0.0010	B150068
Dissolved Iron (Fe)	mg/L	<0.30	0.30	B150619	0.062	0.060	B152078	<0.30	0.30	B150619
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068
Dissolved Lithium (Li)	mg/L	<0.10	0.10	B150619	<0.020	0.020	B152078	<0.10	0.10	B150619
Dissolved Magnesium (Mg)	mg/L	2.5	1.0	B150619	3.3	0.20	B152078	2.6	1.0	B150619
Dissolved Manganese (Mn)	mg/L	<0.020	0.020	B150619	<0.0040	0.0040	B152078	<0.020	0.020	B150619
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B150068	<0.00050	0.00050	B150068	<0.00050	0.00050	B150068
Dissolved Phosphorus (P)	mg/L	<0.50	0.50	B150619	<0.10	0.10	B152078	<0.50	0.50	B150619
Dissolved Potassium (K)	mg/L	2.0	1.5	B150619	1.4	0.30	B152078	2.3	1.5	B150619
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068
Dissolved Silicon (Si)	mg/L	<2.5	2.5	B150619	1.2	0.50	B152078	<2.5	2.5	B150619
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B150068	<0.00010	0.00010	B150068	<0.00010	0.00010	B150068
Dissolved Sodium (Na)	mg/L	<2.5	2.5	B150619	2.4	0.50	B152078	<2.5	2.5	B150619
Dissolved Strontium (Sr)	mg/L	<0.10	0.10	B150619	0.021	0.020	B152078	<0.10	0.10	B150619
Dissolved Sulphur (S)	mg/L	1.1	1.0	B150619	1.1	0.20	B152078	1.2	1.0	B150619
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068	<0.00020	0.00020	B150068
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B150068	<0.00010	0.00010	B150068	<0.00010	0.00010	B150068
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068	<0.0010	0.0010	B150068
Dissolved Zinc (Zn)	mg/L	<0.0030	0.0030	B150068	<0.0030	0.0030	B150068	<0.0030	0.0030	B150068

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG255	CBG256		CBG257	CBG258	CBG259		
Sampling Date		2023/10/03 12:10	2023/10/03 12:00		2023/10/03 11:45	2023/10/03 12:20	2023/10/03 09:05		
COC Number		1/1	1/1		1/1	1/1	1/1		
	UNITS	SC-2	SC-3	QC Batch	SC-4	SC-5	SC-6	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.79	0.62	B143117	<0.020	<0.020	<0.020	0.020	B143117
Total Aluminum (Al)	mg/L	0.086	0.10	B150179	0.045	0.040	0.051	0.0030	B150189
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	B150179	<0.00060	<0.00060	<0.00060	0.00060	B150189
Total Arsenic (As)	mg/L	0.00063	0.00051	B150179	0.00053	0.00045	0.00041	0.00020	B150189
Total Barium (Ba)	mg/L	<0.010	<0.010	B150182	<0.010	<0.010	<0.010	0.010	B150194
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	B150179	<0.0010	<0.0010	<0.0010	0.0010	B150189
Total Boron (B)	mg/L	<0.020	<0.020	B150182	<0.020	<0.020	<0.020	0.020	B150194
Total Calcium (Ca)	mg/L	10	9.4	B150182	8.7	8.9	8.6	0.30	B150194
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	B150179	<0.0010	<0.0010	<0.0010	0.0010	B150189
Total Cobalt (Co)	mg/L	0.00038	<0.00030	B150179	<0.00030	<0.00030	<0.00030	0.00030	B150189
Total Copper (Cu)	mg/L	0.025	0.018	B150179	0.0020	0.0020	0.0020	0.0010	B150189
Total Iron (Fe)	mg/L	0.46	0.41	B150182	0.37	0.31	0.26	0.060	B150194
Total Lead (Pb)	mg/L	<0.00020	<0.00020	B150179	<0.00020	<0.00020	<0.00020	0.00020	B150189
Total Lithium (Li)	mg/L	<0.020	<0.020	B150182	<0.020	<0.020	<0.020	0.020	B150194
Total Magnesium (Mg)	mg/L	3.2	3.0	B150182	3.0	3.0	2.8	0.20	B150194
Total Manganese (Mn)	mg/L	0.081	0.063	B150182	0.030	0.025	0.026	0.0040	B150194
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B150179	<0.00020	<0.00020	<0.00020	0.00020	B150189
Total Nickel (Ni)	mg/L	0.0012	0.00092	B150179	0.00061	0.00056	0.00061	0.00050	B150189
Total Phosphorus (P)	mg/L	<0.10	<0.10	B150182	<0.10	<0.10	<0.10	0.10	B150194
Total Potassium (K)	mg/L	1.6	1.6	B150182	1.6	1.7	1.6	0.30	B150194
Total Selenium (Se)	mg/L	<0.00020	<0.00020	B150179	<0.00020	<0.00020	<0.00020	0.00020	B150189
Total Silicon (Si)	mg/L	1.8	1.7	B150182	1.6	1.5	1.5	0.50	B150194
Total Silver (Ag)	mg/L	<0.00010	<0.00010	B150179	<0.00010	<0.00010	<0.00010	0.00010	B150189
Total Sodium (Na)	mg/L	2.2	2.2	B150182	1.9	1.9	1.8	0.50	B150194
Total Strontium (Sr)	mg/L	0.027	0.025	B150182	0.022	0.022	0.021	0.020	B150194
Total Sulphur (S)	mg/L	3.8	3.3	B150182	1.3	1.2	1.1	0.20	B150194
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	B150179	<0.00020	<0.00020	<0.00020	0.00020	B150189
Total Tin (Sn)	mg/L	<0.0010	<0.0010	B150179	<0.0010	<0.0010	<0.0010	0.0010	B150189
Total Titanium (Ti)	mg/L	0.0016	0.0030	B150179	0.0014	0.0017	0.0022	0.0010	B150189
Total Uranium (U)	mg/L	<0.00010	<0.00010	B150179	<0.00010	<0.00010	<0.00010	0.00010	B150189
Total Vanadium (V)	mg/L	<0.0010	<0.0010	B150179	<0.0010	<0.0010	<0.0010	0.0010	B150189
Total Zinc (Zn)	mg/L	0.36	0.26	B150179	0.0035	0.0034	0.0041	0.0030	B150189

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG260		
Sampling Date		2023/10/03		
COC Number		1/1		
	UNITS	SW-134	RDL	QC Batch
Elements				
Total Cadmium (Cd)	ug/L	<0.020	0.020	B143117
Total Aluminum (Al)	mg/L	0.059	0.0030	B150179
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150179
Total Arsenic (As)	mg/L	0.00057	0.00020	B150179
Total Barium (Ba)	mg/L	<0.010	0.010	B150182
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150179
Total Boron (B)	mg/L	<0.020	0.020	B150182
Total Calcium (Ca)	mg/L	8.3	0.30	B150182
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B150179
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B150179
Total Copper (Cu)	mg/L	0.0022	0.0010	B150179
Total Iron (Fe)	mg/L	0.37	0.060	B150182
Total Lead (Pb)	mg/L	<0.00020	0.00020	B150179
Total Lithium (Li)	mg/L	<0.020	0.020	B150182
Total Magnesium (Mg)	mg/L	2.7	0.20	B150182
Total Manganese (Mn)	mg/L	0.030	0.0040	B150182
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150179
Total Nickel (Ni)	mg/L	0.00060	0.00050	B150179
Total Phosphorus (P)	mg/L	<0.10	0.10	B150182
Total Potassium (K)	mg/L	1.4	0.30	B150182
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150179
Total Silicon (Si)	mg/L	1.6	0.50	B150182
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150179
Total Sodium (Na)	mg/L	1.7	0.50	B150182
Total Strontium (Sr)	mg/L	0.023	0.020	B150182
Total Sulphur (S)	mg/L	1.3	0.20	B150182
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150179
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150179
Total Titanium (Ti)	mg/L	0.0022	0.0010	B150179
Total Uranium (U)	mg/L	<0.00010	0.00010	B150179
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150179
Total Zinc (Zn)	mg/L	0.0044	0.0030	B150179
RDL = Reportable Detection Limit				

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG255		CBG256		CBG257			CBG257		
Sampling Date		2023/10/03 12:10		2023/10/03 12:00		2023/10/03 11:45			2023/10/03 11:45		
COC Number		1/1		1/1		1/1			1/1		
	UNITS	SC-2	QC Batch	SC-3	QC Batch	SC-4	RDL	QC Batch	SC-4 Lab-Dup	RDL	QC Batch
Calculated Parameters											
Total Hardness (CaCO3)	mg/L	38.7	B143132	35.7	B143132	34.0	0.50	B143132			
Misc. Inorganics											
pH	pH	6.36	B154155	6.37	B154155	6.38	N/A	B154155			
Total Organic Carbon (C)	mg/L	12	B149091	12	B149135	13	0.50	B149135			
Total Suspended Solids	mg/L	2.8	B145559	2.8	B145559	3.9	1.0	B145560	1.9	1.0	B145560
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	12 (1)	B151200	11 (1)	B151200	12 (1)	0.50	B151200			
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	B154154	<1.0	B154154	<1.0	1.0	B154154			
Alkalinity (Total as CaCO3)	mg/L	32	B154154	32	B154154	30	1.0	B154154			
Bicarbonate (HCO3)	mg/L	39	B154154	39	B154154	36	1.0	B154154			
Carbonate (CO3)	mg/L	<1.0	B154154	<1.0	B154154	<1.0	1.0	B154154			
Hydroxide (OH)	mg/L	<1.0	B154154	<1.0	B154154	<1.0	1.0	B154154			
Chloride (Cl)	mg/L	1.4	B150151	1.4	B150151	<1.0	1.0	B150151			
Sulphate (SO4)	mg/L	12	B150151	10	B150151	3.1	1.0	B150151			
Physical Properties											
Turbidity	NTU	2.9	B142268	3.6	B142268	2.5	0.10	B142268			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C380927
Report Date: 2023/10/18

KGS Group
Client Project #: 21-1357-005

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG258			CBG258			CBG259		CBG260		
Sampling Date		2023/10/03 12:20			2023/10/03 12:20			2023/10/03 09:05		2023/10/03		
COC Number		1/1			1/1			1/1		1/1		
	UNITS	SC-5	RDL	QC Batch	SC-5 Lab-Dup	RDL	QC Batch	SC-6	QC Batch	SW-134	RDL	QC Batch
Calculated Parameters												
Total Hardness (CaCO3)	mg/L	34.3	0.50	B143132				33.1	B143132	31.7	0.50	B143132
Misc. Inorganics												
pH	pH	6.28	N/A	B154155	6.35	N/A	B154155	6.40	B154155	6.37	N/A	B154155
Total Organic Carbon (C)	mg/L	12	0.50	B149135				12	B149135	12	0.50	B149105
Total Suspended Solids	mg/L	2.1	1.0	B145560				<1.0	B145560	<1.0	1.0	B145560
Lab Filtered Inorganics												
Dissolved Organic Carbon (C)	mg/L	9.7 (1)	0.50	B151200				12 (1)	B151200	12 (1)	0.50	B151200
Anions												
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154154	<1.0	1.0	B154154	<1.0	B154154	<1.0	1.0	B154154
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B154154	29	1.0	B154154	30	B154154	30	1.0	B154154
Bicarbonate (HCO3)	mg/L	35	1.0	B154154	35	1.0	B154154	36	B154154	37	1.0	B154154
Carbonate (CO3)	mg/L	<1.0	1.0	B154154	<1.0	1.0	B154154	<1.0	B154154	<1.0	1.0	B154154
Hydroxide (OH)	mg/L	<1.0	1.0	B154154	<1.0	1.0	B154154	<1.0	B154154	<1.0	1.0	B154154
Chloride (Cl)	mg/L	<1.0	1.0	B150151				<1.0	B150151	1.4	1.0	B150151
Sulphate (SO4)	mg/L	1.0	1.0	B150151				<1.0	B150151	2.5	1.0	B150151
Physical Properties												
Turbidity	NTU	2.3	0.10	B142268				2.0	B142268	3.6	0.10	B142268

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Sample filtered and preserved past method specified hold time

Bureau Veritas ID		CBG260		
Sampling Date		2023/10/03		
COC Number		1/1		
	UNITS	SW-134 Lab-Dup	RDL	QC Batch
Lab Filtered Inorganics				
Dissolved Organic Carbon (C)	mg/L	12	0.50	B151200

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.9°C

REG. METALS (CCME/AT1) – DISS. LAB FILT. Comments

Sample CBG255 [SC-2] Elements by ICP-Dissolved-Lab Filtered: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample CBG258 [SC-5] Elements by ICP-Dissolved-Lab Filtered: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample CBG260 [SW-134] Elements by ICP-Dissolved-Lab Filtered: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Results relate only to the items tested.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B142268	Turbidity	2023/10/06			100	80 - 120	<0.10	NTU	0.87	20
B145559	Total Suspended Solids	2023/10/10	84	80 - 120	94	80 - 120	<1.0	mg/L	12	20
B145560	Total Suspended Solids	2023/10/11	91	80 - 120	102	80 - 120	<1.0	mg/L	NC	20
B149091	Total Organic Carbon (C)	2023/10/12	76 (1)	80 - 120	103	80 - 120	<0.50	mg/L	1.3	20
B149105	Total Organic Carbon (C)	2023/10/13	NC	80 - 120	108	80 - 120	<0.50	mg/L	7.0	20
B149135	Total Organic Carbon (C)	2023/10/12	NC	80 - 120	103	80 - 120	<0.50	mg/L	7.8	20
B150068	Dissolved Aluminum (Al)	2023/10/13	99	80 - 120	112	80 - 120	<0.0030	mg/L	NC	20
B150068	Dissolved Antimony (Sb)	2023/10/13	115	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B150068	Dissolved Arsenic (As)	2023/10/13	NC	80 - 120	99	80 - 120	<0.00020	mg/L	0.25	20
B150068	Dissolved Beryllium (Be)	2023/10/13	95	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150068	Dissolved Chromium (Cr)	2023/10/13	98	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B150068	Dissolved Cobalt (Co)	2023/10/13	95	80 - 120	98	80 - 120	<0.00030	mg/L	NC	20
B150068	Dissolved Copper (Cu)	2023/10/13	93	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B150068	Dissolved Lead (Pb)	2023/10/13	94	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B150068	Dissolved Molybdenum (Mo)	2023/10/13	NC	80 - 120	102	80 - 120	<0.00020	mg/L	0.90	20
B150068	Dissolved Nickel (Ni)	2023/10/13	94	80 - 120	97	80 - 120	<0.00050	mg/L	16	20
B150068	Dissolved Selenium (Se)	2023/10/13	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B150068	Dissolved Silver (Ag)	2023/10/13	96	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20
B150068	Dissolved Thallium (Tl)	2023/10/13	94	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B150068	Dissolved Tin (Sn)	2023/10/13	106	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B150068	Dissolved Titanium (Ti)	2023/10/13	101	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B150068	Dissolved Uranium (U)	2023/10/13	98	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B150068	Dissolved Vanadium (V)	2023/10/13	101	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B150068	Dissolved Zinc (Zn)	2023/10/13	99	80 - 120	102	80 - 120	<0.0030	mg/L	NC	20
B150151	Chloride (Cl)	2023/10/12	103	80 - 120	100	80 - 120	<1.0	mg/L	0.095	20
B150151	Sulphate (SO4)	2023/10/12	97	80 - 120	97	80 - 120	<1.0	mg/L	2.8	20
B150179	Total Aluminum (Al)	2023/10/12	94	80 - 120	106	80 - 120	<0.0030	mg/L	3.7	20
B150179	Total Antimony (Sb)	2023/10/12	118	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B150179	Total Arsenic (As)	2023/10/12	101	80 - 120	96	80 - 120	<0.00020	mg/L	17	20
B150179	Total Beryllium (Be)	2023/10/12	108	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Chromium (Cr)	2023/10/12	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Cobalt (Co)	2023/10/12	99	80 - 120	98	80 - 120	<0.00030	mg/L	10	20
B150179	Total Copper (Cu)	2023/10/12	98	80 - 120	98	80 - 120	<0.0010	mg/L	11	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150179	Total Lead (Pb)	2023/10/12	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Molybdenum (Mo)	2023/10/12	109	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Nickel (Ni)	2023/10/12	98	80 - 120	96	80 - 120	<0.00050	mg/L	6.0	20
B150179	Total Selenium (Se)	2023/10/12	99	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Silver (Ag)	2023/10/12	101	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B150179	Total Thallium (Tl)	2023/10/12	101	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Tin (Sn)	2023/10/12	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Titanium (Ti)	2023/10/12	104	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Uranium (U)	2023/10/12	101	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B150179	Total Vanadium (V)	2023/10/12	103	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Zinc (Zn)	2023/10/12	97	80 - 120	94	80 - 120	<0.0030	mg/L	9.0	20
B150182	Total Barium (Ba)	2023/10/12	99	80 - 120	99	80 - 120	<0.010	mg/L	5.8	20
B150182	Total Boron (B)	2023/10/12	102	80 - 120	101	80 - 120	<0.020	mg/L	NC	20
B150182	Total Calcium (Ca)	2023/10/12	92	80 - 120	94	80 - 120	<0.30	mg/L	0.41	20
B150182	Total Iron (Fe)	2023/10/12	101	80 - 120	102	80 - 120	<0.060	mg/L	0.14	20
B150182	Total Lithium (Li)	2023/10/12	91	80 - 120	92	80 - 120	<0.020	mg/L	NC	20
B150182	Total Magnesium (Mg)	2023/10/12	96	80 - 120	97	80 - 120	<0.20	mg/L	0.86	20
B150182	Total Manganese (Mn)	2023/10/12	102	80 - 120	102	80 - 120	<0.0040	mg/L	0	20
B150182	Total Phosphorus (P)	2023/10/12	101	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B150182	Total Potassium (K)	2023/10/12	94	80 - 120	94	80 - 120	<0.30	mg/L	0.23	20
B150182	Total Silicon (Si)	2023/10/12	97	80 - 120	97	80 - 120	<0.50	mg/L	0.52	20
B150182	Total Sodium (Na)	2023/10/12	95	80 - 120	96	80 - 120	<0.50	mg/L	1.5	20
B150182	Total Strontium (Sr)	2023/10/12	96	80 - 120	96	80 - 120	<0.020	mg/L	1.9	20
B150182	Total Sulphur (S)	2023/10/12	98	80 - 120	97	80 - 120	<0.20	mg/L	1.4	20
B150189	Total Aluminum (Al)	2023/10/12	NC	80 - 120	105	80 - 120	<0.0030	mg/L	4.8	20
B150189	Total Antimony (Sb)	2023/10/12	112	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B150189	Total Arsenic (As)	2023/10/12	102	80 - 120	105	80 - 120	<0.00020	mg/L	3.5	20
B150189	Total Beryllium (Be)	2023/10/12	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B150189	Total Chromium (Cr)	2023/10/12	102	80 - 120	104	80 - 120	<0.0010	mg/L	7.6	20
B150189	Total Cobalt (Co)	2023/10/12	101	80 - 120	103	80 - 120	<0.00030	mg/L	6.3	20
B150189	Total Copper (Cu)	2023/10/12	NC	80 - 120	103	80 - 120	<0.0010	mg/L	10	20
B150189	Total Lead (Pb)	2023/10/12	102	80 - 120	104	80 - 120	<0.00020	mg/L	8.3	20
B150189	Total Molybdenum (Mo)	2023/10/12	105	80 - 120	104	80 - 120	<0.00020	mg/L	4.1	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150189	Total Nickel (Ni)	2023/10/12	101	80 - 120	102	80 - 120	<0.00050	mg/L	4.1	20
B150189	Total Selenium (Se)	2023/10/12	100	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B150189	Total Silver (Ag)	2023/10/12	102	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B150189	Total Thallium (Tl)	2023/10/12	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B150189	Total Tin (Sn)	2023/10/12	103	80 - 120	103	80 - 120	<0.0010	mg/L	9.7	20
B150189	Total Titanium (Ti)	2023/10/12	102	80 - 120	99	80 - 120	<0.0010	mg/L	31 (1)	20
B150189	Total Uranium (U)	2023/10/12	102	80 - 120	104	80 - 120	<0.00010	mg/L	7.9	20
B150189	Total Vanadium (V)	2023/10/12	103	80 - 120	104	80 - 120	<0.0010	mg/L	2.4	20
B150189	Total Zinc (Zn)	2023/10/12	NC	80 - 120	103	80 - 120	<0.0030	mg/L	12	20
B150194	Total Barium (Ba)	2023/10/13	104	80 - 120	101	80 - 120	<0.010	mg/L	1.8	20
B150194	Total Boron (B)	2023/10/13	100	80 - 120	96	80 - 120	<0.020	mg/L	0.93	20
B150194	Total Calcium (Ca)	2023/10/13	NC	80 - 120	94	80 - 120	<0.30	mg/L	1.3	20
B150194	Total Iron (Fe)	2023/10/13	NC	80 - 120	96	80 - 120	<0.060	mg/L	0.51	20
B150194	Total Lithium (Li)	2023/10/13	107	80 - 120	95	80 - 120	<0.020	mg/L	3.7	20
B150194	Total Magnesium (Mg)	2023/10/13	NC	80 - 120	99	80 - 120	<0.20	mg/L	1.1	20
B150194	Total Manganese (Mn)	2023/10/13	115	80 - 120	97	80 - 120	<0.0040	mg/L	1.7	20
B150194	Total Phosphorus (P)	2023/10/13	107	80 - 120	94	80 - 120	<0.10	mg/L	4.5	20
B150194	Total Potassium (K)	2023/10/13	108	80 - 120	93	80 - 120	<0.30	mg/L	0.26	20
B150194	Total Silicon (Si)	2023/10/13	NC	80 - 120	90	80 - 120	<0.50	mg/L	0.64	20
B150194	Total Sodium (Na)	2023/10/13	NC	80 - 120	95	80 - 120	<0.50	mg/L	3.1	20
B150194	Total Strontium (Sr)	2023/10/13	NC	80 - 120	97	80 - 120	<0.020	mg/L	2.8	20
B150194	Total Sulphur (S)	2023/10/13	NC	80 - 120	91	80 - 120	<0.20	mg/L	2.3	20
B150619	Dissolved Barium (Ba)	2023/10/12	97	80 - 120	98	80 - 120	<0.010	mg/L		
B150619	Dissolved Boron (B)	2023/10/12	97	80 - 120	97	80 - 120	<0.020	mg/L		
B150619	Dissolved Calcium (Ca)	2023/10/12	99	80 - 120	101	80 - 120	<0.30	mg/L		
B150619	Dissolved Iron (Fe)	2023/10/12	103	80 - 120	106	80 - 120	<0.060	mg/L		
B150619	Dissolved Lithium (Li)	2023/10/12	95	80 - 120	100	80 - 120	<0.020	mg/L		
B150619	Dissolved Magnesium (Mg)	2023/10/12	105	80 - 120	108	80 - 120	<0.20	mg/L		
B150619	Dissolved Manganese (Mn)	2023/10/12	102	80 - 120	103	80 - 120	<0.0040	mg/L		
B150619	Dissolved Phosphorus (P)	2023/10/12	101	80 - 120	101	80 - 120	<0.10	mg/L		
B150619	Dissolved Potassium (K)	2023/10/12	97	80 - 120	99	80 - 120	<0.30	mg/L		
B150619	Dissolved Silicon (Si)	2023/10/12	94	80 - 120	96	80 - 120	<0.50	mg/L		
B150619	Dissolved Sodium (Na)	2023/10/12	97	80 - 120	100	80 - 120	<0.50	mg/L		

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150619	Dissolved Strontium (Sr)	2023/10/12	95	80 - 120	95	80 - 120	<0.020	mg/L		
B150619	Dissolved Sulphur (S)	2023/10/12	99	80 - 120	95	80 - 120	<0.20	mg/L		
B151200	Dissolved Organic Carbon (C)	2023/10/13	NC	80 - 120	107	80 - 120	<0.50	mg/L	0.97	20
B152078	Dissolved Barium (Ba)	2023/10/13	94	80 - 120	98	80 - 120	<0.010	mg/L		
B152078	Dissolved Boron (B)	2023/10/13	95	80 - 120	97	80 - 120	<0.020	mg/L		
B152078	Dissolved Calcium (Ca)	2023/10/13	NC	80 - 120	101	80 - 120	<0.30	mg/L	4.6	20
B152078	Dissolved Iron (Fe)	2023/10/13	96	80 - 120	99	80 - 120	<0.060	mg/L	NC	20
B152078	Dissolved Lithium (Li)	2023/10/13	100	80 - 120	99	80 - 120	<0.020	mg/L		
B152078	Dissolved Magnesium (Mg)	2023/10/13	103	80 - 120	102	80 - 120	<0.20	mg/L	6.6	20
B152078	Dissolved Manganese (Mn)	2023/10/13	NC	80 - 120	102	80 - 120	<0.0040	mg/L	1.1	20
B152078	Dissolved Phosphorus (P)	2023/10/13	103	80 - 120	99	80 - 120	<0.10	mg/L		
B152078	Dissolved Potassium (K)	2023/10/13	101	80 - 120	101	80 - 120	<0.30	mg/L	1.7	20
B152078	Dissolved Silicon (Si)	2023/10/13	94	80 - 120	96	80 - 120	<0.50	mg/L		
B152078	Dissolved Sodium (Na)	2023/10/13	NC	80 - 120	101	80 - 120	<0.50	mg/L	2.6	20
B152078	Dissolved Strontium (Sr)	2023/10/13	91	80 - 120	95	80 - 120	<0.020	mg/L		
B152078	Dissolved Sulphur (S)	2023/10/13	100	80 - 120	96	80 - 120	<0.20	mg/L		
B154154	Alkalinity (PP as CaCO3)	2023/10/17					<1.0	mg/L	NC	20
B154154	Alkalinity (Total as CaCO3)	2023/10/17			100	80 - 120	<1.0	mg/L	0.30	20
B154154	Bicarbonate (HCO3)	2023/10/17					<1.0	mg/L	0.30	20
B154154	Carbonate (CO3)	2023/10/17					<1.0	mg/L	NC	20
B154154	Hydroxide (OH)	2023/10/17					<1.0	mg/L	NC	20
B154155	pH	2023/10/17			100	97 - 103			1.2	N/A

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

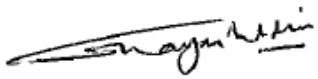
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #: 707522
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address	3rd Floor 865 Waverley St Winnipeg MB R3T 5T4	Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	(204) 896-1209 Fax:	Project Name		C#707522-04-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com; mnienaber@kgsgroup.com	Site #	OAM - Sherridon Mine Site
				Sampled By	AL

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (will be applied if Rush TAT is not specified) — X

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____

Rush Confirmation Number _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-2	23/10/03	12:10	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity + DOC ASAP
2		SC-3		12:00				X	X	X	X	X	X	X	X	X	X	4	to meet hold times.
3		SC-4		11:45				X	X	X	X	X	X	X	X	X	X	4	
4		SC-5		12:20				X	X	X	X	X	X	X	X	X	X	4	
5		SC-6		9:05				X	X	X	X	X	X	X	X	X	X	4	
6		SW-134		AM				X	X	X	X	X	X	X	X	X	X	4	
7																			
8																			
9																			
10																			

mcal-10-510

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Aikenia Ainslie Leria	23/10/05	12:10		23/10/05	1215	
				2023/10/06	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt 1.2 0.9 0.7 | Custody Seal Intact on Cooler? ☐ Yes ☐ No

ICE-YES

3,3,3 CS-Y ICE-Y

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 707134-01-01, 707134-02-01, 707134-03-01

Report Date: 2023/10/18
Report #: R3412120
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380937
Received: 2023/10/05, 12:15

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	8	N/A	2023/10/17	AB SOP-00005	SM 24 2320 B m
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	20	N/A	2023/10/18	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/10/08		Auto Calc
Cadmium - low level CCME (Total) (1)	11	N/A	2023/10/12		Auto Calc
Cadmium - low level CCME (Total) (1)	17	N/A	2023/10/13		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	16	N/A	2023/10/10	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry (1)	12	N/A	2023/10/11	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	12	N/A	2023/10/12	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	14	N/A	2023/10/13	AB SOP-00087	MMCW 119 1996 m
Carbon (DOC) -Lab Filtered (1, 2)	2	N/A	2023/10/16	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	28	N/A	2023/10/12		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	11	N/A	2023/10/12	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	17	N/A	2023/10/13	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	16	N/A	2023/10/11	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1, 4)	12	N/A	2023/10/12	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	11	2023/10/11	2023/10/11	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	2	2023/10/11	2023/10/12	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	14	2023/10/12	2023/10/12	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	1	2023/10/12	2023/10/13	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	28	N/A	2023/10/07	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	2	2023/10/11	2023/10/11	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	10	2023/10/11	2023/10/12	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	1	2023/10/11	2023/10/13	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 707134-01-01, 707134-02-01, 707134-03-01

Report Date: 2023/10/18
Report #: R3412120
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380937
Received: 2023/10/05, 12:15

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS - Total (1)	8	2023/10/12	2023/10/12	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	7	2023/10/12	2023/10/13	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	8	N/A	2023/10/17	AB SOP-00005	SM 24 4500-H+B m
pH @25°C (1, 6)	20	N/A	2023/10/18	AB SOP-00005	SM 24 4500-H+B m
Carbon (Total Organic) (1, 7)	23	N/A	2023/10/12	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	3	N/A	2023/10/13	AB SOP-00087	MMCW 119 1996 m
Carbon (Total Organic) (1, 7)	2	N/A	2023/10/16	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	1	2023/10/10	2023/10/11	AB SOP-00061	SM 24 2540 D m
Total Suspended Solids (NFR) (1)	27	2023/10/11	2023/10/11	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	1	N/A	2023/10/06	CAL SOP-00081	SM 24 2130 B m
Turbidity (1)	27	N/A	2023/10/07	CAL SOP-00081	SM 24 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM-SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 707134-01-01, 707134-02-01, 707134-03-01

Report Date: 2023/10/18
Report #: R3412120
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380937

Received: 2023/10/05, 12:15

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG283	CBG284	CBG292		CBG297		
Sampling Date		2023/10/03 12:30	2023/10/04 09:25	2023/10/04 09:20		2023/10/04 09:30		
COC Number		707134-01-01	707134-01-01	707134-01-01		707134-01-01		
	UNITS	SC-1	SB-1	SB-2	QC Batch	CB-1	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	0.45	0.28	0.27	B143114	0.30	0.020	B143114
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.034	<0.0030	<0.0030	B144326	<0.0030	0.0030	B144343
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	<0.00060	B144326	0.00082	0.00060	B144343
Dissolved Arsenic (As)	mg/L	0.00034	<0.00020	<0.00020	B144326	0.00022	0.00020	B144343
Dissolved Barium (Ba)	mg/L	<0.010	0.013	0.014	B148065	0.013	0.010	B145305
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Boron (B)	mg/L	<0.020	<0.020	<0.020	B148065	<0.020	0.020	B145305
Dissolved Calcium (Ca)	mg/L	10	56	56	B148065	57	0.30	B145305
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	B144326	<0.00030	0.00030	B144343
Dissolved Copper (Cu)	mg/L	0.012	0.0036	0.0035	B144326	0.0040	0.0010	B144343
Dissolved Iron (Fe)	mg/L	0.24	<0.060	0.092	B148065	<0.060	0.060	B145305
Dissolved Lead (Pb)	mg/L	0.00028	<0.00020	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	<0.020	B148065	<0.020	0.020	B145305
Dissolved Magnesium (Mg)	mg/L	3.1	8.9	8.9	B148065	9.1	0.20	B145305
Dissolved Manganese (Mn)	mg/L	0.060	0.065	0.066	B148065	0.060	0.0040	B145305
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Nickel (Ni)	mg/L	0.00051	0.00082	0.00088	B144326	0.00090	0.00050	B144343
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	B148065	<0.10	0.10	B145305
Dissolved Potassium (K)	mg/L	1.6	4.6	4.5	B148065	4.7	0.30	B145305
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Silicon (Si)	mg/L	1.4	0.67	0.68	B148065	0.65	0.50	B145305
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	B144326	<0.00010	0.00010	B144343
Dissolved Sodium (Na)	mg/L	2.5	3.4	3.4	B148065	3.5	0.50	B145305
Dissolved Strontium (Sr)	mg/L	0.027	0.063	0.062	B148065	0.062	0.020	B145305
Dissolved Sulphur (S)	mg/L	3.5	57	57	B148065	59	0.20	B145305
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	B144326	<0.00010	0.00010	B144343

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG283	CBG284	CBG292		CBG297		
Sampling Date		2023/10/03 12:30	2023/10/04 09:25	2023/10/04 09:20		2023/10/04 09:30		
COC Number		707134-01-01	707134-01-01	707134-01-01		707134-01-01		
	UNITS	**SC-1**	**SB-1**	**SB-2**	**QC Batch**	**CB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Zinc (Zn)	mg/L	0.21	0.065	0.064	B144326	0.075	0.0030	B144343
RDL = Reportable Detection Limit								

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG300		CBG301		CBG302		CBG303		
Sampling Date		2023/10/04 09:35		2023/10/04 09:40		2023/10/04 09:45		2023/10/04 09:55		
COC Number		707134-01-01		707134-01-01		707134-01-01		707134-01-01		
	UNITS	CB-2	QC Batch	EB-1	QC Batch	EB-2	QC Batch	NB-1	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	0.28	B143113	0.47	B143041	0.50	B143041	0.30	0.020	B143041
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	<0.0030	B144343	0.021	B144326	<0.0030	B144324	<0.0030	0.0030	B144324
Dissolved Antimony (Sb)	mg/L	<0.00060	B144343	0.00061	B144326	<0.00060	B144324	<0.00060	0.00060	B144324
Dissolved Arsenic (As)	mg/L	0.00020	B144343	0.00024	B144326	0.00021	B144324	0.00025	0.00020	B144324
Dissolved Barium (Ba)	mg/L	0.014	B145305	0.015	B148065	0.015	B148065	0.014	0.010	B148062
Dissolved Beryllium (Be)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Boron (B)	mg/L	<0.020	B145305	<0.020	B148065	<0.020	B148065	<0.020	0.020	B148062
Dissolved Calcium (Ca)	mg/L	57	B145305	62	B148065	65	B148065	65	0.30	B148062
Dissolved Chromium (Cr)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Cobalt (Co)	mg/L	<0.00030	B144343	<0.00030	B144326	0.00030	B144324	<0.00030	0.00030	B144324
Dissolved Copper (Cu)	mg/L	0.0041	B144343	0.0060	B144326	0.0050	B144324	0.0041	0.0010	B144324
Dissolved Iron (Fe)	mg/L	<0.060	B145305	<0.060	B148065	<0.060	B148065	0.095	0.060	B148062
Dissolved Lead (Pb)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Lithium (Li)	mg/L	<0.020	B145305	<0.020	B148065	<0.020	B148065	<0.020	0.020	B148062
Dissolved Magnesium (Mg)	mg/L	9.0	B145305	9.5	B148065	9.7	B148065	11	0.20	B148062
Dissolved Manganese (Mn)	mg/L	0.060	B145305	0.050	B148065	0.052	B148065	0.069	0.0040	B148062
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B144343	0.00030	B144326	<0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Nickel (Ni)	mg/L	0.00088	B144343	0.0012	B144326	0.0011	B144324	0.00084	0.00050	B144324
Dissolved Phosphorus (P)	mg/L	<0.10	B145305	<0.10	B148065	<0.10	B148065	<0.10	0.10	B148062
Dissolved Potassium (K)	mg/L	4.7	B145305	4.8	B148065	4.9	B148065	4.6	0.30	B148062
Dissolved Selenium (Se)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Silicon (Si)	mg/L	0.64	B145305	0.53	B148065	0.50	B148065	0.68	0.50	B148062
Dissolved Silver (Ag)	mg/L	<0.00010	B144343	<0.00010	B144326	<0.00010	B144324	<0.00010	0.00010	B144324
Dissolved Sodium (Na)	mg/L	3.4	B145305	3.6	B148065	3.7	B148065	4.4	0.50	B148062
Dissolved Strontium (Sr)	mg/L	0.062	B145305	0.067	B148065	0.069	B148065	0.10	0.020	B148062
Dissolved Sulphur (S)	mg/L	58	B145305	62	B148065	64	B148065	64	0.20	B148062
Dissolved Thallium (Tl)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Tin (Sn)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Titanium (Ti)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Uranium (U)	mg/L	<0.00010	B144343	0.00019	B144326	<0.00010	B144324	<0.00010	0.00010	B144324

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG300		CBG301		CBG302		CBG303		
Sampling Date		2023/10/04 09:35		2023/10/04 09:40		2023/10/04 09:45		2023/10/04 09:55		
COC Number		707134-01-01		707134-01-01		707134-01-01		707134-01-01		
	UNITS	**CB-2**	**QC Batch**	**EB-1**	**QC Batch**	**EB-2**	**QC Batch**	**NB-1**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B144343	0.0011	B144326	0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Zinc (Zn)	mg/L	0.074	B144343	0.14	B144326	0.14	B144324	0.076	0.0030	B144324
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG304	CBG305		CBG306		CBG307		
Sampling Date		2023/10/04 09:50	2023/10/04 10:00		2023/10/04 08:50		2023/10/04 08:55		
COC Number		707134-01-01	707134-01-01		707134-02-01		707134-02-01		
	UNITS	NB-2	CLD	QC Batch	CL-3 SFC	QC Batch	CL-3 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.34	0.32	B143041	<0.020	B143041	<0.020	0.020	B143041
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	<0.0030	<0.0030	B144326	0.010	B144343	0.012	0.0030	B144343
Dissolved Antimony (Sb)	mg/L	<0.00060	<0.00060	B144326	0.00066	B144343	<0.00060	0.00060	B144343
Dissolved Arsenic (As)	mg/L	0.00026	0.00023	B144326	0.00044	B144343	0.00040	0.00020	B144343
Dissolved Barium (Ba)	mg/L	0.014	0.014	B148065	<0.010	B145308	<0.010	0.010	B145305
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Boron (B)	mg/L	<0.020	<0.020	B148065	<0.020	B145308	<0.020	0.020	B145305
Dissolved Calcium (Ca)	mg/L	67	65	B148065	14	B145308	14	0.30	B145305
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	B144326	<0.00030	B144343	<0.00030	0.00030	B144343
Dissolved Copper (Cu)	mg/L	0.0048	0.0043	B144326	0.0063	B144343	0.0042	0.0010	B144343
Dissolved Iron (Fe)	mg/L	<0.060	<0.060	B148065	0.097	B145308	0.24	0.060	B145305
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	B148065	<0.020	B145308	<0.020	0.020	B145305
Dissolved Magnesium (Mg)	mg/L	10	9.7	B148065	3.7	B145308	3.5	0.20	B145305
Dissolved Manganese (Mn)	mg/L	0.064	0.067	B148065	<0.0040	B145308	<0.0040	0.0040	B145305
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Nickel (Ni)	mg/L	0.00086	0.00084	B144326	<0.00050	B144343	<0.00050	0.00050	B144343
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	B148065	<0.10	B145308	<0.10	0.10	B145305
Dissolved Potassium (K)	mg/L	4.9	4.7	B148065	1.8	B145308	1.7	0.30	B145305
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Silicon (Si)	mg/L	0.60	0.64	B148065	0.75	B145308	0.80	0.50	B145305
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	B144326	<0.00010	B144343	<0.00010	0.00010	B144343
Dissolved Sodium (Na)	mg/L	3.6	3.5	B148065	2.3	B145308	2.2	0.50	B145305
Dissolved Strontium (Sr)	mg/L	0.070	0.068	B148065	0.028	B145308	0.030	0.020	B145305
Dissolved Sulphur (S)	mg/L	55	62	B148065	7.2	B145308	6.8	0.20	B145305
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Tin (Sn)	mg/L	<0.0010	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	B144326	<0.00010	B144343	<0.00010	0.00010	B144343

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG304	CBG305		CBG306		CBG307		
Sampling Date		2023/10/04 09:50	2023/10/04 10:00		2023/10/04 08:50		2023/10/04 08:55		
COC Number		707134-01-01	707134-01-01		707134-02-01		707134-02-01		
	UNITS	**NB-2**	**CLD**	**QC Batch**	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Zinc (Zn)	mg/L	0.082	0.079	B144326	0.0044	B144343	0.0053	0.0030	B144343
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG308		CBG309			CBG309		
Sampling Date		2023/10/04 09:00		2023/10/04 09:05			2023/10/04 09:05		
COC Number		707134-02-01		707134-02-01			707134-02-01		
	UNITS	CL-7 SFC	QC Batch	C-L7 BTM	RDL	QC Batch	C-L7 BTM Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B143041	<0.020	0.020	B143041			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.012	B144326	0.011	0.0030	B144343	0.010	0.0030	B144343
Dissolved Antimony (Sb)	mg/L	<0.00060	B144326	0.00067	0.00060	B144343	<0.00060	0.00060	B144343
Dissolved Arsenic (As)	mg/L	0.00048	B144326	0.00045	0.00020	B144343	0.00050	0.00020	B144343
Dissolved Barium (Ba)	mg/L	0.011	B148062	0.010	0.010	B145308			
Dissolved Beryllium (Be)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Boron (B)	mg/L	<0.020	B148062	<0.020	0.020	B145308			
Dissolved Calcium (Ca)	mg/L	14	B148062	14	0.30	B145308			
Dissolved Chromium (Cr)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Cobalt (Co)	mg/L	<0.00030	B144326	<0.00030	0.00030	B144343	<0.00030	0.00030	B144343
Dissolved Copper (Cu)	mg/L	0.0042	B144326	0.0041	0.0010	B144343	0.0060	0.0010	B144343
Dissolved Iron (Fe)	mg/L	0.095	B148062	0.079	0.060	B145308			
Dissolved Lead (Pb)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Lithium (Li)	mg/L	<0.020	B148062	<0.020	0.020	B145308			
Dissolved Magnesium (Mg)	mg/L	3.6	B148062	3.7	0.20	B145308			
Dissolved Manganese (Mn)	mg/L	<0.0040	B148062	<0.0040	0.0040	B145308			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Nickel (Ni)	mg/L	<0.00050	B144326	<0.00050	0.00050	B144343	<0.00050	0.00050	B144343
Dissolved Phosphorus (P)	mg/L	<0.10	B148062	<0.10	0.10	B145308			
Dissolved Potassium (K)	mg/L	1.6	B148062	1.8	0.30	B145308			
Dissolved Selenium (Se)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Silicon (Si)	mg/L	0.76	B148062	0.77	0.50	B145308			
Dissolved Silver (Ag)	mg/L	<0.00010	B144326	<0.00010	0.00010	B144343	<0.00010	0.00010	B144343
Dissolved Sodium (Na)	mg/L	2.3	B148062	2.6	0.50	B145308			
Dissolved Strontium (Sr)	mg/L	0.033	B148062	0.029	0.020	B145308			
Dissolved Sulphur (S)	mg/L	6.4	B148062	7.2	0.20	B145308			
Dissolved Thallium (Tl)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Tin (Sn)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Titanium (Ti)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Uranium (U)	mg/L	<0.00010	B144326	<0.00010	0.00010	B144343	<0.00010	0.00010	B144343

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG308		CBG309			CBG309		
Sampling Date		2023/10/04 09:00		2023/10/04 09:05			2023/10/04 09:05		
COC Number		707134-02-01		707134-02-01			707134-02-01		
	UNITS	**CL-7 SFC**	**QC Batch**	**C-L7 BTM**	**RDL**	**QC Batch**	**C-L7 BTM Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Zinc (Zn)	mg/L	0.0045	B144326	0.0050	0.0030	B144343	0.0045	0.0030	B144343

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG310		CBG311		CBG312		CBG313		
Sampling Date		2023/10/04 08:40		2023/10/04 09:45		2023/10/04 09:10		2023/10/04 09:15		
COC Number		707134-02-01		707134-02-01		707134-02-01		707134-02-01		
	UNITS	CL-8-SFC	QC Batch	CL-8-BTM	QC Batch	CL-2-SFC	QC Batch	CL-2-BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	B143041	<0.020	B143041	<0.020	B143041	<0.020	0.020	B143041
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.014	B144343	0.011	B144326	0.012	B144343	0.011	0.0030	B144343
Dissolved Antimony (Sb)	mg/L	<0.00060	B144343	<0.00060	B144326	0.0010	B144343	<0.00060	0.00060	B144343
Dissolved Arsenic (As)	mg/L	0.00040	B144343	0.00044	B144326	0.00046	B144343	0.00036	0.00020	B144343
Dissolved Barium (Ba)	mg/L	<0.010	B145308	<0.010	B145308	<0.010	B145305	<0.010	0.010	B145308
Dissolved Beryllium (Be)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Boron (B)	mg/L	<0.020	B145308	<0.020	B145308	<0.020	B145305	<0.020	0.020	B145308
Dissolved Calcium (Ca)	mg/L	14	B145308	14	B145308	13	B145305	14	0.30	B145308
Dissolved Chromium (Cr)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Cobalt (Co)	mg/L	<0.00030	B144343	<0.00030	B144326	<0.00030	B144343	<0.00030	0.00030	B144343
Dissolved Copper (Cu)	mg/L	0.0042	B144343	0.0066	B144326	0.0041	B144343	0.0042	0.0010	B144343
Dissolved Iron (Fe)	mg/L	0.090	B145308	0.091	B145308	0.12	B145305	0.14	0.060	B145308
Dissolved Lead (Pb)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Lithium (Li)	mg/L	<0.020	B145308	<0.020	B145308	<0.020	B145305	<0.020	0.020	B145308
Dissolved Magnesium (Mg)	mg/L	3.7	B145308	3.7	B145308	3.5	B145305	3.6	0.20	B145308
Dissolved Manganese (Mn)	mg/L	<0.0040	B145308	<0.0040	B145308	<0.0040	B145305	<0.0040	0.0040	B145308
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Nickel (Ni)	mg/L	<0.00050	B144343	<0.00050	B144326	<0.00050	B144343	<0.00050	0.00050	B144343
Dissolved Phosphorus (P)	mg/L	<0.10	B145308	<0.10	B145308	<0.10	B145305	<0.10	0.10	B145308
Dissolved Potassium (K)	mg/L	1.8	B145308	1.8	B145308	1.6	B145305	1.8	0.30	B145308
Dissolved Selenium (Se)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Silicon (Si)	mg/L	0.75	B145308	0.75	B145308	0.79	B145305	0.79	0.50	B145308
Dissolved Silver (Ag)	mg/L	<0.00010	B144343	<0.00010	B144326	<0.00010	B144343	<0.00010	0.00010	B144343
Dissolved Sodium (Na)	mg/L	2.3	B145308	2.3	B145308	2.2	B145305	2.3	0.50	B145308
Dissolved Strontium (Sr)	mg/L	0.028	B145308	0.029	B145308	0.030	B145305	0.028	0.020	B145308
Dissolved Sulphur (S)	mg/L	7.2	B145308	7.2	B145308	6.7	B145305	7.0	0.20	B145308
Dissolved Thallium (Tl)	mg/L	<0.00020	B144343	<0.00020	B144326	<0.00020	B144343	<0.00020	0.00020	B144343
Dissolved Tin (Sn)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Titanium (Ti)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Uranium (U)	mg/L	<0.00010	B144343	<0.00010	B144326	<0.00010	B144343	<0.00010	0.00010	B144343

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG310		CBG311		CBG312		CBG313		
Sampling Date		2023/10/04 08:40		2023/10/04 09:45		2023/10/04 09:10		2023/10/04 09:15		
COC Number		707134-02-01		707134-02-01		707134-02-01		707134-02-01		
	UNITS	**CL-8-SFC**	**QC Batch**	**CL-8-BTM**	**QC Batch**	**CL-2-SFC**	**QC Batch**	**CL-2-BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B144343	<0.0010	B144326	<0.0010	B144343	<0.0010	0.0010	B144343
Dissolved Zinc (Zn)	mg/L	0.0048	B144343	0.0044	B144326	0.0041	B144343	0.0043	0.0030	B144343
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG314		CBG315		CBG316		
Sampling Date		2023/10/04 09:30		2023/10/04 08:35		2023/10/04 08:20		
COC Number		707134-02-01		707134-02-01		707134-03-01		
	UNITS	CL-4-SFC	QC Batch	CL-4-BTM	QC Batch	CL-5-SFC	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L	<0.020	B143041	<0.020	B143041	<0.020	0.020	B143041
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.013	B144326	0.011	B144324	0.011	0.0030	B144326
Dissolved Antimony (Sb)	mg/L	<0.00060	B144326	<0.00060	B144324	<0.00060	0.00060	B144326
Dissolved Arsenic (As)	mg/L	0.00043	B144326	0.00051	B144324	0.00047	0.00020	B144326
Dissolved Barium (Ba)	mg/L	<0.010	B148065	<0.010	B148065	<0.010	0.010	B148062
Dissolved Beryllium (Be)	mg/L	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144326
Dissolved Boron (B)	mg/L	<0.020	B148065	<0.020	B148065	<0.020	0.020	B148062
Dissolved Calcium (Ca)	mg/L	13	B148065	12	B148065	13	0.30	B148062
Dissolved Chromium (Cr)	mg/L	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144326
Dissolved Cobalt (Co)	mg/L	<0.00030	B144326	<0.00030	B144324	<0.00030	0.00030	B144326
Dissolved Copper (Cu)	mg/L	0.0038	B144326	0.0037	B144324	0.0038	0.0010	B144326
Dissolved Iron (Fe)	mg/L	0.067	B148065	0.069	B148065	<0.060	0.060	B148062
Dissolved Lead (Pb)	mg/L	0.00021	B144326	<0.00020	B144324	<0.00020	0.00020	B144326
Dissolved Lithium (Li)	mg/L	<0.020	B148065	<0.020	B148065	<0.020	0.020	B148062
Dissolved Magnesium (Mg)	mg/L	3.5	B148065	3.3	B148065	3.4	0.20	B148062
Dissolved Manganese (Mn)	mg/L	<0.0040	B148065	<0.0040	B148065	<0.0040	0.0040	B148062
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B144326	<0.00020	B144324	<0.00020	0.00020	B144326
Dissolved Nickel (Ni)	mg/L	<0.00050	B144326	<0.00050	B144324	<0.00050	0.00050	B144326
Dissolved Phosphorus (P)	mg/L	<0.10	B148065	<0.10	B148065	<0.10	0.10	B148062
Dissolved Potassium (K)	mg/L	1.5	B148065	1.5	B148065	1.5	0.30	B148062
Dissolved Selenium (Se)	mg/L	<0.00020	B144326	<0.00020	B144324	<0.00020	0.00020	B144326
Dissolved Silicon (Si)	mg/L	0.70	B148065	0.71	B148065	0.69	0.50	B148062
Dissolved Silver (Ag)	mg/L	<0.00010	B144326	<0.00010	B144324	<0.00010	0.00010	B144326
Dissolved Sodium (Na)	mg/L	2.2	B148065	2.2	B148065	2.2	0.50	B148062
Dissolved Strontium (Sr)	mg/L	0.031	B148065	0.030	B148065	0.030	0.020	B148062
Dissolved Sulphur (S)	mg/L	5.7	B148065	5.9	B148065	5.8	0.20	B148062
Dissolved Thallium (Tl)	mg/L	<0.00020	B144326	<0.00020	B144324	<0.00020	0.00020	B144326
Dissolved Tin (Sn)	mg/L	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144326
Dissolved Titanium (Ti)	mg/L	<0.0010	B144326	<0.0010	B144324	<0.0010	0.0010	B144326
Dissolved Uranium (U)	mg/L	<0.00010	B144326	<0.00010	B144324	<0.00010	0.00010	B144326

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG314		CBG315		CBG316		
Sampling Date		2023/10/04 09:30		2023/10/04 08:35		2023/10/04 08:20		
COC Number		707134-02-01		707134-02-01		707134-03-01		
	UNITS	**CL-4-SFC**	**QC Batch**	**CL-4-BTM**	**QC Batch**	**CL-5-SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B144326	0.0011	B144324	<0.0010	0.0010	B144326
Dissolved Zinc (Zn)	mg/L	0.0039	B144326	0.0046	B144324	0.0043	0.0030	B144326
RDL = Reportable Detection Limit								

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG316			CBG317		CBG337		
Sampling Date		2023/10/04 08:20			2023/10/04 08:25		2023/10/04 08:10		
COC Number		707134-03-01			707134-03-01		707134-03-01		
	UNITS	CL-5-SFC Lab-Dup	RDL	QC Batch	CL-5-BTM	QC Batch	CL-6-SFC	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				<0.020	B143041	<0.020	0.020	B143041
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.013	0.0030	B144326	0.011	B144326	0.015	0.0030	B144343
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B144326	<0.00060	B144326	0.00083	0.00060	B144343
Dissolved Arsenic (As)	mg/L	0.00040	0.00020	B144326	0.00047	B144326	0.00050	0.00020	B144343
Dissolved Barium (Ba)	mg/L				<0.010	B148065	<0.010	0.010	B145305
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B144326	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Boron (B)	mg/L				<0.020	B148065	<0.020	0.020	B145305
Dissolved Calcium (Ca)	mg/L				13	B148065	12	0.30	B145305
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B144326	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B144326	<0.00030	B144326	<0.00030	0.00030	B144343
Dissolved Copper (Cu)	mg/L	0.0039	0.0010	B144326	0.0040	B144326	0.0037	0.0010	B144343
Dissolved Iron (Fe)	mg/L				<0.060	B148065	<0.060	0.060	B145305
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B144326	<0.00020	B144326	<0.00020	0.00020	B153329
Dissolved Lithium (Li)	mg/L				<0.020	B148065	<0.020	0.020	B145305
Dissolved Magnesium (Mg)	mg/L				3.4	B148065	3.4	0.20	B145305
Dissolved Manganese (Mn)	mg/L				<0.0040	B148065	<0.0040	0.0040	B145305
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B144326	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B144326	<0.00050	B144326	<0.00050	0.00050	B144343
Dissolved Phosphorus (P)	mg/L				<0.10	B148065	<0.10	0.10	B145305
Dissolved Potassium (K)	mg/L				1.6	B148065	1.5	0.30	B145305
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B144326	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Silicon (Si)	mg/L				0.71	B148065	0.59	0.50	B145305
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B144326	<0.00010	B144326	<0.00010	0.00010	B144343
Dissolved Sodium (Na)	mg/L				2.2	B148065	2.2	0.50	B145305
Dissolved Strontium (Sr)	mg/L				0.030	B148065	0.029	0.020	B145305
Dissolved Sulphur (S)	mg/L				5.9	B148065	5.0	0.20	B145305
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B144326	<0.00020	B144326	<0.00020	0.00020	B144343
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B144326	<0.0010	B144326	0.0024	0.0010	B144343
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B144326	<0.0010	B144326	0.0013	0.0010	B144343
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B144326	<0.00010	B144326	<0.00010	0.00010	B144343

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG316			CBG317		CBG337		
Sampling Date		2023/10/04 08:20			2023/10/04 08:25		2023/10/04 08:10		
COC Number		707134-03-01			707134-03-01		707134-03-01		
	UNITS	**CL-5-SFC Lab-Dup**	**RDL**	**QC Batch**	**CL-5-BTM**	**QC Batch**	**CL-6-SFC**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B144326	<0.0010	B144326	<0.0010	0.0010	B144343
Dissolved Zinc (Zn)	mg/L	0.0041	0.0030	B144326	0.0043	B144326	0.0050	0.0030	B144343

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG338		CBG339			CBG339		
Sampling Date		2023/10/04		2023/10/04			2023/10/04		
COC Number		707134-03-01		707134-03-01			707134-03-01		
	UNITS	CL-6-BTM	QC Batch	SW-131	RDL	QC Batch	SW-131 Lab-Dup	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B143041	0.29	0.020	B143041			
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.010	B144326	<0.0030	0.0030	B144324	<0.0030	0.0030	B144324
Dissolved Antimony (Sb)	mg/L	<0.00060	B144326	<0.00060	0.00060	B144324	<0.00060	0.00060	B144324
Dissolved Arsenic (As)	mg/L	0.00045	B144326	0.00025	0.00020	B144324	0.00025	0.00020	B144324
Dissolved Barium (Ba)	mg/L	<0.010	B148065	0.014	0.010	B148062			
Dissolved Beryllium (Be)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Boron (B)	mg/L	<0.020	B148065	<0.020	0.020	B148062			
Dissolved Calcium (Ca)	mg/L	12	B148065	57	0.30	B148062			
Dissolved Chromium (Cr)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Cobalt (Co)	mg/L	<0.00030	B144326	<0.00030	0.00030	B144324	<0.00030	0.00030	B144324
Dissolved Copper (Cu)	mg/L	0.0033	B144326	0.0036	0.0010	B144324	0.0034	0.0010	B144324
Dissolved Iron (Fe)	mg/L	<0.060	B148065	<0.060	0.060	B148062			
Dissolved Lead (Pb)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Lithium (Li)	mg/L	<0.020	B148065	<0.020	0.020	B148062			
Dissolved Magnesium (Mg)	mg/L	3.2	B148065	8.9	0.20	B148062			
Dissolved Manganese (Mn)	mg/L	<0.0040	B148065	0.064	0.0040	B148062			
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Nickel (Ni)	mg/L	<0.00050	B144326	0.00079	0.00050	B144324	0.00075	0.00050	B144324
Dissolved Phosphorus (P)	mg/L	<0.10	B148065	<0.10	0.10	B148062			
Dissolved Potassium (K)	mg/L	1.4	B148065	4.6	0.30	B148062			
Dissolved Selenium (Se)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Silicon (Si)	mg/L	0.59	B148065	0.64	0.50	B148062			
Dissolved Silver (Ag)	mg/L	<0.00010	B144326	<0.00010	0.00010	B144324	<0.00010	0.00010	B144324
Dissolved Sodium (Na)	mg/L	2.1	B148065	3.4	0.50	B148062			
Dissolved Strontium (Sr)	mg/L	0.029	B148065	0.062	0.020	B148062			
Dissolved Sulphur (S)	mg/L	5.0	B148065	54	0.20	B148062			
Dissolved Thallium (Tl)	mg/L	<0.00020	B144326	<0.00020	0.00020	B144324	<0.00020	0.00020	B144324
Dissolved Tin (Sn)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Titanium (Ti)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144324	<0.0010	0.0010	B144324
Dissolved Uranium (U)	mg/L	<0.00010	B144326	<0.00010	0.00010	B144324	<0.00010	0.00010	B144324

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG338		CBG339			CBG339		
Sampling Date		2023/10/04		2023/10/04			2023/10/04		
COC Number		707134-03-01		707134-03-01			707134-03-01		
	UNITS	**CL-6-BTM**	**QC Batch**	**SW-131**	**RDL**	**QC Batch**	**SW-131 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B144326	<0.0010	0.0010	B144324	0.0012	0.0010	B144324
Dissolved Zinc (Zn)	mg/L	0.0040	B144326	0.067	0.0030	B144324	0.065	0.0030	B144324

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG340		CBG341	CBG342		
Sampling Date		2023/10/04		2023/10/04	2023/10/04		
COC Number		707134-03-01		707134-03-01	707134-03-01		
	UNITS	SW-132	QC Batch	SW-133	TRIP BLANK	RDL	QC Batch
Elements							
Dissolved Cadmium (Cd)	ug/L	0.32	B143041	<0.020	<0.020	0.020	B143041
Lab Filtered Elements							
Dissolved Aluminum (Al)	mg/L	<0.0030	B144324	0.018	<0.0030	0.0030	B144343
Dissolved Antimony (Sb)	mg/L	<0.00060	B144324	<0.00060	<0.00060	0.00060	B144343
Dissolved Arsenic (As)	mg/L	0.00026	B144324	0.00043	<0.00020	0.00020	B144343
Dissolved Barium (Ba)	mg/L	0.014	B148062	0.010	<0.010	0.010	B145308
Dissolved Beryllium (Be)	mg/L	<0.0010	B144324	<0.0010	<0.0010	0.0010	B144343
Dissolved Boron (B)	mg/L	<0.020	B148062	<0.020	<0.020	0.020	B145308
Dissolved Calcium (Ca)	mg/L	65	B148062	14	<0.30	0.30	B145308
Dissolved Chromium (Cr)	mg/L	<0.0010	B144324	<0.0010	<0.0010	0.0010	B144343
Dissolved Cobalt (Co)	mg/L	<0.00030	B144324	<0.00030	<0.00030	0.00030	B144343
Dissolved Copper (Cu)	mg/L	0.0041	B144324	0.0041	<0.0010	0.0010	B144343
Dissolved Iron (Fe)	mg/L	<0.060	B148062	0.12	<0.060	0.060	B145308
Dissolved Lead (Pb)	mg/L	<0.00020	B144324	<0.00020	<0.00020	0.00020	B144343
Dissolved Lithium (Li)	mg/L	<0.020	B148062	<0.020	<0.020	0.020	B145308
Dissolved Magnesium (Mg)	mg/L	9.7	B148062	3.8	<0.20	0.20	B145308
Dissolved Manganese (Mn)	mg/L	0.069	B148062	<0.0040	<0.0040	0.0040	B145308
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B144324	<0.00020	<0.00020	0.00020	B144343
Dissolved Nickel (Ni)	mg/L	0.00093	B144324	<0.00050	<0.00050	0.00050	B144343
Dissolved Phosphorus (P)	mg/L	<0.10	B148062	<0.10	<0.10	0.10	B145308
Dissolved Potassium (K)	mg/L	4.7	B148062	1.8	<0.30	0.30	B145308
Dissolved Selenium (Se)	mg/L	<0.00020	B144324	<0.00020	<0.00020	0.00020	B144343
Dissolved Silicon (Si)	mg/L	0.63	B148062	0.79	<0.50	0.50	B145308
Dissolved Silver (Ag)	mg/L	<0.00010	B144324	<0.00010	<0.00010	0.00010	B144343
Dissolved Sodium (Na)	mg/L	3.5	B148062	2.3	<0.50	0.50	B145308
Dissolved Strontium (Sr)	mg/L	0.067	B148062	0.029	<0.020	0.020	B145308
Dissolved Sulphur (S)	mg/L	61	B148062	6.7	<0.20	0.20	B145308
Dissolved Thallium (Tl)	mg/L	<0.00020	B144324	<0.00020	<0.00020	0.00020	B144343
Dissolved Tin (Sn)	mg/L	<0.0010	B144324	<0.0010	<0.0010	0.0010	B144343
Dissolved Titanium (Ti)	mg/L	<0.0010	B144324	<0.0010	<0.0010	0.0010	B144343
Dissolved Uranium (U)	mg/L	<0.00010	B144324	<0.00010	<0.00010	0.00010	B144343
RDL = Reportable Detection Limit							

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CBG340		CBG341	CBG342		
Sampling Date		2023/10/04		2023/10/04	2023/10/04		
COC Number		707134-03-01		707134-03-01	707134-03-01		
	UNITS	**SW-132**	**QC Batch**	**SW-133**	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B144324	<0.0010	<0.0010	0.0010	B144343
Dissolved Zinc (Zn)	mg/L	0.079	B144324	0.0043	<0.0030	0.0030	B144343
RDL = Reportable Detection Limit							

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG283			CBG284			CBG284		
Sampling Date		2023/10/03 12:30			2023/10/04 09:25			2023/10/04 09:25		
COC Number		707134-01-01			707134-01-01			707134-01-01		
	UNITS	SC-1	RDL	QC Batch	SB-1	RDL	QC Batch	SB-1 Lab-Dup	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.51	0.020	B143117	0.40	0.020	B143117			
Total Aluminum (Al)	mg/L	0.072	0.0030	B150174	0.050	0.0030	B150179	0.048	0.0030	B150179
Total Antimony (Sb)	mg/L	0.00091	0.00060	B150174	<0.00060	0.00060	B150179	<0.00060	0.00060	B150179
Total Arsenic (As)	mg/L	0.00044	0.00020	B150174	0.00034	0.00020	B150179	0.00029	0.00020	B150179
Total Barium (Ba)	mg/L	<0.010	0.010	B150177	0.014	0.010	B150182	0.014	0.010	B150182
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179	<0.0010	0.0010	B150179
Total Boron (B)	mg/L	<0.020	0.020	B150177	<0.020	0.020	B150182	<0.020	0.020	B150182
Total Calcium (Ca)	mg/L	11	0.30	B150177	54	0.30	B150182	54	0.30	B150182
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179	<0.0010	0.0010	B150179
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B150174	<0.00030	0.00030	B150179	0.00033	0.00030	B150179
Total Copper (Cu)	mg/L	0.017	0.0010	B150174	0.0087	0.0010	B150179	0.0097	0.0010	B150179
Total Iron (Fe)	mg/L	0.51	0.070	B150177	2.3	0.060	B150182	2.3	0.060	B150182
Total Lead (Pb)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179	0.00025	0.00020	B150179
Total Lithium (Li)	mg/L	<0.020	0.020	B150177	<0.020	0.020	B150182	<0.020	0.020	B150182
Total Magnesium (Mg)	mg/L	3.5	0.20	B150177	8.8	0.20	B150182	8.9	0.20	B150182
Total Manganese (Mn)	mg/L	0.088	0.0040	B150177	0.069	0.0040	B150182	0.069	0.0040	B150182
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179	<0.00020	0.00020	B150179
Total Nickel (Ni)	mg/L	0.0010	0.00050	B150174	0.0015	0.00050	B150179	0.0016	0.00050	B150179
Total Phosphorus (P)	mg/L	<0.10	0.10	B150177	<0.10	0.10	B150182	<0.10	0.10	B150182
Total Potassium (K)	mg/L	1.9	0.30	B150177	4.5	0.30	B150182	4.5	0.30	B150182
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179	<0.00020	0.00020	B150179
Total Silicon (Si)	mg/L	1.7	0.50	B150177	0.83	0.50	B150182	0.82	0.50	B150182
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150174	<0.00010	0.00010	B150179	<0.00010	0.00010	B150179
Total Sodium (Na)	mg/L	2.7	0.50	B150177	3.3	0.50	B150182	3.3	0.50	B150182
Total Strontium (Sr)	mg/L	0.026	0.020	B150177	0.063	0.020	B150182	0.061	0.020	B150182
Total Sulphur (S)	mg/L	3.9	0.20	B150177	59	0.20	B150182	58	0.20	B150182
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179	<0.00020	0.00020	B150179
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179	<0.0010	0.0010	B150179
Total Titanium (Ti)	mg/L	0.0016	0.0010	B150174	0.0016	0.0010	B150179	0.0021	0.0010	B150179
Total Uranium (U)	mg/L	<0.00010	0.00010	B150174	<0.00010	0.00010	B150179	<0.00010	0.00010	B150179
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179	<0.0010	0.0010	B150179

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG283			CBG284			CBG284		
Sampling Date		2023/10/03 12:30			2023/10/04 09:25			2023/10/04 09:25		
COC Number		707134-01-01			707134-01-01			707134-01-01		
	UNITS	**SC-1**	**RDL**	**QC Batch**	**SB-1**	**RDL**	**QC Batch**	**SB-1 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.24	0.0030	B150174	0.14	0.0030	B150179	0.13	0.0030	B150179

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG292	CBG297			CBG300		CBG301		
Sampling Date		2023/10/04 09:20	2023/10/04 09:30			2023/10/04 09:35		2023/10/04 09:40		
COC Number		707134-01-01	707134-01-01			707134-01-01		707134-01-01		
	UNITS	SB-2	CB-1	RDL	QC Batch	CB-2	QC Batch	EB-1	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.33	0.41	0.020	B143117	0.34	B143117	0.51	0.020	B143117
Total Aluminum (Al)	mg/L	0.033	0.042	0.0030	B150174	0.045	B148399	0.060	0.0030	B147348
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B150174	<0.00060	B148399	<0.00060	0.00060	B147348
Total Arsenic (As)	mg/L	0.00022	0.00031	0.00020	B150174	0.00030	B148399	0.00025	0.00020	B147348
Total Barium (Ba)	mg/L	0.015	0.015	0.010	B150177	0.015	B148406	0.015	0.010	B147349
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B147348
Total Boron (B)	mg/L	<0.020	<0.020	0.020	B150177	<0.020	B148406	<0.020	0.020	B147349
Total Calcium (Ca)	mg/L	60	60	0.30	B150177	60	B148406	63	0.30	B147349
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B147348
Total Cobalt (Co)	mg/L	<0.00030	0.00030	0.00030	B150174	<0.00030	B148399	0.00032	0.00030	B147348
Total Copper (Cu)	mg/L	0.0094	0.0088	0.0010	B150174	0.0074	B148399	0.010	0.0010	B147348
Total Iron (Fe)	mg/L	2.6	2.3	0.070	B150177	2.0	B148406	1.6	0.060	B147349
Total Lead (Pb)	mg/L	<0.00020	0.00023	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B147348
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B150177	<0.020	B148406	<0.020	0.020	B147349
Total Magnesium (Mg)	mg/L	9.8	9.8	0.20	B150177	9.3	B148406	9.6	0.20	B147349
Total Manganese (Mn)	mg/L	0.075	0.069	0.0040	B150177	0.068	B148406	0.055	0.0040	B147349
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B147348
Total Nickel (Ni)	mg/L	0.0019	0.0021	0.00050	B150174	0.0012	B148399	0.0015	0.00050	B147348
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B150177	<0.10	B148406	<0.10	0.10	B147349
Total Potassium (K)	mg/L	5.0	4.9	0.30	B150177	4.9	B148406	4.9	0.30	B147349
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B147348
Total Silicon (Si)	mg/L	0.79	0.76	0.50	B150177	0.83	B148406	0.67	0.50	B147349
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B150174	<0.00010	B148399	<0.00010	0.00010	B147348
Total Sodium (Na)	mg/L	3.7	3.7	0.50	B150177	3.6	B148406	3.7	0.50	B147349
Total Strontium (Sr)	mg/L	0.056	0.057	0.020	B150177	0.065	B148406	0.066	0.020	B147349
Total Sulphur (S)	mg/L	61	60	0.20	B150177	59	B148406	64	0.20	B147349
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B147348
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B147348
Total Titanium (Ti)	mg/L	0.0014	0.0018	0.0010	B150174	0.0016	B148399	0.0013	0.0010	B147348
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B150174	<0.00010	B148399	<0.00010	0.00010	B147348
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B147348

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG292	CBG297			CBG300		CBG301		
Sampling Date		2023/10/04 09:20	2023/10/04 09:30			2023/10/04 09:35		2023/10/04 09:40		
COC Number		707134-01-01	707134-01-01			707134-01-01		707134-01-01		
	UNITS	**SB-2**	**CB-1**	**RDL**	**QC Batch**	**CB-2**	**QC Batch**	**EB-1**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.098	0.12	0.0030	B150174	0.096	B148399	0.15	0.0030	B147348
RDL = Reportable Detection Limit										

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG302			CBG303			CBG304		
Sampling Date		2023/10/04 09:45			2023/10/04 09:55			2023/10/04 09:50		
COC Number		707134-01-01			707134-01-01			707134-01-01		
	UNITS	EB-2	RDL	QC Batch	NB-1	RDL	QC Batch	NB-2	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.72	0.020	B143117	0.35	0.020	B143117	0.42	0.020	B143117
Total Aluminum (Al)	mg/L	0.065	0.0030	B150174	0.033	0.0030	B148399	0.033	0.0030	B150174
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150174	<0.00060	0.00060	B148399	<0.00060	0.00060	B150174
Total Arsenic (As)	mg/L	0.00031	0.00020	B150174	0.00027	0.00020	B148399	0.00032	0.00020	B150174
Total Barium (Ba)	mg/L	0.016	0.010	B150177	0.014	0.010	B148406	0.015	0.010	B150177
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174
Total Boron (B)	mg/L	0.020	0.020	B150177	<0.020	0.020	B148406	0.021	0.020	B150177
Total Calcium (Ca)	mg/L	67	0.30	B150177	64	0.30	B148406	64	0.30	B150177
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174
Total Cobalt (Co)	mg/L	0.00042	0.00030	B150174	<0.00030	0.00030	B148399	<0.00030	0.00030	B150174
Total Copper (Cu)	mg/L	0.012	0.0010	B150174	0.0082	0.0010	B148399	0.0089	0.0010	B150174
Total Iron (Fe)	mg/L	1.6	0.070	B150177	2.1	0.060	B148406	1.9	0.070	B150177
Total Lead (Pb)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399	0.00036	0.00020	B150174
Total Lithium (Li)	mg/L	<0.020	0.020	B150177	<0.020	0.020	B148406	<0.020	0.020	B150177
Total Magnesium (Mg)	mg/L	10	0.20	B150177	9.6	0.20	B148406	10	0.20	B150177
Total Manganese (Mn)	mg/L	0.057	0.0040	B150177	0.073	0.0040	B148406	0.067	0.0040	B150177
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399	<0.00020	0.00020	B150174
Total Nickel (Ni)	mg/L	0.0020	0.00050	B150174	0.0010	0.00050	B148399	0.0011	0.00050	B150174
Total Phosphorus (P)	mg/L	<0.10	0.10	B150177	<0.10	0.10	B148406	<0.10	0.10	B150177
Total Potassium (K)	mg/L	5.2	0.30	B150177	4.6	0.30	B148406	4.8	0.30	B150177
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399	<0.00020	0.00020	B150174
Total Silicon (Si)	mg/L	0.60	0.50	B150177	0.78	0.50	B148406	0.73	0.50	B150177
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150174	<0.00010	0.00010	B148399	<0.00010	0.00010	B150174
Total Sodium (Na)	mg/L	3.8	0.50	B150177	3.4	0.50	B148406	3.5	0.50	B150177
Total Strontium (Sr)	mg/L	0.058	0.020	B150177	0.065	0.020	B148406	0.056	0.020	B150177
Total Sulphur (S)	mg/L	66	0.20	B150177	65	0.20	B148406	63	0.20	B150177
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399	<0.00020	0.00020	B150174
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174
Total Titanium (Ti)	mg/L	0.0015	0.0010	B150174	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174
Total Uranium (U)	mg/L	<0.00010	0.00010	B150174	<0.00010	0.00010	B148399	<0.00010	0.00010	B150174
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG302			CBG303			CBG304		
Sampling Date		2023/10/04 09:45			2023/10/04 09:55			2023/10/04 09:50		
COC Number		707134-01-01			707134-01-01			707134-01-01		
	UNITS	**EB-2**	**RDL**	**QC Batch**	**NB-1**	**RDL**	**QC Batch**	**NB-2**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.21	0.0030	B150174	0.10	0.0030	B148399	0.11	0.0030	B150174
RDL = Reportable Detection Limit										

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG305			CBG306			CBG307		
Sampling Date		2023/10/04 10:00			2023/10/04 08:50			2023/10/04 08:55		
COC Number		707134-01-01			707134-02-01			707134-02-01		
	UNITS	CLD	RDL	QC Batch	CL-3 SFC	RDL	QC Batch	CL-3 BTM	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.48	0.020	B143117	0.031	0.020	B143117	0.038	0.020	B143117
Total Aluminum (Al)	mg/L	0.045	0.0030	B150179	0.049	0.0030	B150174	0.050	0.0030	B150196
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150179	<0.00060	0.00060	B150174	<0.00060	0.00060	B150196
Total Arsenic (As)	mg/L	0.00039	0.00020	B150179	0.00050	0.00020	B150174	0.00053	0.00020	B150196
Total Barium (Ba)	mg/L	0.013	0.010	B150182	0.010	0.010	B150177	<0.010	0.010	B150207
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150179	<0.0010	0.0010	B150174	<0.0010	0.0010	B150196
Total Boron (B)	mg/L	<0.020	0.020	B150182	<0.020	0.020	B150177	<0.020	0.020	B150207
Total Calcium (Ca)	mg/L	62	0.30	B150182	14	0.30	B150177	14	0.30	B150207
Total Chromium (Cr)	mg/L	0.0031	0.0010	B150179	<0.0010	0.0010	B150174	<0.0010	0.0010	B150196
Total Cobalt (Co)	mg/L	0.00034	0.00030	B150179	<0.00030	0.00030	B150174	<0.00030	0.00030	B150196
Total Copper (Cu)	mg/L	0.010	0.0010	B150179	0.0059	0.0010	B150174	0.0058	0.0010	B150196
Total Iron (Fe)	mg/L	2.2	0.060	B150182	0.44	0.070	B150177	0.43	0.060	B150207
Total Lead (Pb)	mg/L	<0.00020	0.00020	B150179	<0.00020	0.00020	B150174	<0.00020	0.00020	B150196
Total Lithium (Li)	mg/L	<0.020	0.020	B150182	<0.020	0.020	B150177	<0.020	0.020	B150207
Total Magnesium (Mg)	mg/L	9.6	0.20	B150182	3.6	0.20	B150177	3.6	0.20	B150207
Total Manganese (Mn)	mg/L	0.072	0.0040	B150182	0.018	0.0040	B150177	0.019	0.0040	B150207
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150179	<0.00020	0.00020	B150174	<0.00020	0.00020	B150196
Total Nickel (Ni)	mg/L	0.0013	0.00050	B150179	0.00054	0.00050	B150174	0.00062	0.00050	B150196
Total Phosphorus (P)	mg/L	<0.10	0.10	B150182	<0.10	0.10	B150177	<0.10	0.10	B150207
Total Potassium (K)	mg/L	4.6	0.30	B150182	1.7	0.30	B150177	1.7	0.30	B150207
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150179	<0.00020	0.00020	B150174	<0.00020	0.00020	B150196
Total Silicon (Si)	mg/L	0.77	0.50	B150182	0.87	0.50	B150177	0.92	0.50	B150207
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150179	<0.00010	0.00010	B150174	<0.00010	0.00010	B150196
Total Sodium (Na)	mg/L	3.3	0.50	B150182	2.3	0.50	B150177	2.2	0.50	B150207
Total Strontium (Sr)	mg/L	0.065	0.020	B150182	0.029	0.020	B150177	0.030	0.020	B150207
Total Sulphur (S)	mg/L	66	0.20	B150182	7.0	0.20	B150177	6.9	0.20	B150207
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150179	<0.00020	0.00020	B150174	<0.00020	0.00020	B150196
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150179	<0.0010	0.0010	B150174	0.0011	0.0010	B150196
Total Titanium (Ti)	mg/L	0.0019	0.0010	B150179	0.0013	0.0010	B150174	0.0013	0.0010	B150196
Total Uranium (U)	mg/L	<0.00010	0.00010	B150179	<0.00010	0.00010	B150174	<0.00010	0.00010	B150196
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150179	<0.0010	0.0010	B150174	<0.0010	0.0010	B150196

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG305			CBG306			CBG307		
Sampling Date		2023/10/04 10:00			2023/10/04 08:50			2023/10/04 08:55		
COC Number		707134-01-01			707134-02-01			707134-02-01		
	UNITS	**CLD**	**RDL**	**QC Batch**	**CL-3 SFC**	**RDL**	**QC Batch**	**CL-3 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.14	0.0030	B150179	0.011	0.0030	B150174	0.011	0.0030	B150196
RDL = Reportable Detection Limit										

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG308			CBG308			CBG309		
Sampling Date		2023/10/04 09:00			2023/10/04 09:00			2023/10/04 09:05		
COC Number		707134-02-01			707134-02-01			707134-02-01		
	UNITS	CL-7 SFC	RDL	QC Batch	CL-7 SFC Lab-Dup	RDL	QC Batch	C-L7 BTM	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.026	0.020	B143115				0.026	0.020	B143043
Total Aluminum (Al)	mg/L	0.045	0.0030	B147348	0.042	0.0030	B147348	0.056	0.0030	B148399
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B147348	<0.00060	0.00060	B147348	<0.00060	0.00060	B148399
Total Arsenic (As)	mg/L	0.00051	0.00020	B147348	0.00044	0.00020	B147348	0.00048	0.00020	B148399
Total Barium (Ba)	mg/L	0.010	0.010	B147349	<0.010	0.010	B147349	<0.010	0.010	B148406
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B147348	<0.0010	0.0010	B147348	<0.0010	0.0010	B148399
Total Boron (B)	mg/L	<0.020	0.020	B147349	<0.020	0.020	B147349	<0.020	0.020	B148406
Total Calcium (Ca)	mg/L	14	0.30	B147349	13	0.30	B147349	13	0.30	B148406
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B147348	<0.0010	0.0010	B147348	<0.0010	0.0010	B148399
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B147348	<0.00030	0.00030	B147348	<0.00030	0.00030	B148399
Total Copper (Cu)	mg/L	0.0057	0.0010	B147348	0.0054	0.0010	B147348	0.0057	0.0010	B148399
Total Iron (Fe)	mg/L	0.45	0.060	B147349	0.43	0.060	B147349	0.44	0.060	B148406
Total Lead (Pb)	mg/L	<0.00020	0.00020	B147348	<0.00020	0.00020	B147348	<0.00020	0.00020	B148399
Total Lithium (Li)	mg/L	<0.020	0.020	B147349	<0.020	0.020	B147349	<0.020	0.020	B148406
Total Magnesium (Mg)	mg/L	3.6	0.20	B147349	3.4	0.20	B147349	3.4	0.20	B148406
Total Manganese (Mn)	mg/L	0.019	0.0040	B147349	0.018	0.0040	B147349	0.018	0.0040	B148406
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B147348	<0.00020	0.00020	B147348	<0.00020	0.00020	B148399
Total Nickel (Ni)	mg/L	0.00053	0.00050	B147348	<0.00050	0.00050	B147348	0.00056	0.00050	B148399
Total Phosphorus (P)	mg/L	<0.10	0.10	B147349	<0.10	0.10	B147349	<0.10	0.10	B148406
Total Potassium (K)	mg/L	1.7	0.30	B147349	1.6	0.30	B147349	1.6	0.30	B148406
Total Selenium (Se)	mg/L	<0.00020	0.00020	B147348	<0.00020	0.00020	B147348	<0.00020	0.00020	B148399
Total Silicon (Si)	mg/L	0.95	0.50	B147349	0.89	0.50	B147349	0.93	0.50	B148406
Total Silver (Ag)	mg/L	<0.00010	0.00010	B147348	<0.00010	0.00010	B147348	<0.00010	0.00010	B148399
Total Sodium (Na)	mg/L	2.3	0.50	B147349	2.2	0.50	B147349	2.2	0.50	B148406
Total Strontium (Sr)	mg/L	0.031	0.020	B147349	0.029	0.020	B147349	0.030	0.020	B148406
Total Sulphur (S)	mg/L	7.1	0.20	B147349	6.8	0.20	B147349	6.8	0.20	B148406
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B147348	<0.00020	0.00020	B147348	<0.00020	0.00020	B148399
Total Tin (Sn)	mg/L	<0.0010	0.0010	B147348	<0.0010	0.0010	B147348	<0.0010	0.0010	B148399
Total Titanium (Ti)	mg/L	0.0016	0.0010	B147348	0.0011	0.0010	B147348	0.0013	0.0010	B148399
Total Uranium (U)	mg/L	<0.00010	0.00010	B147348	<0.00010	0.00010	B147348	<0.00010	0.00010	B148399
Total Vanadium (V)	mg/L	<0.0010	0.0010	B147348	<0.0010	0.0010	B147348	<0.0010	0.0010	B148399

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG308			CBG308			CBG309		
Sampling Date		2023/10/04 09:00			2023/10/04 09:00			2023/10/04 09:05		
COC Number		707134-02-01			707134-02-01			707134-02-01		
	UNITS	**CL-7 SFC**	**RDL**	**QC Batch**	**CL-7 SFC Lab-Dup**	**RDL**	**QC Batch**	**C-L7 BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.0099	0.0030	B147348	0.0098	0.0030	B147348	0.0096	0.0030	B148399

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG310			CBG311			CBG312		
Sampling Date		2023/10/04 08:40			2023/10/04 09:45			2023/10/04 09:10		
COC Number		707134-02-01			707134-02-01			707134-02-01		
	UNITS	CL-8-SFC	RDL	QC Batch	CL-8-BTM	RDL	QC Batch	CL-2-SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.026	0.020	B143043	0.032	0.020	B143043	0.035	0.020	B143043
Total Aluminum (Al)	mg/L	0.053	0.0030	B148399	0.042	0.0030	B150174	0.047	0.0030	B150179
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B148399	<0.00060	0.00060	B150174	<0.00060	0.00060	B150179
Total Arsenic (As)	mg/L	0.00047	0.00020	B148399	0.00045	0.00020	B150174	0.00058	0.00020	B150179
Total Barium (Ba)	mg/L	<0.010	0.010	B148406	0.011	0.010	B150177	0.012	0.010	B150182
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179
Total Boron (B)	mg/L	<0.020	0.020	B148406	<0.020	0.020	B150177	<0.020	0.020	B150182
Total Calcium (Ca)	mg/L	13	0.30	B148406	14	0.30	B150177	13	0.30	B150182
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B148399	<0.00030	0.00030	B150174	<0.00030	0.00030	B150179
Total Copper (Cu)	mg/L	0.0055	0.0010	B148399	0.0056	0.0010	B150174	0.0068	0.0010	B150179
Total Iron (Fe)	mg/L	0.42	0.060	B148406	0.47	0.070	B150177	0.46	0.060	B150182
Total Lead (Pb)	mg/L	0.00024	0.00020	B148399	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179
Total Lithium (Li)	mg/L	<0.020	0.020	B148406	<0.020	0.020	B150177	<0.020	0.020	B150182
Total Magnesium (Mg)	mg/L	3.3	0.20	B148406	3.6	0.20	B150177	3.5	0.20	B150182
Total Manganese (Mn)	mg/L	0.018	0.0040	B148406	0.019	0.0040	B150177	0.030	0.0040	B150182
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B148399	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179
Total Nickel (Ni)	mg/L	0.00058	0.00050	B148399	0.00058	0.00050	B150174	0.00096	0.00050	B150179
Total Phosphorus (P)	mg/L	<0.10	0.10	B148406	<0.10	0.10	B150177	<0.10	0.10	B150182
Total Potassium (K)	mg/L	1.5	0.30	B148406	1.8	0.30	B150177	1.6	0.30	B150182
Total Selenium (Se)	mg/L	<0.00020	0.00020	B148399	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179
Total Silicon (Si)	mg/L	0.90	0.50	B148406	0.86	0.50	B150177	0.99	0.50	B150182
Total Silver (Ag)	mg/L	<0.00010	0.00010	B148399	<0.00010	0.00010	B150174	<0.00010	0.00010	B150179
Total Sodium (Na)	mg/L	2.1	0.50	B148406	2.4	0.50	B150177	2.1	0.50	B150182
Total Strontium (Sr)	mg/L	0.029	0.020	B148406	0.030	0.020	B150177	0.031	0.020	B150182
Total Sulphur (S)	mg/L	6.7	0.20	B148406	7.1	0.20	B150177	7.0	0.20	B150182
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B148399	<0.00020	0.00020	B150174	<0.00020	0.00020	B150179
Total Tin (Sn)	mg/L	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179
Total Titanium (Ti)	mg/L	0.0011	0.0010	B148399	0.0012	0.0010	B150174	0.0012	0.0010	B150179
Total Uranium (U)	mg/L	<0.00010	0.00010	B148399	<0.00010	0.00010	B150174	<0.00010	0.00010	B150179
Total Vanadium (V)	mg/L	<0.0010	0.0010	B148399	<0.0010	0.0010	B150174	<0.0010	0.0010	B150179

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG310			CBG311			CBG312		
Sampling Date		2023/10/04 08:40			2023/10/04 09:45			2023/10/04 09:10		
COC Number		707134-02-01			707134-02-01			707134-02-01		
	UNITS	**CL-8-SFC**	**RDL**	**QC Batch**	**CL-8-BTM**	**RDL**	**QC Batch**	**CL-2-SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.0097	0.0030	B148399	0.010	0.0030	B150174	0.011	0.0030	B150179
RDL = Reportable Detection Limit										

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG313		CBG314			CBG314		
Sampling Date		2023/10/04 09:15		2023/10/04 09:30			2023/10/04 09:30		
COC Number		707134-02-01		707134-02-01			707134-02-01		
	UNITS	CL-2-BTM	QC Batch	CL-4-SFC	RDL	QC Batch	CL-4-SFC Lab-Dup	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.032	B143043	0.022	0.020	B143043			
Total Aluminum (Al)	mg/L	0.061	B150179	0.052	0.0030	B148399	0.056	0.0030	B148399
Total Antimony (Sb)	mg/L	<0.00060	B150179	<0.00060	0.00060	B148399	<0.00060	0.00060	B148399
Total Arsenic (As)	mg/L	0.00059	B150179	0.00043	0.00020	B148399	0.00047	0.00020	B148399
Total Barium (Ba)	mg/L	<0.010	B150182	<0.010	0.010	B148406	<0.010	0.010	B148406
Total Beryllium (Be)	mg/L	<0.0010	B150179	<0.0010	0.0010	B148399	<0.0010	0.0010	B148399
Total Boron (B)	mg/L	<0.020	B150182	<0.020	0.020	B148406	<0.020	0.020	B148406
Total Calcium (Ca)	mg/L	13	B150182	13	0.30	B148406	13	0.30	B148406
Total Chromium (Cr)	mg/L	<0.0010	B150179	<0.0010	0.0010	B148399	<0.0010	0.0010	B148399
Total Cobalt (Co)	mg/L	<0.00030	B150179	<0.00030	0.00030	B148399	<0.00030	0.00030	B148399
Total Copper (Cu)	mg/L	0.0067	B150179	0.0053	0.0010	B148399	0.0057	0.0010	B148399
Total Iron (Fe)	mg/L	0.48	B150182	0.40	0.060	B148406	0.41	0.060	B148406
Total Lead (Pb)	mg/L	<0.00020	B150179	<0.00020	0.00020	B148399	<0.00020	0.00020	B148399
Total Lithium (Li)	mg/L	<0.020	B150182	<0.020	0.020	B148406	<0.020	0.020	B148406
Total Magnesium (Mg)	mg/L	3.5	B150182	3.4	0.20	B148406	3.4	0.20	B148406
Total Manganese (Mn)	mg/L	0.026	B150182	0.018	0.0040	B148406	0.019	0.0040	B148406
Total Molybdenum (Mo)	mg/L	<0.00020	B150179	<0.00020	0.00020	B148399	<0.00020	0.00020	B148399
Total Nickel (Ni)	mg/L	0.00057	B150179	0.00053	0.00050	B148399	0.00080	0.00050	B148399
Total Phosphorus (P)	mg/L	<0.10	B150182	<0.10	0.10	B148406	<0.10	0.10	B148406
Total Potassium (K)	mg/L	1.6	B150182	1.6	0.30	B148406	1.5	0.30	B148406
Total Selenium (Se)	mg/L	<0.00020	B150179	<0.00020	0.00020	B148399	<0.00020	0.00020	B148399
Total Silicon (Si)	mg/L	1.0	B150182	0.91	0.50	B148406	0.93	0.50	B148406
Total Silver (Ag)	mg/L	<0.00010	B150179	<0.00010	0.00010	B148399	<0.00010	0.00010	B148399
Total Sodium (Na)	mg/L	2.1	B150182	2.2	0.50	B148406	2.2	0.50	B148406
Total Strontium (Sr)	mg/L	0.030	B150182	0.029	0.020	B148406	0.030	0.020	B148406
Total Sulphur (S)	mg/L	7.0	B150182	6.1	0.20	B148406	6.2	0.20	B148406
Total Thallium (Tl)	mg/L	<0.00020	B150179	<0.00020	0.00020	B148399	<0.00020	0.00020	B148399
Total Tin (Sn)	mg/L	<0.0010	B150179	<0.0010	0.0010	B148399	<0.0010	0.0010	B148399
Total Titanium (Ti)	mg/L	0.0035	B150179	0.0016	0.0010	B148399	0.0013	0.0010	B148399
Total Uranium (U)	mg/L	<0.00010	B150179	<0.00010	0.00010	B148399	<0.00010	0.00010	B148399
Total Vanadium (V)	mg/L	<0.0010	B150179	<0.0010	0.0010	B148399	<0.0010	0.0010	B148399

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG313		CBG314			CBG314		
Sampling Date		2023/10/04 09:15		2023/10/04 09:30			2023/10/04 09:30		
COC Number		707134-02-01		707134-02-01			707134-02-01		
	UNITS	**CL-2-BTM**	**QC Batch**	**CL-4-SFC**	**RDL**	**QC Batch**	**CL-4-SFC Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.012	B150179	0.0099	0.0030	B148399	0.0099	0.0030	B148399

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG315			CBG315			CBG316		
Sampling Date		2023/10/04 08:35			2023/10/04 08:35			2023/10/04 08:20		
COC Number		707134-02-01			707134-02-01			707134-03-01		
	UNITS	CL-4-BTM	RDL	QC Batch	CL-4-BTM Lab-Dup	RDL	QC Batch	CL-5-SFC	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.034	0.020	B143043				<0.020	0.020	B143043
Total Aluminum (Al)	mg/L	0.066	0.0030	B150174	0.073	0.0030	B150174	0.065	0.0030	B148399
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150174	<0.00060	0.00060	B150174	<0.00060	0.00060	B148399
Total Arsenic (As)	mg/L	0.00056	0.00020	B150174	0.00052	0.00020	B150174	0.00046	0.00020	B148399
Total Barium (Ba)	mg/L	0.012	0.010	B150177	0.011	0.010	B150177	<0.010	0.010	B148406
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399
Total Boron (B)	mg/L	<0.020	0.020	B150177	<0.020	0.020	B150177	<0.020	0.020	B148406
Total Calcium (Ca)	mg/L	13	0.30	B150177	13	0.30	B150177	12	0.30	B148406
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B150174	<0.00030	0.00030	B150174	<0.00030	0.00030	B148399
Total Copper (Cu)	mg/L	0.0056	0.0010	B150174	0.0062	0.0010	B150174	0.0049	0.0010	B148399
Total Iron (Fe)	mg/L	0.57	0.070	B150177	0.49	0.070	B150177	0.31	0.060	B148406
Total Lead (Pb)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399
Total Lithium (Li)	mg/L	<0.020	0.020	B150177	<0.020	0.020	B150177	<0.020	0.020	B148406
Total Magnesium (Mg)	mg/L	3.7	0.20	B150177	3.6	0.20	B150177	3.2	0.20	B148406
Total Manganese (Mn)	mg/L	0.027	0.0040	B150177	0.023	0.0040	B150177	0.015	0.0040	B148406
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399
Total Nickel (Ni)	mg/L	0.00061	0.00050	B150174	0.00062	0.00050	B150174	0.00051	0.00050	B148399
Total Phosphorus (P)	mg/L	<0.10	0.10	B150177	<0.10	0.10	B150177	<0.10	0.10	B148406
Total Potassium (K)	mg/L	1.8	0.30	B150177	1.7	0.30	B150177	1.5	0.30	B148406
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399
Total Silicon (Si)	mg/L	0.96	0.50	B150177	0.93	0.50	B150177	0.87	0.50	B148406
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150174	<0.00010	0.00010	B150174	<0.00010	0.00010	B148399
Total Sodium (Na)	mg/L	2.3	0.50	B150177	2.3	0.50	B150177	2.1	0.50	B148406
Total Strontium (Sr)	mg/L	0.028	0.020	B150177	0.027	0.020	B150177	0.028	0.020	B148406
Total Sulphur (S)	mg/L	6.3	0.20	B150177	6.1	0.20	B150177	5.7	0.20	B148406
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150174	<0.00020	0.00020	B150174	<0.00020	0.00020	B148399
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399
Total Titanium (Ti)	mg/L	0.0027	0.0010	B150174	0.0030	0.0010	B150174	0.0019	0.0010	B148399
Total Uranium (U)	mg/L	<0.00010	0.00010	B150174	<0.00010	0.00010	B150174	<0.00010	0.00010	B148399
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150174	<0.0010	0.0010	B150174	<0.0010	0.0010	B148399

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG315			CBG315			CBG316		
Sampling Date		2023/10/04 08:35			2023/10/04 08:35			2023/10/04 08:20		
COC Number		707134-02-01			707134-02-01			707134-03-01		
	UNITS	**CL-4-BTM**	**RDL**	**QC Batch**	**CL-4-BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-5-SFC**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.011	0.0030	B150174	0.013	0.0030	B150174	0.0099	0.0030	B148399

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG317			CBG337		CBG338		
Sampling Date		2023/10/04 08:25			2023/10/04 08:10		2023/10/04		
COC Number		707134-03-01			707134-03-01		707134-03-01		
	UNITS	CL-5-BTM	RDL	QC Batch	CL-6-SFC	QC Batch	CL-6-BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.052	0.020	B143043	0.021	B143043	0.032	0.020	B143043
Total Aluminum (Al)	mg/L	0.061	0.0030	B150174	0.063	B148399	0.059	0.0030	B149556
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150174	<0.00060	B148399	0.00070	0.00060	B149556
Total Arsenic (As)	mg/L	0.00053	0.00020	B150174	0.00050	B148399	0.00052	0.00020	B149556
Total Barium (Ba)	mg/L	0.011	0.010	B150177	<0.010	B148406	0.011	0.010	B149558
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B149556
Total Boron (B)	mg/L	<0.020	0.020	B150177	<0.020	B148406	<0.020	0.020	B149558
Total Calcium (Ca)	mg/L	13	0.30	B150177	11	B148406	12	0.30	B149558
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B149556
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B150174	<0.00030	B148399	<0.00030	0.00030	B149556
Total Copper (Cu)	mg/L	0.0060	0.0010	B150174	0.0044	B148399	0.0051	0.0010	B149556
Total Iron (Fe)	mg/L	0.35	0.070	B150177	0.20	B148406	0.22	0.060	B149558
Total Lead (Pb)	mg/L	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B149556
Total Lithium (Li)	mg/L	<0.020	0.020	B150177	<0.020	B148406	<0.020	0.020	B149558
Total Magnesium (Mg)	mg/L	3.8	0.20	B150177	3.1	B148406	3.5	0.20	B149558
Total Manganese (Mn)	mg/L	0.016	0.0040	B150177	0.014	B148406	0.015	0.0040	B149558
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B149556
Total Nickel (Ni)	mg/L	0.00067	0.00050	B150174	0.00055	B148399	0.00062	0.00050	B149556
Total Phosphorus (P)	mg/L	<0.10	0.10	B150177	<0.10	B148406	<0.10	0.10	B149558
Total Potassium (K)	mg/L	1.8	0.30	B150177	1.4	B148406	1.7	0.30	B149558
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B149556
Total Silicon (Si)	mg/L	0.86	0.50	B150177	0.79	B148406	0.77	0.50	B149558
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150174	<0.00010	B148399	<0.00010	0.00010	B149556
Total Sodium (Na)	mg/L	2.4	0.50	B150177	2.1	B148406	2.3	0.50	B149558
Total Strontium (Sr)	mg/L	0.029	0.020	B150177	0.028	B148406	0.028	0.020	B149558
Total Sulphur (S)	mg/L	6.3	0.20	B150177	4.9	B148406	5.3	0.20	B149558
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150174	<0.00020	B148399	<0.00020	0.00020	B149556
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B149556
Total Titanium (Ti)	mg/L	0.0022	0.0010	B150174	0.0016	B148399	0.0023	0.0010	B149556
Total Uranium (U)	mg/L	<0.00010	0.00010	B150174	<0.00010	B148399	<0.00010	0.00010	B149556
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150174	<0.0010	B148399	<0.0010	0.0010	B149556

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG317			CBG337		CBG338		
Sampling Date		2023/10/04 08:25			2023/10/04 08:10		2023/10/04		
COC Number		707134-03-01			707134-03-01		707134-03-01		
	UNITS	**CL-5-BTM**	**RDL**	**QC Batch**	**CL-6-SFC**	**QC Batch**	**CL-6-BTM**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.014	0.0030	B150174	0.0088	B148399	0.011	0.0030	B149556
RDL = Reportable Detection Limit									

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG339		CBG340		CBG341		CBG342		
Sampling Date		2023/10/04		2023/10/04		2023/10/04		2023/10/04		
COC Number		707134-03-01		707134-03-01		707134-03-01		707134-03-01		
	UNITS	SW-131	QC Batch	SW-132	QC Batch	SW-133	QC Batch	TRIP BLANK	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.42	B143043	0.36	B143043	0.030	B143043	<0.020	0.020	B143043
Total Aluminum (Al)	mg/L	0.049	B150179	0.036	B148399	0.047	B150179	<0.0030	0.0030	B148399
Total Antimony (Sb)	mg/L	<0.00060	B150179	<0.00060	B148399	<0.00060	B150179	<0.00060	0.00060	B148399
Total Arsenic (As)	mg/L	0.00033	B150179	0.00029	B148399	0.00056	B150179	<0.00020	0.00020	B148399
Total Barium (Ba)	mg/L	0.014	B150182	0.014	B148406	<0.010	B150182	<0.010	0.010	B148406
Total Beryllium (Be)	mg/L	<0.0010	B150179	<0.0010	B148399	<0.0010	B150179	<0.0010	0.0010	B148399
Total Boron (B)	mg/L	<0.020	B150182	<0.020	B148406	<0.020	B150182	<0.020	0.020	B148406
Total Calcium (Ca)	mg/L	54	B150182	66	B148406	13	B150182	<0.30	0.30	B148406
Total Chromium (Cr)	mg/L	<0.0010	B150179	<0.0010	B148399	<0.0010	B150179	<0.0010	0.0010	B148399
Total Cobalt (Co)	mg/L	0.00034	B150179	<0.00030	B148399	<0.00030	B150179	<0.00030	0.00030	B148399
Total Copper (Cu)	mg/L	0.012	B150179	0.0083	B148399	0.0090	B150179	<0.0010	0.0010	B148399
Total Iron (Fe)	mg/L	2.3	B150182	2.2	B148406	0.45	B150182	<0.060	0.060	B148406
Total Lead (Pb)	mg/L	<0.00020	B150179	<0.00020	B148399	<0.00020	B150179	<0.00020	0.00020	B148399
Total Lithium (Li)	mg/L	<0.020	B150182	<0.020	B148406	<0.020	B150182	<0.020	0.020	B148406
Total Magnesium (Mg)	mg/L	8.8	B150182	9.8	B148406	3.5	B150182	<0.20	0.20	B148406
Total Manganese (Mn)	mg/L	0.068	B150182	0.073	B148406	0.029	B150182	<0.0040	0.0040	B148406
Total Molybdenum (Mo)	mg/L	<0.00020	B150179	<0.00020	B148399	<0.00020	B150179	<0.00020	0.00020	B148399
Total Nickel (Ni)	mg/L	0.0021	B150179	0.0010	B148399	0.0016	B150179	<0.00050	0.00050	B148399
Total Phosphorus (P)	mg/L	<0.10	B150182	<0.10	B148406	<0.10	B150182	<0.10	0.10	B148406
Total Potassium (K)	mg/L	4.5	B150182	4.8	B148406	1.6	B150182	<0.30	0.30	B148406
Total Selenium (Se)	mg/L	<0.00020	B150179	<0.00020	B148399	<0.00020	B150179	<0.00020	0.00020	B148399
Total Silicon (Si)	mg/L	0.80	B150182	0.79	B148406	0.95	B150182	<0.50	0.50	B148406
Total Silver (Ag)	mg/L	<0.00010	B150179	<0.00010	B148399	<0.00010	B150179	<0.00010	0.00010	B148399
Total Sodium (Na)	mg/L	3.3	B150182	3.5	B148406	2.1	B150182	<0.50	0.50	B148406
Total Strontium (Sr)	mg/L	0.061	B150182	0.066	B148406	0.030	B150182	<0.020	0.020	B148406
Total Sulphur (S)	mg/L	58	B150182	65	B148406	6.8	B150182	<0.20	0.20	B148406
Total Thallium (Tl)	mg/L	<0.00020	B150179	<0.00020	B148399	<0.00020	B150179	<0.00020	0.00020	B148399
Total Tin (Sn)	mg/L	<0.0010	B150179	<0.0010	B148399	<0.0010	B150179	<0.0010	0.0010	B148399
Total Titanium (Ti)	mg/L	0.0012	B150179	0.0016	B148399	<0.0010	B150179	<0.0010	0.0010	B148399
Total Uranium (U)	mg/L	<0.00010	B150179	<0.00010	B148399	<0.00010	B150179	<0.00010	0.00010	B148399
Total Vanadium (V)	mg/L	<0.0010	B150179	<0.0010	B148399	<0.0010	B150179	<0.0010	0.0010	B148399

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG339		CBG340		CBG341		CBG342		
Sampling Date		2023/10/04		2023/10/04		2023/10/04		2023/10/04		
COC Number		707134-03-01		707134-03-01		707134-03-01		707134-03-01		
	UNITS	**SW-131**	**QC Batch**	**SW-132**	**QC Batch**	**SW-133**	**QC Batch**	**TRIP BLANK**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.12	B150179	0.10	B148399	0.011	B150179	0.0043	0.0030	B148399
RDL = Reportable Detection Limit										

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG283			CBG283			CBG284		
Sampling Date		2023/10/03 12:30			2023/10/03 12:30			2023/10/04 09:25		
COC Number		707134-01-01			707134-01-01			707134-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	39	0.50	B143129				180	0.50	B143129
Total Hardness (CaCO3)	mg/L	42.1	0.50	B143132				172	0.50	B143051
Misc. Inorganics										
pH	pH	6.38	N/A	B154155				5.90	N/A	B154281
Total Organic Carbon (C)	mg/L	12	0.50	B149135				6.9	0.50	B149105
Total Suspended Solids	mg/L	<1.0	1.0	B145560				3.2	1.0	B147226
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	12	0.50	B148992				7.1	0.50	B148992
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154154				<1.0	1.0	B154280
Alkalinity (Total as CaCO3)	mg/L	34	1.0	B154154				4.2	1.0	B154280
Bicarbonate (HCO3)	mg/L	42	1.0	B154154				5.2	1.0	B154280
Carbonate (CO3)	mg/L	<1.0	1.0	B154154				<1.0	1.0	B154280
Hydroxide (OH)	mg/L	<1.0	1.0	B154154				<1.0	1.0	B154280
Sulphate (SO4)	mg/L	11	1.0	B145298	11	1.0	B145298	180	5.0	B145300
Physical Properties										
Turbidity	NTU	3.0	0.10	B143505	2.8	0.10	B143505	20	0.10	B143941

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C380937
Report Date: 2023/10/18

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG292		CBG297		CBG300		CBG301		
Sampling Date		2023/10/04 09:20		2023/10/04 09:30		2023/10/04 09:35		2023/10/04 09:40		
COC Number		707134-01-01		707134-01-01		707134-01-01		707134-01-01		
	UNITS	SB-2	QC Batch	CB-1	QC Batch	CB-2	QC Batch	EB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	180	B143129	180	B143129	180	B143129	190	0.50	B143129
Total Hardness (CaCO3)	mg/L	191	B143051	190	B143051	189	B143051	198	0.50	B143051
Misc. Inorganics										
pH	pH	5.89	B154155	5.91	B154281	5.91	B154281	5.90	N/A	B154281
Total Organic Carbon (C)	mg/L	6.9	B149135	7.1	B149091	7.0	B149091	6.4	0.50	B149135
Total Suspended Solids	mg/L	6.1	B147226	3.9	B147228	3.7	B147228	2.9	1.0	B147228
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.7	B148992	6.4	B148993	7.4	B148993	7.1	0.50	B148992
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B154154	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Alkalinity (Total as CaCO3)	mg/L	4.1	B154154	3.9	B154280	4.5	B154280	4.1	1.0	B154280
Bicarbonate (HCO3)	mg/L	4.9	B154154	4.7	B154280	5.4	B154280	5.0	1.0	B154280
Carbonate (CO3)	mg/L	<1.0	B154154	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Hydroxide (OH)	mg/L	<1.0	B154154	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Sulphate (SO4)	mg/L	180	B145300	180	B146303	180	B145471	190	5.0	B145300
Physical Properties										
Turbidity	NTU	21	B143941	19	B143941	17	B143941	13	0.10	B143941

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C380937
Report Date: 2023/10/18

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG302		CBG303		CBG304		
Sampling Date		2023/10/04 09:45		2023/10/04 09:55		2023/10/04 09:50		
COC Number		707134-01-01		707134-01-01		707134-01-01		
	UNITS	EB-2	QC Batch	NB-1	QC Batch	NB-2	RDL	QC Batch
Calculated Parameters								
Hardness (CaCO3)	mg/L	200	B143129	200	B143129	210	0.50	B143129
Total Hardness (CaCO3)	mg/L	209	B143051	199	B143051	200	0.50	B143051
Misc. Inorganics								
pH	pH	5.88	B154281	5.79	B154281	5.85	N/A	B154155
Total Organic Carbon (C)	mg/L	7.1	B149091	7.1	B149135	7.4	0.50	B149135
Total Suspended Solids	mg/L	3.4	B147228	4.3	B147228	2.9	1.0	B147228
Lab Filtered Inorganics								
Dissolved Organic Carbon (C)	mg/L	6.9	B148992	6.8	B148992	6.9	0.50	B148992
Anions								
Alkalinity (PP as CaCO3)	mg/L	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154154
Alkalinity (Total as CaCO3)	mg/L	4.1	B154280	3.2	B154280	3.8	1.0	B154154
Bicarbonate (HCO3)	mg/L	5.1	B154280	3.9	B154280	4.6	1.0	B154154
Carbonate (CO3)	mg/L	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154154
Hydroxide (OH)	mg/L	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154154
Sulphate (SO4)	mg/L	200	B145300	200	B145300	210	5.0	B145300
Physical Properties								
Turbidity	NTU	12	B143941	16	B143941	14	0.10	B143941

RDL = Reportable Detection Limit
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG304			CBG305			CBG305		
Sampling Date		2023/10/04 09:50			2023/10/04 10:00			2023/10/04 10:00		
COC Number		707134-01-01			707134-01-01			707134-01-01		
	UNITS	NB-2 Lab-Dup	RDL	QC Batch	CLD	RDL	QC Batch	CLD Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				200	0.50	B143129			
Total Hardness (CaCO3)	mg/L				194	0.50	B143051			
Misc. Inorganics										
pH	pH				5.84	N/A	B154155			
Total Organic Carbon (C)	mg/L				7.2	0.50	B149091			
Total Suspended Solids	mg/L				4.1	1.0	B147228			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.9	0.50	B148992	6.7	0.50	B148992			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B154154			
Alkalinity (Total as CaCO3)	mg/L				3.7	1.0	B154154			
Bicarbonate (HCO3)	mg/L				4.5	1.0	B154154			
Carbonate (CO3)	mg/L				<1.0	1.0	B154154			
Hydroxide (OH)	mg/L				<1.0	1.0	B154154			
Sulphate (SO4)	mg/L				200	5.0	B145300			
Physical Properties										
Turbidity	NTU				16	0.10	B143942	15	0.10	B143942

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C380937
Report Date: 2023/10/18

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG306		CBG307		CBG308		CBG309		
Sampling Date		2023/10/04 08:50		2023/10/04 08:55		2023/10/04 09:00		2023/10/04 09:05		
COC Number		707134-02-01		707134-02-01		707134-02-01		707134-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	QC Batch	CL-7 SFC	QC Batch	C-L7 BTM	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	50	B143129	48	B143129	50	B143129	49	0.50	B143129
Total Hardness (CaCO3)	mg/L	48.9	B143051	49.6	B143051	49.6	B143051	47.6	0.50	B143051
Misc. Inorganics										
pH	pH	6.40	B154281	6.41	B154281	6.38	B154281	6.37	N/A	B154281
Total Organic Carbon (C)	mg/L	9.5	B149091	9.1	B154932	10	B149091	9.8	0.50	B149135
Total Suspended Solids	mg/L	3.2	B147228	2.3	B147228	2.7	B147228	1.5	1.0	B147228
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.1	B148993	10	B153178	10	B148992	11	0.50	B148993
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	B154280	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Alkalinity (Total as CaCO3)	mg/L	29	B154280	29	B154280	28	B154280	29	1.0	B154280
Bicarbonate (HCO3)	mg/L	35	B154280	35	B154280	34	B154280	36	1.0	B154280
Carbonate (CO3)	mg/L	<1.0	B154280	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Hydroxide (OH)	mg/L	<1.0	B154280	<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Sulphate (SO4)	mg/L	27	B146494	22	B145470	25	B145300	22	1.0	B145471
Physical Properties										
Turbidity	NTU	2.5	B143942	4.0	B143942	2.5	B143942	3.1	0.10	B143942

RDL = Reportable Detection Limit
N/A = Not Applicable

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Bureau Veritas Job #: C380937
Report Date: 2023/10/18

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG309			CBG310		CBG311		CBG312		
Sampling Date		2023/10/04 09:05			2023/10/04 08:40		2023/10/04 09:45		2023/10/04 09:10		
COC Number		707134-02-01			707134-02-01		707134-02-01		707134-02-01		
	UNITS	C-L7 BTM Lab-Dup	RDL	QC Batch	CL-8-SFC	QC Batch	CL-8-BTM	QC Batch	CL-2-SFC	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L				50	B143129	50	B143129	47	0.50	B143129
Total Hardness (CaCO3)	mg/L				46.2	B143051	50.1	B143051	46.5	0.50	B143051
Misc. Inorganics											
pH	pH				6.40	B154281	6.38	B154281	6.39	N/A	B154281
Total Organic Carbon (C)	mg/L				9.9	B149105	9.9	B149091	10	0.50	B149091
Total Suspended Solids	mg/L				2.5	B147228	1.4	B147228	2.0	1.0	B147228
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L				8.8	B148993	9.9	B148993	8.6	0.50	B148993
Anions											
Alkalinity (PP as CaCO3)	mg/L				<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Alkalinity (Total as CaCO3)	mg/L				29	B154280	28	B154280	30	1.0	B154280
Bicarbonate (HCO3)	mg/L				36	B154280	34	B154280	36	1.0	B154280
Carbonate (CO3)	mg/L				<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Hydroxide (OH)	mg/L				<1.0	B154280	<1.0	B154280	<1.0	1.0	B154280
Sulphate (SO4)	mg/L	22	1.0	B145471	23	B145449	23	B145451	22	1.0	B145471
Physical Properties											
Turbidity	NTU				2.9	B143942	3.1	B143942	3.0	0.10	B143942

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C380937
Report Date: 2023/10/18

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AFA

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG313		CBG314			CBG314		
Sampling Date		2023/10/04 09:15		2023/10/04 09:30			2023/10/04 09:30		
COC Number		707134-02-01		707134-02-01			707134-02-01		
	UNITS	CL-2-BTM	QC Batch	CL-4-SFC	RDL	QC Batch	CL-4-SFC Lab-Dup	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	49	B143129	47	0.50	B143049			
Total Hardness (CaCO3)	mg/L	46.4	B143051	45.8	0.50	B143051			
Misc. Inorganics									
pH	pH	6.38	B154281	6.39	N/A	B154155			
Total Organic Carbon (C)	mg/L	10	B149091	9.4	0.50	B149105			
Total Suspended Solids	mg/L	2.3	B147228	2.3	1.0	B147232	2.3	1.0	B147232
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	10	B148993	9.8	0.50	B148992			
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B154280	<1.0	1.0	B154154			
Alkalinity (Total as CaCO3)	mg/L	29	B154280	29	1.0	B154154			
Bicarbonate (HCO3)	mg/L	36	B154280	35	1.0	B154154			
Carbonate (CO3)	mg/L	<1.0	B154280	<1.0	1.0	B154154			
Hydroxide (OH)	mg/L	<1.0	B154280	<1.0	1.0	B154154			
Sulphate (SO4)	mg/L	23	B146303	20	1.0	B145300			
Physical Properties									
Turbidity	NTU	3.2	B143942	3.3	0.10	B143942			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG315			CBG315			CBG316		
Sampling Date		2023/10/04 08:35			2023/10/04 08:35			2023/10/04 08:20		
COC Number		707134-02-01			707134-02-01			707134-03-01		
	UNITS	CL-4-BTM	RDL	QC Batch	CL-4-BTM Lab-Dup	RDL	QC Batch	CL-5-SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	45	0.50	B143049				46	0.50	B143049
Total Hardness (CaCO3)	mg/L	47.4	0.50	B143051				43.5	0.50	B143051
Misc. Inorganics										
pH	pH	6.40	N/A	B154281				6.40	N/A	B154155
Total Organic Carbon (C)	mg/L	9.9 (1)	0.50	B149091	9.7	0.50	B149091	9.5	0.50	B149091
Total Suspended Solids	mg/L	1.1	1.0	B147232				3.8	0.99	B147232
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	10	0.50	B148992				10	0.50	B148992
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154280				<1.0	1.0	B154154
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B154280				28	1.0	B154154
Bicarbonate (HCO3)	mg/L	35	1.0	B154280				35	1.0	B154154
Carbonate (CO3)	mg/L	<1.0	1.0	B154280				<1.0	1.0	B154154
Hydroxide (OH)	mg/L	<1.0	1.0	B154280				<1.0	1.0	B154154
Sulphate (SO4)	mg/L	19	1.0	B145300				22	1.0	B145300
Physical Properties										
Turbidity	NTU	4.5	0.10	B143942				3.2	0.10	B143942

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG317			CBG337			CBG337		
Sampling Date		2023/10/04 08:25			2023/10/04 08:10			2023/10/04 08:10		
COC Number		707134-03-01			707134-03-01			707134-03-01		
	UNITS	CL-5-BTM	RDL	QC Batch	CL-6-SFC	RDL	QC Batch	CL-6-SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	46	0.50	B143049	43	0.50	B143049			
Total Hardness (CaCO3)	mg/L	48.9	0.50	B143051	41.2	0.50	B143051			
Misc. Inorganics										
pH	pH	6.39	N/A	B154281	6.29	N/A	B154281	6.37	N/A	B154281
Total Organic Carbon (C)	mg/L	9.3	0.50	B154932	9.9	0.50	B149091			
Total Suspended Solids	mg/L	<1.0	1.0	B147232	<1.0	1.0	B147232			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	10	0.50	B153178	9.8 (1)	0.50	B148993	9.5	0.50	B148993
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154280	<1.0	1.0	B154280	<1.0	1.0	B154280
Alkalinity (Total as CaCO3)	mg/L	28	1.0	B154280	29	1.0	B154280	30	1.0	B154280
Bicarbonate (HCO3)	mg/L	34	1.0	B154280	36	1.0	B154280	37	1.0	B154280
Carbonate (CO3)	mg/L	<1.0	1.0	B154280	<1.0	1.0	B154280	<1.0	1.0	B154280
Hydroxide (OH)	mg/L	<1.0	1.0	B154280	<1.0	1.0	B154280	<1.0	1.0	B154280
Chloride (Cl)	mg/L	<1.0	1.0	B145297						
Sulphate (SO4)	mg/L	20	1.0	B145297	17	1.0	B146303			
Physical Properties										
Turbidity	NTU	2.6	0.10	B143942	2.1	0.10	B143942			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG338			CBG339			CBG340		
Sampling Date		2023/10/04			2023/10/04			2023/10/04		
COC Number		707134-03-01			707134-03-01			707134-03-01		
	UNITS	CL-6-BTM	RDL	QC Batch	SW-131	RDL	QC Batch	SW-132	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	42	0.50	B143049	180	0.50	B143049	200	0.50	B143049
Total Hardness (CaCO3)	mg/L	44.9	0.50	B143051	170	0.50	B143051	204	0.50	B143051
Misc. Inorganics										
pH	pH	6.40	N/A	B154281	5.90	N/A	B154155	5.85	N/A	B154155
Total Organic Carbon (C)	mg/L	9.7	0.50	B149135	7.7	0.50	B149135	6.8	0.50	B149091
Total Suspended Solids	mg/L	1.7	0.97	B147232	3.9	1.0	B147232	3.5	0.99	B147232
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.6	0.50	B148992	6.9	0.50	B148992	6.7	0.50	B148992
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154280	<1.0	1.0	B154154	<1.0	1.0	B154154
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B154280	4.6	1.0	B154154	3.4	1.0	B154154
Bicarbonate (HCO3)	mg/L	36	1.0	B154280	5.6	1.0	B154154	4.2	1.0	B154154
Carbonate (CO3)	mg/L	<1.0	1.0	B154280	<1.0	1.0	B154154	<1.0	1.0	B154154
Hydroxide (OH)	mg/L	<1.0	1.0	B154280	<1.0	1.0	B154154	<1.0	1.0	B154154
Sulphate (SO4)	mg/L	18	1.0	B145300	170	5.0	B145298	190	5.0	B145298
Physical Properties										
Turbidity	NTU	2.4	0.10	B143942	21	0.10	B143942	16	0.10	B143942

RDL = Reportable Detection Limit
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CBG341		CBG342		
Sampling Date		2023/10/04		2023/10/04		
COC Number		707134-03-01		707134-03-01		
	UNITS	SW-133	QC Batch	TRIP BLANK	RDL	QC Batch
Calculated Parameters						
Hardness (CaCO3)	mg/L	50	B143049	<0.50	0.50	B143049
Total Hardness (CaCO3)	mg/L	46.4	B143051	<0.50	0.50	B143051
Misc. Inorganics						
pH	pH	6.35	B154281	4.97	N/A	B154281
Total Organic Carbon (C)	mg/L	10	B149091	<0.50	0.50	B149091
Total Suspended Solids	mg/L	<1.0	B147232	<1.0	1.0	B147232
Lab Filtered Inorganics						
Dissolved Organic Carbon (C)	mg/L	8.5	B148993	<0.50	0.50	B148993
Anions						
Alkalinity (PP as CaCO3)	mg/L	<1.0	B154280	<1.0	1.0	B154280
Alkalinity (Total as CaCO3)	mg/L	29	B154280	<1.0	1.0	B154280
Bicarbonate (HCO3)	mg/L	35	B154280	<1.0	1.0	B154280
Carbonate (CO3)	mg/L	<1.0	B154280	<1.0	1.0	B154280
Hydroxide (OH)	mg/L	<1.0	B154280	<1.0	1.0	B154280
Sulphate (SO4)	mg/L	23	B146494	2.8	1.0	B146303
Physical Properties						
Turbidity	NTU	3.0	B143942	<0.10	0.10	B143942

RDL = Reportable Detection Limit
N/A = Not Applicable

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	0.5°C
Package 2	13.4°C
Package 3	0.5°C
Package 4	0.4°C

Sample CBG337, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B143505	Turbidity	2023/10/06			102	80 - 120	<0.10	NTU	5.5	20
B143941	Turbidity	2023/10/07			101	80 - 120	<0.10	NTU	4.5	20
B143942	Turbidity	2023/10/07			101	80 - 120	<0.10	NTU	2.6	20
B144324	Dissolved Aluminum (Al)	2023/10/07	100	80 - 120	102	80 - 120	<0.0030	mg/L	NC	20
B144324	Dissolved Antimony (Sb)	2023/10/07	107	80 - 120	107	80 - 120	<0.00060	mg/L	NC	20
B144324	Dissolved Arsenic (As)	2023/10/07	102	80 - 120	99	80 - 120	<0.00020	mg/L	2.4	20
B144324	Dissolved Beryllium (Be)	2023/10/07	105	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B144324	Dissolved Chromium (Cr)	2023/10/07	96	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B144324	Dissolved Cobalt (Co)	2023/10/07	96	80 - 120	96	80 - 120	<0.00030	mg/L	NC	20
B144324	Dissolved Copper (Cu)	2023/10/07	92	80 - 120	94	80 - 120	<0.0010	mg/L	5.6	20
B144324	Dissolved Lead (Pb)	2023/10/07	99	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B144324	Dissolved Molybdenum (Mo)	2023/10/07	105	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B144324	Dissolved Nickel (Ni)	2023/10/07	93	80 - 120	93	80 - 120	<0.00050	mg/L	5.1	20
B144324	Dissolved Selenium (Se)	2023/10/07	102	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B144324	Dissolved Silver (Ag)	2023/10/07	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B144324	Dissolved Thallium (Tl)	2023/10/07	100	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B144324	Dissolved Tin (Sn)	2023/10/07	107	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B144324	Dissolved Titanium (Ti)	2023/10/07	95	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B144324	Dissolved Uranium (U)	2023/10/07	100	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B144324	Dissolved Vanadium (V)	2023/10/07	98	80 - 120	100	80 - 120	<0.0010	mg/L	15	20
B144324	Dissolved Zinc (Zn)	2023/10/07	99	80 - 120	97	80 - 120	<0.0030	mg/L	2.8	20
B144326	Dissolved Aluminum (Al)	2023/10/07	100	80 - 120	105	80 - 120	<0.0030	mg/L	15	20
B144326	Dissolved Antimony (Sb)	2023/10/07	105	80 - 120	106	80 - 120	<0.00060	mg/L	NC	20
B144326	Dissolved Arsenic (As)	2023/10/07	100	80 - 120	97	80 - 120	<0.00020	mg/L	15	20
B144326	Dissolved Beryllium (Be)	2023/10/07	103	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B144326	Dissolved Chromium (Cr)	2023/10/07	96	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B144326	Dissolved Cobalt (Co)	2023/10/07	95	80 - 120	95	80 - 120	<0.00030	mg/L	NC	20
B144326	Dissolved Copper (Cu)	2023/10/07	94	80 - 120	94	80 - 120	<0.0010	mg/L	0.55	20
B144326	Dissolved Lead (Pb)	2023/10/07	102	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B144326	Dissolved Molybdenum (Mo)	2023/10/07	102	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B144326	Dissolved Nickel (Ni)	2023/10/07	92	80 - 120	93	80 - 120	<0.00050	mg/L	NC	20
B144326	Dissolved Selenium (Se)	2023/10/07	102	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B144326	Dissolved Silver (Ag)	2023/10/07	99	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B144326	Dissolved Thallium (Tl)	2023/10/07	102	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B144326	Dissolved Tin (Sn)	2023/10/07	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B144326	Dissolved Titanium (Ti)	2023/10/07	94	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B144326	Dissolved Uranium (U)	2023/10/07	99	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B144326	Dissolved Vanadium (V)	2023/10/07	96	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B144326	Dissolved Zinc (Zn)	2023/10/07	99	80 - 120	94	80 - 120	<0.0030	mg/L	5.2	20
B144343	Dissolved Aluminum (Al)	2023/10/07	99	80 - 120	107	80 - 120	<0.0030	mg/L	9.0	20
B144343	Dissolved Antimony (Sb)	2023/10/07	105	80 - 120	104	80 - 120	<0.00060	mg/L	12	20
B144343	Dissolved Arsenic (As)	2023/10/07	100	80 - 120	96	80 - 120	<0.00020	mg/L	12	20
B144343	Dissolved Beryllium (Be)	2023/10/07	103	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20
B144343	Dissolved Chromium (Cr)	2023/10/07	97	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B144343	Dissolved Cobalt (Co)	2023/10/07	96	80 - 120	95	80 - 120	<0.00030	mg/L	NC	20
B144343	Dissolved Copper (Cu)	2023/10/07	95	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B144343	Dissolved Lead (Pb)	2023/10/07	103	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B144343	Dissolved Molybdenum (Mo)	2023/10/07	102	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B144343	Dissolved Nickel (Ni)	2023/10/07	95	80 - 120	93	80 - 120	<0.00050	mg/L	NC	20
B144343	Dissolved Selenium (Se)	2023/10/07	103	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B144343	Dissolved Silver (Ag)	2023/10/07	100	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B144343	Dissolved Thallium (Tl)	2023/10/07	102	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B144343	Dissolved Tin (Sn)	2023/10/07	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B144343	Dissolved Titanium (Ti)	2023/10/07	95	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B144343	Dissolved Uranium (U)	2023/10/07	100	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B144343	Dissolved Vanadium (V)	2023/10/07	97	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B144343	Dissolved Zinc (Zn)	2023/10/07	100	80 - 120	95	80 - 120	<0.0030	mg/L	11	20
B145297	Chloride (Cl)	2023/10/10	103	80 - 120	100	80 - 120	<1.0	mg/L	1.5	20
B145297	Sulphate (SO4)	2023/10/10	101	80 - 120	96	80 - 120	<1.0	mg/L	NC	20
B145298	Sulphate (SO4)	2023/10/10	97	80 - 120	96	80 - 120	<1.0	mg/L	1.1	20
B145300	Sulphate (SO4)	2023/10/11	112	80 - 120	102	80 - 120	<1.0	mg/L	16	20
B145305	Dissolved Barium (Ba)	2023/10/12	NC	80 - 120	100	80 - 120	<0.010	mg/L		
B145305	Dissolved Boron (B)	2023/10/12	96	80 - 120	100	80 - 120	<0.020	mg/L		
B145305	Dissolved Calcium (Ca)	2023/10/12	97	80 - 120	99	80 - 120	<0.30	mg/L	1.9	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B145305	Dissolved Iron (Fe)	2023/10/12	97	80 - 120	102	80 - 120	<0.060	mg/L	NC	20
B145305	Dissolved Lithium (Li)	2023/10/12	95	80 - 120	98	80 - 120	<0.020	mg/L		
B145305	Dissolved Magnesium (Mg)	2023/10/12	99	80 - 120	99	80 - 120	<0.20	mg/L	0.44	20
B145305	Dissolved Manganese (Mn)	2023/10/12	99	80 - 120	104	80 - 120	<0.0040	mg/L	16	20
B145305	Dissolved Phosphorus (P)	2023/10/12	99	80 - 120	100	80 - 120	<0.10	mg/L		
B145305	Dissolved Potassium (K)	2023/10/12	97	80 - 120	100	80 - 120	<0.30	mg/L	NC	20
B145305	Dissolved Silicon (Si)	2023/10/12	91	80 - 120	98	80 - 120	<0.50	mg/L		
B145305	Dissolved Sodium (Na)	2023/10/12	NC	80 - 120	102	80 - 120	<0.50	mg/L	2.8	20
B145305	Dissolved Strontium (Sr)	2023/10/12	94	80 - 120	98	80 - 120	<0.020	mg/L		
B145305	Dissolved Sulphur (S)	2023/10/12	NC	80 - 120	97	80 - 120	<0.20	mg/L		
B145308	Dissolved Barium (Ba)	2023/10/12	93	80 - 120	101	80 - 120	<0.010	mg/L	12	20
B145308	Dissolved Boron (B)	2023/10/12	95	80 - 120	101	80 - 120	<0.020	mg/L	0.65	20
B145308	Dissolved Calcium (Ca)	2023/10/12	96	80 - 120	101	80 - 120	<0.30	mg/L	2.9	20
B145308	Dissolved Iron (Fe)	2023/10/12	102	80 - 120	107	80 - 120	<0.060	mg/L	NC	20
B145308	Dissolved Lithium (Li)	2023/10/12	92	80 - 120	99	80 - 120	<0.020	mg/L	6.4	20
B145308	Dissolved Magnesium (Mg)	2023/10/12	100	80 - 120	108	80 - 120	<0.20	mg/L	1.2	20
B145308	Dissolved Manganese (Mn)	2023/10/12	101	80 - 120	104	80 - 120	<0.0040	mg/L	3.1	20
B145308	Dissolved Phosphorus (P)	2023/10/12	101	80 - 120	102	80 - 120	<0.10	mg/L	NC	20
B145308	Dissolved Potassium (K)	2023/10/12	94	80 - 120	99	80 - 120	<0.30	mg/L	3.9	20
B145308	Dissolved Silicon (Si)	2023/10/12	92	80 - 120	97	80 - 120	<0.50	mg/L	0.0097	20
B145308	Dissolved Sodium (Na)	2023/10/12	NC	80 - 120	100	80 - 120	<0.50	mg/L	1.0	20
B145308	Dissolved Strontium (Sr)	2023/10/12	91	80 - 120	98	80 - 120	<0.020	mg/L	2.0	20
B145308	Dissolved Sulphur (S)	2023/10/12	NC	80 - 120	96	80 - 120	<0.20	mg/L	5.0	20
B145449	Sulphate (SO4)	2023/10/10	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.63	20
B145451	Sulphate (SO4)	2023/10/10	NC	80 - 120	99	80 - 120	<1.0	mg/L	0.70	20
B145470	Sulphate (SO4)	2023/10/10	97	80 - 120	97	80 - 120	<1.0	mg/L	NC	20
B145471	Sulphate (SO4)	2023/10/10	89	80 - 120	97	80 - 120	<1.0	mg/L	0.40	20
B145560	Total Suspended Solids	2023/10/11	91	80 - 120	102	80 - 120	<1.0	mg/L	NC	20
B146303	Sulphate (SO4)	2023/10/10	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.78	20
B146494	Sulphate (SO4)	2023/10/10	104	80 - 120	98	80 - 120	<1.0	mg/L	0.85	20
B147226	Total Suspended Solids	2023/10/11	NC	80 - 120	97	80 - 120	<1.0	mg/L	6.2	20
B147228	Total Suspended Solids	2023/10/11	96	80 - 120	96	80 - 120	<1.0	mg/L	4.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B147232	Total Suspended Solids	2023/10/11	100	80 - 120	94	80 - 120	<1.0	mg/L	0	20
B147348	Total Aluminum (Al)	2023/10/11	110	80 - 120	106	80 - 120	<0.0030	mg/L	7.3	20
B147348	Total Antimony (Sb)	2023/10/11	119	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B147348	Total Arsenic (As)	2023/10/11	102	80 - 120	101	80 - 120	<0.00020	mg/L	14	20
B147348	Total Beryllium (Be)	2023/10/11	110	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B147348	Total Chromium (Cr)	2023/10/11	105	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B147348	Total Cobalt (Co)	2023/10/11	104	80 - 120	104	80 - 120	<0.00030	mg/L	NC	20
B147348	Total Copper (Cu)	2023/10/11	102	80 - 120	103	80 - 120	<0.0010	mg/L	4.8	20
B147348	Total Lead (Pb)	2023/10/11	104	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B147348	Total Molybdenum (Mo)	2023/10/11	112	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B147348	Total Nickel (Ni)	2023/10/11	102	80 - 120	102	80 - 120	<0.00050	mg/L	6.3	20
B147348	Total Selenium (Se)	2023/10/11	98	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B147348	Total Silver (Ag)	2023/10/11	103	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B147348	Total Thallium (Tl)	2023/10/11	106	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B147348	Total Tin (Sn)	2023/10/11	107	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B147348	Total Titanium (Ti)	2023/10/11	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B147348	Total Uranium (U)	2023/10/11	106	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B147348	Total Vanadium (V)	2023/10/11	107	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B147348	Total Zinc (Zn)	2023/10/11	98	80 - 120	98	80 - 120	<0.0030	mg/L	1.7	20
B147349	Total Barium (Ba)	2023/10/11	97	80 - 120	97	80 - 120	<0.010	mg/L	1.0	20
B147349	Total Boron (B)	2023/10/11	99	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B147349	Total Calcium (Ca)	2023/10/11	NC	80 - 120	99	80 - 120	<0.30	mg/L	4.4	20
B147349	Total Iron (Fe)	2023/10/11	103	80 - 120	101	80 - 120	<0.060	mg/L	5.0	20
B147349	Total Lithium (Li)	2023/10/11	98	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
B147349	Total Magnesium (Mg)	2023/10/11	98	80 - 120	99	80 - 120	<0.20	mg/L	4.3	20
B147349	Total Manganese (Mn)	2023/10/11	103	80 - 120	101	80 - 120	<0.0040	mg/L	4.4	20
B147349	Total Phosphorus (P)	2023/10/11	99	80 - 120	98	80 - 120	<0.10	mg/L	NC	20
B147349	Total Potassium (K)	2023/10/11	99	80 - 120	98	80 - 120	<0.30	mg/L	8.0	20
B147349	Total Silicon (Si)	2023/10/11	99	80 - 120	98	80 - 120	<0.50	mg/L	5.7	20
B147349	Total Sodium (Na)	2023/10/11	101	80 - 120	101	80 - 120	<0.50	mg/L	5.1	20
B147349	Total Strontium (Sr)	2023/10/11	95	80 - 120	96	80 - 120	<0.020	mg/L	4.3	20
B147349	Total Sulphur (S)	2023/10/11	99	80 - 120	97	80 - 120	<0.20	mg/L	4.3	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B148062	Dissolved Barium (Ba)	2023/10/11			98	80 - 120	<0.010	mg/L		
B148062	Dissolved Boron (B)	2023/10/11			102	80 - 120	<0.020	mg/L		
B148062	Dissolved Calcium (Ca)	2023/10/11			101	80 - 120	<0.30	mg/L	0.44	20
B148062	Dissolved Iron (Fe)	2023/10/11			104	80 - 120	<0.060	mg/L		
B148062	Dissolved Lithium (Li)	2023/10/11			97	80 - 120	<0.020	mg/L		
B148062	Dissolved Magnesium (Mg)	2023/10/11			103	80 - 120	<0.20	mg/L	0.61	20
B148062	Dissolved Manganese (Mn)	2023/10/11			103	80 - 120	<0.0040	mg/L		
B148062	Dissolved Phosphorus (P)	2023/10/11			100	80 - 120	<0.10	mg/L		
B148062	Dissolved Potassium (K)	2023/10/11			101	80 - 120	<0.30	mg/L		
B148062	Dissolved Silicon (Si)	2023/10/11			100	80 - 120	<0.50	mg/L		
B148062	Dissolved Sodium (Na)	2023/10/11			105	80 - 120	<0.50	mg/L		
B148062	Dissolved Strontium (Sr)	2023/10/11			99	80 - 120	<0.020	mg/L		
B148062	Dissolved Sulphur (S)	2023/10/11			97	80 - 120	<0.20	mg/L		
B148065	Dissolved Barium (Ba)	2023/10/11	96	80 - 120	99	80 - 120	<0.010	mg/L	0.74	20
B148065	Dissolved Boron (B)	2023/10/11	104	80 - 120	103	80 - 120	<0.020	mg/L	11	20
B148065	Dissolved Calcium (Ca)	2023/10/11	NC	80 - 120	102	80 - 120	<0.30	mg/L	3.6	20
B148065	Dissolved Iron (Fe)	2023/10/11	100	80 - 120	107	80 - 120	<0.060	mg/L	NC	20
B148065	Dissolved Lithium (Li)	2023/10/11	96	80 - 120	98	80 - 120	<0.020	mg/L	1.6	20
B148065	Dissolved Magnesium (Mg)	2023/10/11	98	80 - 120	104	80 - 120	<0.20	mg/L	3.0	20
B148065	Dissolved Manganese (Mn)	2023/10/11	101	80 - 120	106	80 - 120	<0.0040	mg/L	5.2	20
B148065	Dissolved Phosphorus (P)	2023/10/11	102	80 - 120	103	80 - 120	<0.10	mg/L	NC	20
B148065	Dissolved Potassium (K)	2023/10/11	101	80 - 120	102	80 - 120	<0.30	mg/L	3.4	20
B148065	Dissolved Silicon (Si)	2023/10/11	86	80 - 120	102	80 - 120	<0.50	mg/L	1.5	20
B148065	Dissolved Sodium (Na)	2023/10/11	NC	80 - 120	107	80 - 120	<0.50	mg/L	3.2	20
B148065	Dissolved Strontium (Sr)	2023/10/11	NC	80 - 120	99	80 - 120	<0.020	mg/L	2.2	20
B148065	Dissolved Sulphur (S)	2023/10/11	NC	80 - 120	99	80 - 120	<0.20	mg/L	2.0	20
B148399	Total Aluminum (Al)	2023/10/12	100	80 - 120	102	80 - 120	<0.0030	mg/L	8.2	20
B148399	Total Antimony (Sb)	2023/10/12	116	80 - 120	113	80 - 120	<0.00060	mg/L	NC	20
B148399	Total Arsenic (As)	2023/10/12	102	80 - 120	100	80 - 120	<0.00020	mg/L	10	20
B148399	Total Beryllium (Be)	2023/10/12	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B148399	Total Chromium (Cr)	2023/10/12	106	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B148399	Total Cobalt (Co)	2023/10/12	106	80 - 120	104	80 - 120	<0.00030	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B148399	Total Copper (Cu)	2023/10/12	104	80 - 120	103	80 - 120	<0.0010	mg/L	6.2	20
B148399	Total Lead (Pb)	2023/10/12	107	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B148399	Total Molybdenum (Mo)	2023/10/12	109	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B148399	Total Nickel (Ni)	2023/10/12	104	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
B148399	Total Selenium (Se)	2023/10/12	99	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B148399	Total Silver (Ag)	2023/10/12	104	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B148399	Total Thallium (Tl)	2023/10/12	108	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B148399	Total Tin (Sn)	2023/10/12	104	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B148399	Total Titanium (Ti)	2023/10/12	103	80 - 120	102	80 - 120	<0.0010	mg/L	19	20
B148399	Total Uranium (U)	2023/10/12	105	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B148399	Total Vanadium (V)	2023/10/12	108	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B148399	Total Zinc (Zn)	2023/10/12	97	80 - 120	98	80 - 120	<0.0030	mg/L	0.19	20
B148406	Total Barium (Ba)	2023/10/11	99	80 - 120	96	80 - 120	<0.010	mg/L	NC	20
B148406	Total Boron (B)	2023/10/11	100	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
B148406	Total Calcium (Ca)	2023/10/11	101	80 - 120	97	80 - 120	<0.30	mg/L	0.10	20
B148406	Total Iron (Fe)	2023/10/11	103	80 - 120	100	80 - 120	<0.060	mg/L	3.9	20
B148406	Total Lithium (Li)	2023/10/11	99	80 - 120	95	80 - 120	<0.020	mg/L	NC	20
B148406	Total Magnesium (Mg)	2023/10/11	101	80 - 120	97	80 - 120	<0.20	mg/L	0.91	20
B148406	Total Manganese (Mn)	2023/10/11	103	80 - 120	100	80 - 120	<0.0040	mg/L	2.7	20
B148406	Total Phosphorus (P)	2023/10/11	98	80 - 120	97	80 - 120	<0.10	mg/L	NC	20
B148406	Total Potassium (K)	2023/10/11	100	80 - 120	96	80 - 120	<0.30	mg/L	3.7	20
B148406	Total Silicon (Si)	2023/10/11	99	80 - 120	97	80 - 120	<0.50	mg/L	2.0	20
B148406	Total Sodium (Na)	2023/10/11	103	80 - 120	99	80 - 120	<0.50	mg/L	0.16	20
B148406	Total Strontium (Sr)	2023/10/11	97	80 - 120	95	80 - 120	<0.020	mg/L	1.7	20
B148406	Total Sulphur (S)	2023/10/11	98	80 - 120	96	80 - 120	<0.20	mg/L	1.3	20
B148992	Dissolved Organic Carbon (C)	2023/10/12	102	80 - 120	109	80 - 120	<0.50	mg/L	0.45	20
B148993	Dissolved Organic Carbon (C)	2023/10/13	68 (1)	80 - 120	111	80 - 120	<0.50	mg/L	3.0	20
B149091	Total Organic Carbon (C)	2023/10/12	76 (1)	80 - 120	103	80 - 120	<0.50	mg/L	1.3	20
B149105	Total Organic Carbon (C)	2023/10/13	NC	80 - 120	108	80 - 120	<0.50	mg/L	7.0	20
B149135	Total Organic Carbon (C)	2023/10/12	NC	80 - 120	103	80 - 120	<0.50	mg/L	7.8	20
B149556	Total Aluminum (Al)	2023/10/12	191 (1)	80 - 120	114	80 - 120	<0.0030	mg/L	3.1	20
B149556	Total Antimony (Sb)	2023/10/12	132 (1)	80 - 120	125 (1)	80 - 120	<0.00060	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B149556	Total Arsenic (As)	2023/10/12	115	80 - 120	108	80 - 120	<0.00020	mg/L	4.1	20
B149556	Total Beryllium (Be)	2023/10/12	112	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B149556	Total Chromium (Cr)	2023/10/12	114	80 - 120	110	80 - 120	<0.0010	mg/L	5.1	20
B149556	Total Cobalt (Co)	2023/10/12	111	80 - 120	109	80 - 120	<0.00030	mg/L	1.7	20
B149556	Total Copper (Cu)	2023/10/12	109	80 - 120	108	80 - 120	<0.0010	mg/L	6.7	20
B149556	Total Lead (Pb)	2023/10/12	113	80 - 120	108	80 - 120	<0.00020	mg/L	7.8	20
B149556	Total Molybdenum (Mo)	2023/10/12	123 (1)	80 - 120	112	80 - 120	<0.00020	mg/L	8.0	20
B149556	Total Nickel (Ni)	2023/10/12	110	80 - 120	107	80 - 120	<0.00050	mg/L	6.9	20
B149556	Total Selenium (Se)	2023/10/12	111	80 - 120	107	80 - 120	<0.00020	mg/L	12	20
B149556	Total Silver (Ag)	2023/10/12	115	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B149556	Total Thallium (Tl)	2023/10/12	113	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20
B149556	Total Tin (Sn)	2023/10/12	122 (1)	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20
B149556	Total Titanium (Ti)	2023/10/12	117	80 - 120	110	80 - 120	<0.0010	mg/L	5.4	20
B149556	Total Uranium (U)	2023/10/12	114	80 - 120	107	80 - 120	<0.00010	mg/L	0.81	20
B149556	Total Vanadium (V)	2023/10/12	115	80 - 120	110	80 - 120	<0.0010	mg/L	1.1	20
B149556	Total Zinc (Zn)	2023/10/12	111	80 - 120	108	80 - 120	<0.0030	mg/L	2.7	20
B149558	Total Barium (Ba)	2023/10/12	103	80 - 120	101	80 - 120	<0.010	mg/L	4.6	20
B149558	Total Boron (B)	2023/10/12	101	80 - 120	99	80 - 120	<0.020	mg/L	4.0	20
B149558	Total Calcium (Ca)	2023/10/12	NC	80 - 120	101	80 - 120	<0.30	mg/L	1.9	20
B149558	Total Iron (Fe)	2023/10/12	110	80 - 120	106	80 - 120	<0.060	mg/L	1.8	20
B149558	Total Lithium (Li)	2023/10/12	103	80 - 120	100	80 - 120	<0.020	mg/L	1.7	20
B149558	Total Magnesium (Mg)	2023/10/12	112	80 - 120	105	80 - 120	<0.20	mg/L	3.2	20
B149558	Total Manganese (Mn)	2023/10/12	108	80 - 120	104	80 - 120	<0.0040	mg/L	3.1	20
B149558	Total Phosphorus (P)	2023/10/12	105	80 - 120	101	80 - 120	<0.10	mg/L	0.64	20
B149558	Total Potassium (K)	2023/10/12	103	80 - 120	99	80 - 120	<0.30	mg/L	1.2	20
B149558	Total Silicon (Si)	2023/10/12	100	80 - 120	96	80 - 120	<0.50	mg/L	1.0	20
B149558	Total Sodium (Na)	2023/10/12	NC	80 - 120	100	80 - 120	<0.50	mg/L	2.0	20
B149558	Total Strontium (Sr)	2023/10/12	100	80 - 120	97	80 - 120	<0.020	mg/L	4.7	20
B149558	Total Sulphur (S)	2023/10/12	NC	80 - 120	98	80 - 120	<0.20	mg/L	3.1	20
B150174	Total Aluminum (Al)	2023/10/12	112	80 - 120	103	80 - 120	<0.0030	mg/L	9.8	20
B150174	Total Antimony (Sb)	2023/10/12	126 (1)	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B150174	Total Arsenic (As)	2023/10/12	107	80 - 120	99	80 - 120	<0.00020	mg/L	7.1	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150174	Total Beryllium (Be)	2023/10/12	106	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B150174	Total Chromium (Cr)	2023/10/12	108	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B150174	Total Cobalt (Co)	2023/10/12	107	80 - 120	98	80 - 120	<0.00030	mg/L	NC	20
B150174	Total Copper (Cu)	2023/10/12	106	80 - 120	98	80 - 120	<0.0010	mg/L	11	20
B150174	Total Lead (Pb)	2023/10/12	109	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B150174	Total Molybdenum (Mo)	2023/10/12	115	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B150174	Total Nickel (Ni)	2023/10/12	106	80 - 120	96	80 - 120	<0.00050	mg/L	0.94	20
B150174	Total Selenium (Se)	2023/10/12	104	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B150174	Total Silver (Ag)	2023/10/12	109	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B150174	Total Thallium (Tl)	2023/10/12	110	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B150174	Total Tin (Sn)	2023/10/12	114	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B150174	Total Titanium (Ti)	2023/10/12	110	80 - 120	100	80 - 120	<0.0010	mg/L	13	20
B150174	Total Uranium (U)	2023/10/12	109	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B150174	Total Vanadium (V)	2023/10/12	109	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B150174	Total Zinc (Zn)	2023/10/12	103	80 - 120	97	80 - 120	<0.0030	mg/L	20	20
B150177	Total Barium (Ba)	2023/10/12	102	80 - 120	104	80 - 120	<0.010	mg/L	7.1	20
B150177	Total Boron (B)	2023/10/12	101	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B150177	Total Calcium (Ca)	2023/10/12	NC	80 - 120	101	80 - 120	<0.30	mg/L	1.7	20
B150177	Total Iron (Fe)	2023/10/12	110	80 - 120	110	80 - 120	<0.070	mg/L	14	20
B150177	Total Lithium (Li)	2023/10/12	101	80 - 120	100	80 - 120	<0.020	mg/L	NC	20
B150177	Total Magnesium (Mg)	2023/10/12	108	80 - 120	107	80 - 120	<0.20	mg/L	1.7	20
B150177	Total Manganese (Mn)	2023/10/12	109	80 - 120	108	80 - 120	<0.0040	mg/L	17	20
B150177	Total Phosphorus (P)	2023/10/12	105	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
B150177	Total Potassium (K)	2023/10/12	101	80 - 120	99	80 - 120	<0.30	mg/L	3.7	20
B150177	Total Silicon (Si)	2023/10/12	99	80 - 120	100	80 - 120	<0.50	mg/L	3.3	20
B150177	Total Sodium (Na)	2023/10/12	101	80 - 120	100	80 - 120	<0.50	mg/L	0.77	20
B150177	Total Strontium (Sr)	2023/10/12	98	80 - 120	100	80 - 120	<0.020	mg/L	2.1	20
B150177	Total Sulphur (S)	2023/10/12	102	80 - 120	101	80 - 120	<0.20	mg/L	3.3	20
B150179	Total Aluminum (Al)	2023/10/12	94	80 - 120	106	80 - 120	<0.0030	mg/L	3.7	20
B150179	Total Antimony (Sb)	2023/10/12	118	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B150179	Total Arsenic (As)	2023/10/12	101	80 - 120	96	80 - 120	<0.00020	mg/L	17	20
B150179	Total Beryllium (Be)	2023/10/12	108	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150179	Total Chromium (Cr)	2023/10/12	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Cobalt (Co)	2023/10/12	99	80 - 120	98	80 - 120	<0.00030	mg/L	10	20
B150179	Total Copper (Cu)	2023/10/12	98	80 - 120	98	80 - 120	<0.0010	mg/L	11	20
B150179	Total Lead (Pb)	2023/10/12	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Molybdenum (Mo)	2023/10/12	109	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Nickel (Ni)	2023/10/12	98	80 - 120	96	80 - 120	<0.00050	mg/L	6.0	20
B150179	Total Selenium (Se)	2023/10/12	99	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Silver (Ag)	2023/10/12	101	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B150179	Total Thallium (Tl)	2023/10/12	101	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Tin (Sn)	2023/10/12	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Titanium (Ti)	2023/10/12	104	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Uranium (U)	2023/10/12	101	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B150179	Total Vanadium (V)	2023/10/12	103	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Zinc (Zn)	2023/10/12	97	80 - 120	94	80 - 120	<0.0030	mg/L	9.0	20
B150182	Total Barium (Ba)	2023/10/12	99	80 - 120	99	80 - 120	<0.010	mg/L	5.8	20
B150182	Total Boron (B)	2023/10/12	102	80 - 120	101	80 - 120	<0.020	mg/L	NC	20
B150182	Total Calcium (Ca)	2023/10/12	92	80 - 120	94	80 - 120	<0.30	mg/L	0.41	20
B150182	Total Iron (Fe)	2023/10/12	101	80 - 120	102	80 - 120	<0.060	mg/L	0.14	20
B150182	Total Lithium (Li)	2023/10/12	91	80 - 120	92	80 - 120	<0.020	mg/L	NC	20
B150182	Total Magnesium (Mg)	2023/10/12	96	80 - 120	97	80 - 120	<0.20	mg/L	0.86	20
B150182	Total Manganese (Mn)	2023/10/12	102	80 - 120	102	80 - 120	<0.0040	mg/L	0	20
B150182	Total Phosphorus (P)	2023/10/12	101	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B150182	Total Potassium (K)	2023/10/12	94	80 - 120	94	80 - 120	<0.30	mg/L	0.23	20
B150182	Total Silicon (Si)	2023/10/12	97	80 - 120	97	80 - 120	<0.50	mg/L	0.52	20
B150182	Total Sodium (Na)	2023/10/12	95	80 - 120	96	80 - 120	<0.50	mg/L	1.5	20
B150182	Total Strontium (Sr)	2023/10/12	96	80 - 120	96	80 - 120	<0.020	mg/L	1.9	20
B150182	Total Sulphur (S)	2023/10/12	98	80 - 120	97	80 - 120	<0.20	mg/L	1.4	20
B150196	Total Aluminum (Al)	2023/10/13	120	80 - 120	110	80 - 120	<0.0030	mg/L	15	20
B150196	Total Antimony (Sb)	2023/10/13	129 (1)	80 - 120	125 (1)	80 - 120	<0.00060	mg/L	NC	20
B150196	Total Arsenic (As)	2023/10/13	112	80 - 120	108	80 - 120	<0.00020	mg/L	8.6	20
B150196	Total Beryllium (Be)	2023/10/13	110	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Chromium (Cr)	2023/10/13	113	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150196	Total Cobalt (Co)	2023/10/13	111	80 - 120	108	80 - 120	<0.00030	mg/L	15	20
B150196	Total Copper (Cu)	2023/10/13	111	80 - 120	106	80 - 120	<0.0010	mg/L	14	20
B150196	Total Lead (Pb)	2023/10/13	112	80 - 120	109	80 - 120	<0.00020	mg/L	15	20
B150196	Total Molybdenum (Mo)	2023/10/13	117	80 - 120	112	80 - 120	<0.00020	mg/L	NC	20
B150196	Total Nickel (Ni)	2023/10/13	111	80 - 120	105	80 - 120	<0.00050	mg/L	14	20
B150196	Total Selenium (Se)	2023/10/13	109	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B150196	Total Silver (Ag)	2023/10/13	111	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B150196	Total Thallium (Tl)	2023/10/13	112	80 - 120	109	80 - 120	<0.00020	mg/L	18	20
B150196	Total Tin (Sn)	2023/10/13	117	80 - 120	111	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Titanium (Ti)	2023/10/13	112	80 - 120	108	80 - 120	<0.0010	mg/L	6.0	20
B150196	Total Uranium (U)	2023/10/13	113	80 - 120	108	80 - 120	<0.00010	mg/L	14	20
B150196	Total Vanadium (V)	2023/10/13	113	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Zinc (Zn)	2023/10/13	115	80 - 120	107	80 - 120	<0.0030	mg/L	2.1	20
B150207	Total Barium (Ba)	2023/10/13	100	80 - 120	94	80 - 120	<0.010	mg/L	0.49	20
B150207	Total Boron (B)	2023/10/13	100	80 - 120	92	80 - 120	<0.020	mg/L	0.25	20
B150207	Total Calcium (Ca)	2023/10/13	NC	80 - 120	95	80 - 120	<0.30	mg/L	0.37	20
B150207	Total Iron (Fe)	2023/10/13	104	80 - 120	94	80 - 120	<0.060	mg/L	2.2	20
B150207	Total Lithium (Li)	2023/10/13	103	80 - 120	94	80 - 120	<0.020	mg/L	2.5	20
B150207	Total Magnesium (Mg)	2023/10/13	103	80 - 120	93	80 - 120	<0.20	mg/L	0.062	20
B150207	Total Manganese (Mn)	2023/10/13	107	80 - 120	97	80 - 120	<0.0040	mg/L	2.3	20
B150207	Total Phosphorus (P)	2023/10/13	101	80 - 120	92	80 - 120	<0.10	mg/L	NC	20
B150207	Total Potassium (K)	2023/10/13	102	80 - 120	93	80 - 120	<0.30	mg/L	1.6	20
B150207	Total Silicon (Si)	2023/10/13	NC	80 - 120	92	80 - 120	<0.50	mg/L	2.6	20
B150207	Total Sodium (Na)	2023/10/13	105	80 - 120	96	80 - 120	<0.50	mg/L	0.23	20
B150207	Total Strontium (Sr)	2023/10/13	96	80 - 120	91	80 - 120	<0.020	mg/L	1.0	20
B150207	Total Sulphur (S)	2023/10/13	NC	80 - 120	92	80 - 120	<0.20	mg/L	2.6	20
B153178	Dissolved Organic Carbon (C)	2023/10/16	93	80 - 120	101	80 - 120	<0.50	mg/L	0.88	20
B153329	Dissolved Lead (Pb)	2023/10/14	93	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B154154	Alkalinity (PP as CaCO3)	2023/10/17					<1.0	mg/L	NC	20
B154154	Alkalinity (Total as CaCO3)	2023/10/17			100	80 - 120	<1.0	mg/L	0.30	20
B154154	Bicarbonate (HCO3)	2023/10/17					<1.0	mg/L	0.30	20
B154154	Carbonate (CO3)	2023/10/17					<1.0	mg/L	NC	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B154154	Hydroxide (OH)	2023/10/17					<1.0	mg/L	NC	20
B154155	pH	2023/10/17			100	97 - 103			1.2	N/A
B154280	Alkalinity (PP as CaCO3)	2023/10/18					<1.0	mg/L	NC	20
B154280	Alkalinity (Total as CaCO3)	2023/10/18			100	80 - 120	<1.0	mg/L	2.4	20
B154280	Bicarbonate (HCO3)	2023/10/18					<1.0	mg/L	2.4	20
B154280	Carbonate (CO3)	2023/10/18					<1.0	mg/L	NC	20
B154280	Hydroxide (OH)	2023/10/18					<1.0	mg/L	NC	20
B154281	pH	2023/10/18			100	97 - 103			1.3	N/A
B154932	Total Organic Carbon (C)	2023/10/16	109	80 - 120	97	80 - 120	<0.50	mg/L	3.5	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Sandy Yuan, M.Sc., QP, Scientific Specialist

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

Bureau Veritas Proprietary Software
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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:

Company Name: #7500 KGS Group
Contact Name: Accounts Payable
Address: 3rd Floor 865 Waverly St, Winnipeg MB R3T 5T4
Phone: (204) 896-1209 Fax:
Email: payables@kgsgroup.com

Report Information

Company Name:
Contact Name: Ed Collins, Monika Niemczyk
Address:
Phone: Fax:
Email: Ecollins@kgsgroup.com; mniemczyk@kgsgroup.com

Project Information

Quotation #: C21675
P.O. #:
Project #: 21-1357-005
Project Name:
Site #: OAM - Sherridon Mine Site
Sampled By:

Laboratory Use Only

Bureau Veritas Job #:
Bottle Order #: 707134
Chain Of Custody Record: C#707134-01-01
Project Manager: Janelle Kochan

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]
(will be applied if Rush TAT is not specified)
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Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/10/03	12:30	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC ASAP to meet hold times
2		SB-1	23/10/04	9:25		N	N	X	X	X	X	X	X	X	X	X	X		
3		SB-2		9:20		N	N	X	X	X	X	X	X	X	X	X	X		
4		CB-1		9:30		N	N	X	X	X	X	X	X	X	X	X	X		
5		CB-2		9:35		N	N	X	X	X	X	X	X	X	X	X	X		
6		EB-1		9:40		N	N	X	X	X	X	X	X	X	X	X	X		
7		EB-2		9:45		N	N	X	X	X	X	X	X	X	X	X	X		
8		NB-1		9:55		N	N	X	X	X	X	X	X	X	X	X	X		
9		NB-2		9:50		N	N	X	X	X	X	X	X	X	X	X	X		
10		CLD		10:00		N	N	X	X	X	X	X	X	X	X	X	X		

mcal-10-512

C380937

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Tyrell	23/10/05	12:10	Brooklyn Hiebert	23/10/05	1215			ACTR	Yes / No
			ATRAVERSE	2023/10/06	08:30				

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See ACTR

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins; Monika Niemczyk	P.O. #			707134
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#707134-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com; mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10ºC) from time of sampling until delivery to Bureau Veritas

Analysis Requested

Turnaround Time (TAT) Required

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Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/10/04	8:50	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity ; DOC
2		CL-3 BTM		8:55				X	X	X	X	X	X	X	X	X	X		ASAP to meet hold times
3		CL-7 SFC		9:00				X	X	X	X	X	X	X	X	X	X		
4		CL-7 BTM		9:05				X	X	X	X	X	X	X	X	X	X		
5		CL-8 SFC		8:40				X	X	X	X	X	X	X	X	X	X		
6		CL-8 BTM		8:45				X	X	X	X	X	X	X	X	X	X		
7		CL-2 SFC		9:10				X	X	X	X	X	X	X	X	X	X		
8		CL-2 BTM		9:15				X	X	X	X	X	X	X	X	X	X		
9		CL-4 SFC		8:30				X	X	X	X	X	X	X	X	X	X		
10		CL-4 BTM		8:35				X	X	X	X	X	X	X	X	X	X		

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck	23/10/05	12:10	Brooklyn Hiebert	23/10/05	1215			ACTR	Yes / No
			ATRAUSCH	2023/10/06	08:30				

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SeeACTA

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins, Monika Niemczyk	P.O. #			707134
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#707134-03-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com; mniemczyk@kgsgroup.com	Sampled By			

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

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Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water? (Y/N)	Metals Field Filtered? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/10/04	8:20	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	Analyze turbidity & DOC ASAP to meet hold times
2		CL-5 BTM		8:25				X	X	X	X	X	X	X	X	X	X		
3		CL-6 SFC		8:10				X	X	X	X	X	X	X	X	X	X		
4		CL-6 BTM		8:15				X	X	X	X	X	X	X	X	X	X		
5		SW-131		AM				X	X	X	X	X	X	X	X	X	X		
6		SW-132		AM				X	X	X	X	X	X	X	X	X	X		
7		SW-133		AM				X	X	X	X	X	X	X	X	X	X		
8		TRIP BLANK	23/10/04	—	—			X	X	X	X	X	X	X	X	X	X		
9																			
10																			

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (ºC) on Receipt	Custody Seal Intact on Cooler?
Kaitlyn Clark / Rachael Dyck	23/10/05	12:10	Brooklyn Helgert	23/10/05	1215			ACTR	Yes / No
			ATRAVER Cili	2023/10/06	08:30				

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See ACTR

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Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 708441-01-01, 708441-02-01, 708441-03-01

Report Date: 2023/10/20
Report #: R3413962
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C384842
Received: 2023/10/18, 08:30

Sample Matrix: Water
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	28	N/A	2023/10/20	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	28	N/A	2023/10/20		Auto Calc
Cadmium - low level CCME (Total) (1)	28	N/A	2023/10/20		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	28	N/A	2023/10/20	AB SOP-00020	SM24-4500-Cl/SO4-E m
Carbon (DOC) -Lab Filtered (1, 2)	28	N/A	2023/10/20	AB SOP-00087	MMCW 119 1996 m
Hardness (1)	28	N/A	2023/10/20		Auto Calc
Hardness Total (calculated as CaCO3) (1, 3)	28	N/A	2023/10/20	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (1, 4)	28	N/A	2023/10/20	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	28	2023/10/19	2023/10/20	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (1, 5)	28	N/A	2023/10/20	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	28	2023/10/19	2023/10/20	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
pH @25°C (1, 6)	28	N/A	2023/10/20	AB SOP-00005	SM 24 4500-H+B m
Carbon (Total Organic) (1, 7)	28	N/A	2023/10/20	AB SOP-00087	MMCW 119 1996 m
Total Suspended Solids (NFR) (1)	28	2023/10/19	2023/10/20	AB SOP-00061	SM 24 2540 D m
Turbidity (1)	28	N/A	2023/10/19	CAL SOP-00081	SM 24 2130 B m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - SHERRIDON MINE SITE

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 708441-01-01, 708441-02-01, 708441-03-01

Report Date: 2023/10/20
Report #: R3413962
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C384842
Received: 2023/10/18, 08:30

otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) DOC present in the sample should be considered as non-purgeable DOC. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(4) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(5) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) TOC present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

==========

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF060		CCF061	CCF062	CCF063	CCF064		
Sampling Date		2023/10/17 11:45		2023/10/17 10:10	2023/10/17 10:05	2023/10/17 10:15	2023/10/17 10:20		
COC Number		708441-01-01		708441-01-01	708441-01-01	708441-01-01	708441-01-01		
	UNITS	SC-1	QC Batch	SB-1	SB-2	CB-1	CB-2	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.42	B160777	0.28	0.27	0.26	0.29	0.020	B160479
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.019	B162505	0.0056	<0.0030	<0.0030	<0.0030	0.0030	B162505
Dissolved Antimony (Sb)	mg/L	<0.00060	B162505	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B162505
Dissolved Arsenic (As)	mg/L	0.00031	B162505	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Barium (Ba)	mg/L	<0.010	B162280	0.014	0.015	0.014	0.014	0.010	B162280
Dissolved Beryllium (Be)	mg/L	<0.0010	B162505	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Boron (B)	mg/L	<0.020	B162280	<0.020	<0.020	<0.020	<0.020	0.020	B162280
Dissolved Calcium (Ca)	mg/L	11	B162280	61	62	62	62	0.30	B162280
Dissolved Chromium (Cr)	mg/L	<0.0010	B162505	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Cobalt (Co)	mg/L	<0.00030	B162505	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B162505
Dissolved Copper (Cu)	mg/L	0.010	B162505	0.0038	0.0039	0.0041	0.0043	0.0010	B162505
Dissolved Iron (Fe)	mg/L	0.16	B162280	<0.060	0.11	<0.060	<0.060	0.060	B162280
Dissolved Lead (Pb)	mg/L	<0.00020	B162505	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Lithium (Li)	mg/L	<0.020	B162280	<0.020	<0.020	<0.020	0.022	0.020	B162280
Dissolved Magnesium (Mg)	mg/L	3.3	B162280	9.4	9.6	9.7	9.6	0.20	B162280
Dissolved Manganese (Mn)	mg/L	0.064	B162280	0.072	0.076	0.074	0.072	0.0040	B162280
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B162505	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Nickel (Ni)	mg/L	0.0010	B162505	0.00088	0.00089	0.00095	0.00091	0.00050	B162505
Dissolved Phosphorus (P)	mg/L	<0.10	B162280	<0.10	<0.10	<0.10	<0.10	0.10	B162280
Dissolved Potassium (K)	mg/L	1.7	B162280	5.1	5.4	5.3	5.3	0.30	B162280
Dissolved Selenium (Se)	mg/L	<0.00020	B162505	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Silicon (Si)	mg/L	1.2	B162280	0.66	0.70	0.68	0.66	0.50	B162280
Dissolved Silver (Ag)	mg/L	<0.00010	B162505	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B162505
Dissolved Sodium (Na)	mg/L	3.7	B162280	3.6	3.8	3.8	3.7	0.50	B162280
Dissolved Strontium (Sr)	mg/L	0.024	B162280	0.054	0.054	0.054	0.054	0.020	B162280
Dissolved Sulphur (S)	mg/L	3.7	B162280	58	57	59	60	0.20	B162280
Dissolved Thallium (Tl)	mg/L	<0.00020	B162505	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Tin (Sn)	mg/L	<0.0010	B162505	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Titanium (Ti)	mg/L	<0.0010	B162505	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Uranium (U)	mg/L	<0.00010	B162505	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B162505

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF060		CCF061	CCF062	CCF063	CCF064		
Sampling Date		2023/10/17 11:45		2023/10/17 10:10	2023/10/17 10:05	2023/10/17 10:15	2023/10/17 10:20		
COC Number		708441-01-01		708441-01-01	708441-01-01	708441-01-01	708441-01-01		
	UNITS	**SC-1**	**QC Batch**	**SB-1**	**SB-2**	**CB-1**	**CB-2**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B162505	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Zinc (Zn)	mg/L	0.22	B162505	0.069	0.070	0.074	0.074	0.0030	B162505
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF065		CCF066	CCF067	CCF068	CCF069		
Sampling Date		2023/10/17 10:25		2023/10/17 10:30	2023/10/17 10:45	2023/10/17 10:40	2023/10/17 10:56		
COC Number		708441-01-01		708441-01-01	708441-01-01	708441-01-01	708441-01-01		
	UNITS	EB-1	QC Batch	EB-2	NB-1	NB-2	CLD	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	0.49	B160479	0.50	0.28	0.30	0.31	0.020	B160479
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	<0.0030	B162528	<0.0030	<0.0030	<0.0030	<0.0030	0.0030	B162505
Dissolved Antimony (Sb)	mg/L	<0.00060	B162528	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B162505
Dissolved Arsenic (As)	mg/L	<0.00020	B162528	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Barium (Ba)	mg/L	0.015	B162280	0.014	0.013	0.013	0.013	0.010	B162280
Dissolved Beryllium (Be)	mg/L	<0.0010	B162528	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Boron (B)	mg/L	<0.020	B162280	<0.020	<0.020	<0.020	<0.020	0.020	B162280
Dissolved Calcium (Ca)	mg/L	68	B162280	68	65	66	66	0.30	B162280
Dissolved Chromium (Cr)	mg/L	<0.0010	B162528	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Cobalt (Co)	mg/L	0.00040	B162528	0.00044	<0.00030	<0.00030	<0.00030	0.00030	B162505
Dissolved Copper (Cu)	mg/L	0.0080	B162528	0.0069	0.0046	0.0047	0.0047	0.0010	B162505
Dissolved Iron (Fe)	mg/L	<0.060	B162280	<0.060	0.066	<0.060	<0.060	0.060	B162280
Dissolved Lead (Pb)	mg/L	<0.00020	B162528	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Lithium (Li)	mg/L	<0.020	B162280	0.025	<0.020	<0.020	0.022	0.020	B162280
Dissolved Magnesium (Mg)	mg/L	10	B162280	10	10	10	10	0.20	B162280
Dissolved Manganese (Mn)	mg/L	0.064	B162280	0.066	0.067	0.069	0.074	0.0040	B162280
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B162528	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Nickel (Ni)	mg/L	0.0014	B162528	0.0013	0.00087	0.00087	0.00090	0.00050	B162505
Dissolved Phosphorus (P)	mg/L	<0.10	B162280	<0.10	<0.10	<0.10	<0.10	0.10	B162280
Dissolved Potassium (K)	mg/L	5.4	B162280	5.4	5.1	5.2	5.0	0.30	B162280
Dissolved Selenium (Se)	mg/L	<0.00020	B162528	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Silicon (Si)	mg/L	0.55	B162280	0.55	0.58	0.63	0.65	0.50	B162280
Dissolved Silver (Ag)	mg/L	<0.00010	B162528	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B162505
Dissolved Sodium (Na)	mg/L	3.9	B162280	3.9	3.6	3.7	3.6	0.50	B162280
Dissolved Strontium (Sr)	mg/L	0.057	B162280	0.054	0.053	0.054	0.053	0.020	B162280
Dissolved Sulphur (S)	mg/L	65	B162280	66	59	62	65	0.20	B162280
Dissolved Thallium (Tl)	mg/L	<0.00020	B162528	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B162505
Dissolved Tin (Sn)	mg/L	<0.0010	B162528	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Titanium (Ti)	mg/L	<0.0010	B162528	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Uranium (U)	mg/L	<0.00010	B162528	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B162505
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF065		CCF066	CCF067	CCF068	CCF069		
Sampling Date		2023/10/17 10:25		2023/10/17 10:30	2023/10/17 10:45	2023/10/17 10:40	2023/10/17 10:56		
COC Number		708441-01-01		708441-01-01	708441-01-01	708441-01-01	708441-01-01		
	UNITS	**EB-1**	**QC Batch**	**EB-2**	**NB-1**	**NB-2**	**CLD**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B162528	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B162505
Dissolved Zinc (Zn)	mg/L	0.16	B162528	0.14	0.076	0.079	0.081	0.0030	B162505
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF070		CCF071		CCF072	CCF073		
Sampling Date		2023/10/17 09:15		2023/10/17 09:15		2023/10/17 09:20	2023/10/17 09:20		
COC Number		708441-02-01		708441-02-01		708441-02-01	708441-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	QC Batch	CL-7 SFC	CL-7 BTM	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L	<0.020	B160479	<0.020	B160479	<0.020	<0.020	0.020	B160479
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L	0.0096	B162528	0.010	B162528	0.0096	0.011	0.0030	B162505
Dissolved Antimony (Sb)	mg/L	<0.00060	B162528	<0.00060	B162528	<0.00060	<0.00060	0.00060	B162505
Dissolved Arsenic (As)	mg/L	0.00040	B162528	0.00043	B162528	0.00031	0.00033	0.00020	B162505
Dissolved Barium (Ba)	mg/L	<0.010	B162340	<0.010	B162280	<0.010	<0.010	0.010	B162280
Dissolved Beryllium (Be)	mg/L	<0.0010	B162528	<0.0010	B162528	<0.0010	<0.0010	0.0010	B162505
Dissolved Boron (B)	mg/L	<0.020	B162340	<0.020	B162280	<0.020	<0.020	0.020	B162280
Dissolved Calcium (Ca)	mg/L	14	B162340	14	B162280	14	14	0.30	B162280
Dissolved Chromium (Cr)	mg/L	<0.0010	B162528	<0.0010	B162528	<0.0010	<0.0010	0.0010	B162505
Dissolved Cobalt (Co)	mg/L	<0.00030	B162528	<0.00030	B162528	<0.00030	<0.00030	0.00030	B162505
Dissolved Copper (Cu)	mg/L	0.0040	B162528	0.0042	B162528	0.0038	0.0043	0.0010	B162505
Dissolved Iron (Fe)	mg/L	0.14	B162340	0.16	B162280	0.16	0.14	0.060	B162280
Dissolved Lead (Pb)	mg/L	<0.00020	B162528	<0.00020	B162528	<0.00020	<0.00020	0.00020	B162505
Dissolved Lithium (Li)	mg/L	<0.020	B162340	<0.020	B162280	<0.020	<0.020	0.020	B162280
Dissolved Magnesium (Mg)	mg/L	3.5	B162340	3.6	B162280	3.5	3.7	0.20	B162280
Dissolved Manganese (Mn)	mg/L	<0.0040	B162340	<0.0040	B162280	<0.0040	<0.0040	0.0040	B162280
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B162528	<0.00020	B162528	<0.00020	<0.00020	0.00020	B162505
Dissolved Nickel (Ni)	mg/L	<0.00050	B162528	<0.00050	B162528	<0.00050	0.00056	0.00050	B162505
Dissolved Phosphorus (P)	mg/L	<0.10	B162340	<0.10	B162280	<0.10	<0.10	0.10	B162280
Dissolved Potassium (K)	mg/L	1.9	B162340	1.8	B162280	1.9	1.9	0.30	B162280
Dissolved Selenium (Se)	mg/L	<0.00020	B162528	<0.00020	B162528	<0.00020	<0.00020	0.00020	B162505
Dissolved Silicon (Si)	mg/L	0.76	B162340	0.76	B162280	0.75	0.74	0.50	B162280
Dissolved Silver (Ag)	mg/L	<0.00010	B162528	<0.00010	B162528	<0.00010	<0.00010	0.00010	B162505
Dissolved Sodium (Na)	mg/L	2.3	B162340	2.3	B162280	2.3	2.3	0.50	B162280
Dissolved Strontium (Sr)	mg/L	0.026	B162340	0.027	B162280	0.027	0.027	0.020	B162280
Dissolved Sulphur (S)	mg/L	7.0	B162340	6.9	B162280	6.9	6.9	0.20	B162280
Dissolved Thallium (Tl)	mg/L	<0.00020	B162528	<0.00020	B162528	<0.00020	<0.00020	0.00020	B162505
Dissolved Tin (Sn)	mg/L	<0.0010	B162528	<0.0010	B162528	<0.0010	<0.0010	0.0010	B162505
Dissolved Titanium (Ti)	mg/L	<0.0010	B162528	<0.0010	B162528	<0.0010	<0.0010	0.0010	B162505
Dissolved Uranium (U)	mg/L	<0.00010	B162528	<0.00010	B162528	<0.00010	<0.00010	0.00010	B162505

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF070		CCF071		CCF072	CCF073		
Sampling Date		2023/10/17 09:15		2023/10/17 09:15		2023/10/17 09:20	2023/10/17 09:20		
COC Number		708441-02-01		708441-02-01		708441-02-01	708441-02-01		
	UNITS	**CL-3 SFC**	**QC Batch**	**CL-3 BTM**	**QC Batch**	**CL-7 SFC**	**CL-7 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B162528	<0.0010	B162528	<0.0010	<0.0010	0.0010	B162505
Dissolved Zinc (Zn)	mg/L	0.0056	B162528	0.0058	B162528	0.0053	0.0055	0.0030	B162505
RDL = Reportable Detection Limit									

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF074		CCF075		CCF076		CCF077		
Sampling Date		2023/10/17 09:10		2023/10/17 09:10		2023/10/17 09:35		2023/10/17 09:35		
COC Number		708441-02-01		708441-02-01		708441-02-01		708441-02-01		
	UNITS	CL-8 SFC	QC Batch	CL-8 BTM	QC Batch	CL-2 SFC	QC Batch	CL-2 BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	B160479	<0.020	B160777	<0.020	B160777	<0.020	0.020	B160777
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0095	B162505	0.0091	B162528	0.012	B162505	0.0097	0.0030	B162528
Dissolved Antimony (Sb)	mg/L	<0.00060	B162505	<0.00060	B162528	<0.00060	B162505	<0.00060	0.00060	B162528
Dissolved Arsenic (As)	mg/L	0.00034	B162505	0.00036	B162528	0.00032	B162505	0.00036	0.00020	B162528
Dissolved Barium (Ba)	mg/L	<0.010	B162280	<0.010	B162340	<0.010	B162280	<0.010	0.010	B162340
Dissolved Beryllium (Be)	mg/L	<0.0010	B162505	<0.0010	B162528	<0.0010	B162505	<0.0010	0.0010	B162528
Dissolved Boron (B)	mg/L	<0.020	B162280	<0.020	B162340	<0.020	B162280	<0.020	0.020	B162340
Dissolved Calcium (Ca)	mg/L	14	B162280	13	B162340	14	B162280	14	0.30	B162340
Dissolved Chromium (Cr)	mg/L	<0.0010	B162505	<0.0010	B162528	<0.0010	B162505	<0.0010	0.0010	B162528
Dissolved Cobalt (Co)	mg/L	<0.00030	B162505	<0.00030	B162528	<0.00030	B162505	<0.00030	0.00030	B162528
Dissolved Copper (Cu)	mg/L	0.0040	B162505	0.0040	B162528	0.0041	B162505	0.0043	0.0010	B162528
Dissolved Iron (Fe)	mg/L	0.15	B162280	0.17	B162340	0.20	B162280	0.23	0.060	B162340
Dissolved Lead (Pb)	mg/L	<0.00020	B162505	<0.00020	B162528	<0.00020	B162505	<0.00020	0.00020	B162528
Dissolved Lithium (Li)	mg/L	<0.020	B162280	<0.020	B162340	<0.020	B162280	<0.020	0.020	B162340
Dissolved Magnesium (Mg)	mg/L	3.6	B162280	3.4	B162340	3.5	B162280	3.5	0.20	B162340
Dissolved Manganese (Mn)	mg/L	<0.0040	B162280	<0.0040	B162340	<0.0040	B162280	<0.0040	0.0040	B162340
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B162505	<0.00020	B162528	<0.00020	B162505	<0.00020	0.00020	B162528
Dissolved Nickel (Ni)	mg/L	<0.00050	B162505	<0.00050	B162528	<0.00050	B162505	<0.00050	0.00050	B162528
Dissolved Phosphorus (P)	mg/L	<0.10	B162280	<0.10	B162340	<0.10	B162280	<0.10	0.10	B162340
Dissolved Potassium (K)	mg/L	1.9	B162280	1.8	B162340	1.8	B162280	1.8	0.30	B162340
Dissolved Selenium (Se)	mg/L	<0.00020	B162505	<0.00020	B162528	<0.00020	B162505	<0.00020	0.00020	B162528
Dissolved Silicon (Si)	mg/L	0.75	B162280	0.78	B162340	0.82	B162280	0.87	0.50	B162340
Dissolved Silver (Ag)	mg/L	<0.00010	B162505	<0.00010	B162528	<0.00010	B162505	<0.00010	0.00010	B162528
Dissolved Sodium (Na)	mg/L	2.3	B162280	2.2	B162340	2.4	B162280	2.3	0.50	B162340
Dissolved Strontium (Sr)	mg/L	0.028	B162280	0.026	B162340	0.027	B162280	0.026	0.020	B162340
Dissolved Sulphur (S)	mg/L	7.0	B162280	7.2	B162340	7.1	B162280	7.1	0.20	B162340
Dissolved Thallium (Tl)	mg/L	<0.00020	B162505	<0.00020	B162528	<0.00020	B162505	<0.00020	0.00020	B162528
Dissolved Tin (Sn)	mg/L	<0.0010	B162505	<0.0010	B162528	<0.0010	B162505	<0.0010	0.0010	B162528
Dissolved Titanium (Ti)	mg/L	<0.0010	B162505	<0.0010	B162528	<0.0010	B162505	<0.0010	0.0010	B162528
Dissolved Uranium (U)	mg/L	<0.00010	B162505	<0.00010	B162528	<0.00010	B162505	<0.00010	0.00010	B162528

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF074		CCF075		CCF076		CCF077		
Sampling Date		2023/10/17 09:10		2023/10/17 09:10		2023/10/17 09:35		2023/10/17 09:35		
COC Number		708441-02-01		708441-02-01		708441-02-01		708441-02-01		
	UNITS	**CL-8 SFC**	**QC Batch**	**CL-8 BTM**	**QC Batch**	**CL-2 SFC**	**QC Batch**	**CL-2 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B162505	<0.0010	B162528	<0.0010	B162505	<0.0010	0.0010	B162528
Dissolved Zinc (Zn)	mg/L	0.0047	B162505	0.0051	B162528	0.0046	B162505	0.0055	0.0030	B162528
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF078		CCF079		CCF080		CCF081		
Sampling Date		2023/10/17 09:05		2023/10/17 09:05		2023/10/17 09:00		2023/10/17 09:00		
COC Number		708441-02-01		708441-02-01		708441-03-01		708441-03-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	QC Batch	CL-5 BTM	RDL	QC Batch
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	B160777	<0.020	B160777	<0.020	B160777	<0.020	0.020	B160777
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.011	B162528	0.0092	B162505	0.0091	B162528	0.011	0.0030	B162505
Dissolved Antimony (Sb)	mg/L	<0.00060	B162528	<0.00060	B162505	<0.00060	B162528	<0.00060	0.00060	B162505
Dissolved Arsenic (As)	mg/L	0.00036	B162528	0.00031	B162505	0.00033	B162528	0.00034	0.00020	B162505
Dissolved Barium (Ba)	mg/L	<0.010	B162340	<0.010	B162280	<0.010	B162340	<0.010	0.010	B162340
Dissolved Beryllium (Be)	mg/L	<0.0010	B162528	<0.0010	B162505	<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Boron (B)	mg/L	<0.020	B162340	<0.020	B162280	<0.020	B162340	<0.020	0.020	B162340
Dissolved Calcium (Ca)	mg/L	14	B162340	14	B162280	13	B162340	13	0.30	B162340
Dissolved Chromium (Cr)	mg/L	<0.0010	B162528	<0.0010	B162505	<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Cobalt (Co)	mg/L	<0.00030	B162528	<0.00030	B162505	<0.00030	B162528	<0.00030	0.00030	B162505
Dissolved Copper (Cu)	mg/L	0.0041	B162528	0.0036	B162505	0.0037	B162528	0.0038	0.0010	B162505
Dissolved Iron (Fe)	mg/L	0.17	B162340	0.14	B162280	0.10	B162340	0.12	0.060	B162340
Dissolved Lead (Pb)	mg/L	<0.00020	B162528	<0.00020	B162505	<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Lithium (Li)	mg/L	<0.020	B162340	<0.020	B162280	<0.020	B162340	<0.020	0.020	B162340
Dissolved Magnesium (Mg)	mg/L	3.5	B162340	3.5	B162280	3.3	B162340	3.4	0.20	B162340
Dissolved Manganese (Mn)	mg/L	<0.0040	B162340	<0.0040	B162280	<0.0040	B162340	<0.0040	0.0040	B162340
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B162528	<0.00020	B162505	<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Nickel (Ni)	mg/L	<0.00050	B162528	<0.00050	B162505	<0.00050	B162528	<0.00050	0.00050	B162505
Dissolved Phosphorus (P)	mg/L	<0.10	B162340	<0.10	B162280	<0.10	B162340	<0.10	0.10	B162340
Dissolved Potassium (K)	mg/L	1.8	B162340	1.8	B162280	1.8	B162340	1.7	0.30	B162340
Dissolved Selenium (Se)	mg/L	<0.00020	B162528	<0.00020	B162505	<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Silicon (Si)	mg/L	0.78	B162340	0.75	B162280	0.70	B162340	0.73	0.50	B162340
Dissolved Silver (Ag)	mg/L	<0.00010	B162528	<0.00010	B162505	<0.00010	B162528	<0.00010	0.00010	B162505
Dissolved Sodium (Na)	mg/L	2.3	B162340	2.3	B162280	2.3	B162340	2.3	0.50	B162340
Dissolved Strontium (Sr)	mg/L	0.026	B162340	0.027	B162280	0.026	B162340	0.026	0.020	B162340
Dissolved Sulphur (S)	mg/L	6.8	B162340	6.5	B162280	5.8	B162340	6.0	0.20	B162340
Dissolved Thallium (Tl)	mg/L	<0.00020	B162528	<0.00020	B162505	<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Tin (Sn)	mg/L	<0.0010	B162528	<0.0010	B162505	<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Titanium (Ti)	mg/L	<0.0010	B162528	<0.0010	B162505	<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Uranium (U)	mg/L	<0.00010	B162528	<0.00010	B162505	<0.00010	B162528	<0.00010	0.00010	B162505

RDL = Reportable Detection Limit

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF078		CCF079		CCF080		CCF081		
Sampling Date		2023/10/17 09:05		2023/10/17 09:05		2023/10/17 09:00		2023/10/17 09:00		
COC Number		708441-02-01		708441-02-01		708441-03-01		708441-03-01		
	UNITS	CL-4 SFC	QC Batch	CL-4 BTM	QC Batch	CL-5 SFC	QC Batch	CL-5 BTM	RDL	QC Batch
Dissolved Vanadium (V)	mg/L	<0.0010	B162528	<0.0010	B162505	<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Zinc (Zn)	mg/L	0.0069	B162528	0.0044	B162505	0.0044	B162528	0.0045	0.0030	B162505
RDL = Reportable Detection Limit										

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF081			CCF082	CCF083		
Sampling Date		2023/10/17 09:00			2023/10/17 08:50	2023/10/17 08:50		
COC Number		708441-03-01			708441-03-01	708441-03-01		
	UNITS	CL-5 BTM Lab-Dup	RDL	QC Batch	CL-6 SFC	CL-6 BTM	RDL	QC Batch
Elements								
Dissolved Cadmium (Cd)	ug/L				<0.020	<0.020	0.020	B160777
Lab Filtered Elements								
Dissolved Aluminum (Al)	mg/L	0.010	0.0030	B162505	0.0067	0.0098	0.0030	B162528
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B162505	<0.00060	<0.00060	0.00060	B162528
Dissolved Arsenic (As)	mg/L	0.00029	0.00020	B162505	0.00047	0.00037	0.00020	B162528
Dissolved Barium (Ba)	mg/L				<0.010	0.011	0.010	B162340
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B162505	<0.0010	<0.0010	0.0010	B162528
Dissolved Boron (B)	mg/L				<0.020	<0.020	0.020	B162340
Dissolved Calcium (Ca)	mg/L				11	12	0.30	B162340
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B162505	<0.0010	<0.0010	0.0010	B162528
Dissolved Cobalt (Co)	mg/L	<0.00030	0.00030	B162505	<0.00030	<0.00030	0.00030	B162528
Dissolved Copper (Cu)	mg/L	0.0037	0.0010	B162505	0.0030	0.0034	0.0010	B162528
Dissolved Iron (Fe)	mg/L				<0.060	0.077	0.060	B162340
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B162505	<0.00020	<0.00020	0.00020	B162528
Dissolved Lithium (Li)	mg/L				<0.020	0.021	0.020	B162340
Dissolved Magnesium (Mg)	mg/L				3.2	3.4	0.20	B162340
Dissolved Manganese (Mn)	mg/L				<0.0040	<0.0040	0.0040	B162340
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B162505	<0.00020	<0.00020	0.00020	B162528
Dissolved Nickel (Ni)	mg/L	<0.00050	0.00050	B162505	<0.00050	<0.00050	0.00050	B162528
Dissolved Phosphorus (P)	mg/L				<0.10	<0.10	0.10	B162340
Dissolved Potassium (K)	mg/L				1.7	1.8	0.30	B162340
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B162505	<0.00020	<0.00020	0.00020	B162528
Dissolved Silicon (Si)	mg/L				<0.50	0.67	0.50	B162340
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B162505	<0.00010	<0.00010	0.00010	B162528
Dissolved Sodium (Na)	mg/L				2.2	2.3	0.50	B162340
Dissolved Strontium (Sr)	mg/L				0.025	0.026	0.020	B162340
Dissolved Sulphur (S)	mg/L				4.3	4.9	0.20	B162340
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B162505	<0.00020	<0.00020	0.00020	B162528
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B162505	<0.0010	<0.0010	0.0010	B162528
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B162505	<0.0010	<0.0010	0.0010	B162528
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	B162505	<0.00010	<0.00010	0.00010	B162528

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF081			CCF082	CCF083		
Sampling Date		2023/10/17 09:00			2023/10/17 08:50	2023/10/17 08:50		
COC Number		708441-03-01			708441-03-01	708441-03-01		
	UNITS	**CL-5 BTM Lab-Dup**	**RDL**	**QC Batch**	**CL-6 SFC**	**CL-6 BTM**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B162505	<0.0010	<0.0010	0.0010	B162528
Dissolved Zinc (Zn)	mg/L	0.0045	0.0030	B162505	0.0056	0.0062	0.0030	B162528

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF083			CCF084		CCF085		
Sampling Date		2023/10/17 08:50			2023/10/17		2023/10/17		
COC Number		708441-03-01			708441-03-01		708441-03-01		
	UNITS	CL-6 BTM Lab-Dup	RDL	QC Batch	SW-136	QC Batch	SW-137	RDL	QC Batch
Elements									
Dissolved Cadmium (Cd)	ug/L				<0.020	B160777	<0.020	0.020	B160777
Lab Filtered Elements									
Dissolved Aluminum (Al)	mg/L				0.0053	B162528	0.0094	0.0030	B162505
Dissolved Antimony (Sb)	mg/L				<0.00060	B162528	<0.00060	0.00060	B162505
Dissolved Arsenic (As)	mg/L				0.00044	B162528	0.00031	0.00020	B162505
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B162340	<0.010	B162340	<0.010	0.010	B162280
Dissolved Beryllium (Be)	mg/L				<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Boron (B)	mg/L	<0.020	0.020	B162340	<0.020	B162340	<0.020	0.020	B162280
Dissolved Calcium (Ca)	mg/L	12	0.30	B162340	11	B162340	14	0.30	B162280
Dissolved Chromium (Cr)	mg/L				<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Cobalt (Co)	mg/L				<0.00030	B162528	<0.00030	0.00030	B162505
Dissolved Copper (Cu)	mg/L				0.0027	B162528	0.0035	0.0010	B162505
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B162340	<0.060	B162340	0.15	0.060	B162280
Dissolved Lead (Pb)	mg/L				<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B162340	<0.020	B162340	<0.020	0.020	B162280
Dissolved Magnesium (Mg)	mg/L	3.3	0.20	B162340	3.2	B162340	3.5	0.20	B162280
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B162340	<0.0040	B162340	<0.0040	0.0040	B162280
Dissolved Molybdenum (Mo)	mg/L				<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Nickel (Ni)	mg/L				<0.00050	B162528	<0.00050	0.00050	B162505
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B162340	<0.10	B162340	<0.10	0.10	B162280
Dissolved Potassium (K)	mg/L	1.7	0.30	B162340	1.7	B162340	1.8	0.30	B162280
Dissolved Selenium (Se)	mg/L				<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Silicon (Si)	mg/L	0.62	0.50	B162340	<0.50	B162340	0.76	0.50	B162280
Dissolved Silver (Ag)	mg/L				<0.00010	B162528	<0.00010	0.00010	B162505
Dissolved Sodium (Na)	mg/L	2.3	0.50	B162340	2.3	B162340	2.3	0.50	B162280
Dissolved Strontium (Sr)	mg/L	0.025	0.020	B162340	0.026	B162340	0.026	0.020	B162280
Dissolved Sulphur (S)	mg/L	5.0	0.20	B162340	4.4	B162340	7.0	0.20	B162280
Dissolved Thallium (Tl)	mg/L				<0.00020	B162528	<0.00020	0.00020	B162505
Dissolved Tin (Sn)	mg/L				<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Titanium (Ti)	mg/L				<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Uranium (U)	mg/L				<0.00010	B162528	<0.00010	0.00010	B162505

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF083			CCF084		CCF085		
Sampling Date		2023/10/17 08:50			2023/10/17		2023/10/17		
COC Number		708441-03-01			708441-03-01		708441-03-01		
	UNITS	**CL-6 BTM Lab-Dup**	**RDL**	**QC Batch**	**SW-136**	**QC Batch**	**SW-137**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L				<0.0010	B162528	<0.0010	0.0010	B162505
Dissolved Zinc (Zn)	mg/L				0.0039	B162528	0.0045	0.0030	B162505

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF086		CCF087		
Sampling Date		2023/10/17		2023/10/17		
COC Number		708441-03-01		708441-03-01		
	UNITS	SW-138	QC Batch	TRIP BLANK	RDL	QC Batch
Elements						
Dissolved Cadmium (Cd)	ug/L	0.51	B160777	<0.020	0.020	B160777
Lab Filtered Elements						
Dissolved Aluminum (Al)	mg/L	<0.0030	B162505	<0.0030	0.0030	B162505
Dissolved Antimony (Sb)	mg/L	<0.00060	B162505	<0.00060	0.00060	B162505
Dissolved Arsenic (As)	mg/L	<0.00020	B162505	<0.00020	0.00020	B162505
Dissolved Barium (Ba)	mg/L	0.015	B162340	<0.010	0.010	B162280
Dissolved Beryllium (Be)	mg/L	<0.0010	B162505	<0.0010	0.0010	B162505
Dissolved Boron (B)	mg/L	<0.020	B162340	<0.020	0.020	B162280
Dissolved Calcium (Ca)	mg/L	69	B162340	<0.30	0.30	B162280
Dissolved Chromium (Cr)	mg/L	<0.0010	B162505	<0.0010	0.0010	B162505
Dissolved Cobalt (Co)	mg/L	0.00046	B162505	<0.00030	0.00030	B162505
Dissolved Copper (Cu)	mg/L	0.0070	B162505	<0.0010	0.0010	B162505
Dissolved Iron (Fe)	mg/L	<0.060	B162340	<0.060	0.060	B162280
Dissolved Lead (Pb)	mg/L	<0.00020	B162505	<0.00020	0.00020	B162505
Dissolved Lithium (Li)	mg/L	<0.020	B162340	<0.020	0.020	B162280
Dissolved Magnesium (Mg)	mg/L	10	B162340	<0.20	0.20	B162280
Dissolved Manganese (Mn)	mg/L	0.066	B162340	<0.0040	0.0040	B162280
Dissolved Molybdenum (Mo)	mg/L	<0.00020	B162505	<0.00020	0.00020	B162505
Dissolved Nickel (Ni)	mg/L	0.0013	B162505	<0.00050	0.00050	B162505
Dissolved Phosphorus (P)	mg/L	<0.10	B162340	<0.10	0.10	B162280
Dissolved Potassium (K)	mg/L	5.3	B162340	<0.30	0.30	B162280
Dissolved Selenium (Se)	mg/L	<0.00020	B162505	<0.00020	0.00020	B162505
Dissolved Silicon (Si)	mg/L	0.55	B162340	<0.50	0.50	B162280
Dissolved Silver (Ag)	mg/L	<0.00010	B162505	<0.00010	0.00010	B162505
Dissolved Sodium (Na)	mg/L	3.9	B162340	<0.50	0.50	B162280
Dissolved Strontium (Sr)	mg/L	0.056	B162340	<0.020	0.020	B162280
Dissolved Sulphur (S)	mg/L	66	B162340	<0.20	0.20	B162280
Dissolved Thallium (Tl)	mg/L	<0.00020	B162505	<0.00020	0.00020	B162505
Dissolved Tin (Sn)	mg/L	<0.0010	B162505	<0.0010	0.0010	B162505
Dissolved Titanium (Ti)	mg/L	<0.0010	B162505	<0.0010	0.0010	B162505
Dissolved Uranium (U)	mg/L	<0.00010	B162505	<0.00010	0.00010	B162505
RDL = Reportable Detection Limit						

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REG. METALS (CCME/AT1) – DISS. LAB FILT.

Bureau Veritas ID		CCF086		CCF087		
Sampling Date		2023/10/17		2023/10/17		
COC Number		708441-03-01		708441-03-01		
	UNITS	**SW-138**	**QC Batch**	**TRIP BLANK**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	mg/L	<0.0010	B162505	<0.0010	0.0010	B162505
Dissolved Zinc (Zn)	mg/L	0.15	B162505	<0.0030	0.0030	B162505
RDL = Reportable Detection Limit						

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF060		CCF061		CCF062	CCF063		
Sampling Date		2023/10/17 11:45		2023/10/17 10:10		2023/10/17 10:05	2023/10/17 10:15		
COC Number		708441-01-01		708441-01-01		708441-01-01	708441-01-01		
	UNITS	SC-1	QC Batch	SB-1	QC Batch	SB-2	CB-1	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.50	B160778	0.36	B160480	0.38	0.36	0.020	B160480
Total Aluminum (Al)	mg/L	0.045	B161326	0.059	B161318	0.048	0.042	0.0030	B161326
Total Antimony (Sb)	mg/L	<0.00060	B161326	<0.00060	B161318	<0.00060	<0.00060	0.00060	B161326
Total Arsenic (As)	mg/L	0.00040	B161326	0.00028	B161318	<0.00020	0.00024	0.00020	B161326
Total Barium (Ba)	mg/L	<0.010	B161346	0.015	B161324	0.015	0.014	0.010	B161346
Total Beryllium (Be)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Boron (B)	mg/L	<0.020	B161346	<0.020	B161324	<0.020	<0.020	0.020	B161346
Total Calcium (Ca)	mg/L	10	B161346	60	B161324	59	60	0.30	B161346
Total Chromium (Cr)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Cobalt (Co)	mg/L	<0.00030	B161326	0.00032	B161318	0.00034	0.00031	0.00030	B161326
Total Copper (Cu)	mg/L	0.017	B161326	0.0086	B161318	0.0075	0.0086	0.0010	B161326
Total Iron (Fe)	mg/L	0.24	B161346	2.4	B161324	2.3	2.1	0.060	B161346
Total Lead (Pb)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Lithium (Li)	mg/L	<0.020	B161346	<0.020	B161324	<0.020	<0.020	0.020	B161346
Total Magnesium (Mg)	mg/L	3.0	B161346	9.1	B161324	9.1	9.1	0.20	B161346
Total Manganese (Mn)	mg/L	0.071	B161346	0.074	B161324	0.079	0.076	0.0040	B161346
Total Molybdenum (Mo)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Nickel (Ni)	mg/L	0.00059	B161326	0.0015	B161318	0.0012	0.0012	0.00050	B161326
Total Phosphorus (P)	mg/L	<0.10	B161346	<0.10	B161324	<0.10	<0.10	0.10	B161346
Total Potassium (K)	mg/L	1.5	B161346	4.9	B161324	4.9	5.0	0.30	B161346
Total Selenium (Se)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Silicon (Si)	mg/L	1.4	B161346	0.88	B161324	0.91	0.87	0.50	B161346
Total Silver (Ag)	mg/L	<0.00010	B161326	<0.00010	B161318	<0.00010	<0.00010	0.00010	B161326
Total Sodium (Na)	mg/L	3.3	B161346	3.5	B161324	3.5	3.5	0.50	B161346
Total Strontium (Sr)	mg/L	0.024	B161346	0.063	B161324	0.062	0.062	0.020	B161346
Total Sulphur (S)	mg/L	3.7	B161346	59	B161324	60	61	0.20	B161346
Total Thallium (Tl)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Tin (Sn)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Titanium (Ti)	mg/L	0.0017	B161326	0.0027	B161318	0.0020	0.0025	0.0010	B161326
Total Uranium (U)	mg/L	<0.00010	B161326	<0.00010	B161318	<0.00010	<0.00010	0.00010	B161326
Total Vanadium (V)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Zinc (Zn)	mg/L	0.22	B161326	0.11	B161318	0.11	0.10	0.0030	B161326

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF064	CCF065			CCF065		
Sampling Date		2023/10/17 10:20	2023/10/17 10:25			2023/10/17 10:25		
COC Number		708441-01-01	708441-01-01			708441-01-01		
	UNITS	CB-2	EB-1	RDL	QC Batch	EB-1 Lab-Dup	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.38	0.66	0.020	B160480			
Total Aluminum (Al)	mg/L	0.048	0.074	0.0030	B161326	0.071	0.0030	B161326
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B161326	<0.00060	0.00060	B161326
Total Arsenic (As)	mg/L	<0.00020	<0.00020	0.00020	B161326	0.00025	0.00020	B161326
Total Barium (Ba)	mg/L	0.015	0.015	0.010	B161346	0.015	0.010	B161346
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B161326	<0.0010	0.0010	B161326
Total Boron (B)	mg/L	<0.020	0.027	0.020	B161346	<0.020	0.020	B161346
Total Calcium (Ca)	mg/L	61	65	0.30	B161346	64	0.30	B161346
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B161326	<0.0010	0.0010	B161326
Total Cobalt (Co)	mg/L	0.00033	0.00051	0.00030	B161326	0.00043	0.00030	B161326
Total Copper (Cu)	mg/L	0.0085	0.013	0.0010	B161326	0.013	0.0010	B161326
Total Iron (Fe)	mg/L	2.0	1.5	0.060	B161346	1.4	0.060	B161346
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B161326	<0.00020	0.00020	B161326
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B161346	<0.020	0.020	B161346
Total Magnesium (Mg)	mg/L	9.3	9.5	0.20	B161346	9.4	0.20	B161346
Total Manganese (Mn)	mg/L	0.074	0.067	0.0040	B161346	0.064	0.0040	B161346
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B161326	<0.00020	0.00020	B161326
Total Nickel (Ni)	mg/L	0.0014	0.0014	0.00050	B161326	0.0015	0.00050	B161326
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B161346	<0.10	0.10	B161346
Total Potassium (K)	mg/L	5.0	5.0	0.30	B161346	4.9	0.30	B161346
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B161326	<0.00020	0.00020	B161326
Total Silicon (Si)	mg/L	0.86	0.80	0.50	B161346	0.75	0.50	B161346
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B161326	<0.00010	0.00010	B161326
Total Sodium (Na)	mg/L	3.5	3.6	0.50	B161346	3.5	0.50	B161346
Total Strontium (Sr)	mg/L	0.063	0.064	0.020	B161346	0.063	0.020	B161346
Total Sulphur (S)	mg/L	61	65	0.20	B161346	64	0.20	B161346
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B161326	<0.00020	0.00020	B161326
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B161326	<0.0010	0.0010	B161326
Total Titanium (Ti)	mg/L	0.0025	0.0021	0.0010	B161326	0.0021	0.0010	B161326
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B161326	<0.00010	0.00010	B161326
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B161326	<0.0010	0.0010	B161326

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF064	CCF065			CCF065		
Sampling Date		2023/10/17 10:20	2023/10/17 10:25			2023/10/17 10:25		
COC Number		708441-01-01	708441-01-01			708441-01-01		
	UNITS	**CB-2**	**EB-1**	**RDL**	**QC Batch**	**EB-1 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.11	0.19	0.0030	B161326	0.20	0.0030	B161326

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF066		CCF067		CCF068		CCF069		
Sampling Date		2023/10/17 10:30		2023/10/17 10:45		2023/10/17 10:40		2023/10/17 10:56		
COC Number		708441-01-01		708441-01-01		708441-01-01		708441-01-01		
	UNITS	EB-2	QC Batch	NB-1	QC Batch	NB-2	QC Batch	CLD	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.74	B160480	0.39	B160480	0.39	B160480	0.40	0.020	B160480
Total Aluminum (Al)	mg/L	0.087	B161318	0.033	B161326	0.033	B161318	0.036	0.0030	B161326
Total Antimony (Sb)	mg/L	<0.00060	B161318	<0.00060	B161326	<0.00060	B161318	<0.00060	0.00060	B161326
Total Arsenic (As)	mg/L	<0.00020	B161318	<0.00020	B161326	0.00025	B161318	0.00022	0.00020	B161326
Total Barium (Ba)	mg/L	0.015	B161324	0.015	B161346	0.012	B161324	0.014	0.010	B161346
Total Beryllium (Be)	mg/L	<0.0010	B161318	<0.0010	B161326	<0.0010	B161318	<0.0010	0.0010	B161326
Total Boron (B)	mg/L	<0.020	B161324	0.033	B161346	<0.020	B161324	0.021	0.020	B161346
Total Calcium (Ca)	mg/L	65	B161324	64	B161346	55	B161324	63	0.30	B161346
Total Chromium (Cr)	mg/L	<0.0010	B161318	<0.0010	B161326	<0.0010	B161318	0.0019	0.0010	B161326
Total Cobalt (Co)	mg/L	0.00060	B161318	0.00031	B161326	0.00031	B161318	0.00030	0.00030	B161326
Total Copper (Cu)	mg/L	0.014	B161318	0.0079	B161326	0.0084	B161318	0.0082	0.0010	B161326
Total Iron (Fe)	mg/L	1.4	B161324	1.8	B161346	1.6	B161324	1.6	0.060	B161346
Total Lead (Pb)	mg/L	<0.00020	B161318	0.0011	B161326	<0.00020	B161318	<0.00020	0.00020	B161326
Total Lithium (Li)	mg/L	<0.020	B161324	<0.020	B161346	<0.020	B161324	<0.020	0.020	B161346
Total Magnesium (Mg)	mg/L	9.3	B161324	9.4	B161346	8.2	B161324	9.4	0.20	B161346
Total Manganese (Mn)	mg/L	0.065	B161324	0.082	B161346	0.073	B161324	0.077	0.0040	B161346
Total Molybdenum (Mo)	mg/L	<0.00020	B161318	<0.00020	B161326	<0.00020	B161318	<0.00020	0.00020	B161326
Total Nickel (Ni)	mg/L	0.0019	B161318	0.0011	B161326	0.0016	B161318	0.0016	0.00050	B161326
Total Phosphorus (P)	mg/L	<0.10	B161324	<0.10	B161346	<0.10	B161324	<0.10	0.10	B161346
Total Potassium (K)	mg/L	4.9	B161324	4.8	B161346	4.1	B161324	4.7	0.30	B161346
Total Selenium (Se)	mg/L	<0.00020	B161318	<0.00020	B161326	<0.00020	B161318	<0.00020	0.00020	B161326
Total Silicon (Si)	mg/L	0.73	B161324	0.90	B161346	0.79	B161324	0.83	0.50	B161346
Total Silver (Ag)	mg/L	<0.00010	B161318	<0.00010	B161326	<0.00010	B161318	<0.00010	0.00010	B161326
Total Sodium (Na)	mg/L	3.6	B161324	3.4	B161346	2.9	B161324	3.3	0.50	B161346
Total Strontium (Sr)	mg/L	0.066	B161324	0.064	B161346	0.055	B161324	0.063	0.020	B161346
Total Sulphur (S)	mg/L	64	B161324	64	B161346	64	B161324	63	0.20	B161346
Total Thallium (Tl)	mg/L	<0.00020	B161318	<0.00020	B161326	<0.00020	B161318	<0.00020	0.00020	B161326
Total Tin (Sn)	mg/L	<0.0010	B161318	<0.0010	B161326	<0.0010	B161318	<0.0010	0.0010	B161326
Total Titanium (Ti)	mg/L	0.0024	B161318	<0.0010	B161326	0.0016	B161318	0.0013	0.0010	B161326
Total Uranium (U)	mg/L	<0.00010	B161318	<0.00010	B161326	<0.00010	B161318	<0.00010	0.00010	B161326
Total Vanadium (V)	mg/L	<0.0010	B161318	<0.0010	B161326	<0.0010	B161318	<0.0010	0.0010	B161326
Total Zinc (Zn)	mg/L	0.22	B161318	0.11	B161326	0.11	B161318	0.12	0.0030	B161326

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF070		CCF071		CCF072	CCF073		
Sampling Date		2023/10/17 09:15		2023/10/17 09:15		2023/10/17 09:20	2023/10/17 09:20		
COC Number		708441-02-01		708441-02-01		708441-02-01	708441-02-01		
	UNITS	CL-3 SFC	QC Batch	CL-3 BTM	QC Batch	CL-7 SFC	CL-7 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.033	B160480	0.030	B160480	0.026	0.029	0.020	B160480
Total Aluminum (Al)	mg/L	0.049	B161326	0.046	B161318	0.039	0.043	0.0030	B161326
Total Antimony (Sb)	mg/L	0.0012	B161326	<0.00060	B161318	<0.00060	<0.00060	0.00060	B161326
Total Arsenic (As)	mg/L	0.00047	B161326	0.00048	B161318	0.00047	0.00041	0.00020	B161326
Total Barium (Ba)	mg/L	<0.010	B161346	0.010	B161324	<0.010	<0.010	0.010	B161346
Total Beryllium (Be)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Boron (B)	mg/L	<0.020	B161346	<0.020	B161324	<0.020	<0.020	0.020	B161346
Total Calcium (Ca)	mg/L	14	B161346	14	B161324	14	14	0.30	B161346
Total Chromium (Cr)	mg/L	<0.0010	B161326	0.0014	B161318	<0.0010	<0.0010	0.0010	B161326
Total Cobalt (Co)	mg/L	<0.00030	B161326	<0.00030	B161318	<0.00030	<0.00030	0.00030	B161326
Total Copper (Cu)	mg/L	0.0059	B161326	0.0044	B161318	0.0059	0.0052	0.0010	B161326
Total Iron (Fe)	mg/L	0.40	B161346	0.38	B161324	0.32	0.35	0.060	B161346
Total Lead (Pb)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Lithium (Li)	mg/L	<0.020	B161346	<0.020	B161324	<0.020	<0.020	0.020	B161346
Total Magnesium (Mg)	mg/L	3.5	B161346	3.6	B161324	3.5	3.5	0.20	B161346
Total Manganese (Mn)	mg/L	0.017	B161346	0.017	B161324	0.014	0.016	0.0040	B161346
Total Molybdenum (Mo)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Nickel (Ni)	mg/L	<0.00050	B161326	0.0019	B161318	0.0015	<0.00050	0.00050	B161326
Total Phosphorus (P)	mg/L	<0.10	B161346	<0.10	B161324	<0.10	<0.10	0.10	B161346
Total Potassium (K)	mg/L	1.7	B161346	1.7	B161324	1.7	1.7	0.30	B161346
Total Selenium (Se)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Silicon (Si)	mg/L	0.94	B161346	0.97	B161324	0.92	0.94	0.50	B161346
Total Silver (Ag)	mg/L	<0.00010	B161326	<0.00010	B161318	<0.00010	<0.00010	0.00010	B161326
Total Sodium (Na)	mg/L	2.2	B161346	2.2	B161324	2.2	2.2	0.50	B161346
Total Strontium (Sr)	mg/L	0.030	B161346	0.031	B161324	0.029	0.029	0.020	B161346
Total Sulphur (S)	mg/L	7.3	B161346	7.3	B161324	7.2	7.3	0.20	B161346
Total Thallium (Tl)	mg/L	<0.00020	B161326	<0.00020	B161318	<0.00020	<0.00020	0.00020	B161326
Total Tin (Sn)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Titanium (Ti)	mg/L	0.0016	B161326	0.0015	B161318	0.0014	0.0016	0.0010	B161326
Total Uranium (U)	mg/L	<0.00010	B161326	<0.00010	B161318	<0.00010	<0.00010	0.00010	B161326
Total Vanadium (V)	mg/L	<0.0010	B161326	<0.0010	B161318	<0.0010	<0.0010	0.0010	B161326
Total Zinc (Zn)	mg/L	0.011	B161326	0.012	B161318	0.0094	0.011	0.0030	B161326

RDL = Reportable Detection Limit

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF074	CCF075	CCF076	CCF077	CCF078	CCF079		
Sampling Date		2023/10/17 09:10	2023/10/17 09:10	2023/10/17 09:35	2023/10/17 09:35	2023/10/17 09:05	2023/10/17 09:05		
COC Number		708441-02-01	708441-02-01	708441-02-01	708441-02-01	708441-02-01	708441-02-01		
	UNITS	CL-8 SFC	CL-8 BTM	CL-2 SFC	CL-2 BTM	CL-4 SFC	CL-4 BTM	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.028	0.031	0.028	0.029	0.021	0.025	0.020	B160480
Total Aluminum (Al)	mg/L	0.048	0.041	0.040	0.045	0.043	0.054	0.0030	B161318
Total Antimony (Sb)	mg/L	<0.00060	0.0011	<0.00060	<0.00060	<0.00060	<0.00060	0.00060	B161318
Total Arsenic (As)	mg/L	0.00040	0.00038	0.00050	0.00049	0.00038	0.00042	0.00020	B161318
Total Barium (Ba)	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	B161324
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Boron (B)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B161324
Total Calcium (Ca)	mg/L	14	14	13	14	13	14	0.30	B161324
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0.00030	B161318
Total Copper (Cu)	mg/L	0.0051	0.0058	0.0051	0.0060	0.0056	0.0068	0.0010	B161318
Total Iron (Fe)	mg/L	0.35	0.38	0.40	0.43	0.33	0.39	0.060	B161324
Total Lead (Pb)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Lithium (Li)	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	B161324
Total Magnesium (Mg)	mg/L	3.5	3.6	3.3	3.4	3.2	3.5	0.20	B161324
Total Manganese (Mn)	mg/L	0.016	0.017	0.020	0.021	0.016	0.017	0.0040	B161324
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Nickel (Ni)	mg/L	<0.00050	0.00089	<0.00050	0.00070	<0.00050	0.00065	0.00050	B161318
Total Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	B161324
Total Potassium (K)	mg/L	1.6	1.7	1.5	1.6	1.5	1.7	0.30	B161324
Total Selenium (Se)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Silicon (Si)	mg/L	0.95	1.0	0.95	1.0	0.89	1.1	0.50	B161324
Total Silver (Ag)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B161318
Total Sodium (Na)	mg/L	2.1	2.2	2.1	2.1	2.1	2.2	0.50	B161324
Total Strontium (Sr)	mg/L	0.029	0.030	0.028	0.029	0.028	0.030	0.020	B161324
Total Sulphur (S)	mg/L	7.2	7.6	6.9	7.1	6.6	6.9	0.20	B161324
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Titanium (Ti)	mg/L	<0.0010	0.0016	<0.0010	0.0017	0.0016	0.0022	0.0010	B161318
Total Uranium (U)	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00010	B161318
Total Vanadium (V)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Zinc (Zn)	mg/L	0.010	0.010	0.010	0.011	0.0095	0.012	0.0030	B161318

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF080	CCF081		CCF082	CCF083	CCF084		
Sampling Date		2023/10/17 09:00	2023/10/17 09:00		2023/10/17 08:50	2023/10/17 08:50	2023/10/17		
COC Number		708441-03-01	708441-03-01		708441-03-01	708441-03-01	708441-03-01		
	UNITS	CL-5 SFC	CL-5 BTM	QC Batch	CL-6 SFC	CL-6 BTM	SW-136	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.025	<0.020	B160480	<0.020	0.024	<0.020	0.020	B160778
Total Aluminum (Al)	mg/L	0.044	0.042	B161318	0.028	0.050	0.031	0.0030	B161318
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	B161318	<0.00060	<0.00060	<0.00060	0.00060	B161318
Total Arsenic (As)	mg/L	0.00044	0.00049	B161318	0.00044	0.00052	0.00063	0.00020	B161318
Total Barium (Ba)	mg/L	<0.010	<0.010	B161324	<0.010	<0.010	<0.010	0.010	B161324
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	B161318	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Boron (B)	mg/L	<0.020	<0.020	B161324	<0.020	<0.020	<0.020	0.020	B161324
Total Calcium (Ca)	mg/L	13	13	B161324	11	11	11	0.30	B161324
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	B161318	<0.0010	0.0028	<0.0010	0.0010	B161318
Total Cobalt (Co)	mg/L	<0.00030	<0.00030	B161318	<0.00030	<0.00030	<0.00030	0.00030	B161318
Total Copper (Cu)	mg/L	0.0052	0.0045	B161318	0.0032	0.0047	0.0041	0.0010	B161318
Total Iron (Fe)	mg/L	0.26	0.27	B161324	<0.060	0.16	<0.060	0.060	B161324
Total Lead (Pb)	mg/L	<0.00020	<0.00020	B161318	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Lithium (Li)	mg/L	<0.020	<0.020	B161324	<0.020	<0.020	<0.020	0.020	B161324
Total Magnesium (Mg)	mg/L	3.3	3.3	B161324	3.2	3.2	3.1	0.20	B161324
Total Manganese (Mn)	mg/L	0.014	0.014	B161324	0.012	0.015	0.012	0.0040	B161324
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	B161318	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Nickel (Ni)	mg/L	0.00063	<0.00050	B161318	0.00052	0.0021	0.00070	0.00050	B161318
Total Phosphorus (P)	mg/L	<0.10	<0.10	B161324	<0.10	<0.10	<0.10	0.10	B161324
Total Potassium (K)	mg/L	1.6	1.6	B161324	1.5	1.5	1.5	0.30	B161324
Total Selenium (Se)	mg/L	<0.00020	<0.00020	B161318	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Silicon (Si)	mg/L	0.88	0.93	B161324	0.63	0.82	0.63	0.50	B161324
Total Silver (Ag)	mg/L	<0.00010	<0.00010	B161318	<0.00010	<0.00010	<0.00010	0.00010	B161318
Total Sodium (Na)	mg/L	2.1	2.1	B161324	2.1	2.1	2.1	0.50	B161324
Total Strontium (Sr)	mg/L	0.029	0.029	B161324	0.028	0.028	0.028	0.020	B161324
Total Sulphur (S)	mg/L	5.9	6.1	B161324	4.4	5.0	4.4	0.20	B161324
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	B161318	<0.00020	<0.00020	<0.00020	0.00020	B161318
Total Tin (Sn)	mg/L	<0.0010	<0.0010	B161318	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Titanium (Ti)	mg/L	0.0016	0.0021	B161318	<0.0010	0.0025	0.0013	0.0010	B161318
Total Uranium (U)	mg/L	<0.00010	<0.00010	B161318	<0.00010	<0.00010	<0.00010	0.00010	B161318
Total Vanadium (V)	mg/L	<0.0010	<0.0010	B161318	<0.0010	<0.0010	<0.0010	0.0010	B161318
Total Zinc (Zn)	mg/L	0.0086	0.0092	B161318	0.0076	0.010	0.0080	0.0030	B161318

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF085	CCF086			CCF086		
Sampling Date		2023/10/17	2023/10/17			2023/10/17		
COC Number		708441-03-01	708441-03-01			708441-03-01		
	UNITS	SW-137	SW-138	RDL	QC Batch	SW-138 Lab-Dup	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.028	0.68	0.020	B160778			
Total Aluminum (Al)	mg/L	0.041	0.079	0.0030	B161318	0.077	0.0030	B161318
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B161318	<0.00060	0.00060	B161318
Total Arsenic (As)	mg/L	0.00044	0.00021	0.00020	B161318	0.00023	0.00020	B161318
Total Barium (Ba)	mg/L	<0.010	0.018	0.010	B161324	0.017	0.010	B161324
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B161318	<0.0010	0.0010	B161318
Total Boron (B)	mg/L	<0.020	0.021	0.020	B161324	<0.020	0.020	B161324
Total Calcium (Ca)	mg/L	14	66	0.30	B161324	66	0.30	B161324
Total Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B161318	<0.0010	0.0010	B161318
Total Cobalt (Co)	mg/L	<0.00030	0.00053	0.00030	B161318	0.00053	0.00030	B161318
Total Copper (Cu)	mg/L	0.0047	0.012	0.0010	B161318	0.013	0.0010	B161318
Total Iron (Fe)	mg/L	0.35	1.4	0.060	B161324	1.5	0.060	B161324
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B161318	<0.00020	0.00020	B161318
Total Lithium (Li)	mg/L	<0.020	<0.020	0.020	B161324	<0.020	0.020	B161324
Total Magnesium (Mg)	mg/L	3.5	9.6	0.20	B161324	9.5	0.20	B161324
Total Manganese (Mn)	mg/L	0.016	0.066	0.0040	B161324	0.066	0.0040	B161324
Total Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B161318	<0.00020	0.00020	B161318
Total Nickel (Ni)	mg/L	<0.00050	0.0018	0.00050	B161318	0.0018	0.00050	B161318
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B161324	<0.10	0.10	B161324
Total Potassium (K)	mg/L	1.6	5.0	0.30	B161324	5.0	0.30	B161324
Total Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B161318	<0.00020	0.00020	B161318
Total Silicon (Si)	mg/L	1.0	0.77	0.50	B161324	0.76	0.50	B161324
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B161318	<0.00010	0.00010	B161318
Total Sodium (Na)	mg/L	2.2	3.6	0.50	B161324	3.6	0.50	B161324
Total Strontium (Sr)	mg/L	0.029	0.069	0.020	B161324	0.068	0.020	B161324
Total Sulphur (S)	mg/L	7.1	66	0.20	B161324	66	0.20	B161324
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B161318	<0.00020	0.00020	B161318
Total Tin (Sn)	mg/L	<0.0010	<0.0010	0.0010	B161318	<0.0010	0.0010	B161318
Total Titanium (Ti)	mg/L	0.0016	0.0026	0.0010	B161318	0.0027	0.0010	B161318
Total Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B161318	<0.00010	0.00010	B161318
Total Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B161318	<0.0010	0.0010	B161318

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF085	CCF086			CCF086		
Sampling Date		2023/10/17	2023/10/17			2023/10/17		
COC Number		708441-03-01	708441-03-01			708441-03-01		
	UNITS	**SW-137**	**SW-138**	**RDL**	**QC Batch**	**SW-138 Lab-Dup**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.0099	0.20	0.0030	B161318	0.19	0.0030	B161318

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CCF087		
Sampling Date		2023/10/17		
COC Number		708441-03-01		
	UNITS	TRIP BLANK	RDL	QC Batch
Elements				
Total Cadmium (Cd)	ug/L	<0.020	0.020	B160778
Total Aluminum (Al)	mg/L	0.0035	0.0030	B161318
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B161318
Total Arsenic (As)	mg/L	<0.00020	0.00020	B161318
Total Barium (Ba)	mg/L	<0.010	0.010	B161324
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B161318
Total Boron (B)	mg/L	0.022	0.020	B161324
Total Calcium (Ca)	mg/L	<0.30	0.30	B161324
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B161318
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B161318
Total Copper (Cu)	mg/L	<0.0010	0.0010	B161318
Total Iron (Fe)	mg/L	<0.060	0.060	B161324
Total Lead (Pb)	mg/L	<0.00020	0.00020	B161318
Total Lithium (Li)	mg/L	<0.020	0.020	B161324
Total Magnesium (Mg)	mg/L	<0.20	0.20	B161324
Total Manganese (Mn)	mg/L	<0.0040	0.0040	B161324
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B161318
Total Nickel (Ni)	mg/L	<0.00050	0.00050	B161318
Total Phosphorus (P)	mg/L	<0.10	0.10	B161324
Total Potassium (K)	mg/L	<0.30	0.30	B161324
Total Selenium (Se)	mg/L	<0.00020	0.00020	B161318
Total Silicon (Si)	mg/L	<0.50	0.50	B161324
Total Silver (Ag)	mg/L	<0.00010	0.00010	B161318
Total Sodium (Na)	mg/L	<0.50	0.50	B161324
Total Strontium (Sr)	mg/L	<0.020	0.020	B161324
Total Sulphur (S)	mg/L	<0.20	0.20	B161324
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B161318
Total Tin (Sn)	mg/L	<0.0010	0.0010	B161318
Total Titanium (Ti)	mg/L	<0.0010	0.0010	B161318
Total Uranium (U)	mg/L	<0.00010	0.00010	B161318
Total Vanadium (V)	mg/L	<0.0010	0.0010	B161318
Total Zinc (Zn)	mg/L	<0.0030	0.0030	B161318
RDL = Reportable Detection Limit				

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Bureau Veritas Job #: C384842
Report Date: 2023/10/20

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AL

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF060			CCF060			CCF061		
Sampling Date		2023/10/17 11:45			2023/10/17 11:45			2023/10/17 10:10		
COC Number		708441-01-01			708441-01-01			708441-01-01		
	UNITS	SC-1	RDL	QC Batch	SC-1 Lab-Dup	RDL	QC Batch	SB-1	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	41	0.50	B160781				190	0.50	B160248
Total Hardness (CaCO3)	mg/L	37.6	0.50	B160782				188	0.50	B160168
Misc. Inorganics										
pH	pH	7.07	N/A	B161825				6.11	N/A	B161825
Total Organic Carbon (C)	mg/L	11	0.50	B162188				6.4	0.50	B162188
Total Suspended Solids	mg/L	1.0	1.0	B161370	1.0	1.0	B161370	4.1	1.0	B161370
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	11	0.50	B162257				6.3	0.50	B162257
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161821				<1.0	1.0	B161821
Alkalinity (Total as CaCO3)	mg/L	28	1.0	B161821				1.8	1.0	B161821
Bicarbonate (HCO3)	mg/L	34	1.0	B161821				2.2	1.0	B161821
Carbonate (CO3)	mg/L	<1.0	1.0	B161821				<1.0	1.0	B161821
Hydroxide (OH)	mg/L	<1.0	1.0	B161821				<1.0	1.0	B161821
Sulphate (SO4)	mg/L	11	1.0	B162527				180	5.0	B162527
Physical Properties										
Turbidity	NTU	2.7	0.10	B160802				23	0.10	B160802

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C384842
Report Date: 2023/10/20

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AL

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF062	CCF063	CCF064		CCF065	CCF066		
Sampling Date		2023/10/17 10:05	2023/10/17 10:15	2023/10/17 10:20		2023/10/17 10:25	2023/10/17 10:30		
COC Number		708441-01-01	708441-01-01	708441-01-01		708441-01-01	708441-01-01		
	UNITS	**SB-2**	**CB-1**	**CB-2**	**QC Batch**	**EB-1**	**EB-2**	**RDL**	**QC Batch**
Calculated Parameters									
Hardness (CaCO3)	mg/L	190	200	190	B160248	210	210	0.50	B160248
Total Hardness (CaCO3)	mg/L	185	188	191	B160168	201	200	0.50	B160168
Misc. Inorganics									
pH	pH	6.08	6.08	6.12	B161825	5.78	5.75	N/A	B161823
Total Organic Carbon (C)	mg/L	6.5	5.2	6.4	B162186	6.1	4.7	0.50	B162186
Total Suspended Solids	mg/L	3.2	3.5	1.1	B161370	1.4	1.8	1.0	B161370
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	5.5	6.5	6.1	B162257	6.3	5.1	0.50	B162256
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	<1.0	<1.0	B161821	<1.0	<1.0	1.0	B161819
Alkalinity (Total as CaCO3)	mg/L	1.8	1.5	1.9	B161821	3.8	3.3	1.0	B161819
Bicarbonate (HCO3)	mg/L	2.1	1.9	2.3	B161821	4.7	4.0	1.0	B161819
Carbonate (CO3)	mg/L	<1.0	<1.0	<1.0	B161821	<1.0	<1.0	1.0	B161819
Hydroxide (OH)	mg/L	<1.0	<1.0	<1.0	B161821	<1.0	<1.0	1.0	B161819
Sulphate (SO4)	mg/L	180	180	190	B162527	200	190	5.0	B162521
Physical Properties									
Turbidity	NTU	24	21	20	B160802	15	15	0.10	B160802

RDL = Reportable Detection Limit
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF066			CCF067			CCF067		
Sampling Date		2023/10/17 10:30			2023/10/17 10:45			2023/10/17 10:45		
COC Number		708441-01-01			708441-01-01			708441-01-01		
	UNITS	EB-2 Lab-Dup	RDL	QC Batch	NB-1	RDL	QC Batch	NB-1 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L				200	0.50	B160248			
Total Hardness (CaCO3)	mg/L				198	0.50	B160168			
Misc. Inorganics										
pH	pH				5.67	N/A	B161823			
Total Organic Carbon (C)	mg/L				6.2	0.50	B162188			
Total Suspended Solids	mg/L				3.2	1.0	B161370			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	5.6	0.50	B162256	6.4	0.50	B162256			
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B161819			
Alkalinity (Total as CaCO3)	mg/L				2.3	1.0	B161819			
Bicarbonate (HCO3)	mg/L				2.8	1.0	B161819			
Carbonate (CO3)	mg/L				<1.0	1.0	B161819			
Hydroxide (OH)	mg/L				<1.0	1.0	B161819			
Sulphate (SO4)	mg/L				190	5.0	B162527			
Physical Properties										
Turbidity	NTU				16	0.10	B160887	17	0.10	B160887

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF068			CCF069			CCF070		
Sampling Date		2023/10/17 10:40			2023/10/17 10:56			2023/10/17 09:15		
COC Number		708441-01-01			708441-01-01			708441-02-01		
	UNITS	NB-2	RDL	QC Batch	CLD	RDL	QC Batch	CL-3 SFC	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	210	0.50	B160248	200	0.50	B160248	49	0.50	B160248
Total Hardness (CaCO3)	mg/L	171	0.50	B160168	197	0.50	B160168	49.4	0.50	B160782
Misc. Inorganics										
pH	pH	5.92	N/A	B161825	5.88	N/A	B161825	6.34	N/A	B161823
Total Organic Carbon (C)	mg/L	6.6	0.50	B162188	6.3	0.50	B162186	9.0	0.50	B162186
Total Suspended Solids	mg/L	1.7	0.99	B161370	1.7	1.0	B161370	<1.0	1.0	B161370
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	6.4	0.50	B162257	5.4	0.50	B162257	9.0	0.50	B162256
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161821	<1.0	1.0	B161821	<1.0	1.0	B161819
Alkalinity (Total as CaCO3)	mg/L	1.3	1.0	B161821	1.1	1.0	B161821	30	1.0	B161819
Bicarbonate (HCO3)	mg/L	1.5	1.0	B161821	1.3	1.0	B161821	36	1.0	B161819
Carbonate (CO3)	mg/L	<1.0	1.0	B161821	<1.0	1.0	B161821	<1.0	1.0	B161819
Hydroxide (OH)	mg/L	<1.0	1.0	B161821	<1.0	1.0	B161821	<1.0	1.0	B161819
Sulphate (SO4)	mg/L	190	5.0	B162527	190	5.0	B162521	23	1.0	B162521
Physical Properties										
Turbidity	NTU	16	0.10	B160887	16	0.10	B160887	2.9	0.10	B160887

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF071			CCF072			CCF072		
Sampling Date		2023/10/17 09:15			2023/10/17 09:20			2023/10/17 09:20		
COC Number		708441-02-01			708441-02-01			708441-02-01		
	UNITS	CL-3 BTM	RDL	QC Batch	CL-7 SFC	RDL	QC Batch	CL-7 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	49	0.50	B160248	50	0.50	B160780			
Total Hardness (CaCO3)	mg/L	50.0	0.50	B160782	48.7	0.50	B160782			
Misc. Inorganics										
pH	pH	7.09	N/A	B161825	6.31	N/A	B161823			
Total Organic Carbon (C)	mg/L	9.2	0.50	B162186	8.8 (1)	0.50	B162186	9.1	0.50	B162186
Total Suspended Solids	mg/L	<1.0	1.0	B161370	<0.99	0.99	B161370			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.7	0.50	B162256	7.5	0.50	B162256			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161821	<1.0	1.0	B161819			
Alkalinity (Total as CaCO3)	mg/L	27	1.0	B161821	29	1.0	B161819			
Bicarbonate (HCO3)	mg/L	33	1.0	B161821	36	1.0	B161819			
Carbonate (CO3)	mg/L	<1.0	1.0	B161821	<1.0	1.0	B161819			
Hydroxide (OH)	mg/L	<1.0	1.0	B161821	<1.0	1.0	B161819			
Sulphate (SO4)	mg/L	25	1.0	B162521	24	1.0	B162527			
Physical Properties										
Turbidity	NTU	3.2	0.10	B160887	3.0	0.10	B160887			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF073			CCF074			CCF074		
Sampling Date		2023/10/17 09:20			2023/10/17 09:10			2023/10/17 09:10		
COC Number		708441-02-01			708441-02-01			708441-02-01		
	UNITS	CL-7 BTM	RDL	QC Batch	CL-8 SFC	RDL	QC Batch	CL-8 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	50	0.50	B160781	50	0.50	B160780			
Total Hardness (CaCO3)	mg/L	48.7	0.50	B160782	48.5	0.50	B160782			
Misc. Inorganics										
pH	pH	6.31	N/A	B161823	6.31	N/A	B161823			
Total Organic Carbon (C)	mg/L	8.8	0.50	B162188	9.3	0.50	B162186			
Total Suspended Solids	mg/L	<0.99	0.99	B161370	<1.0	1.0	B161370			
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	9.2	0.50	B162256	9.1 (1)	0.50	B162257	9.8	0.50	B162257
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819			
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B161819	30	1.0	B161819			
Bicarbonate (HCO3)	mg/L	37	1.0	B161819	36	1.0	B161819			
Carbonate (CO3)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819			
Hydroxide (OH)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819			
Sulphate (SO4)	mg/L	24	1.0	B162521	24	1.0	B162527			
Physical Properties										
Turbidity	NTU	3.0	0.10	B160887	3.0	0.10	B160887			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C384842
Report Date: 2023/10/20

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AL

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF075		CCF076		CCF077	CCF078		
Sampling Date		2023/10/17 09:10		2023/10/17 09:35		2023/10/17 09:35	2023/10/17 09:05		
COC Number		708441-02-01		708441-02-01		708441-02-01	708441-02-01		
	UNITS	CL-8 BTM	QC Batch	CL-2 SFC	QC Batch	CL-2 BTM	CL-4 SFC	RDL	QC Batch
Calculated Parameters									
Hardness (CaCO3)	mg/L	48	B160781	50	B160781	49	49	0.50	B160781
Total Hardness (CaCO3)	mg/L	50.4	B160782	46.6	B160782	48.0	45.3	0.50	B160782
Misc. Inorganics									
pH	pH	6.33	B161823	6.30	B161823	6.33	6.35	N/A	B161823
Total Organic Carbon (C)	mg/L	9.1	B162186	9.5	B162186	9.4	9.2	0.50	B162186
Total Suspended Solids	mg/L	3.1	B161370	1.5	B161370	<1.0	<1.0	1.0	B161370
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	7.6	B162256	7.8	B162256	9.6	8.4	0.50	B162256
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B161819	<1.0	B161819	<1.0	<1.0	1.0	B161819
Alkalinity (Total as CaCO3)	mg/L	30	B161819	30	B161819	29	30	1.0	B161819
Bicarbonate (HCO3)	mg/L	37	B161819	37	B161819	36	36	1.0	B161819
Carbonate (CO3)	mg/L	<1.0	B161819	<1.0	B161819	<1.0	<1.0	1.0	B161819
Hydroxide (OH)	mg/L	<1.0	B161819	<1.0	B161819	<1.0	<1.0	1.0	B161819
Sulphate (SO4)	mg/L	26	B162521	25	B162527	24	22	1.0	B162521
Physical Properties									
Turbidity	NTU	3.2	B160887	2.8	B160887	3.1	3.2	0.10	B160887

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C384842
Report Date: 2023/10/20

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AL

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF079			CCF080			CCF080		
Sampling Date		2023/10/17 09:05			2023/10/17 09:00			2023/10/17 09:00		
COC Number		708441-02-01			708441-03-01			708441-03-01		
	UNITS	CL-4 BTM	RDL	QC Batch	CL-5 SFC	RDL	QC Batch	CL-5 SFC Lab-Dup	RDL	QC Batch
Calculated Parameters										
Hardness (CaCO3)	mg/L	49	0.50	B160781	45	0.50	B160781			
Total Hardness (CaCO3)	mg/L	48.3	0.50	B160782	45.0	0.50	B160782			
Misc. Inorganics										
pH	pH	6.36	N/A	B161823	6.36	N/A	B161823			
Total Organic Carbon (C)	mg/L	9.4	0.50	B162188	8.8	0.50	B162186			
Total Suspended Solids	mg/L	<0.99	0.99	B161370	1.0	1.0	B161492	<1.0	1.0	B161492
Lab Filtered Inorganics										
Dissolved Organic Carbon (C)	mg/L	8.6	0.50	B162256	8.8	0.50	B162256			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819			
Alkalinity (Total as CaCO3)	mg/L	30	1.0	B161819	29	1.0	B161819			
Bicarbonate (HCO3)	mg/L	37	1.0	B161819	36	1.0	B161819			
Carbonate (CO3)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819			
Hydroxide (OH)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819			
Sulphate (SO4)	mg/L	23	1.0	B162527	22	1.0	B162521			
Physical Properties										
Turbidity	NTU	3.6	0.10	B160887	3.4	0.10	B160887			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C384842
Report Date: 2023/10/20

KGS Group
Client Project #: 21-1357-005
Sampler Initials: AL

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF081			CCF081			CCF082	CCF083		
Sampling Date		2023/10/17 09:00			2023/10/17 09:00			2023/10/17 08:50	2023/10/17 08:50		
COC Number		708441-03-01			708441-03-01			708441-03-01	708441-03-01		
	UNITS	CL-5 BTM	RDL	QC Batch	CL-5 BTM Lab-Dup	RDL	QC Batch	CL-6 SFC	CL-6 BTM	RDL	QC Batch
Calculated Parameters											
Hardness (CaCO3)	mg/L	46	0.50	B160781				41	44	0.50	B160781
Total Hardness (CaCO3)	mg/L	45.3	0.50	B160782				41.2	41.7	0.50	B160782
Misc. Inorganics											
pH	pH	6.23	N/A	B161823	6.30	N/A	B161823	6.36	6.34	N/A	B161823
Total Organic Carbon (C)	mg/L	9.2 (1)	0.50	B162188	9.1	0.50	B162188	8.6	8.9	0.50	B162186
Total Suspended Solids	mg/L	1.0	1.0	B161492				<1.0	<1.0	1.0	B161492
Lab Filtered Inorganics											
Dissolved Organic Carbon (C)	mg/L	9.0	0.50	B162256				8.8	8.7	0.50	B162256
Anions											
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819	<1.0	<1.0	1.0	B161819
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B161819	31	1.0	B161819	30	30	1.0	B161819
Bicarbonate (HCO3)	mg/L	35	1.0	B161819	37	1.0	B161819	37	37	1.0	B161819
Carbonate (CO3)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819	<1.0	<1.0	1.0	B161819
Hydroxide (OH)	mg/L	<1.0	1.0	B161819	<1.0	1.0	B161819	<1.0	<1.0	1.0	B161819
Sulphate (SO4)	mg/L	23	1.0	B162521				15	17	1.0	B162521
Physical Properties											
Turbidity	NTU	3.1	0.10	B160887				1.4	2.6	0.10	B160887

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF084		CCF085			CCF086		
Sampling Date		2023/10/17		2023/10/17			2023/10/17		
COC Number		708441-03-01		708441-03-01			708441-03-01		
	UNITS	**SW-136**	**QC Batch**	**SW-137**	**RDL**	**QC Batch**	**SW-138**	**RDL**	**QC Batch**
Calculated Parameters									
Hardness (CaCO3)	mg/L	42	B160781	49	0.50	B160781	210	0.50	B160781
Total Hardness (CaCO3)	mg/L	40.5	B160782	48.4	0.50	B160782	203	0.50	B160782
Misc. Inorganics									
pH	pH	6.35	B161823	6.31	N/A	B161823	5.79	N/A	B161823
Total Organic Carbon (C)	mg/L	8.7	B162186	8.9	0.50	B162188	6.0	0.50	B162186
Total Suspended Solids	mg/L	<1.0	B161492	<1.0	1.0	B161492	2.4	1.0	B161492
Lab Filtered Inorganics									
Dissolved Organic Carbon (C)	mg/L	8.9	B162256	9.1	0.50	B162256	6.0	0.50	B162256
Anions									
Alkalinity (PP as CaCO3)	mg/L	<1.0	B161819	<1.0	1.0	B161819	<1.0	1.0	B161819
Alkalinity (Total as CaCO3)	mg/L	29	B161819	31	1.0	B161819	3.4	1.0	B161819
Bicarbonate (HCO3)	mg/L	35	B161819	38	1.0	B161819	4.2	1.0	B161819
Carbonate (CO3)	mg/L	<1.0	B161819	<1.0	1.0	B161819	<1.0	1.0	B161819
Hydroxide (OH)	mg/L	<1.0	B161819	<1.0	1.0	B161819	<1.0	1.0	B161819
Sulphate (SO4)	mg/L	14	B162521	24	1.0	B162521	190	5.0	B162521
Physical Properties									
Turbidity	NTU	2.5	B160887	3.4	0.10	B160887	14	0.10	B160887

RDL = Reportable Detection Limit
N/A = Not Applicable

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RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		CCF087		
Sampling Date		2023/10/17		
COC Number		708441-03-01		
	UNITS	**TRIP BLANK**	**RDL**	**QC Batch**
Calculated Parameters				
Hardness (CaCO3)	mg/L	<0.50	0.50	B160781
Total Hardness (CaCO3)	mg/L	<0.50	0.50	B160782
Misc. Inorganics				
pH	pH	4.85	N/A	B161823
Total Organic Carbon (C)	mg/L	<0.50	0.50	B162188
Total Suspended Solids	mg/L	<1.0	1.0	B161492
Lab Filtered Inorganics				
Dissolved Organic Carbon (C)	mg/L	<0.50	0.50	B162256
Anions				
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B161819
Alkalinity (Total as CaCO3)	mg/L	<1.0	1.0	B161819
Bicarbonate (HCO3)	mg/L	<1.0	1.0	B161819
Carbonate (CO3)	mg/L	<1.0	1.0	B161819
Hydroxide (OH)	mg/L	<1.0	1.0	B161819
Sulphate (SO4)	mg/L	<1.0	1.0	B162521
Physical Properties				
Turbidity	NTU	<0.10	0.10	B161229

RDL = Reportable Detection Limit
N/A = Not Applicable

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.1°C
Package 2	2.7°C
Package 3	2.7°C
Package 4	1.6°C

Results relate only to the items tested.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B160802	Turbidity	2023/10/19			102	80 - 120	<0.10	NTU	4.4	20
B160887	Turbidity	2023/10/19			101	80 - 120	<0.10	NTU	3.6	20
B161229	Turbidity	2023/10/19			101	80 - 120	<0.10	NTU	13	20
B161318	Total Aluminum (Al)	2023/10/20	105	80 - 120	106	80 - 120	<0.0030	mg/L	2.6	20
B161318	Total Antimony (Sb)	2023/10/20	114	80 - 120	112	80 - 120	<0.00060	mg/L	NC	20
B161318	Total Arsenic (As)	2023/10/20	105	80 - 120	103	80 - 120	<0.00020	mg/L	12	20
B161318	Total Beryllium (Be)	2023/10/20	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B161318	Total Chromium (Cr)	2023/10/20	106	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B161318	Total Cobalt (Co)	2023/10/20	106	80 - 120	103	80 - 120	<0.00030	mg/L	1.3	20
B161318	Total Copper (Cu)	2023/10/20	106	80 - 120	108	80 - 120	<0.0010	mg/L	1.4	20
B161318	Total Lead (Pb)	2023/10/20	105	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B161318	Total Molybdenum (Mo)	2023/10/20	106	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B161318	Total Nickel (Ni)	2023/10/20	106	80 - 120	103	80 - 120	<0.00050	mg/L	2.9	20
B161318	Total Selenium (Se)	2023/10/20	104	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B161318	Total Silver (Ag)	2023/10/20	104	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B161318	Total Thallium (Tl)	2023/10/20	105	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B161318	Total Tin (Sn)	2023/10/20	106	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B161318	Total Titanium (Ti)	2023/10/20	109	80 - 120	105	80 - 120	<0.0010	mg/L	3.7	20
B161318	Total Uranium (U)	2023/10/20	107	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20
B161318	Total Vanadium (V)	2023/10/20	106	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B161318	Total Zinc (Zn)	2023/10/20	101	80 - 120	101	80 - 120	<0.0030	mg/L	2.0	20
B161324	Total Barium (Ba)	2023/10/20	111	80 - 120	104	80 - 120	<0.010	mg/L	3.4	20
B161324	Total Boron (B)	2023/10/20	108	80 - 120	101	80 - 120	<0.020	mg/L	3.9	20
B161324	Total Calcium (Ca)	2023/10/20	110	80 - 120	106	80 - 120	<0.30	mg/L	0.030	20
B161324	Total Iron (Fe)	2023/10/20	114	80 - 120	103	80 - 120	<0.060	mg/L	2.7	20
B161324	Total Lithium (Li)	2023/10/20	111	80 - 120	105	80 - 120	<0.020	mg/L	NC	20
B161324	Total Magnesium (Mg)	2023/10/20	109	80 - 120	102	80 - 120	<0.20	mg/L	1.0	20
B161324	Total Manganese (Mn)	2023/10/20	113	80 - 120	109	80 - 120	<0.0040	mg/L	0.45	20
B161324	Total Phosphorus (P)	2023/10/20	109	80 - 120	104	80 - 120	<0.10	mg/L	NC	20
B161324	Total Potassium (K)	2023/10/20	111	80 - 120	104	80 - 120	<0.30	mg/L	0.41	20
B161324	Total Silicon (Si)	2023/10/20	108	80 - 120	104	80 - 120	<0.50	mg/L	0.89	20
B161324	Total Sodium (Na)	2023/10/20	112	80 - 120	106	80 - 120	<0.50	mg/L	0.058	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B161324	Total Strontium (Sr)	2023/10/20	108	80 - 120	101	80 - 120	<0.020	mg/L	1.0	20
B161324	Total Sulphur (S)	2023/10/20	98	80 - 120	101	80 - 120	<0.20	mg/L	0.25	20
B161326	Total Aluminum (Al)	2023/10/20	110	80 - 120	104	80 - 120	<0.0030	mg/L	3.2	20
B161326	Total Antimony (Sb)	2023/10/20	110	80 - 120	109	80 - 120	<0.00060	mg/L	NC	20
B161326	Total Arsenic (As)	2023/10/20	101	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B161326	Total Beryllium (Be)	2023/10/20	99	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B161326	Total Chromium (Cr)	2023/10/20	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B161326	Total Cobalt (Co)	2023/10/20	103	80 - 120	102	80 - 120	<0.00030	mg/L	18	20
B161326	Total Copper (Cu)	2023/10/20	102	80 - 120	105	80 - 120	<0.0010	mg/L	0.075	20
B161326	Total Lead (Pb)	2023/10/20	101	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B161326	Total Molybdenum (Mo)	2023/10/20	106	80 - 120	104	80 - 120	<0.00020	mg/L	NC	20
B161326	Total Nickel (Ni)	2023/10/20	102	80 - 120	101	80 - 120	<0.00050	mg/L	1.4	20
B161326	Total Selenium (Se)	2023/10/20	100	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B161326	Total Silver (Ag)	2023/10/20	103	80 - 120	101	80 - 120	<0.00010	mg/L	NC	20
B161326	Total Thallium (Tl)	2023/10/20	102	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B161326	Total Tin (Sn)	2023/10/20	105	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B161326	Total Titanium (Ti)	2023/10/20	103	80 - 120	105	80 - 120	<0.0010	mg/L	0.094	20
B161326	Total Uranium (U)	2023/10/20	103	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B161326	Total Vanadium (V)	2023/10/20	104	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B161326	Total Zinc (Zn)	2023/10/20	104	80 - 120	99	80 - 120	<0.0030	mg/L	1.7	20
B161346	Total Barium (Ba)	2023/10/20	100	80 - 120	101	80 - 120	<0.010	mg/L	2.7	20
B161346	Total Boron (B)	2023/10/20	99	80 - 120	96	80 - 120	<0.020	mg/L	NC	20
B161346	Total Calcium (Ca)	2023/10/20	NC	80 - 120	103	80 - 120	<0.30	mg/L	1.9	20
B161346	Total Iron (Fe)	2023/10/20	NC	80 - 120	98	80 - 120	<0.060	mg/L	4.8	20
B161346	Total Lithium (Li)	2023/10/20	102	80 - 120	103	80 - 120	<0.020	mg/L	NC	20
B161346	Total Magnesium (Mg)	2023/10/20	100	80 - 120	101	80 - 120	<0.20	mg/L	1.6	20
B161346	Total Manganese (Mn)	2023/10/20	105	80 - 120	103	80 - 120	<0.0040	mg/L	4.0	20
B161346	Total Phosphorus (P)	2023/10/20	102	80 - 120	98	80 - 120	<0.10	mg/L	NC	20
B161346	Total Potassium (K)	2023/10/20	103	80 - 120	104	80 - 120	<0.30	mg/L	1.3	20
B161346	Total Silicon (Si)	2023/10/20	100	80 - 120	98	80 - 120	<0.50	mg/L	7.5	20
B161346	Total Sodium (Na)	2023/10/20	103	80 - 120	105	80 - 120	<0.50	mg/L	2.3	20
B161346	Total Strontium (Sr)	2023/10/20	96	80 - 120	98	80 - 120	<0.020	mg/L	2.4	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B161346	Total Sulphur (S)	2023/10/20	NC	80 - 120	97	80 - 120	<0.20	mg/L	2.3	20
B161370	Total Suspended Solids	2023/10/20	96	80 - 120	94	80 - 120	<1.0	mg/L	0	20
B161492	Total Suspended Solids	2023/10/20	101	80 - 120	91	80 - 120	<1.0	mg/L	0	20
B161819	Alkalinity (PP as CaCO3)	2023/10/20					<1.0	mg/L	NC	20
B161819	Alkalinity (Total as CaCO3)	2023/10/20			101	80 - 120	<1.0	mg/L	6.8	20
B161819	Bicarbonate (HCO3)	2023/10/20					<1.0	mg/L	6.8	20
B161819	Carbonate (CO3)	2023/10/20					<1.0	mg/L	NC	20
B161819	Hydroxide (OH)	2023/10/20					<1.0	mg/L	NC	20
B161821	Alkalinity (PP as CaCO3)	2023/10/20					<1.0	mg/L	NC	20
B161821	Alkalinity (Total as CaCO3)	2023/10/20			99	80 - 120	<1.0	mg/L	0.038	20
B161821	Bicarbonate (HCO3)	2023/10/20					<1.0	mg/L	0.038	20
B161821	Carbonate (CO3)	2023/10/20					<1.0	mg/L	NC	20
B161821	Hydroxide (OH)	2023/10/20					<1.0	mg/L	NC	20
B161823	pH	2023/10/20			100	97 - 103			1.1	N/A
B161825	pH	2023/10/20			100	97 - 103			1.3	N/A
B162186	Total Organic Carbon (C)	2023/10/20	74 (1)	80 - 120	99	80 - 120	<0.50	mg/L	3.2	20
B162188	Total Organic Carbon (C)	2023/10/20	73 (1)	80 - 120	99	80 - 120	<0.50	mg/L	1.7	20
B162256	Dissolved Organic Carbon (C)	2023/10/20	92	80 - 120	110	80 - 120	<0.50	mg/L	9.4	20
B162257	Dissolved Organic Carbon (C)	2023/10/20	78 (1)	80 - 120	94	80 - 120	<0.50	mg/L	7.0	20
B162280	Dissolved Barium (Ba)	2023/10/20	96	80 - 120	94	80 - 120	<0.010	mg/L	NC	20
B162280	Dissolved Boron (B)	2023/10/20	99	80 - 120	97	80 - 120	<0.020	mg/L	NC	20
B162280	Dissolved Calcium (Ca)	2023/10/20	101	80 - 120	95	80 - 120	<0.30	mg/L	4.3	20
B162280	Dissolved Iron (Fe)	2023/10/20	103	80 - 120	94	80 - 120	<0.060	mg/L	10	20
B162280	Dissolved Lithium (Li)	2023/10/20	95	80 - 120	93	80 - 120	<0.020	mg/L	NC	20
B162280	Dissolved Magnesium (Mg)	2023/10/20	102	80 - 120	95	80 - 120	<0.20	mg/L	1.6	20
B162280	Dissolved Manganese (Mn)	2023/10/20	103	80 - 120	95	80 - 120	<0.0040	mg/L	2.5	20
B162280	Dissolved Phosphorus (P)	2023/10/20	104	80 - 120	96	80 - 120	<0.10	mg/L	NC	20
B162280	Dissolved Potassium (K)	2023/10/20	101	80 - 120	97	80 - 120	<0.30	mg/L	1.7	20
B162280	Dissolved Silicon (Si)	2023/10/20	98	80 - 120	94	80 - 120	<0.50	mg/L	4.8	20
B162280	Dissolved Sodium (Na)	2023/10/20	101	80 - 120	96	80 - 120	<0.50	mg/L	39 (1)	20
B162280	Dissolved Strontium (Sr)	2023/10/20	94	80 - 120	92	80 - 120	<0.020	mg/L	1.8	20
B162280	Dissolved Sulphur (S)	2023/10/20	102	80 - 120	92	80 - 120	<0.20	mg/L	21 (1)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B162340	Dissolved Barium (Ba)	2023/10/20	93	80 - 120	93	80 - 120	<0.010	mg/L	6.4	20
B162340	Dissolved Boron (B)	2023/10/20	95	80 - 120	92	80 - 120	<0.020	mg/L	NC	20
B162340	Dissolved Calcium (Ca)	2023/10/20	98	80 - 120	94	80 - 120	<0.30	mg/L	2.3	20
B162340	Dissolved Iron (Fe)	2023/10/20	100	80 - 120	92	80 - 120	<0.060	mg/L	NC	20
B162340	Dissolved Lithium (Li)	2023/10/20	92	80 - 120	92	80 - 120	<0.020	mg/L	6.9	20
B162340	Dissolved Magnesium (Mg)	2023/10/20	100	80 - 120	94	80 - 120	<0.20	mg/L	2.2	20
B162340	Dissolved Manganese (Mn)	2023/10/20	101	80 - 120	92	80 - 120	<0.0040	mg/L	NC	20
B162340	Dissolved Phosphorus (P)	2023/10/20	102	80 - 120	93	80 - 120	<0.10	mg/L	NC	20
B162340	Dissolved Potassium (K)	2023/10/20	98	80 - 120	96	80 - 120	<0.30	mg/L	6.3	20
B162340	Dissolved Silicon (Si)	2023/10/20	95	80 - 120	91	80 - 120	<0.50	mg/L	8.6	20
B162340	Dissolved Sodium (Na)	2023/10/20	98	80 - 120	95	80 - 120	<0.50	mg/L	1.0	20
B162340	Dissolved Strontium (Sr)	2023/10/20	90	80 - 120	90	80 - 120	<0.020	mg/L	4.5	20
B162340	Dissolved Sulphur (S)	2023/10/20	100	80 - 120	88	80 - 120	<0.20	mg/L	1.6	20
B162505	Dissolved Aluminum (Al)	2023/10/20	94	80 - 120	91	80 - 120	<0.0030	mg/L	9.8	20
B162505	Dissolved Antimony (Sb)	2023/10/20	103	80 - 120	101	80 - 120	<0.00060	mg/L	NC	20
B162505	Dissolved Arsenic (As)	2023/10/20	98	80 - 120	89	80 - 120	<0.00020	mg/L	17	20
B162505	Dissolved Beryllium (Be)	2023/10/20	97	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
B162505	Dissolved Chromium (Cr)	2023/10/20	97	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
B162505	Dissolved Cobalt (Co)	2023/10/20	98	80 - 120	92	80 - 120	<0.00030	mg/L	NC	20
B162505	Dissolved Copper (Cu)	2023/10/20	98	80 - 120	90	80 - 120	<0.0010	mg/L	2.7	20
B162505	Dissolved Lead (Pb)	2023/10/20	93	80 - 120	91	80 - 120	<0.00020	mg/L	NC	20
B162505	Dissolved Molybdenum (Mo)	2023/10/20	97	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B162505	Dissolved Nickel (Ni)	2023/10/20	97	80 - 120	89	80 - 120	<0.00050	mg/L	NC	20
B162505	Dissolved Selenium (Se)	2023/10/20	96	80 - 120	84	80 - 120	<0.00020	mg/L	NC	20
B162505	Dissolved Silver (Ag)	2023/10/20	91	80 - 120	90	80 - 120	<0.00010	mg/L	NC	20
B162505	Dissolved Thallium (Tl)	2023/10/20	91	80 - 120	89	80 - 120	<0.00020	mg/L	NC	20
B162505	Dissolved Tin (Sn)	2023/10/20	93	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B162505	Dissolved Titanium (Ti)	2023/10/20	99	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
B162505	Dissolved Uranium (U)	2023/10/20	94	80 - 120	92	80 - 120	<0.00010	mg/L	NC	20
B162505	Dissolved Vanadium (V)	2023/10/20	96	80 - 120	90	80 - 120	<0.0010	mg/L	NC	20
B162505	Dissolved Zinc (Zn)	2023/10/20	95	80 - 120	85	80 - 120	<0.0030	mg/L	0.24	20
B162521	Sulphate (SO4)	2023/10/20	NC	80 - 120	98	80 - 120	<1.0	mg/L	0.69	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B162527	Sulphate (SO4)	2023/10/20	100	80 - 120	99	80 - 120	<1.0	mg/L	NC	20
B162528	Dissolved Aluminum (Al)	2023/10/20	81	80 - 120	81	80 - 120	<0.0030	mg/L	NC	20
B162528	Dissolved Antimony (Sb)	2023/10/20	104	80 - 120	98	80 - 120	<0.00060	mg/L	NC	20
B162528	Dissolved Arsenic (As)	2023/10/20	103	80 - 120	92	80 - 120	<0.00020	mg/L	15	20
B162528	Dissolved Beryllium (Be)	2023/10/20	100	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B162528	Dissolved Chromium (Cr)	2023/10/20	95	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B162528	Dissolved Cobalt (Co)	2023/10/20	95	80 - 120	93	80 - 120	<0.00030	mg/L	NC	20
B162528	Dissolved Copper (Cu)	2023/10/20	94	80 - 120	93	80 - 120	<0.0010	mg/L	0.15	20
B162528	Dissolved Lead (Pb)	2023/10/20	91	80 - 120	89	80 - 120	<0.00020	mg/L	NC	20
B162528	Dissolved Molybdenum (Mo)	2023/10/20	100	80 - 120	91	80 - 120	<0.00020	mg/L	1.3	20
B162528	Dissolved Nickel (Ni)	2023/10/20	94	80 - 120	92	80 - 120	<0.00050	mg/L	2.8	20
B162528	Dissolved Selenium (Se)	2023/10/20	100	80 - 120	88	80 - 120	<0.00020	mg/L	2.2	20
B162528	Dissolved Silver (Ag)	2023/10/20	91	80 - 120	88	80 - 120	<0.00010	mg/L	NC	20
B162528	Dissolved Thallium (Tl)	2023/10/20	90	80 - 120	87	80 - 120	<0.00020	mg/L	NC	20
B162528	Dissolved Tin (Sn)	2023/10/20	95	80 - 120	88	80 - 120	<0.0010	mg/L	NC	20
B162528	Dissolved Titanium (Ti)	2023/10/20	93	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B162528	Dissolved Uranium (U)	2023/10/20	NC	80 - 120	90	80 - 120	<0.00010	mg/L	1.5	20
B162528	Dissolved Vanadium (V)	2023/10/20	96	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B162528	Dissolved Zinc (Zn)	2023/10/20	91	80 - 120	88	80 - 120	<0.0030	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

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Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			708441
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#708441-02-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com ; mmenczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	AL/AA		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-3 SFC	23/10/17	9:15	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
2		CL-3 BTM		9:15				X	X	X	X	X	X	X	X	X	X	4	
3		CL-7 SFC		9:20				X	X	X	X	X	X	X	X	X	X	4	
4		CL-7 BTM		9:20				X	X	X	X	X	X	X	X	X	X	4	
5		CL-8 SFC		9:10				X	X	X	X	X	X	X	X	X	X	4	
6		CL-8 BTM		9:10				X	X	X	X	X	X	X	X	X	X	4	
7		CL-2 SFC		9:35				X	X	X	X	X	X	X	X	X	X	4	
8		CL-2 BTM		9:35				X	X	X	X	X	X	X	X	X	X	4	
9		CL-4 SFC		9:05				X	X	X	X	X	X	X	X	X	X	4	
10		CL-4 BTM		9:05				X	X	X	X	X	X	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☐
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required: ☒
Rush Confirmation Number: JK4101801
(call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Adonia Ainslie Loria	23/10/18	12:45	Katrina Schnabel KS	23/10/18	1752	
			EnEn2	2023/10/19	08:30	

Lab Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt: 4°C | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #: 708441
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name	OAM - Sherridon Mine Site	C#708441-03-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com jmniemczyk@kgsgroup.com	Site #			
				Sampled By	AL/AA		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☐
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required: ☒
Rush Confirmation Number: JK8101501 (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) – Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		CL-5 SFC	23/10/17	9:00	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
2		CL-5 BTM		9:00				X	X	X	X	X	X	X	X	X	X	4	
3		CL-6 SFC		8:50				X	X	X	X	X	X	X	X	X	X	4	
4		CL-6 BTM		8:50				X	X	X	X	X	X	X	X	X	X	4	
5		SW-136		AM				X	X	X	X	X	X	X	X	X	X	4	
6		SW-137		AM				X	X	X	X	X	X	X	X	X	X	4	
7		SW-138		AM				X	X	X	X	X	X	X	X	X	X	4	
8		TRIP BLANK		—				X	X	X	X	X	X	X	X	X	X	4	
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Athena Ainsleigh Lorek	23/10/18	12:45	Katrina Schandel	23/10/18	1257		☐	6.6	☐ Yes ☐ No
			SwEm	2023/10/19	08:30				

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* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

BUREAU VERITAS

MCAL

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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COOLER OBSERVATIONS:

BV JOB#:

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	✓		TEMP	2 (1)	1 (2)	2 (3)
INTACT	✓					
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	✓		TEMP	3 (1)	4 (2)	5 (3)
INTACT	✓					
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	✓		TEMP	3 (1)	2 (2)	2 (3)
INTACT	✓					
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	✓		TEMP	4 (1)	4 (2)	4 (3)
INTACT	✓					
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	✓		TEMP	1 (1)	0 (2)	5 (3)
INTACT	✓					
ICE PRESENT	✓					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP	1	2	3
INTACT						
ICE PRESENT						

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
	Sr Tech	2023/10/19	08:30

WINNIPEG ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
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RECEIPT OBSERVATIONS:

	YES	NO				
CUSTODY SEAL PRESENT			COOLER ID 1			
CUSTODY SEAL INTACT			TEMP	2.4 (1)	1.8 (2)	1.1 (3)
ICE PRESENT	X					
CUSTODY SEAL PRESENT			COOLER ID 2			
CUSTODY SEAL INTACT			TEMP	2.9 (1)	2.3 (2)	2.9 (3)
ICE PRESENT	X					
CUSTODY SEAL PRESENT			COOLER ID 3			
CUSTODY SEAL INTACT			TEMP	2.0 (1)	2.8 (2)	3.4 (3)
ICE PRESENT	X					
CUSTODY SEAL PRESENT			COOLER ID 4			
CUSTODY SEAL INTACT			TEMP	1.0 (1)	1.2 (2)	2.7 (3)
ICE PRESENT	X					
CUSTODY SEAL PRESENT			COOLER ID 5			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 6			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 7			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 8			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 9			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						
CUSTODY SEAL PRESENT			COOLER ID 10			
CUSTODY SEAL INTACT			TEMP	(1)	(2)	(3)
ICE PRESENT						

BUREAU VERITAS JOB#

RECEIVED BY (SIGN & PRINT)	DATE (YYYY/MM/DD)	TIME (HH:MM)
Katarina Schmidt KS	23/10/18	1252

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name	KGS Group	Quotation #	C21675	Bureau Veritas Job #	Bottle Order #: 708441
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #			
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#708441-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com; jmniencaykc@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	AL/AA		

Regulatory Criteria: MWQSOG

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required: X
Rush Confirmation Number JK8101801 *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	pH, Alkalinity	Total Suspended Solids (NFR)	Turbidity	Regulated Metals (CCME/AT1) - Total	Reg. Metals (CCME/AT1) - Diss. Lab Filt.	Hardness	Hardness Total (calculated as CaCO3)	Sulphate	Carbon (Total Organic)	Carbon (DOC) -Lab Filtered	# of Bottles	Comments
1		SC-1	23/10/17	11:45	SW	N	N	X	X	X	X	X	X	X	X	X	X	4	
2		SB-1		10:10				X	X	X	X	X	X	X	X	X	X	4	
3		SB-2		10:05				X	X	X	X	X	X	X	X	X	X	4	
4		CB-1		10:15				X	X	X	X	X	X	X	X	X	X	4	
5		CB-2		10:20				X	X	X	X	X	X	X	X	X	X	4	
6		EB-1		10:25				X	X	X	X	X	X	X	X	X	X	4	
7		EB-2		10:30				X	X	X	X	X	X	X	X	X	X	4	
8		NB-1		10:45				X	X	X	X	X	X	X	X	X	X	4	
9		NB-2		10:40				X	X	X	X	X	X	X	X	X	X	4	
10		CLD		10:50				X	X	X	X	X	X	X	X	X	X	4	

mcal-10-1518

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Alexia Ainsleigh Loria	23/10/18	12:45	Katrina Schindel KS	23/10/18	1252			ACTR	Yes / No
			Sin Eric	2023/10/19	08:30				

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White: Bureau Veritas Yellow: Client

APPENDIX C.2

Laboratory Certificates of Analysis – Toxicity

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 7500 KGS Group Job Number: C335298

Client Project Name & Number: 21-1357-005

Test Result:

96 hrs LC50 % vol/vol (95% CL): >100% (N/A) Statistical Method: Visual

Sample Name : CAMP LAKE DISCHARGE Sample Matrix : Water

Description: Yellow, clear Sample Number: BQQ200-01

Sample Collected: May 16, 2023 11:40 AM Sampling Method : N/A Site Collection: N/A

Sample Collected By: RCP Volume Received: 40 L Avg Temp Arrival: 3 °C Storage: 2-6°C

Sample Received: May 17, 2023 12:50 PM pH: 6.5 Dissolved Oxygen: 10.5 mg/L

Analysis Start : May 21, 2023 11:55 AM Temperature : 14 °C Sample Conductance: 260 µS/cm

Concentration	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)
% vol/vol	Start	Start	Start	Start	24 hrs	24 hrs	24 hrs	24 hrs	48 hrs	48 hrs	48 hrs	48 hrs
0	16	7.6	309	8.9	0	0	0	0	0	0	0	0
6.25	16	7.8	306	8.7	0	0	0	0	0	0	0	0
12.5	16	7.8	302	9.0	0	0	0	0	0	0	0	0
25	15	7.8	296	8.9	0	0	0	0	0	0	0	0
50	15	7.6	284	8.8	0	0	0	0	0	0	0	0
100	15	6.8	263	9.0	0	0	0	0	0	0	0	0

Concentration	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)
% vol/vol	72 hrs	72 hrs	72 hrs	72 hrs	96 hrs	96 hr	96 hrs	96 hrs	96 hrs	96 hrs	96 hrs	96 hrs
0	0	0	0	0	16	7.2	315	8.5	0	0	0	0
6.25	0	0	0	0	16	7.6	308	8.2	0	0	0	0
12.5	0	0	0	0	16	7.6	307	8.3	0	0	0	0
25	0	0	0	0	15	7.7	299	8.6	0	0	0	0
50	0	0	0	0	16	7.6	288	8.7	0	0	0	0
100	0	0	0	0	16	7.1	271	8.8	0	0	0	0

Comments : None

Culture/Control/Dilution Water City of Edmonton dechlorinated tap water

Hardness: 150 mg/L $CaCO_3$ Other parameters available on request.

Test Conditions Test concentration : 0,6.25,12.5,25,50,100 (% vol/vol)

Organisms per Vessel :	10	Test Temperature :	15 ± 1 °C	Solution Depth :	>15 cm
Total # of Organisms Used :	60	Pre-aeration Time :	120 min.	Rate of Aeration	6.5±1 mL/min/L
Test Volume :	20 L	Vessel Volume :	38L	Test pH Adjusted:	No
Loading Density :	0.2 g/L	Photoperiod :	16:8 (light: dark)		

Test Organism : Rainbow Trout *(Oncorhynchus mykiss)* Source : LSL Trout Hatchery

Culture Temperature :	15 ± 2 °C	Weight (Mean) +- SD :	0.5 ± 0.1 g	Length (Mean) +- SD :	3.97 ± 0.36 cm
Culture Water Renewal :	≥ 1.0 L/min/kg fish	Weight (Range) :	0.3 – 0.7 g	Length (Range) :	3.40 – 4.60 cm
Culture Photoperiod :	16:8 (light: dark)			% Mortality within 7 days :	0.1%
Feeding rate and frequency :	daily: 1-5% biomass of trout.			Acclimation Time:	>14 days

Reference chemical: Phenol Test Date: May 18, 2023

Test Endpoint 96 hrs LC50 (95% confidence interval) : 11.0 (10.1, 11.9)mg/L Statistical Method : Probit

Historical Mean LC50 (warning limits) : 9.98 (8.82, 11.3) mg/L Concentration : 0,8,10,12,15,20 mg/L

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 7500 KGS Group

Job Number: C335298

Client Project Name & Number: 21-1357-005

Sample Number: BQQ200-01

Test Method EPS 1/RM/13

Method Deviations : None

Note: The results contained in this report refer only to the testing of the sample submitted. Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation, including the toxicity parameters reported herein. The conductivity, dissolved oxygen and pH data contained within the toxicity report are provided for information purposes and are not individually accredited parameters. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.

Analyst : Kaylie Lyons, Kyle Monaghan, Svetlana Sofrenovic



Verified By : Cara Shurgot, Analyst 2

Date: May 27, 2023 12:39 PM

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 695543-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/07/26
Report #: R3371419
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C352735
Received: 2023/07/13, 08:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Rainbow Trout LC50 Multi-concentration (1)	1	N/A	2023/07/14	BBY2SOP-00004	EPS 1/RM/13

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Vancouver, 4606 Canada Way , Burnaby, BC, V5G 1K5

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 695543-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/07/26
Report #: R3371419
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C352735
Received: 2023/07/13, 08:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

==========

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Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C352735
Report Date: 2023/07/26

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BUM671	
Sampling Date		2023/07/11 10:10	
COC Number		695543-01-01	
	UNITS		**QC Batch**
Rainbow Trout Bioassay			
LC50	% vol/vol	ATTACHED	B034947

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	8.0°C
Package 2	7.0°C

Results relate only to the items tested.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Navpreet Shergill, Scientist

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Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

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C352735_COC

Lab Only

Bottle Order #: 695543

Chain Of Custody Record

Project Manager

C#695543-01-01

INVOICE TO:		Report Information		Project Information	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #	
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005
	Winnipeg MB R3T 5T4			Project Name	
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com MNiemczyk@kgsgroup.com	Sampled By	RED / ~~RM~~

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____

Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	Rainbow Trout LC50 Multi-Concentration	# of Bottles	Comments
1		Camp Lake Discharge	23/07/11	10:10	SW	N	N	X	2	
2										
3										
4										
5										
6										
7										
8										
9										
10										

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / RDyck	23/07/12	11:50	BM Brooklyn Hiebert	23/07/12	1135			1.2.0 / 1.8 / 1.5	
			DICKSON MAING	23/07/13	0800			2.0.8 / 0.9 / 1.0	Yes / No

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White: Bureau Veritas Yellow: Client

7.7.10
7.7.7

Bureau Veritas Canada (2019) Inc.

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 7500 KGS Group Job Number: C352735

Client Project Name & Number: 21-1357-005

Test Result:

96 hrs LC50 % vol/vol (95% CL): >100% (N/A) Statistical Method: Visual

Sample Name : N/A

Description:	Light orange.			Sample Number:	BUM671-01
Sample Collected:	Jul 11, 2023 10:10 AM	Sampling Method :	N/A	Site Collection:	N/A
Sample Collected By:	RED	Volume Received:	2 x ECO20	Avg Temp Arrival:	2 °C Storage: 2-6°C
Sample Received:	Jul 13, 2023 08:00 AM	pH:	7.1	Dissolved Oxygen:	9.9 mg/L
Analysis Start :	Jul 14, 2023 03:40 PM	Temperature :	14 °C	Sample Conductance:	327 µS/cm

Concentration	Temperature (°C)	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (mg/L)	pH	pH	Conductivity (uS/cm)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)
% vol/vol	Initial	96 hrs	Initial	96 hrs	Initial	96 hrs	Initial	96 hrs	96 hrs	96 hrs
0	14	14	10.2	10.2	7.8	7.7	53	0	0	0
6.25	14	14	10.3	10.0	7.8	7.6	76	0	0	0
12.5	14	14	10.3	9.9	7.7	7.3	94	0	0	0
25	14	14	10.3	9.9	7.6	7.5	130	0	0	0
50	14	14	10.3	10.0	7.5	7.3	209	0	0	0
100	14	14	10.2	10.1	7.2	7.4	327	0	0	0

Comments : All fish appeared and behaved normally during the test.

Culture/Control/Dilution Water Burnaby Municipal Dechlorinated Water

Hardness: 32 mg/L $CaCO_3$ Other parameters available on request.

Test Conditions Test concentration : 0,6.25,12.5,25,50,100 (% vol/vol)

Organisms per Vessel :	10	Test Temperature :	15 ± 1 °C	Solution Depth :	>15 cm
Total # of Organisms Used :	60	Pre-aeration Time :	30 min.	Rate of Aeration	6.5±1 mL/min/L
Test Volume :	15 L	Vessel Volume :	20L	Test pH Adjusted:	No
Loading Density :	0.2 g/L	Photoperiod :	16:8 (light: dark)		

Test Organism : Rainbow Trout *(Oncorhynchus mykiss)* Source : Aqua Farm

Culture Temperature :	15 ± 2 °C	Weight (Mean) +- SD :	0.4 ± 0.1 g	Length (Mean) +- SD :	4.09 ± 0.27 cm
Culture Water Renewal :	≥ 1L/min/kg fish	Weight (Range) :	0.3 – 0.5 g	Length (Range) :	3.70 – 4.40 cm
Culture Photoperiod :	16:8 (light: dark)			% Mortality within 7 days :	0%
Feeding rate and frequency :	daily: 1-5% biomass of trout.			Acclimation Time:	>14 days

Reference chemical: Zinc Test Date: Jul 14, 2023

Test Endpoint 96 hrs LC50 (95% confidence interval) : 0.18 (0.15, 0.22)mg/L Statistical Method : Untrimmed Spearman-Kärber

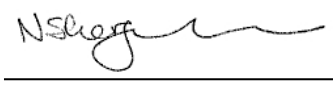
Historical Mean LC50 (warning limits) : 0.19 (0.10, 0.34) mg/L Concentration : 0,0.04,0.08,0.16,0.32,0.64 mg/L

Test Method BV Lab's BBY2SOP-00004 is based on the latest version of EPS 1/RM9 and EPS 1 /RM13.

Method Deviations : None.

Note: The results contained in this report refer only to the testing of the sample submitted. Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation, including the toxicity parameters reported herein. The conductivity, dissolved oxygen and pH data contained within the toxicity report are provided for information purposes and are not individually accredited parameters. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.

Analyst : Donald Lai



Verified By : Navpreet Shergill, Scientist Date: Jul 26, 2023 11:14 AM

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: C#695544-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/09/22
Report #: R3399541
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C370836
Received: 2023/09/07, 12:05

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Rainbow Trout LC50 Multi-Concentration (1)	1	N/A	2023/09/10	EENVSOP-00160	EPS 1 RM13 2nd ed m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Edmonton Environmental, 4326 76 Avenue NW , Edmonton, AB, T6B 2H8

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: C#695544-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/09/22
Report #: R3399541
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C370836
Received: 2023/09/07, 12:05

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

==========

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TOXICOLOGY (WATER)

Bureau Veritas ID		BYO192	
Sampling Date		2023/09/06 10:00	
COC Number		C#695544-01-01	
	UNITS	CAMP LAKE DISCHARGE	QC Batch
Rainbow Trout Bioassay			
LC50	% vol/vol	ATTACHED	B101583

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.0°C
Package 2	-0.3°C

Results relate only to the items tested.

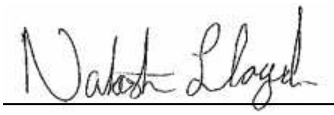
Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas Job #: C370836
Report Date: 2023/09/22

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RA

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Natasha Lloyd, Team Lead

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Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Bureau Veritas
D-675 Berry Street, Winnipeg, Manitoba Canada R3H 1A7 Tel:(204) 772-7276 Toll-free:800-563-6266 Fax:(204) 772-2386 www.bvna.com

152(2)

Page of

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C370836	695544
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#695544-01-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com mmeczyk@kgsgroup.com	Sampled By	RED, AFA		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT [X]

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____ [ ]

Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	Rainbow Trout LC50 Multi-Concentration	# of Bottles	Comments
1		Camp Lake Discharge	23/09/06	10:00	SW	N	N	X	2	
2										
3										
4										
5										
6										
7										
8										
9										
10										

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyal	23/09/06	12:00	Ayton Ratt WP	2023/09/07	12:05			1) 1.5/0.7/0.8	Yes / No
			AMINAT AZEEZ	2023/09/08	12:18			2) 0.1/-0.5/-0.4 ICE-YES	

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

1,2,3
1,1,2

16/yes

Bureau Veritas Canada (2019) Inc.

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 7500 KGS Group Job Number: C370836

Client Project Name & Number: 21-1357-005

Test Result:

96 hrs LC50 % vol/vol (95% CL): >100% (N/A) Statistical Method: Visual

Sample Name : CAMP LAKE DISCHARGE Sample Matrix : Water

Description: Yellow, clear Sample Number: BYO192-01

Sample Collected: Sep 06, 2023 10:00 AM Sampling Method : N/A Site Collection: N/A

Sample Collected By: RA Volume Received: 40 L Avg Temp Arrival: 0 °C Storage: 2-6°C

Sample Received: Sep 07, 2023 12:05 PM pH: 6.2 Dissolved Oxygen: 10.6 mg/L

Analysis Start : Sep 10, 2023 10:35 AM Temperature : 14 °C Sample Conductance: 289 µS/cm

Concentration	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)
% vol/vol	Start	Start	Start	Start	24 hrs	24 hrs	24 hrs	24 hrs	48 hrs	48 hrs	48 hrs	48 hrs
0	14	7.5	306	9.3	0	0	0	0	0	0	0	0
6.25	14	7.6	305	9.4	0	0	0	0	0	0	0	0
12.5	14	7.6	304	9.3	0	0	0	0	0	0	0	0
25	14	7.6	304	9.7	0	0	0	0	0	0	0	0
50	14	7.5	303	9.9	0	0	0	0	0	0	0	0
100	14	6.7	299	9.9	0	0	0	0	0	0	0	0

Concentration	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)
% vol/vol	72 hrs	72 hrs	72 hrs	72 hrs	96 hrs	96 hr	96 hrs	96 hrs	96 hrs	96 hrs	96 hrs	96 hrs
0	0	0	0	0	14	7.4	312	9.0	0	0	0	0
6.25	0	0	0	0	14	7.3	310	8.8	0	0	0	0
12.5	0	0	0	0	14	7.5	308	9.0	0	0	0	0
25	0	0	0	0	14	7.4	310	8.9	0	0	0	0
50	0	0	0	0	14	7.3	310	8.9	0	0	0	0
100	0	0	0	0	14	6.7	316	9.0	0	0	0	0

Comments : None

Culture/Control/Dilution Water City of Edmonton dechlorinated tap water

Hardness: 170 mg/L $CaCO_3$ Other parameters available on request.

Test Conditions Test concentration : 0,6.25,12.5,25,50,100 (% vol/vol)

Organisms per Vessel :	10	Test Temperature :	15 ± 1 °C	Solution Depth :	>15 cm
Total # of Organisms Used :	60	Pre-aeration Time :	120 min.	Rate of Aeration	6.5±1 mL/min/L
Test Volume :	20 L	Vessel Volume :	38L	Test pH Adjusted:	No
Loading Density :	0.4 g/L	Photoperiod :	16:8 (light: dark)		

Test Organism : Rainbow Trout *(Oncorhynchus mykiss)* Source : LSL Trout Hatchery

Culture Temperature :	15 ± 2 °C	Weight (Mean) +- SD :	0.8 ± 0.1 g	Length (Mean) +- SD :	4.24 ± 0.31 cm
Culture Water Renewal :	≥ 1.0 L/min/kg fish	Weight (Range) :	0.6 – 1.0 g	Length (Range) :	3.80 – 4.80 cm
Culture Photoperiod :	16:8 (light: dark)			% Mortality within 7 days :	0.1%
Feeding rate and frequency :	daily: 1-5% biomass of trout.			Acclimation Time:	>14 days

Reference chemical: Phenol Test Date: Aug 16, 2023

Test Endpoint 96 hrs LC50 (95% confidence interval) : 9.16 (8.00, 15.0)mg/L Statistical Method : Binomial

Historical Mean LC50 (warning limits) : 10.1 (9.01, 11.3) mg/L Concentration : 0,8,10,12,15,20 mg/L

RESULTS OF RAINBOW TROUT LC50 MULTI-CONCENTRATION

Client : 7500 KGS Group

Job Number: C370836

Client Project Name & Number: 21-1357-005

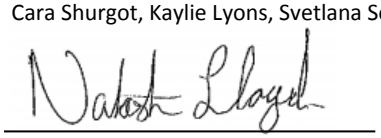
Sample Number: BYO192-01

Test Method EPS 1/RM/13

Method Deviations : None

Note: The results contained in this report refer only to the testing of the sample submitted. Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation, including the toxicity parameters reported herein. The conductivity, dissolved oxygen and pH data contained within the toxicity report are provided for information purposes and are not individually accredited parameters. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.

Analyst : Cara Shurgot, Kaylie Lyons, Svetlana Sofrenovic



Verified By : Natasha Lloyd, Team Lead

Date: Sep 22, 2023 03:11 PM

APPENDIX D

Laboratory Certificates of Analysis – Groundwater

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696997-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/25
Report #: R3355164
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344331
Received: 2023/06/16, 08:45

Sample Matrix: Water
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH	10	N/A	2023/06/23	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved	10	N/A	2023/06/21		Auto Calc
Cadmium - low level CCME (Total)	10	N/A	2023/06/23		Auto Calc
Chloride/Sulphate by Auto Colourimetry	1	N/A	2023/06/20	AB SOP-00020	SM24-4500-Cl/SO4-E m
Chloride/Sulphate by Auto Colourimetry	9	N/A	2023/06/21	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductivity @25C	10	N/A	2023/06/23	AB SOP-00005	SM 23 2510 B m
Hardness	1	N/A	2023/06/18		Auto Calc
Hardness	1	N/A	2023/06/20		Auto Calc
Hardness	8	N/A	2023/06/21		Auto Calc
Mercury (Dissolved) by CV (1)	10	2023/06/21	2023/06/21	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Total) by CV	10	2023/06/21	2023/06/23	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP-Dissolved-Lab Filtered (1)	1	N/A	2023/06/18	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1)	1	N/A	2023/06/19	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1)	8	N/A	2023/06/20	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total	10	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	7	N/A	2023/06/19	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	1	N/A	2023/06/20	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	2	N/A	2023/06/21	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	5	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	5	2023/06/22	2023/06/23	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ion Balance	3	N/A	2023/06/23		Auto Calc
Ion Balance	7	N/A	2023/06/24		Auto Calc
Sum of cations, anions	1	N/A	2023/06/18		Auto Calc
Sum of cations, anions	1	N/A	2023/06/20		Auto Calc
Sum of cations, anions	8	N/A	2023/06/21		Auto Calc
Nitrate and Nitrite	10	N/A	2023/06/18		Auto Calc
NO2 (N); NO2 (N) + NO3 (N) in Water	10	N/A	2023/06/17	AB SOP-00091	SM 24 4500 NO3m
Nitrate (as N)	10	2023/06/16	2023/06/18		Auto Calc
pH @25°C (3)	10	N/A	2023/06/23	AB SOP-00005	SM 23 4500-H+B m

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696997-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/25
Report #: R3355164
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344331
Received: 2023/06/16, 08:45

Sample Matrix: Water
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Dissolved Solids (Calculated)	3	N/A	2023/06/23		Auto Calc
Total Dissolved Solids (Calculated)	7	N/A	2023/06/24		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

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Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(2) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696997-01-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/25
Report #: R3355164
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344331
Received: 2023/06/16, 08:45

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

==========

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Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP287			BSP288			BSP289		
Sampling Date		2023/06/14 08:00			2023/06/14 08:15			2023/06/14 08:25		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-05-BR	RDL	QC Batch	MW-01-BR	RDL	QC Batch	MW-04-0B	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	2.0	N/A	A998758	30	N/A	A998758	12	N/A	A998758
Cation Sum	meq/L	2.1	N/A	A998758	29	N/A	A998758	12	N/A	A998758
Hardness (CaCO3)	mg/L	98	0.50	A998773	1300	0.50	A998773	560	0.50	A998773
Ion Balance (% Difference)	%	NC	N/A	A998757	2.2	N/A	A998757	3.2	N/A	A998757
Nitrate (N)	mg/L	0.015	0.010	A998759	0.049	0.010	A998759	<0.010	0.010	A998759
Nitrate (NO3)	mg/L	0.064	0.044	A998821	0.22	0.044	A998821	<0.044	0.044	A998821
Nitrite (NO2)	mg/L	<0.033	0.033	A998821	<0.033	0.033	A998821	<0.033	0.033	A998821
Calculated Total Dissolved Solids	mg/L	120	10	A998760	1800	25	A998760	660	10	A998760
Elements										
Dissolved Cadmium (Cd)	ug/L	0.11	0.020	A998736	0.068	0.020	A998736	0.16	0.020	A998736
Misc. Inorganics										
Conductivity	uS/cm	200	2.0	B004374	2200	2.0	B004374	1000	2.0	B004374
pH	pH	6.71	N/A	B004373	7.74	N/A	B004373	7.81	N/A	B004373
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B004345	<1.0	1.0	B004345	<1.0	1.0	B004345
Alkalinity (Total as CaCO3)	mg/L	54	1.0	B004345	350	1.0	B004345	340	1.0	B004345
Bicarbonate (HCO3)	mg/L	65	1.0	B004345	420	1.0	B004345	410	1.0	B004345
Carbonate (CO3)	mg/L	<1.0	1.0	B004345	<1.0	1.0	B004345	<1.0	1.0	B004345
Hydroxide (OH)	mg/L	<1.0	1.0	B004345	<1.0	1.0	B004345	<1.0	1.0	B004345
Chloride (Cl)	mg/L	<1.0	1.0	B004685	54	1.0	B004685	13	1.0	B002789
Sulphate (SO4)	mg/L	43	1.0	B004685	1000	25	B004685	210	5.0	B002789
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	A999448	<0.010	0.010	A999452	<0.010	0.010	A999448
Nitrate plus Nitrite (N)	mg/L	0.015	0.010	A999448	0.049	0.010	A999452	<0.010	0.010	A999448
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.019	0.0030	B000732	0.0048	0.0030	B000732	<0.0030	0.0030	B000746
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B000732	<0.00060	0.00060	B000732	<0.00060	0.00060	B000746
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B000732	0.00052	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Barium (Ba)	mg/L	0.016	0.010	B000027	0.043	0.010	B000027	0.094	0.010	B000027
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Boron (B)	mg/L	<0.020	0.020	B000027	0.19	0.020	B000027	0.17	0.020	B000027

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP287			BSP288			BSP289		
Sampling Date		2023/06/14 08:00			2023/06/14 08:15			2023/06/14 08:25		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	**MW-05-BR**	**RDL**	**QC Batch**	**MW-01-BR**	**RDL**	**QC Batch**	**MW-04-0B**	**RDL**	**QC Batch**
Dissolved Calcium (Ca)	mg/L	32	0.30	B000027	270	0.30	B000027	140	0.30	B000027
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Cobalt (Co)	mg/L	0.0075	0.00030	B000732	0.0062	0.00030	B000732	<0.00030	0.00030	B000746
Dissolved Copper (Cu)	mg/L	0.0036	0.0010	B000732	0.0046	0.0010	B000732	0.0020	0.0010	B000746
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B000027	0.073	0.060	B000027	<0.060	0.060	B000027
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B000027	0.051	0.020	B000027	0.047	0.020	B000027
Dissolved Magnesium (Mg)	mg/L	4.6	0.20	B000027	160	0.20	B000027	48	0.20	B000027
Dissolved Manganese (Mn)	mg/L	0.35	0.0040	B000027	0.35	0.0040	B000027	0.56	0.0040	B000027
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B000732	0.0028	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Nickel (Ni)	mg/L	0.0025	0.00050	B000732	0.0041	0.00050	B000732	<0.00050	0.00050	B000746
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B000027	<0.10	0.10	B000027	<0.10	0.10	B000027
Dissolved Potassium (K)	mg/L	3.6	0.30	B000027	21	0.30	B000027	4.7	0.30	B000027
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B000732	0.0032	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Silicon (Si)	mg/L	6.0	0.50	B000027	6.7	0.50	B000027	11	0.50	B000027
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B000732	<0.00010	0.00010	B000732	<0.00010	0.00010	B000746
Dissolved Sodium (Na)	mg/L	1.5	0.50	B000027	44	0.50	B000027	26	0.50	B000027
Dissolved Strontium (Sr)	mg/L	0.034	0.020	B000027	1.9	0.020	B000027	0.70	0.020	B000027
Dissolved Sulphur (S)	mg/L	15	0.20	B000027	350	0.20	B000027	75	0.20	B000027
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Uranium (U)	mg/L	0.0021	0.00010	B000732	0.074	0.00010	B000732	0.00056	0.00010	B000746
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Zinc (Zn)	mg/L	0.046	0.0030	B000732	0.016	0.0030	B000732	0.050	0.0030	B000746
RDL = Reportable Detection Limit										

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP290			BSP291			BSP292		
Sampling Date		2023/06/14 08:30			2023/06/14 08:50			2023/06/14 09:15		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-04-BR	RDL	QC Batch	MW-02-BR	RDL	QC Batch	MW-03-BR	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	8.8	N/A	A998758	6.6	N/A	A998758	9.2	N/A	A998758
Cation Sum	meq/L	9.5	N/A	A998758	6.9	N/A	A998758	10	N/A	A998758
Hardness (CaCO3)	mg/L	130	0.50	A998773	120	0.50	A998773	450	0.50	A998773
Ion Balance (% Difference)	%	3.6	N/A	A998837	2.5	N/A	A998837	4.1	N/A	A998837
Nitrate (N)	mg/L	0.083	0.010	A998759	<0.010	0.010	A998759	<0.010	0.010	A998759
Nitrate (NO3)	mg/L	0.37	0.044	A998821	<0.044	0.044	A998821	<0.044	0.044	A998821
Nitrite (NO2)	mg/L	<0.033	0.033	A998821	<0.033	0.033	A998821	<0.033	0.033	A998821
Calculated Total Dissolved Solids	mg/L	550	10	A998760	390	10	A998760	560	10	A998760
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	A998736	<0.020	0.020	A998736	<0.020	0.020	A998736
Misc. Inorganics										
Conductivity	uS/cm	880	2.0	B004374	630	2.0	B004374	820	2.0	B004374
pH	pH	8.25	N/A	B004373	8.07	N/A	B004373	7.53	N/A	B004373
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B004345	<1.0	1.0	B004345	<1.0	1.0	B004345
Alkalinity (Total as CaCO3)	mg/L	200	1.0	B004345	180	1.0	B004345	200	1.0	B004345
Bicarbonate (HCO3)	mg/L	240	1.0	B004345	220	1.0	B004345	240	1.0	B004345
Carbonate (CO3)	mg/L	<1.0	1.0	B004345	<1.0	1.0	B004345	<1.0	1.0	B004345
Hydroxide (OH)	mg/L	<1.0	1.0	B004345	<1.0	1.0	B004345	<1.0	1.0	B004345
Chloride (Cl)	mg/L	20	1.0	B004685	20	1.0	B004685	1.7	1.0	B004697
Sulphate (SO4)	mg/L	200	5.0	B004685	120	1.0	B004685	250	5.0	B004697
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	A999448	<0.010	0.010	A999452	<0.010	0.010	A999448
Nitrate plus Nitrite (N)	mg/L	0.083	0.010	A999448	<0.010	0.010	A999452	<0.010	0.010	A999448
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.0031	0.0030	B000746	0.0035	0.0030	B000732	<0.0030	0.0030	B000746
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B000746	<0.00060	0.00060	B000732	<0.00060	0.00060	B000746
Dissolved Arsenic (As)	mg/L	0.0046	0.00020	B000746	0.00059	0.00020	B000732	0.00078	0.00020	B000746
Dissolved Barium (Ba)	mg/L	0.031	0.010	B000027	0.042	0.010	B000027	0.10	0.010	B000027
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B000746	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Boron (B)	mg/L	0.45	0.020	B000027	0.48	0.020	B000027	0.071	0.020	B000027

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP290			BSP291			BSP292		
Sampling Date		2023/06/14 08:30			2023/06/14 08:50			2023/06/14 09:15		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	**MW-04-BR**	**RDL**	**QC Batch**	**MW-02-BR**	**RDL**	**QC Batch**	**MW-03-BR**	**RDL**	**QC Batch**
Dissolved Calcium (Ca)	mg/L	25	0.30	B000027	26	0.30	B000027	140	0.30	B000027
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B000746	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Cobalt (Co)	mg/L	0.00041	0.00030	B000746	0.0016	0.00030	B000732	0.0011	0.00030	B000746
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	B000746	0.0036	0.0010	B000732	0.0013	0.0010	B000746
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B000027	<0.060	0.060	B000027	0.11	0.060	B000027
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B000746	<0.00020	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Lithium (Li)	mg/L	0.13	0.020	B000027	0.084	0.020	B000027	0.041	0.020	B000027
Dissolved Magnesium (Mg)	mg/L	16	0.20	B000027	14	0.20	B000027	26	0.20	B000027
Dissolved Manganese (Mn)	mg/L	0.13	0.0040	B000027	0.058	0.0040	B000027	1.1	0.0040	B000027
Dissolved Molybdenum (Mo)	mg/L	0.0065	0.00020	B000746	0.00068	0.00020	B000732	0.00033	0.00020	B000746
Dissolved Nickel (Ni)	mg/L	0.0011	0.00050	B000746	<0.00050	0.00050	B000732	0.0012	0.00050	B000746
Dissolved Phosphorus (P)	mg/L	0.10	0.10	B000027	<0.10	0.10	B000027	<0.10	0.10	B000027
Dissolved Potassium (K)	mg/L	6.1	0.30	B000027	6.0	0.30	B000027	8.4	0.30	B000027
Dissolved Selenium (Se)	mg/L	0.00033	0.00020	B000746	<0.00020	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Silicon (Si)	mg/L	5.9	0.50	B000027	7.3	0.50	B000027	10	0.50	B000027
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B000746	<0.00010	0.00010	B000732	<0.00010	0.00010	B000746
Dissolved Sodium (Na)	mg/L	160	0.50	B000027	98	0.50	B000027	16	0.50	B000027
Dissolved Strontium (Sr)	mg/L	0.44	0.020	B000027	0.36	0.020	B000027	0.41	0.020	B000027
Dissolved Sulphur (S)	mg/L	74	0.20	B000027	41	0.20	B000027	92	0.20	B000027
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B000746	<0.00020	0.00020	B000732	<0.00020	0.00020	B000746
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B000746	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B000746	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Uranium (U)	mg/L	0.0075	0.00010	B000746	0.0058	0.00010	B000732	0.0015	0.00010	B000746
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B000746	<0.0010	0.0010	B000732	<0.0010	0.0010	B000746
Dissolved Zinc (Zn)	mg/L	<0.0030	0.0030	B000746	<0.0030	0.0030	B008326	0.23	0.0030	B000746
RDL = Reportable Detection Limit										

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP292			BSP293			BSP293		
Sampling Date		2023/06/14 09:15			2023/06/14 09:30			2023/06/14 09:30		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-03-BR Lab-Dup	RDL	QC Batch	MW-09-0B	RDL	QC Batch	MW-09-0B Lab-Dup	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L				9.6	N/A	A998758			
Cation Sum	meq/L				10	N/A	A998758			
Hardness (CaCO3)	mg/L				460	0.50	A998773			
Ion Balance (% Difference)	%				3.4	N/A	A998837			
Nitrate (N)	mg/L				<0.050	0.050	A998759			
Nitrate (NO3)	mg/L				<0.22	0.22	A998821			
Nitrite (NO2)	mg/L				<0.033	0.033	A998821			
Calculated Total Dissolved Solids	mg/L				630	10	A998760			
Elements										
Dissolved Cadmium (Cd)	ug/L				0.34	0.020	A998736			
Misc. Inorganics										
Conductivity	uS/cm				870	2.0	B004374	880	2.0	B004374
pH	pH				6.62 (1)	N/A	B004373	6.36	N/A	B004373
Anions										
Alkalinity (PP as CaCO3)	mg/L				<1.0	1.0	B004345	<1.0	1.0	B004345
Alkalinity (Total as CaCO3)	mg/L				60	1.0	B004345	61	1.0	B004345
Bicarbonate (HCO3)	mg/L				73	1.0	B004345	74	1.0	B004345
Carbonate (CO3)	mg/L				<1.0	1.0	B004345	<1.0	1.0	B004345
Hydroxide (OH)	mg/L				<1.0	1.0	B004345	<1.0	1.0	B004345
Chloride (Cl)	mg/L	<1.0	1.0	B004697	<1.0	1.0	B002789			
Sulphate (SO4)	mg/L	260	5.0	B004697	400	5.0	B002789			
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	A999448	<0.010	0.010	A999448			
Nitrate plus Nitrite (N)	mg/L	<0.010	0.010	A999448	<0.050 (2)	0.050	A999448			
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L				<0.0030	0.0030	B000732			
Dissolved Antimony (Sb)	mg/L				<0.00060	0.00060	B000732			
Dissolved Arsenic (As)	mg/L				0.00059	0.00020	B000732			
Dissolved Barium (Ba)	mg/L				0.017	0.010	B000027	0.017	0.010	B000027

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Duplicate exceeds acceptance criteria due to sample matrix. Reanalysis yields similar results.
(2) Detection limits raised due to matrix interference.

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP292			BSP293			BSP293		
Sampling Date		2023/06/14 09:15			2023/06/14 09:30			2023/06/14 09:30		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-03-BR Lab-Dup	RDL	QC Batch	MW-09-0B	RDL	QC Batch	MW-09-0B Lab-Dup	RDL	QC Batch
Dissolved Beryllium (Be)	mg/L				<0.0010	0.0010	B000732			
Dissolved Boron (B)	mg/L				0.051	0.020	B000027	0.049	0.020	B000027
Dissolved Calcium (Ca)	mg/L				130	0.30	B000027	130	0.30	B000027
Dissolved Chromium (Cr)	mg/L				<0.0010	0.0010	B000732			
Dissolved Cobalt (Co)	mg/L				0.041	0.00030	B000732			
Dissolved Copper (Cu)	mg/L				<0.0010	0.0010	B000732			
Dissolved Iron (Fe)	mg/L				17	0.060	B000027	17	0.060	B000027
Dissolved Lead (Pb)	mg/L				<0.00020	0.00020	B000732			
Dissolved Lithium (Li)	mg/L				0.061	0.020	B000027	0.069	0.020	B000027
Dissolved Magnesium (Mg)	mg/L				32	0.20	B000027	32	0.20	B000027
Dissolved Manganese (Mn)	mg/L				2.3	0.0040	B000027	2.3	0.0040	B000027
Dissolved Molybdenum (Mo)	mg/L				<0.00020	0.00020	B000732			
Dissolved Nickel (Ni)	mg/L				0.015	0.00050	B000732			
Dissolved Phosphorus (P)	mg/L				<0.10	0.10	B000027	<0.10	0.10	B000027
Dissolved Potassium (K)	mg/L				6.9	0.30	B000027	7.1	0.30	B000027
Dissolved Selenium (Se)	mg/L				<0.00020	0.00020	B000732			
Dissolved Silicon (Si)	mg/L				10	0.50	B000027	10	0.50	B000027
Dissolved Silver (Ag)	mg/L				<0.00010	0.00010	B000732			
Dissolved Sodium (Na)	mg/L				6.6	0.50	B000027	6.7	0.50	B000027
Dissolved Strontium (Sr)	mg/L				0.24	0.020	B000027	0.24	0.020	B000027
Dissolved Sulphur (S)	mg/L				150	0.20	B000027	150	0.20	B000027
Dissolved Thallium (Tl)	mg/L				<0.00020	0.00020	B000732			
Dissolved Tin (Sn)	mg/L				<0.0010	0.0010	B000732			
Dissolved Titanium (Ti)	mg/L				<0.0010	0.0010	B000732			
Dissolved Uranium (U)	mg/L				<0.00010	0.00010	B000732			
Dissolved Vanadium (V)	mg/L				<0.0010	0.0010	B000732			
Dissolved Zinc (Zn)	mg/L				31	0.030	B000732			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP294			BSP295			BSP296		
Sampling Date		2023/06/14 09:40			2023/06/14			2023/06/14 09:50		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-11-0B	RDL	QC Batch	MW-100	RDL	QC Batch	MW-10-0B	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	12	N/A	A998758	7.4	N/A	A998758	9.9	N/A	A998758
Cation Sum	meq/L	13	N/A	A998758	7.4	N/A	A998758	10	N/A	A998758
Hardness (CaCO3)	mg/L	600	0.50	A998773	340	0.50	A998773	450	0.50	A998773
Ion Balance (% Difference)	%	4.7	N/A	A998837	0.32	N/A	A998837	2.3	N/A	A998837
Nitrate (N)	mg/L	<0.010	0.010	A998759	<0.010	0.010	A998759	<0.010	0.010	A998759
Nitrate (NO3)	mg/L	<0.044	0.044	A998821	<0.044	0.044	A998821	<0.044	0.044	A998821
Nitrite (NO2)	mg/L	<0.033	0.033	A998821	<0.033	0.033	A998821	<0.033	0.033	A998821
Calculated Total Dissolved Solids	mg/L	720	10	A998760	490	10	A998760	650	10	A998760
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	A998736	110	0.020	A998736	3.1	0.020	A998736
Misc. Inorganics										
Conductivity	uS/cm	1000	2.0	B004320	710	2.0	B004371	870	2.0	B004320
pH	pH	7.58	N/A	B004319	6.18	N/A	B004369	6.56	N/A	B004319
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004351	<1.0	1.0	B004314
Alkalinity (Total as CaCO3)	mg/L	170	1.0	B004314	25	1.0	B004351	65	1.0	B004314
Bicarbonate (HCO3)	mg/L	210	1.0	B004314	30	1.0	B004351	80	1.0	B004314
Carbonate (CO3)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004351	<1.0	1.0	B004314
Hydroxide (OH)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004351	<1.0	1.0	B004314
Chloride (Cl)	mg/L	1.0	1.0	B002785	<1.0	1.0	B002789	<1.0	1.0	B002789
Sulphate (SO4)	mg/L	390	5.0	B002785	330	5.0	B002789	410	5.0	B002789
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	A999463	<0.010	0.010	A999442	<0.010	0.010	A999463
Nitrate plus Nitrite (N)	mg/L	<0.010	0.010	A999463	<0.010	0.010	A999442	<0.010	0.010	A999463
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	0.015	0.0030	B000732	0.0081	0.0030	B000732	0.0032	0.0030	B000732
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B000732	<0.00060	0.00060	B000732	<0.00060	0.00060	B000732
Dissolved Arsenic (As)	mg/L	0.00086	0.00020	B000732	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732
Dissolved Barium (Ba)	mg/L	0.062	0.010	B000028	0.026	0.010	B000026	0.021	0.010	B000027
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732
Dissolved Boron (B)	mg/L	0.059	0.020	B000028	0.042	0.020	B000026	0.082	0.020	B000027

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP294			BSP295			BSP296		
Sampling Date		2023/06/14 09:40			2023/06/14			2023/06/14 09:50		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	**MW-11-0B**	**RDL**	**QC Batch**	**MW-100**	**RDL**	**QC Batch**	**MW-10-0B**	**RDL**	**QC Batch**
Dissolved Calcium (Ca)	mg/L	170	0.30	B000028	99	0.30	B000026	140	0.30	B000027
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732
Dissolved Cobalt (Co)	mg/L	0.0046	0.00030	B000732	0.048	0.00030	B000732	0.037	0.00030	B000732
Dissolved Copper (Cu)	mg/L	0.0023	0.0010	B008326	0.37	0.0010	B000732	<0.0010	0.0010	B000732
Dissolved Iron (Fe)	mg/L	0.51	0.060	B000028	2.2	0.060	B000026	13	0.060	B000027
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732
Dissolved Lithium (Li)	mg/L	0.047	0.020	B000028	0.054	0.020	B000026	0.064	0.020	B000027
Dissolved Magnesium (Mg)	mg/L	40	0.20	B000028	22	0.20	B000026	28	0.20	B000027
Dissolved Manganese (Mn)	mg/L	1.9	0.0040	B000028	1.9	0.0040	B000026	2.5	0.0040	B000027
Dissolved Molybdenum (Mo)	mg/L	0.00026	0.00020	B000732	<0.00020	0.00020	B000732	0.00046	0.00020	B000732
Dissolved Nickel (Ni)	mg/L	0.0021	0.00050	B000732	0.017	0.00050	B000732	0.017	0.00050	B000732
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B000028	<0.10	0.10	B000026	<0.10	0.10	B000027
Dissolved Potassium (K)	mg/L	6.5	0.30	B000028	8.2	0.30	B000026	7.1	0.30	B000027
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732
Dissolved Silicon (Si)	mg/L	9.6	0.50	B000028	8.3	0.50	B000026	9.8	0.50	B000027
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B000732	<0.00010	0.00010	B000732	<0.00010	0.00010	B000732
Dissolved Sodium (Na)	mg/L	10	0.50	B000028	5.4	0.50	B000026	13	0.50	B000027
Dissolved Strontium (Sr)	mg/L	0.55	0.020	B000028	0.18	0.020	B000026	0.26	0.020	B000027
Dissolved Sulphur (S)	mg/L	130	0.20	B000028	110	0.20	B000026	150	0.20	B000027
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732	<0.00020	0.00020	B000732
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732
Dissolved Uranium (U)	mg/L	0.00032	0.00010	B000732	0.0012	0.00010	B000732	0.00072	0.00010	B000732
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732	<0.0010	0.0010	B000732
Dissolved Zinc (Zn)	mg/L	1.3	0.0030	B000732	35	0.030	B000732	16	0.012	B000732
RDL = Reportable Detection Limit										

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP287	BSP288			BSP289		
Sampling Date		2023/06/14 08:00	2023/06/14 08:15			2023/06/14 08:25		
COC Number		696997-01-01	696997-01-01			696997-01-01		
	UNITS	MW-05-BR	MW-01-BR	RDL	QC Batch	MW-04-0B	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L	0.16	0.15	0.030	A998637	0.19	0.020	A998637
Total Aluminum (Al)	mg/L	2.3	2.4	0.0030	B006423	12	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B006423	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	0.00053	0.0018	0.00020	B006423	0.0019	0.00020	B006434
Total Barium (Ba)	mg/L	0.028	0.11	0.010	B006431	0.20	0.050	B006446
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B006423	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	<0.020	0.18	0.020	B006431	0.16	0.10	B006446
Total Calcium (Ca)	mg/L	30	270	0.30	B006431	150	1.5	B006446
Total Chromium (Cr)	mg/L	0.0011	0.0050	0.0010	B006423	0.031	0.0010	B006434
Total Cobalt (Co)	mg/L	0.011	0.010	0.00030	B006423	0.0071	0.00030	B006434
Total Copper (Cu)	mg/L	0.013	0.018	0.0010	B006423	0.040	0.0010	B006434
Total Iron (Fe)	mg/L	2.4	6.7	0.060	B006431	18	0.30	B006446
Total Lead (Pb)	mg/L	0.0018	0.0036	0.00020	B006423	0.0051	0.00020	B006434
Total Lithium (Li)	mg/L	<0.020	0.038	0.020	B006431	<0.10	0.10	B006446
Total Magnesium (Mg)	mg/L	5.0	160	0.20	B006431	57	1.0	B006446
Total Manganese (Mn)	mg/L	0.37	0.88	0.0040	B006431	0.77	0.020	B006446
Total Molybdenum (Mo)	mg/L	<0.00020	0.0034	0.00020	B006423	<0.00020	0.00020	B006434
Total Nickel (Ni)	mg/L	0.0033	0.0070	0.00050	B006423	0.020	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.10	0.14	0.10	B006431	<0.50	0.50	B006446
Total Potassium (K)	mg/L	4.1	20	0.30	B006431	8.9	1.5	B006446
Total Selenium (Se)	mg/L	0.00049	0.0037	0.00020	B006423	0.00024	0.00020	B006434
Total Silicon (Si)	mg/L	10	14	0.50	B006431	31	2.5	B006446
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B006423	<0.00010	0.00010	B006434
Total Sodium (Na)	mg/L	1.7	40	0.50	B006431	27	2.5	B006446
Total Strontium (Sr)	mg/L	0.034	1.7	0.020	B006431	0.74	0.10	B006446
Total Sulphur (S)	mg/L	14	320	0.20	B006431	76	1.0	B006446
Total Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B006423	<0.00020	0.00020	B006434
Total Tin (Sn)	mg/L	0.0011	0.0020	0.0010	B006423	0.0012	0.0010	B006434
Total Titanium (Ti)	mg/L	0.085	0.15	0.0010	B006423	0.94	0.0010	B006434
Total Uranium (U)	mg/L	0.0027	0.082	0.00010	B006423	0.0017	0.00010	B006434
Total Vanadium (V)	mg/L	0.0026	0.0080	0.0010	B006423	0.034	0.0010	B006434
Total Zinc (Zn)	mg/L	0.060	0.028	0.0030	B006423	0.096	0.0030	B006434

RDL = Reportable Detection Limit

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP290			BSP291			BSP292		
Sampling Date		2023/06/14 08:30			2023/06/14 08:50			2023/06/14 09:15		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-04-BR	RDL	QC Batch	MW-02-BR	RDL	QC Batch	MW-03-BR	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.093	0.030	A998637	0.035	0.020	A998637	2.0	0.046	A998637
Total Aluminum (Al)	mg/L	0.91	0.0030	B006423	0.63	0.0030	B006434	100	0.030	B006384
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B006423	<0.00060	0.00060	B006434	<0.0012	0.0012	B006384
Total Arsenic (As)	mg/L	0.0046	0.00020	B006423	0.00082	0.00020	B006434	0.027	0.00040	B006384
Total Barium (Ba)	mg/L	0.039	0.010	B006431	0.042	0.010	B006446	1.1	0.10	B006422
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B006423	<0.0010	0.0010	B006434	<0.010	0.010	B006384
Total Boron (B)	mg/L	0.42	0.020	B006431	0.44	0.020	B006446	<0.20	0.20	B006422
Total Calcium (Ca)	mg/L	24	0.30	B006431	24	0.30	B006446	190	3.0	B006422
Total Chromium (Cr)	mg/L	0.0018	0.0010	B006423	<0.0010	0.0010	B006434	0.28	0.0020	B006384
Total Cobalt (Co)	mg/L	0.0012	0.00030	B006423	0.0040	0.00030	B006434	0.074	0.00060	B006384
Total Copper (Cu)	mg/L	0.0034	0.0010	B006423	0.0064	0.0010	B006434	0.28	0.0020	B006384
Total Iron (Fe)	mg/L	1.4	0.060	B006431	0.62	0.060	B006446	170	0.60	B006422
Total Lead (Pb)	mg/L	0.0016	0.00020	B006423	0.00020	0.00020	B006434	0.056	0.00040	B006384
Total Lithium (Li)	mg/L	0.094	0.020	B006431	0.061	0.020	B006446	<0.20	0.20	B006422
Total Magnesium (Mg)	mg/L	16	0.20	B006431	13	0.20	B006446	97	2.0	B006422
Total Manganese (Mn)	mg/L	0.14	0.0040	B006431	0.064	0.0040	B006446	3.1	0.040	B006422
Total Molybdenum (Mo)	mg/L	0.0071	0.00020	B006423	0.00077	0.00020	B006434	0.0024	0.00040	B006384
Total Nickel (Ni)	mg/L	0.0024	0.00050	B006423	0.00065	0.00050	B006434	0.19	0.0010	B006384
Total Phosphorus (P)	mg/L	0.15	0.10	B006431	<0.10	0.10	B006446	3.3	1.0	B006422
Total Potassium (K)	mg/L	6.1	0.30	B006431	5.8	0.30	B006446	46	3.0	B006422
Total Selenium (Se)	mg/L	0.00025	0.00020	B006423	<0.00020	0.00020	B006434	0.0013	0.00040	B006384
Total Silicon (Si)	mg/L	11	0.50	B006431	7.7	0.50	B006446	120	5.0	B006422
Total Silver (Ag)	mg/L	<0.00010	0.00010	B006423	<0.00010	0.00010	B006434	0.00051	0.00020	B006384
Total Sodium (Na)	mg/L	140	0.50	B006431	87	0.50	B006446	19	5.0	B006422
Total Strontium (Sr)	mg/L	0.41	0.020	B006431	0.32	0.020	B006446	0.58	0.20	B006422
Total Sulphur (S)	mg/L	66	0.20	B006431	33	0.20	B006446	96	2.0	B006422
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B006423	0.00060	0.00020	B006434	0.0016	0.00040	B006384
Total Tin (Sn)	mg/L	0.0012	0.0010	B006423	<0.0010	0.0010	B006434	0.0086	0.0020	B006384
Total Titanium (Ti)	mg/L	0.044	0.0010	B006423	0.023	0.0010	B006434	6.2	0.0020	B006384
Total Uranium (U)	mg/L	0.0089	0.00010	B006423	0.0060	0.00010	B006434	0.015	0.00020	B006384
Total Vanadium (V)	mg/L	0.0027	0.0010	B006423	0.0010	0.0010	B006434	0.28	0.0020	B006384
Total Zinc (Zn)	mg/L	0.0081	0.0030	B006423	0.0030	0.0030	B006434	28	0.030	B006384

RDL = Reportable Detection Limit

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP293			BSP293			BSP294		
Sampling Date		2023/06/14 09:30			2023/06/14 09:30			2023/06/14 09:40		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	MW-09-0B	RDL	QC Batch	MW-09-0B Lab-Dup	RDL	QC Batch	MW-11-0B	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.93	0.020	A998637				0.038	0.020	A998637
Total Aluminum (Al)	mg/L	2.9	0.0030	B006434	2.6	0.0030	B006434	0.58	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B006434	<0.00060	0.00060	B006434	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	0.0016	0.00020	B006434	0.0013	0.00020	B006434	0.0022	0.00020	B006434
Total Barium (Ba)	mg/L	<0.050	0.050	B006446	<0.050	0.050	B006446	0.068	0.010	B006446
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	B006434	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	0.11	0.10	B006446	<0.10	0.10	B006446	0.060	0.020	B006446
Total Calcium (Ca)	mg/L	130	1.5	B006446	120	1.5	B006446	160	0.30	B006446
Total Chromium (Cr)	mg/L	0.0065	0.0010	B006434	0.0058	0.0010	B006434	0.0015	0.0010	B006434
Total Cobalt (Co)	mg/L	0.047	0.00030	B006434	0.043	0.00030	B006434	0.0050	0.00030	B006434
Total Copper (Cu)	mg/L	0.0044	0.0010	B006434	0.0041	0.0010	B006434	<0.0010	0.0010	B006434
Total Iron (Fe)	mg/L	22	0.30	B006446	21	0.30	B006446	4.2	0.060	B006446
Total Lead (Pb)	mg/L	0.0012	0.00020	B006434	0.0011	0.00020	B006434	0.00028	0.00020	B006434
Total Lithium (Li)	mg/L	<0.10	0.10	B006446	<0.10	0.10	B006446	0.040	0.020	B006446
Total Magnesium (Mg)	mg/L	33	1.0	B006446	32	1.0	B006446	36	0.20	B006446
Total Manganese (Mn)	mg/L	2.3	0.020	B006446	2.2	0.020	B006446	1.9	0.0040	B006446
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B006434	<0.00020	0.00020	B006434	0.00031	0.00020	B006434
Total Nickel (Ni)	mg/L	0.020	0.00050	B006434	0.019	0.00050	B006434	0.0030	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.50	0.50	B006446	<0.50	0.50	B006446	<0.10	0.10	B006446
Total Potassium (K)	mg/L	7.9	1.5	B006446	7.4	1.5	B006446	6.0	0.30	B006446
Total Selenium (Se)	mg/L	<0.00020	0.00020	B006434	<0.00020	0.00020	B006434	<0.00020	0.00020	B006434
Total Silicon (Si)	mg/L	13	2.5	B006446	13	2.5	B006446	11	0.50	B006446
Total Silver (Ag)	mg/L	<0.00010	0.00010	B006434	<0.00010	0.00010	B006434	<0.00010	0.00010	B006434
Total Sodium (Na)	mg/L	7.5	2.5	B006446	6.3	2.5	B006446	9.0	0.50	B006446
Total Strontium (Sr)	mg/L	0.26	0.10	B006446	0.23	0.10	B006446	0.52	0.020	B006446
Total Sulphur (S)	mg/L	150	1.0	B006446	140	1.0	B006446	130	0.20	B006446
Total Thallium (Tl)	mg/L	0.00056	0.00020	B006434	0.00046	0.00020	B006434	0.00033	0.00020	B006434
Total Tin (Sn)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	B006434	0.0011	0.0010	B006434
Total Titanium (Ti)	mg/L	0.20	0.0010	B006434	0.19	0.0010	B006434	0.042	0.0010	B006434
Total Uranium (U)	mg/L	0.00026	0.00010	B006434	0.00023	0.00010	B006434	0.00023	0.00010	B006434
Total Vanadium (V)	mg/L	0.0064	0.0010	B006434	0.0059	0.0010	B006434	0.0014	0.0010	B006434

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP293			BSP293			BSP294		
Sampling Date		2023/06/14 09:30			2023/06/14 09:30			2023/06/14 09:40		
COC Number		696997-01-01			696997-01-01			696997-01-01		
	UNITS	**MW-09-0B**	**RDL**	**QC Batch**	**MW-09-0B Lab-Dup**	**RDL**	**QC Batch**	**MW-11-0B**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	30	0.030	B006434	29	0.030	B006434	1.4	0.0030	B006434

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP295	BSP296		
Sampling Date		2023/06/14	2023/06/14 09:50		
COC Number		696997-01-01	696997-01-01		
	UNITS	MW-100	MW-10-0B	RDL	QC Batch
Elements					
Total Cadmium (Cd)	ug/L	130	13	0.030	A998637
Total Aluminum (Al)	mg/L	0.079	3.4	0.030	B006423
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B006423
Total Arsenic (As)	mg/L	0.00032	0.00066	0.00020	B006423
Total Barium (Ba)	mg/L	0.023	0.049	0.010	B006431
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B006423
Total Boron (B)	mg/L	0.041	0.080	0.020	B006431
Total Calcium (Ca)	mg/L	88	120	0.30	B006431
Total Chromium (Cr)	mg/L	<0.0010	0.0069	0.0010	B006423
Total Cobalt (Co)	mg/L	0.048	0.040	0.00030	B006423
Total Copper (Cu)	mg/L	0.48	0.043	0.0010	B006423
Total Iron (Fe)	mg/L	6.1	22	0.060	B006431
Total Lead (Pb)	mg/L	0.0074	0.0013	0.00020	B006423
Total Lithium (Li)	mg/L	0.030	0.046	0.020	B006431
Total Magnesium (Mg)	mg/L	20	27	0.20	B006431
Total Manganese (Mn)	mg/L	1.8	2.3	0.0040	B006431
Total Molybdenum (Mo)	mg/L	<0.00020	0.00062	0.00020	B006423
Total Nickel (Ni)	mg/L	0.018	0.021	0.00050	B006423
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B006431
Total Potassium (K)	mg/L	7.8	7.9	0.30	B006431
Total Selenium (Se)	mg/L	0.00023	<0.00020	0.00020	B006423
Total Silicon (Si)	mg/L	8.1	17	0.50	B006431
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B006423
Total Sodium (Na)	mg/L	4.4	12	0.50	B006431
Total Strontium (Sr)	mg/L	0.15	0.24	0.020	B006431
Total Sulphur (S)	mg/L	110	130	0.20	B006431
Total Thallium (Tl)	mg/L	0.00072	<0.00020	0.00020	B006423
Total Tin (Sn)	mg/L	<0.0010	0.0014	0.0010	B006423
Total Titanium (Ti)	mg/L	0.0011	0.21	0.0010	B006423
Total Uranium (U)	mg/L	0.0026	0.0016	0.00010	B006423
Total Vanadium (V)	mg/L	<0.0010	0.0076	0.0010	B006423
Total Zinc (Zn)	mg/L	33	18	0.030	B006423

RDL = Reportable Detection Limit

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		BSP287	BSP288	BSP289	BSP290	BSP291		
Sampling Date		2023/06/14 08:00	2023/06/14 08:15	2023/06/14 08:25	2023/06/14 08:30	2023/06/14 08:50		
COC Number		696997-01-01	696997-01-01	696997-01-01	696997-01-01	696997-01-01		
	UNITS	MW-05-BR	MW-01-BR	MW-04-0B	MW-04-BR	MW-02-BR	RDL	QC Batch
Elements								
Dissolved Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	<0.0000019	<0.0000019	0.0000019	B004051
Total Mercury (Hg)	mg/L	0.0000029	0.0000091	0.0000080	0.0000022	0.0000032	0.0000019	B004152

RDL = Reportable Detection Limit

Bureau Veritas ID		BSP291			BSP292	BSP293		
Sampling Date		2023/06/14 08:50			2023/06/14 09:15	2023/06/14 09:30		
COC Number		696997-01-01			696997-01-01	696997-01-01		
	UNITS	MW-02-BR Lab-Dup	RDL	QC Batch	MW-03-BR	MW-09-0B	RDL	QC Batch
Elements								
Dissolved Mercury (Hg)	mg/L				<0.0000019	<0.0000019	0.0000019	B004051
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	B004152	0.0000060	<0.0000019	0.0000019	B004152

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		BSP294	BSP295	BSP296		
Sampling Date		2023/06/14 09:40	2023/06/14	2023/06/14 09:50		
COC Number		696997-01-01	696997-01-01	696997-01-01		
	UNITS	MW-11-0B	MW-100	MW-10-0B	RDL	QC Batch
Elements						
Dissolved Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	0.0000019	B004051
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	<0.0000019	0.0000019	B004152

RDL = Reportable Detection Limit

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.3°C

REGULATED METALS (CCME/AT1) - TOTAL Comments

Sample BSP289 [MW-04-0B] Elements by ICP - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample BSP292 [MW-03-BR] Elements by ICPMS - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample BSP292 [MW-03-BR] Elements by ICP - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample BSP293 [MW-09-0B] Elements by ICP - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample BSP291, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.
Sample BSP294, Elements by ICPMS-Dissolved-Lab Filtered: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A999442	Nitrate plus Nitrite (N)	2023/06/17	NC	80 - 120	104	80 - 120	<0.010	mg/L	0.59	20
A999442	Nitrite (N)	2023/06/17	NC	80 - 120	101	80 - 120	<0.010	mg/L	0.95	20
A999448	Nitrate plus Nitrite (N)	2023/06/17	112	80 - 120	105	80 - 120	<0.010	mg/L	NC	20
A999448	Nitrite (N)	2023/06/17	97	80 - 120	100	80 - 120	<0.010	mg/L	NC	20
A999452	Nitrate plus Nitrite (N)	2023/06/17	141 (1)	80 - 120	105	80 - 120	<0.010	mg/L	5.7	20
A999452	Nitrite (N)	2023/06/17	107	80 - 120	99	80 - 120	<0.010	mg/L	NC	20
A999463	Nitrate plus Nitrite (N)	2023/06/17	40 (1)	80 - 120	107	80 - 120	<0.010	mg/L	NC	20
A999463	Nitrite (N)	2023/06/17	88	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
B000026	Dissolved Barium (Ba)	2023/06/19	98	80 - 120	100	80 - 120	<0.010	mg/L		
B000026	Dissolved Boron (B)	2023/06/19	95	80 - 120	96	80 - 120	<0.020	mg/L		
B000026	Dissolved Calcium (Ca)	2023/06/19	95	80 - 120	100	80 - 120	<0.30	mg/L	2.3	20
B000026	Dissolved Iron (Fe)	2023/06/19	97	80 - 120	104	80 - 120	<0.060	mg/L	NC	20
B000026	Dissolved Lithium (Li)	2023/06/19	99	80 - 120	99	80 - 120	<0.020	mg/L		
B000026	Dissolved Magnesium (Mg)	2023/06/19	100	80 - 120	100	80 - 120	<0.20	mg/L	1.5	20
B000026	Dissolved Manganese (Mn)	2023/06/19	95	80 - 120	99	80 - 120	<0.0040	mg/L	1.7	20
B000026	Dissolved Phosphorus (P)	2023/06/19	104	80 - 120	102	80 - 120	<0.10	mg/L		
B000026	Dissolved Potassium (K)	2023/06/19	99	80 - 120	97	80 - 120	<0.30	mg/L	2.7	20
B000026	Dissolved Silicon (Si)	2023/06/19	100	80 - 120	104	80 - 120	<0.50	mg/L		
B000026	Dissolved Sodium (Na)	2023/06/19	97	80 - 120	105	80 - 120	<0.50	mg/L	2.1	20
B000026	Dissolved Strontium (Sr)	2023/06/19	95	80 - 120	100	80 - 120	<0.020	mg/L		
B000026	Dissolved Sulphur (S)	2023/06/19	101	80 - 120	99	80 - 120	<0.20	mg/L		
B000027	Dissolved Barium (Ba)	2023/06/20	96	80 - 120	102	80 - 120	<0.010	mg/L	0.48	20
B000027	Dissolved Boron (B)	2023/06/20	96	80 - 120	97	80 - 120	<0.020	mg/L	3.8	20
B000027	Dissolved Calcium (Ca)	2023/06/20	NC	80 - 120	107	80 - 120	<0.30	mg/L	1.4	20
B000027	Dissolved Iron (Fe)	2023/06/20	NC	80 - 120	101	80 - 120	<0.060	mg/L	0.60	20
B000027	Dissolved Lithium (Li)	2023/06/20	100	80 - 120	100	80 - 120	<0.020	mg/L	13	20
B000027	Dissolved Magnesium (Mg)	2023/06/20	97	80 - 120	102	80 - 120	<0.20	mg/L	1.7	20
B000027	Dissolved Manganese (Mn)	2023/06/20	NC	80 - 120	104	80 - 120	<0.0040	mg/L	1.9	20
B000027	Dissolved Phosphorus (P)	2023/06/20	101	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
B000027	Dissolved Potassium (K)	2023/06/20	101	80 - 120	97	80 - 120	<0.30	mg/L	2.5	20
B000027	Dissolved Silicon (Si)	2023/06/20	94	80 - 120	108	80 - 120	<0.50	mg/L	0.43	20
B000027	Dissolved Sodium (Na)	2023/06/20	98	80 - 120	101	80 - 120	<0.50	mg/L	2.0	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000027	Dissolved Strontium (Sr)	2023/06/20	95	80 - 120	102	80 - 120	<0.020	mg/L	1.8	20
B000027	Dissolved Sulphur (S)	2023/06/20	NC	80 - 120	101	80 - 120	<0.20	mg/L	0.23	20
B000028	Dissolved Barium (Ba)	2023/06/18	97	80 - 120	94	80 - 120	<0.010	mg/L		
B000028	Dissolved Boron (B)	2023/06/18	99	80 - 120	96	80 - 120	<0.020	mg/L		
B000028	Dissolved Calcium (Ca)	2023/06/18	101	80 - 120	96	80 - 120	<0.30	mg/L	0.88	20
B000028	Dissolved Iron (Fe)	2023/06/18	103	80 - 120	100	80 - 120	<0.060	mg/L		
B000028	Dissolved Lithium (Li)	2023/06/18	99	80 - 120	92	80 - 120	<0.020	mg/L		
B000028	Dissolved Magnesium (Mg)	2023/06/18	105	80 - 120	96	80 - 120	<0.20	mg/L	1.1	20
B000028	Dissolved Manganese (Mn)	2023/06/18	102	80 - 120	99	80 - 120	<0.0040	mg/L		
B000028	Dissolved Phosphorus (P)	2023/06/18	107	80 - 120	100	80 - 120	<0.10	mg/L		
B000028	Dissolved Potassium (K)	2023/06/18	107	80 - 120	100	80 - 120	<0.30	mg/L		
B000028	Dissolved Silicon (Si)	2023/06/18	99	80 - 120	97	80 - 120	<0.50	mg/L		
B000028	Dissolved Sodium (Na)	2023/06/18	104	80 - 120	97	80 - 120	<0.50	mg/L		
B000028	Dissolved Strontium (Sr)	2023/06/18	93	80 - 120	91	80 - 120	<0.020	mg/L		
B000028	Dissolved Sulphur (S)	2023/06/18	103	80 - 120	97	80 - 120	<0.20	mg/L		
B000732	Dissolved Aluminum (Al)	2023/06/19	92	80 - 120	92	80 - 120	<0.0030	mg/L		
B000732	Dissolved Antimony (Sb)	2023/06/19	102	80 - 120	95	80 - 120	<0.00060	mg/L		
B000732	Dissolved Arsenic (As)	2023/06/19	96	80 - 120	92	80 - 120	<0.00020	mg/L		
B000732	Dissolved Beryllium (Be)	2023/06/19	91	80 - 120	84	80 - 120	<0.0010	mg/L		
B000732	Dissolved Chromium (Cr)	2023/06/19	96	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Cobalt (Co)	2023/06/19	93	80 - 120	95	80 - 120	<0.00030	mg/L		
B000732	Dissolved Copper (Cu)	2023/06/19	87	80 - 120	96	80 - 120	<0.0010	mg/L		
B000732	Dissolved Lead (Pb)	2023/06/19	87	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Molybdenum (Mo)	2023/06/19	106	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Nickel (Ni)	2023/06/19	89	80 - 120	93	80 - 120	<0.00050	mg/L		
B000732	Dissolved Selenium (Se)	2023/06/19	100	80 - 120	93	80 - 120	<0.00020	mg/L		
B000732	Dissolved Silver (Ag)	2023/06/19	90	80 - 120	94	80 - 120	<0.00010	mg/L		
B000732	Dissolved Thallium (Tl)	2023/06/19	85	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Tin (Sn)	2023/06/19	102	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Titanium (Ti)	2023/06/19	106	80 - 120	94	80 - 120	<0.0010	mg/L		
B000732	Dissolved Uranium (U)	2023/06/19	NC	80 - 120	90	80 - 120	<0.00010	mg/L	1.5	20
B000732	Dissolved Vanadium (V)	2023/06/19	102	80 - 120	92	80 - 120	<0.0010	mg/L		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000732	Dissolved Zinc (Zn)	2023/06/19	90	80 - 120	96	80 - 120	<0.0030	mg/L		
B000746	Dissolved Aluminum (Al)	2023/06/19	92	80 - 120	91	80 - 120	<0.0030	mg/L	NC	20
B000746	Dissolved Antimony (Sb)	2023/06/19	106	80 - 120	112	80 - 120	<0.00060	mg/L	NC	20
B000746	Dissolved Arsenic (As)	2023/06/19	87	80 - 120	94	80 - 120	<0.00020	mg/L	4.8	20
B000746	Dissolved Beryllium (Be)	2023/06/19	90	80 - 120	86	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Chromium (Cr)	2023/06/19	91	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Cobalt (Co)	2023/06/19	90	80 - 120	99	80 - 120	<0.00030	mg/L	1.5	20
B000746	Dissolved Copper (Cu)	2023/06/19	88	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Lead (Pb)	2023/06/19	84	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B000746	Dissolved Molybdenum (Mo)	2023/06/19	91	80 - 120	97	80 - 120	<0.00020	mg/L	1.6	20
B000746	Dissolved Nickel (Ni)	2023/06/19	90	80 - 120	97	80 - 120	<0.00050	mg/L	7.4	20
B000746	Dissolved Selenium (Se)	2023/06/19	94	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B000746	Dissolved Silver (Ag)	2023/06/19	84	80 - 120	91	80 - 120	<0.00010	mg/L	NC	20
B000746	Dissolved Thallium (Tl)	2023/06/19	88	80 - 120	92	80 - 120	<0.00020	mg/L	NC	20
B000746	Dissolved Tin (Sn)	2023/06/19	83	80 - 120	89	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Titanium (Ti)	2023/06/19	87	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Uranium (U)	2023/06/19	82	80 - 120	90	80 - 120	<0.00010	mg/L	2.9	20
B000746	Dissolved Vanadium (V)	2023/06/19	95	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B000746	Dissolved Zinc (Zn)	2023/06/19	83	80 - 120	94	80 - 120	<0.0030	mg/L	NC	20
B002785	Chloride (Cl)	2023/06/20	NC	80 - 120	98	80 - 120	<1.0	mg/L	5.9	20
B002785	Sulphate (SO4)	2023/06/20	NC	80 - 120	96	80 - 120	<1.0	mg/L	3.4	20
B002789	Chloride (Cl)	2023/06/21	102	80 - 120	100	80 - 120	<1.0	mg/L	0.68	20
B002789	Sulphate (SO4)	2023/06/21	99	80 - 120	98	80 - 120	<1.0	mg/L	2.0	20
B004051	Dissolved Mercury (Hg)	2023/06/21	105	80 - 120	102	80 - 120	<0.0000019	mg/L	NC	20
B004152	Total Mercury (Hg)	2023/06/23	106	80 - 120	105	80 - 120	<0.0000019	mg/L	NC	20
B004314	Alkalinity (PP as CaCO3)	2023/06/23					<1.0	mg/L	NC	20
B004314	Alkalinity (Total as CaCO3)	2023/06/23			97	80 - 120	<1.0	mg/L	0.83	20
B004314	Bicarbonate (HCO3)	2023/06/23					<1.0	mg/L	0.83	20
B004314	Carbonate (CO3)	2023/06/23					<1.0	mg/L	NC	20
B004314	Hydroxide (OH)	2023/06/23					<1.0	mg/L	NC	20
B004319	pH	2023/06/23			100	97 - 103			0.0052	N/A
B004320	Conductivity	2023/06/23			100	90 - 110	<2.0	uS/cm	0.36	10

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B004345	Alkalinity (PP as CaCO3)	2023/06/23					<1.0	mg/L	NC	20
B004345	Alkalinity (Total as CaCO3)	2023/06/23			99	80 - 120	<1.0	mg/L	1.2	20
B004345	Bicarbonate (HCO3)	2023/06/23					<1.0	mg/L	1.2	20
B004345	Carbonate (CO3)	2023/06/23					<1.0	mg/L	NC	20
B004345	Hydroxide (OH)	2023/06/23					<1.0	mg/L	NC	20
B004351	Alkalinity (PP as CaCO3)	2023/06/23					<1.0	mg/L		
B004351	Alkalinity (Total as CaCO3)	2023/06/23			98	80 - 120	<1.0	mg/L	0.26	20
B004351	Bicarbonate (HCO3)	2023/06/23					<1.0	mg/L	0.26	20
B004351	Carbonate (CO3)	2023/06/23					<1.0	mg/L	NC	20
B004351	Hydroxide (OH)	2023/06/23					<1.0	mg/L	NC	20
B004369	pH	2023/06/23			100	97 - 103			1.4	N/A
B004371	Conductivity	2023/06/23			100	90 - 110	<2.0	uS/cm	0	10
B004373	pH	2023/06/23			100	97 - 103			4.0	N/A
B004374	Conductivity	2023/06/23			99	90 - 110	<2.0	uS/cm	0.23	10
B004685	Chloride (Cl)	2023/06/21	105	80 - 120	98	80 - 120	<1.0	mg/L		
B004685	Sulphate (SO4)	2023/06/21	109	80 - 120	98	80 - 120	<1.0	mg/L	2.0	20
B004697	Chloride (Cl)	2023/06/21	100	80 - 120	99	80 - 120	<1.0	mg/L	NC	20
B004697	Sulphate (SO4)	2023/06/21	NC	80 - 120	98	80 - 120	<1.0	mg/L	4.2	20
B006384	Total Aluminum (Al)	2023/06/22	107	80 - 120	111	80 - 120	<0.0030	mg/L	3.8	20
B006384	Total Antimony (Sb)	2023/06/22	109	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B006384	Total Arsenic (As)	2023/06/22	90	80 - 120	95	80 - 120	<0.00020	mg/L	18	20
B006384	Total Beryllium (Be)	2023/06/22	96	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20
B006384	Total Chromium (Cr)	2023/06/22	96	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B006384	Total Cobalt (Co)	2023/06/22	97	80 - 120	102	80 - 120	<0.00030	mg/L	13	20
B006384	Total Copper (Cu)	2023/06/22	96	80 - 120	102	80 - 120	<0.0010	mg/L	0.15	20
B006384	Total Lead (Pb)	2023/06/22	99	80 - 120	103	80 - 120	<0.00020	mg/L	2.9	20
B006384	Total Molybdenum (Mo)	2023/06/22	101	80 - 120	105	80 - 120	<0.00020	mg/L	2.9	20
B006384	Total Nickel (Ni)	2023/06/22	97	80 - 120	101	80 - 120	<0.00050	mg/L	6.6	20
B006384	Total Selenium (Se)	2023/06/22	91	80 - 120	96	80 - 120	<0.00020	mg/L	14	20
B006384	Total Silver (Ag)	2023/06/22	99	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B006384	Total Thallium (Tl)	2023/06/22	99	80 - 120	104	80 - 120	<0.00020	mg/L	19	20
B006384	Total Tin (Sn)	2023/06/22	102	80 - 120	105	80 - 120	<0.0010	mg/L	2.1	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006384	Total Titanium (Ti)	2023/06/22	97	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B006384	Total Uranium (U)	2023/06/22	98	80 - 120	102	80 - 120	<0.00010	mg/L	NC	20
B006384	Total Vanadium (V)	2023/06/22	96	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B006384	Total Zinc (Zn)	2023/06/22	92	80 - 120	99	80 - 120	<0.0030	mg/L	0.086	20
B006422	Total Barium (Ba)	2023/06/22	99	80 - 120	103	80 - 120	<0.010	mg/L	1.8	20
B006422	Total Boron (B)	2023/06/22	101	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006422	Total Calcium (Ca)	2023/06/22	NC	80 - 120	102	80 - 120	<0.30	mg/L	2.8	20
B006422	Total Iron (Fe)	2023/06/22	110	80 - 120	111	80 - 120	<0.060	mg/L	5.1	20
B006422	Total Lithium (Li)	2023/06/22	100	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006422	Total Magnesium (Mg)	2023/06/22	NC	80 - 120	105	80 - 120	<0.20	mg/L	3.4	20
B006422	Total Manganese (Mn)	2023/06/22	105	80 - 120	105	80 - 120	<0.0040	mg/L	2.3	20
B006422	Total Phosphorus (P)	2023/06/22	102	80 - 120	101	80 - 120	<0.10	mg/L	NC	20
B006422	Total Potassium (K)	2023/06/22	101	80 - 120	105	80 - 120	<0.30	mg/L	15	20
B006422	Total Silicon (Si)	2023/06/22	103	80 - 120	106	80 - 120	<0.50	mg/L	NC	20
B006422	Total Sodium (Na)	2023/06/22	NC	80 - 120	101	80 - 120	<0.50	mg/L	3.3	20
B006422	Total Strontium (Sr)	2023/06/22	90	80 - 120	99	80 - 120	<0.020	mg/L	NC	20
B006422	Total Sulphur (S)	2023/06/22	NC	80 - 120	99	80 - 120	<0.20	mg/L	2.2	20
B006423	Total Aluminum (Al)	2023/06/23	110	80 - 120	114	80 - 120	<0.0030	mg/L	12	20
B006423	Total Antimony (Sb)	2023/06/23	122 (1)	80 - 120	118	80 - 120	<0.00060	mg/L	NC	20
B006423	Total Arsenic (As)	2023/06/23	100	80 - 120	98	80 - 120	<0.00020	mg/L	19	20
B006423	Total Beryllium (Be)	2023/06/23	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Chromium (Cr)	2023/06/23	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Cobalt (Co)	2023/06/23	103	80 - 120	101	80 - 120	<0.00030	mg/L	NC	20
B006423	Total Copper (Cu)	2023/06/23	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Lead (Pb)	2023/06/23	107	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B006423	Total Molybdenum (Mo)	2023/06/23	110	80 - 120	107	80 - 120	<0.00020	mg/L	3.2	20
B006423	Total Nickel (Ni)	2023/06/23	102	80 - 120	100	80 - 120	<0.00050	mg/L	2.4	20
B006423	Total Selenium (Se)	2023/06/23	104	80 - 120	103	80 - 120	<0.00020	mg/L	2.9	20
B006423	Total Silver (Ag)	2023/06/23	107	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B006423	Total Thallium (Tl)	2023/06/23	108	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B006423	Total Tin (Sn)	2023/06/23	111	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Titanium (Ti)	2023/06/23	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006423	Total Uranium (U)	2023/06/23	106	80 - 120	103	80 - 120	<0.00010	mg/L	1.3	20
B006423	Total Vanadium (V)	2023/06/23	103	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006423	Total Zinc (Zn)	2023/06/23	103	80 - 120	102	80 - 120	<0.0030	mg/L	5.6	20
B006431	Total Barium (Ba)	2023/06/22	100	80 - 120	105	80 - 120	<0.010	mg/L	1.8	20
B006431	Total Boron (B)	2023/06/22	101	80 - 120	105	80 - 120	<0.020	mg/L	NC	20
B006431	Total Calcium (Ca)	2023/06/22	NC	80 - 120	104	80 - 120	<0.30	mg/L	1.9	20
B006431	Total Iron (Fe)	2023/06/22	NC	80 - 120	114	80 - 120	<0.060	mg/L	1.8	20
B006431	Total Lithium (Li)	2023/06/22	102	80 - 120	104	80 - 120	<0.020	mg/L	NC	20
B006431	Total Magnesium (Mg)	2023/06/22	104	80 - 120	108	80 - 120	<0.20	mg/L	2.1	20
B006431	Total Manganese (Mn)	2023/06/22	105	80 - 120	108	80 - 120	<0.0040	mg/L	NC	20
B006431	Total Phosphorus (P)	2023/06/22	100	80 - 120	104	80 - 120	<0.10	mg/L	NC	20
B006431	Total Potassium (K)	2023/06/22	102	80 - 120	107	80 - 120	<0.30	mg/L	2.6	20
B006431	Total Silicon (Si)	2023/06/22	104	80 - 120	110	80 - 120	<0.50	mg/L	0.32	20
B006431	Total Sodium (Na)	2023/06/22	100	80 - 120	104	80 - 120	<0.50	mg/L	2.7	20
B006431	Total Strontium (Sr)	2023/06/22	96	80 - 120	102	80 - 120	<0.020	mg/L	1.6	20
B006431	Total Sulphur (S)	2023/06/22	NC	80 - 120	103	80 - 120	<0.20	mg/L	1.7	20
B006434	Total Aluminum (Al)	2023/06/22	107	80 - 120	104	80 - 120	<0.0030	mg/L	10	20
B006434	Total Antimony (Sb)	2023/06/22	125 (1)	80 - 120	120	80 - 120	<0.00060	mg/L	NC	20
B006434	Total Arsenic (As)	2023/06/22	105	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Beryllium (Be)	2023/06/22	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Chromium (Cr)	2023/06/22	107	80 - 120	102	80 - 120	<0.0010	mg/L	12	20
B006434	Total Cobalt (Co)	2023/06/22	107	80 - 120	104	80 - 120	<0.00030	mg/L	9.1	20
B006434	Total Copper (Cu)	2023/06/22	106	80 - 120	102	80 - 120	<0.0010	mg/L	5.4	20
B006434	Total Lead (Pb)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	7.3	20
B006434	Total Molybdenum (Mo)	2023/06/22	111	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Nickel (Ni)	2023/06/22	105	80 - 120	103	80 - 120	<0.00050	mg/L	7.8	20
B006434	Total Selenium (Se)	2023/06/22	112	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Silver (Ag)	2023/06/22	109	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B006434	Total Thallium (Tl)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	20	20
B006434	Total Tin (Sn)	2023/06/22	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Titanium (Ti)	2023/06/22	108	80 - 120	104	80 - 120	<0.0010	mg/L	5.9	20
B006434	Total Uranium (U)	2023/06/22	109	80 - 120	103	80 - 120	<0.00010	mg/L	14	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006434	Total Vanadium (V)	2023/06/22	106	80 - 120	103	80 - 120	<0.0010	mg/L	8.1	20
B006434	Total Zinc (Zn)	2023/06/22	107	80 - 120	105	80 - 120	<0.0030	mg/L	3.7	20
B006446	Total Barium (Ba)	2023/06/22	101	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
B006446	Total Boron (B)	2023/06/22	102	80 - 120	102	80 - 120	<0.020	mg/L	12	20
B006446	Total Calcium (Ca)	2023/06/22	103	80 - 120	101	80 - 120	<0.30	mg/L	6.2	20
B006446	Total Iron (Fe)	2023/06/22	117	80 - 120	109	80 - 120	<0.060	mg/L	4.1	20
B006446	Total Lithium (Li)	2023/06/22	100	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006446	Total Magnesium (Mg)	2023/06/22	104	80 - 120	103	80 - 120	<0.20	mg/L	4.6	20
B006446	Total Manganese (Mn)	2023/06/22	104	80 - 120	104	80 - 120	<0.0040	mg/L	4.2	20
B006446	Total Phosphorus (P)	2023/06/22	99	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B006446	Total Potassium (K)	2023/06/22	105	80 - 120	104	80 - 120	<0.30	mg/L	6.8	20
B006446	Total Silicon (Si)	2023/06/22	111	80 - 120	106	80 - 120	<0.50	mg/L	5.7	20
B006446	Total Sodium (Na)	2023/06/22	NC	80 - 120	101	80 - 120	<0.50	mg/L	18	20
B006446	Total Strontium (Sr)	2023/06/22	98	80 - 120	98	80 - 120	<0.020	mg/L	12	20
B006446	Total Sulphur (S)	2023/06/22	101	80 - 120	99	80 - 120	<0.20	mg/L	5.0	20
B008326	Dissolved Copper (Cu)	2023/06/23	91	80 - 120	102	80 - 120	<0.0010	mg/L		
B008326	Dissolved Zinc (Zn)	2023/06/23	99	80 - 120	104	80 - 120	<0.0030	mg/L	9.6	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

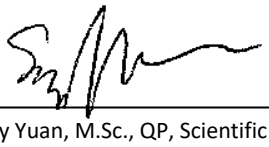
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist

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Bureau Veritas
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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C344331	696997
Address	3rd Floor 865 Waverly St Winnipeg MB R3T 5T4	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
Phone	(204) 896-1209 Fax:	Phone	Fax:	Project Name		C#696997-01-01	Janelle Kochan
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mniemczyk@kgsgroup.com	Site #	OAM - Sherridon Mine Site		
				Sampled By	RED, JNR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	Routine + Diss. Reg. Metals – Lab Filt	Regulated Metals (CCME/AT1) - Total	Mercury (Total) by CV	Mercury (Dissolved) by CV	# of Bottles	Comments
1		MW-05-BR	23/06/14	8:00	GW	N	N	X	X	X	X	4	
2		MW-01-BR		8:15	GW	N	N	X	X	X	X	4	
3		MW-04-OB		8:25		N	N	X	X	X	X	4	
4		MW-04-BR		8:30		N	N	X	X	X	X	4	
5		MW-02-BR		8:50		N	N	X	X	X	X	4	
6		MW-03-BR		9:15		N	N	X	X	X	X	4	
7		MW-09-OB		9:30		N	N	X	X	X	X	4	
8		MW-11-OB		9:40		N	N	X	X	X	X	4	
9		MW-100		AM		N	N	X	X	X	X	4	
10		MW-10-OB		9:50		N	N	X	X	X	X	4	

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT X

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____

Rush Confirmation Number _____ *(call lab for #)*

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Lab Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/06/15		JASON BIL	230616	0845		☐	2 2 0	☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696997-02-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/25
Report #: R3355165
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344341
Received: 2023/06/16, 08:45

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH	5	N/A	2023/06/23	AB SOP-00005	SM 23 2320 B m
Cadmium - low level CCME - Dissolved	2	N/A	2023/06/21		Auto Calc
Cadmium - low level CCME - Dissolved	3	N/A	2023/06/23		Auto Calc
Cadmium - low level CCME (Total)	5	N/A	2023/06/23		Auto Calc
Chloride/Sulphate by Auto Colourimetry	5	N/A	2023/06/18	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductivity @25C	5	N/A	2023/06/23	AB SOP-00005	SM 23 2510 B m
Hardness	1	N/A	2023/06/18		Auto Calc
Hardness	4	N/A	2023/06/21		Auto Calc
Mercury (Dissolved) by CV (1)	4	2023/06/21	2023/06/21	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Dissolved) by CV-Lab Filtered	1	2023/06/20	2023/06/20	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Total) by CV	5	2023/06/21	2023/06/23	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP-Dissolved-Lab Filtered (1)	1	N/A	2023/06/18	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1)	1	N/A	2023/06/19	AB SOP-00042	EPA 6010d R5 m
Elements by ICP-Dissolved-Lab Filtered (1)	3	N/A	2023/06/20	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total	5	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	1	N/A	2023/06/19	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	1	N/A	2023/06/21	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	2	N/A	2023/06/22	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS-Dissolved-Lab Filtered (2)	1	N/A	2023/06/23	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total	5	2023/06/22	2023/06/22	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ion Balance	5	N/A	2023/06/23		Auto Calc
Sum of cations, anions	1	N/A	2023/06/18		Auto Calc
Sum of cations, anions	4	N/A	2023/06/21		Auto Calc
Nitrate and Nitrite	5	N/A	2023/06/18		Auto Calc
NO2 (N); NO2 (N) + NO3 (N) in Water	5	N/A	2023/06/17	AB SOP-00091	SM 24 4500 NO3m
Nitrate (as N)	5	2023/06/16	2023/06/18		Auto Calc
pH @25°C (3)	5	N/A	2023/06/23	AB SOP-00005	SM 23 4500-H+B m
Total Dissolved Solids (Calculated)	5	N/A	2023/06/23		Auto Calc

Remarks:

Bureau Veritas Calgary: 2021 - 41st Avenue N.E. T2E 6P2 Telephone (403) 291-3077 Fax (403) 291-9468

Your Project #: 21-1357-005
Site#: OAM - Sherridon Mine Site
Your C.O.C. #: 696997-02-01

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Report Date: 2023/06/25
Report #: R3355165
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C344341
Received: 2023/06/16, 08:45

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(2) Samples were filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Alberta Environmental laboratory operations.

Bureau Veritas Job #: C344341
Report Date: 2023/06/25

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP324			BSP325			BSP326		
Sampling Date		2023/06/14			2023/06/14 10:00			2023/06/14 10:15		
COC Number		696997-02-01			696997-02-01			696997-02-01		
	UNITS	TRIP BLANK	RDL	QC Batch	MW-06-BR	RDL	QC Batch	NW-07-BR	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	0.0000	N/A	A999038	7.0	N/A	A999283	4.8	N/A	A999284
Cation Sum	meq/L	0.0070	N/A	A999038	7.1	N/A	A999283	4.3	N/A	A999284
Hardness (CaCO3)	mg/L	<0.50	0.50	A999253	330	0.50	A999253	200	0.50	A999253
Ion Balance (% Difference)	%	NC	N/A	A999110	1.2	N/A	A999110	5.7	N/A	A999110
Nitrate (N)	mg/L	<0.010	0.010	A999122	<0.010	0.010	A999122	0.32	0.010	A999122
Nitrate (NO3)	mg/L	<0.044	0.044	A999120	<0.044	0.044	A999285	1.4	0.044	A999286
Nitrite (NO2)	mg/L	<0.033	0.033	A999120	<0.033	0.033	A999285	<0.033	0.033	A999286
Calculated Total Dissolved Solids	mg/L	<10	10	A999256	460	10	A999256	310	10	A999256
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.40	0.40	A998736	110	0.020	A998736	57	0.40	A998736
Misc. Inorganics										
Conductivity	uS/cm	<2.0	2.0	B004320	700	2.0	B004320	490	2.0	B004320
pH	pH	5.15	N/A	B004319	6.19	N/A	B004319	4.43	N/A	B004319
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004314	<1.0	1.0	B004314
Alkalinity (Total as CaCO3)	mg/L	<1.0	1.0	B004314	22	1.0	B004314	<1.0	1.0	B004314
Bicarbonate (HCO3)	mg/L	<1.0	1.0	B004314	27	1.0	B004314	<1.0	1.0	B004314
Carbonate (CO3)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004314	<1.0	1.0	B004314
Hydroxide (OH)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004314	<1.0	1.0	B004314
Chloride (Cl)	mg/L	<1.0	1.0	B000111	<1.0	1.0	B000111	<1.0	1.0	B000111
Sulphate (SO4)	mg/L	<1.0	1.0	B000111	310	5.0	B000111	230	5.0	B000111
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	A999463	<0.010	0.010	A999463	<0.010	0.010	A999452
Nitrate plus Nitrite (N)	mg/L	<0.010	0.010	A999463	<0.010	0.010	A999463	0.32	0.010	A999452
Lab Filtered Elements										
Dissolved Aluminum (Al)	mg/L	<0.060	0.060	A999797	0.0077	0.0030	B000732	4.6	0.12	A999797
Dissolved Antimony (Sb)	mg/L	<0.012	0.012	A999797	<0.00060	0.00060	B000732	<0.012	0.012	A999797
Dissolved Arsenic (As)	mg/L	<0.0040	0.0040	A999797	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Barium (Ba)	mg/L	<0.010	0.010	B000027	0.024	0.010	B000027	0.019	0.010	B000028
Dissolved Beryllium (Be)	mg/L	<0.020	0.020	A999797	<0.0010	0.0010	B000732	<0.040	0.040	A999797
Dissolved Boron (B)	mg/L	<0.020	0.020	B000027	0.041	0.020	B000027	<0.020	0.020	B000028

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP324			BSP325			BSP326		
Sampling Date		2023/06/14			2023/06/14 10:00			2023/06/14 10:15		
COC Number		696997-02-01			696997-02-01			696997-02-01		
	UNITS	TRIP BLANK	RDL	QC Batch	MW-06-BR	RDL	QC Batch	NW-07-BR	RDL	QC Batch
Dissolved Calcium (Ca)	mg/L	<0.30	0.30	B000027	95	0.30	B000027	57	0.30	B000028
Dissolved Chromium (Cr)	mg/L	<0.020	0.020	A999797	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Cobalt (Co)	mg/L	<0.0060	0.0060	A999797	0.047	0.00030	B000732	0.036	0.0060	A999797
Dissolved Copper (Cu)	mg/L	<0.020	0.020	A999797	0.37	0.0010	B000732	6.2	0.020	A999797
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B000027	2.5	0.060	B000027	0.076	0.060	B000028
Dissolved Lead (Pb)	mg/L	<0.0040	0.0040	A999797	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B000027	0.050	0.020	B000027	<0.020	0.020	B000028
Dissolved Magnesium (Mg)	mg/L	<0.20	0.20	B000027	22	0.20	B000027	13	0.20	B000028
Dissolved Manganese (Mn)	mg/L	<0.0040	0.0040	B000027	1.9	0.0040	B000027	0.58	0.0040	B000028
Dissolved Molybdenum (Mo)	mg/L	<0.0040	0.0040	A999797	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Nickel (Ni)	mg/L	<0.010	0.010	A999797	0.017	0.00050	B000732	0.019	0.010	A999797
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B000027	<0.10	0.10	B000027	0.14	0.10	B000028
Dissolved Potassium (K)	mg/L	<0.30	0.30	B000027	8.1	0.30	B000027	7.3	0.30	B000028
Dissolved Selenium (Se)	mg/L	<0.0040	0.0040	A999797	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Silicon (Si)	mg/L	<0.50	0.50	B000027	8.6	0.50	B000027	12	0.50	B000028
Dissolved Silver (Ag)	mg/L	<0.0020	0.0020	A999797	<0.00010	0.00010	B000732	<0.0020	0.0020	A999797
Dissolved Sodium (Na)	mg/L	<0.50	0.50	B000027	4.9	0.50	B000027	2.7	0.50	B000028
Dissolved Strontium (Sr)	mg/L	<0.020	0.020	B000027	0.17	0.020	B000027	0.076	0.020	B000028
Dissolved Sulphur (S)	mg/L	<0.20	0.20	B000027	130	0.20	B000027	74	0.20	B000028
Dissolved Thallium (Tl)	mg/L	<0.0040	0.0040	A999797	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Tin (Sn)	mg/L	<0.020	0.020	A999797	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Titanium (Ti)	mg/L	<0.020	0.020	A999797	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Uranium (U)	mg/L	<0.0020	0.0020	A999797	0.0012	0.00010	B000732	0.0036	0.0020	A999797
Dissolved Vanadium (V)	mg/L	0.023	0.020	A999797	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Zinc (Zn)	mg/L	<0.060	0.060	A999797	34	0.030	B000732	14	0.060	A999797
RDL = Reportable Detection Limit										

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP327			BSP328		
Sampling Date		2023/06/14 10:45			2023/06/14 11:00		
COC Number		696997-02-01			696997-02-01		
	UNITS	MW-08-BR	RDL	QC Batch	FIELD BLANK	RDL	QC Batch
Calculated Parameters							
Anion Sum	meq/L	4.0	N/A	A999284	0.0000	N/A	A999284
Cation Sum	meq/L	4.2	N/A	A999284	0.016	N/A	A999284
Hardness (CaCO3)	mg/L	190	0.50	A999253	<0.50	0.50	A999253
Ion Balance (% Difference)	%	2.4	N/A	A999110	NC	N/A	A999110
Nitrate (N)	mg/L	0.31	0.010	A999122	<0.010	0.010	A999122
Nitrate (NO3)	mg/L	1.4	0.044	A999286	<0.044	0.044	A999286
Nitrite (NO2)	mg/L	<0.033	0.033	A999286	<0.033	0.033	A999286
Calculated Total Dissolved Solids	mg/L	260	10	A999256	<10	10	A999256
Elements							
Dissolved Cadmium (Cd)	ug/L	2.4	0.020	A998736	<0.40	0.40	A998736
Misc. Inorganics							
Conductivity	uS/cm	400	2.0	B004320	<2.0	2.0	B004320
pH	pH	6.46	N/A	B004319	4.80	N/A	B004319
Anions							
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004314
Alkalinity (Total as CaCO3)	mg/L	29	1.0	B004314	<1.0	1.0	B004314
Bicarbonate (HCO3)	mg/L	35	1.0	B004314	<1.0	1.0	B004314
Carbonate (CO3)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004314
Hydroxide (OH)	mg/L	<1.0	1.0	B004314	<1.0	1.0	B004314
Chloride (Cl)	mg/L	<1.0	1.0	B000111	<1.0	1.0	B000111
Sulphate (SO4)	mg/L	160	5.0	B000111	<1.0	1.0	B000111
Nutrients							
Nitrite (N)	mg/L	<0.010	0.010	A999463	<0.010	0.010	A999463
Nitrate plus Nitrite (N)	mg/L	0.31	0.010	A999463	<0.010	0.010	A999463
Lab Filtered Elements							
Dissolved Aluminum (Al)	mg/L	0.068	0.0030	B000732	<0.060	0.060	A999797
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B000732	<0.012	0.012	A999797
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Barium (Ba)	mg/L	0.022	0.010	B000027	<0.010	0.010	B000027
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Boron (B)	mg/L	0.029	0.020	B000027	<0.020	0.020	B000027

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE + DISS. REG. METALS – LAB FILT (WATER)

Bureau Veritas ID		BSP327			BSP328		
Sampling Date		2023/06/14 10:45			2023/06/14 11:00		
COC Number		696997-02-01			696997-02-01		
	UNITS	MW-08-BR	RDL	QC Batch	FIELD BLANK	RDL	QC Batch
Dissolved Calcium (Ca)	mg/L	56	0.30	B000027	<0.30	0.30	B000027
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Cobalt (Co)	mg/L	0.041	0.00030	B000732	<0.0060	0.0060	A999797
Dissolved Copper (Cu)	mg/L	0.12	0.0010	B000732	<0.020	0.020	A999797
Dissolved Iron (Fe)	mg/L	0.072	0.060	B000027	<0.060	0.060	B000027
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Lithium (Li)	mg/L	0.045	0.020	B000027	<0.020	0.020	B000027
Dissolved Magnesium (Mg)	mg/L	12	0.20	B000027	<0.20	0.20	B000027
Dissolved Manganese (Mn)	mg/L	0.40	0.0040	B000027	<0.0040	0.0040	B000027
Dissolved Molybdenum (Mo)	mg/L	0.00033	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Nickel (Ni)	mg/L	0.022	0.00050	B000732	<0.010	0.010	A999797
Dissolved Phosphorus (P)	mg/L	0.12	0.10	B000027	<0.10	0.10	B000027
Dissolved Potassium (K)	mg/L	5.6	0.30	B000027	<0.30	0.30	B000027
Dissolved Selenium (Se)	mg/L	0.00034	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Silicon (Si)	mg/L	12	0.50	B000027	<0.50	0.50	B000027
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B000732	<0.0020	0.0020	A999797
Dissolved Sodium (Na)	mg/L	4.0	0.50	B000027	<0.50	0.50	B000027
Dissolved Strontium (Sr)	mg/L	0.11	0.020	B000027	<0.020	0.020	B000027
Dissolved Sulphur (S)	mg/L	60	0.20	B000027	<0.20	0.20	B000027
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B000732	<0.0040	0.0040	A999797
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B000732	<0.020	0.020	A999797
Dissolved Uranium (U)	mg/L	0.0017	0.00010	B000732	<0.0020	0.0020	A999797
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B000732	0.020	0.020	A999797
Dissolved Zinc (Zn)	mg/L	1.5	0.0030	B000732	<0.060	0.060	A999797
RDL = Reportable Detection Limit							

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP324			BSP325		BSP326		
Sampling Date		2023/06/14			2023/06/14 10:00		2023/06/14 10:15		
COC Number		696997-02-01			696997-02-01		696997-02-01		
	UNITS	TRIP BLANK	RDL	QC Batch	MW-06-BR	RDL	NW-07-BR	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.037	0.020	A998637	130	0.020	68	0.020	A998637
Total Aluminum (Al)	mg/L	0.0030	0.0030	B009164	0.075	0.0030	5.8	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B006434	<0.00060	0.00060	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	<0.00020	0.00020	B006434	0.00021	0.00020	0.00021	0.00020	B006434
Total Barium (Ba)	mg/L	<0.010	0.010	B006446	0.022	0.010	0.019	0.010	B006446
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	<0.020	0.020	B006446	0.037	0.020	<0.020	0.020	B006446
Total Calcium (Ca)	mg/L	<0.30	0.30	B006446	86	0.30	52	0.30	B006446
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	<0.0010	0.0010	B006434
Total Cobalt (Co)	mg/L	<0.00030	0.00030	B006434	0.049	0.00030	0.039	0.00030	B006434
Total Copper (Cu)	mg/L	<0.0010	0.0010	B006434	0.49	0.0010	6.7	0.010	B006434
Total Iron (Fe)	mg/L	<0.060	0.060	B006446	5.9	0.060	0.19	0.060	B006446
Total Lead (Pb)	mg/L	0.00022	0.00020	B006434	0.0072	0.00020	0.00071	0.00020	B006434
Total Lithium (Li)	mg/L	<0.020	0.020	B006446	0.030	0.020	<0.020	0.020	B006446
Total Magnesium (Mg)	mg/L	<0.20	0.20	B006446	20	0.20	12	0.20	B006446
Total Manganese (Mn)	mg/L	<0.0040	0.0040	B006446	1.7	0.0040	0.56	0.0040	B006446
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B009164	<0.00020	0.00020	<0.00020	0.00020	B006434
Total Nickel (Ni)	mg/L	<0.00050	0.00050	B009164	0.017	0.00050	0.021	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.10	0.10	B006446	<0.10	0.10	0.10	0.10	B006446
Total Potassium (K)	mg/L	<0.30	0.30	B006446	7.6	0.30	6.5	0.30	B006446
Total Selenium (Se)	mg/L	<0.00020	0.00020	B006434	<0.00020	0.00020	0.00095	0.00020	B006434
Total Silicon (Si)	mg/L	<0.50	0.50	B006446	7.8	0.50	12	0.50	B006446
Total Silver (Ag)	mg/L	<0.00010	0.00010	B006434	<0.00010	0.00010	0.00011	0.00010	B006434
Total Sodium (Na)	mg/L	<0.50	0.50	B006446	4.3	0.50	2.4	0.50	B006446
Total Strontium (Sr)	mg/L	<0.020	0.020	B006446	0.15	0.020	0.072	0.020	B006446
Total Sulphur (S)	mg/L	<0.20	0.20	B006446	110	0.20	76	0.20	B006446
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B009164	0.00049	0.00020	0.00024	0.00020	B006434
Total Tin (Sn)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	<0.0010	0.0010	B006434
Total Titanium (Ti)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	0.0024	0.0010	B006434
Total Uranium (U)	mg/L	<0.00010	0.00010	B006434	0.0026	0.00010	0.0041	0.00010	B006434
Total Vanadium (V)	mg/L	<0.0010	0.0010	B006434	<0.0010	0.0010	<0.0010	0.0010	B006434
Total Zinc (Zn)	mg/L	<0.0030	0.0030	B006434	33	0.030	16	0.030	B006434

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		BSP327	BSP328		
Sampling Date		2023/06/14 10:45	2023/06/14 11:00		
COC Number		696997-02-01	696997-02-01		
	UNITS	MW-08-BR	FIELD BLANK	RDL	QC Batch
Elements					
Total Cadmium (Cd)	ug/L	2.8	0.030	0.020	A999280
Total Aluminum (Al)	mg/L	2.2	<0.0030	0.0030	B006434
Total Antimony (Sb)	mg/L	<0.00060	<0.00060	0.00060	B006434
Total Arsenic (As)	mg/L	0.00038	<0.00020	0.00020	B006434
Total Barium (Ba)	mg/L	0.027	<0.010	0.010	B006446
Total Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B006434
Total Boron (B)	mg/L	0.026	<0.020	0.020	B006446
Total Calcium (Ca)	mg/L	55	<0.30	0.30	B006446
Total Chromium (Cr)	mg/L	0.0014	<0.0010	0.0010	B006434
Total Cobalt (Co)	mg/L	0.055	<0.00030	0.00030	B006434
Total Copper (Cu)	mg/L	0.24	<0.0010	0.0010	B006434
Total Iron (Fe)	mg/L	1.2	<0.060	0.060	B006446
Total Lead (Pb)	mg/L	0.0013	<0.00020	0.00020	B006434
Total Lithium (Li)	mg/L	0.029	<0.020	0.020	B006446
Total Magnesium (Mg)	mg/L	12	<0.20	0.20	B006446
Total Manganese (Mn)	mg/L	0.39	<0.0040	0.0040	B006446
Total Molybdenum (Mo)	mg/L	0.00055	<0.00020	0.00020	B006434
Total Nickel (Ni)	mg/L	0.030	<0.00050	0.00050	B006434
Total Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B006446
Total Potassium (K)	mg/L	5.7	<0.30	0.30	B006446
Total Selenium (Se)	mg/L	0.00047	<0.00020	0.00020	B006434
Total Silicon (Si)	mg/L	14	<0.50	0.50	B006446
Total Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B006434
Total Sodium (Na)	mg/L	3.8	<0.50	0.50	B006446
Total Strontium (Sr)	mg/L	0.11	<0.020	0.020	B006446
Total Sulphur (S)	mg/L	52	<0.20	0.20	B006446
Total Thallium (Tl)	mg/L	0.00024	<0.00020	0.00020	B006434
Total Tin (Sn)	mg/L	0.0018	<0.0010	0.0010	B006434
Total Titanium (Ti)	mg/L	0.034	<0.0010	0.0010	B006434
Total Uranium (U)	mg/L	0.0037	<0.00010	0.00010	B006434
Total Vanadium (V)	mg/L	0.0013	<0.0010	0.0010	B006434
Total Zinc (Zn)	mg/L	1.7	0.0032	0.0030	B006434

RDL = Reportable Detection Limit

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Bureau Veritas Job #: C344341
Report Date: 2023/06/25

KGS Group
Client Project #: 21-1357-005
Sampler Initials: RED

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		BSP324			BSP325	BSP326		
Sampling Date		2023/06/14			2023/06/14 10:00	2023/06/14 10:15		
COC Number		696997-02-01			696997-02-01	696997-02-01		
	UNITS	TRIP BLANK	RDL	QC Batch	MW-06-BR	NW-07-BR	RDL	QC Batch
Elements								
Dissolved Mercury (Hg)	mg/L				<0.0000019	<0.0000019	0.0000019	B004135
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	B004152	<0.0000019	0.0000028	0.0000019	B004152
Lab Filtered Elements								
Dissolved Mercury (Hg)	ug/L	<0.0019	0.0019	B002204				

RDL = Reportable Detection Limit

Bureau Veritas ID		BSP327	BSP328			BSP328		
Sampling Date		2023/06/14 10:45	2023/06/14 11:00			2023/06/14 11:00		
COC Number		696997-02-01	696997-02-01			696997-02-01		
	UNITS	MW-08-BR	FIELD BLANK	RDL	QC Batch	FIELD BLANK Lab-Dup	RDL	QC Batch
Elements								
Dissolved Mercury (Hg)	mg/L	<0.0000019	<0.0000019	0.0000019	B004135	<0.0000019	0.0000019	B004135
Total Mercury (Hg)	mg/L	<0.0000019	<0.0000019	0.0000019	B004152			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	1.3°C

ROUTINE + DISS. REG. METALS – LAB FILT (WATER) Comments

Sample BSP324 [TRIP BLANK] Elements by ICPMS-Dissolved-Lab Filtered: Detection limits raised due to matrix interference.
Sample BSP326 [NW-07-BR] Elements by ICPMS-Dissolved-Lab Filtered: Detection limits raised due to matrix interference.
Sample BSP328 [FIELD BLANK] Elements by ICPMS-Dissolved-Lab Filtered: Detection limits raised due to matrix interference.
Sample BSP324, Elements by ICPMS - Total: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
A999452	Nitrate plus Nitrite (N)	2023/06/17	141 (1)	80 - 120	105	80 - 120	<0.010	mg/L	5.7	20
A999452	Nitrite (N)	2023/06/17	107	80 - 120	99	80 - 120	<0.010	mg/L	NC	20
A999463	Nitrate plus Nitrite (N)	2023/06/17	40 (1)	80 - 120	107	80 - 120	<0.010	mg/L	NC	20
A999463	Nitrite (N)	2023/06/17	88	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
A999797	Dissolved Aluminum (Al)	2023/06/22	NC	80 - 120	101	80 - 120	<0.0030	mg/L	3.7	20
A999797	Dissolved Antimony (Sb)	2023/06/22	NC	80 - 120	126 (1)	80 - 120	<0.00060	mg/L	72 (1)	20
A999797	Dissolved Arsenic (As)	2023/06/22	101	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
A999797	Dissolved Beryllium (Be)	2023/06/22	104	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
A999797	Dissolved Chromium (Cr)	2023/06/22	81	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
A999797	Dissolved Cobalt (Co)	2023/06/22	103	80 - 120	102	80 - 120	<0.00030	mg/L	NC	20
A999797	Dissolved Copper (Cu)	2023/06/22	NC	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
A999797	Dissolved Lead (Pb)	2023/06/22	81	80 - 120	87	80 - 120	<0.00020	mg/L	NC	20
A999797	Dissolved Molybdenum (Mo)	2023/06/22	104	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
A999797	Dissolved Nickel (Ni)	2023/06/22	81	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20
A999797	Dissolved Selenium (Se)	2023/06/22	106	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
A999797	Dissolved Silver (Ag)	2023/06/22	95	80 - 120	93	80 - 120	<0.00010	mg/L	NC	20
A999797	Dissolved Thallium (Tl)	2023/06/22	88	80 - 120	86	80 - 120	<0.00020	mg/L	NC	20
A999797	Dissolved Tin (Sn)	2023/06/22	96	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
A999797	Dissolved Titanium (Ti)	2023/06/22	115	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20
A999797	Dissolved Uranium (U)	2023/06/22	97	80 - 120	95	80 - 120	<0.00010	mg/L	2.9	20
A999797	Dissolved Vanadium (V)	2023/06/22	111	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
A999797	Dissolved Zinc (Zn)	2023/06/22	NC	80 - 120	103	80 - 120	<0.0030	mg/L	NC	20
B000027	Dissolved Barium (Ba)	2023/06/20	96	80 - 120	102	80 - 120	<0.010	mg/L	0.48	20
B000027	Dissolved Boron (B)	2023/06/20	96	80 - 120	97	80 - 120	<0.020	mg/L	3.8	20
B000027	Dissolved Calcium (Ca)	2023/06/20	NC	80 - 120	107	80 - 120	<0.30	mg/L	1.4	20
B000027	Dissolved Iron (Fe)	2023/06/20	NC	80 - 120	101	80 - 120	<0.060	mg/L	0.60	20
B000027	Dissolved Lithium (Li)	2023/06/20	100	80 - 120	100	80 - 120	<0.020	mg/L	13	20
B000027	Dissolved Magnesium (Mg)	2023/06/20	97	80 - 120	102	80 - 120	<0.20	mg/L	1.7	20
B000027	Dissolved Manganese (Mn)	2023/06/20	NC	80 - 120	104	80 - 120	<0.0040	mg/L	1.9	20
B000027	Dissolved Phosphorus (P)	2023/06/20	101	80 - 120	105	80 - 120	<0.10	mg/L	NC	20
B000027	Dissolved Potassium (K)	2023/06/20	101	80 - 120	97	80 - 120	<0.30	mg/L	2.5	20
B000027	Dissolved Silicon (Si)	2023/06/20	94	80 - 120	108	80 - 120	<0.50	mg/L	0.43	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000027	Dissolved Sodium (Na)	2023/06/20	98	80 - 120	101	80 - 120	<0.50	mg/L	2.0	20
B000027	Dissolved Strontium (Sr)	2023/06/20	95	80 - 120	102	80 - 120	<0.020	mg/L	1.8	20
B000027	Dissolved Sulphur (S)	2023/06/20	NC	80 - 120	101	80 - 120	<0.20	mg/L	0.23	20
B000028	Dissolved Barium (Ba)	2023/06/18	97	80 - 120	94	80 - 120	<0.010	mg/L		
B000028	Dissolved Boron (B)	2023/06/18	99	80 - 120	96	80 - 120	<0.020	mg/L		
B000028	Dissolved Calcium (Ca)	2023/06/18	101	80 - 120	96	80 - 120	<0.30	mg/L	0.88	20
B000028	Dissolved Iron (Fe)	2023/06/18	103	80 - 120	100	80 - 120	<0.060	mg/L		
B000028	Dissolved Lithium (Li)	2023/06/18	99	80 - 120	92	80 - 120	<0.020	mg/L		
B000028	Dissolved Magnesium (Mg)	2023/06/18	105	80 - 120	96	80 - 120	<0.20	mg/L	1.1	20
B000028	Dissolved Manganese (Mn)	2023/06/18	102	80 - 120	99	80 - 120	<0.0040	mg/L		
B000028	Dissolved Phosphorus (P)	2023/06/18	107	80 - 120	100	80 - 120	<0.10	mg/L		
B000028	Dissolved Potassium (K)	2023/06/18	107	80 - 120	100	80 - 120	<0.30	mg/L		
B000028	Dissolved Silicon (Si)	2023/06/18	99	80 - 120	97	80 - 120	<0.50	mg/L		
B000028	Dissolved Sodium (Na)	2023/06/18	104	80 - 120	97	80 - 120	<0.50	mg/L		
B000028	Dissolved Strontium (Sr)	2023/06/18	93	80 - 120	91	80 - 120	<0.020	mg/L		
B000028	Dissolved Sulphur (S)	2023/06/18	103	80 - 120	97	80 - 120	<0.20	mg/L		
B000111	Chloride (Cl)	2023/06/19	72 (1)	80 - 120	97	80 - 120	<1.0	mg/L	0.32	20
B000111	Sulphate (SO4)	2023/06/19	NC	80 - 120	96	80 - 120	<1.0	mg/L	4.2	20
B000732	Dissolved Aluminum (Al)	2023/06/19	92	80 - 120	92	80 - 120	<0.0030	mg/L		
B000732	Dissolved Antimony (Sb)	2023/06/19	102	80 - 120	95	80 - 120	<0.00060	mg/L		
B000732	Dissolved Arsenic (As)	2023/06/19	96	80 - 120	92	80 - 120	<0.00020	mg/L		
B000732	Dissolved Beryllium (Be)	2023/06/19	91	80 - 120	84	80 - 120	<0.0010	mg/L		
B000732	Dissolved Chromium (Cr)	2023/06/19	96	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Cobalt (Co)	2023/06/19	93	80 - 120	95	80 - 120	<0.00030	mg/L		
B000732	Dissolved Copper (Cu)	2023/06/19	87	80 - 120	96	80 - 120	<0.0010	mg/L		
B000732	Dissolved Lead (Pb)	2023/06/19	87	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Molybdenum (Mo)	2023/06/19	106	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Nickel (Ni)	2023/06/19	89	80 - 120	93	80 - 120	<0.00050	mg/L		
B000732	Dissolved Selenium (Se)	2023/06/19	100	80 - 120	93	80 - 120	<0.00020	mg/L		
B000732	Dissolved Silver (Ag)	2023/06/19	90	80 - 120	94	80 - 120	<0.00010	mg/L		
B000732	Dissolved Thallium (Tl)	2023/06/19	85	80 - 120	95	80 - 120	<0.00020	mg/L		
B000732	Dissolved Tin (Sn)	2023/06/19	102	80 - 120	92	80 - 120	<0.0010	mg/L		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B000732	Dissolved Titanium (Ti)	2023/06/19	106	80 - 120	94	80 - 120	<0.0010	mg/L		
B000732	Dissolved Uranium (U)	2023/06/19	NC	80 - 120	90	80 - 120	<0.00010	mg/L	1.5	20
B000732	Dissolved Vanadium (V)	2023/06/19	102	80 - 120	92	80 - 120	<0.0010	mg/L		
B000732	Dissolved Zinc (Zn)	2023/06/19	90	80 - 120	96	80 - 120	<0.0030	mg/L		
B002204	Dissolved Mercury (Hg)	2023/06/20	98	80 - 120	96	80 - 120	<0.0019	ug/L	NC	20
B004135	Dissolved Mercury (Hg)	2023/06/21	104	80 - 120	100	80 - 120	<0.0000019	mg/L	NC	20
B004152	Total Mercury (Hg)	2023/06/23	106	80 - 120	105	80 - 120	<0.0000019	mg/L	NC	20
B004314	Alkalinity (PP as CaCO3)	2023/06/23					<1.0	mg/L	NC	20
B004314	Alkalinity (Total as CaCO3)	2023/06/23			97	80 - 120	<1.0	mg/L	0.83	20
B004314	Bicarbonate (HCO3)	2023/06/23					<1.0	mg/L	0.83	20
B004314	Carbonate (CO3)	2023/06/23					<1.0	mg/L	NC	20
B004314	Hydroxide (OH)	2023/06/23					<1.0	mg/L	NC	20
B004319	pH	2023/06/23			100	97 - 103			0.0052	N/A
B004320	Conductivity	2023/06/23			100	90 - 110	<2.0	uS/cm	0.36	10
B006434	Total Aluminum (Al)	2023/06/22	107	80 - 120	104	80 - 120	<0.0030	mg/L	10	20
B006434	Total Antimony (Sb)	2023/06/22	125 (1)	80 - 120	120	80 - 120	<0.00060	mg/L	NC	20
B006434	Total Arsenic (As)	2023/06/22	105	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Beryllium (Be)	2023/06/22	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Chromium (Cr)	2023/06/22	107	80 - 120	102	80 - 120	<0.0010	mg/L	12	20
B006434	Total Cobalt (Co)	2023/06/22	107	80 - 120	104	80 - 120	<0.00030	mg/L	9.1	20
B006434	Total Copper (Cu)	2023/06/22	106	80 - 120	102	80 - 120	<0.0010	mg/L	5.4	20
B006434	Total Lead (Pb)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	7.3	20
B006434	Total Molybdenum (Mo)	2023/06/22	111	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Nickel (Ni)	2023/06/22	105	80 - 120	103	80 - 120	<0.00050	mg/L	7.8	20
B006434	Total Selenium (Se)	2023/06/22	112	80 - 120	108	80 - 120	<0.00020	mg/L	NC	20
B006434	Total Silver (Ag)	2023/06/22	109	80 - 120	105	80 - 120	<0.00010	mg/L	NC	20
B006434	Total Thallium (Tl)	2023/06/22	110	80 - 120	106	80 - 120	<0.00020	mg/L	20	20
B006434	Total Tin (Sn)	2023/06/22	112	80 - 120	107	80 - 120	<0.0010	mg/L	NC	20
B006434	Total Titanium (Ti)	2023/06/22	108	80 - 120	104	80 - 120	<0.0010	mg/L	5.9	20
B006434	Total Uranium (U)	2023/06/22	109	80 - 120	103	80 - 120	<0.00010	mg/L	14	20
B006434	Total Vanadium (V)	2023/06/22	106	80 - 120	103	80 - 120	<0.0010	mg/L	8.1	20
B006434	Total Zinc (Zn)	2023/06/22	107	80 - 120	105	80 - 120	<0.0030	mg/L	3.7	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B006446	Total Barium (Ba)	2023/06/22	101	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
B006446	Total Boron (B)	2023/06/22	102	80 - 120	102	80 - 120	<0.020	mg/L	12	20
B006446	Total Calcium (Ca)	2023/06/22	103	80 - 120	101	80 - 120	<0.30	mg/L	6.2	20
B006446	Total Iron (Fe)	2023/06/22	117	80 - 120	109	80 - 120	<0.060	mg/L	4.1	20
B006446	Total Lithium (Li)	2023/06/22	100	80 - 120	102	80 - 120	<0.020	mg/L	NC	20
B006446	Total Magnesium (Mg)	2023/06/22	104	80 - 120	103	80 - 120	<0.20	mg/L	4.6	20
B006446	Total Manganese (Mn)	2023/06/22	104	80 - 120	104	80 - 120	<0.0040	mg/L	4.2	20
B006446	Total Phosphorus (P)	2023/06/22	99	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B006446	Total Potassium (K)	2023/06/22	105	80 - 120	104	80 - 120	<0.30	mg/L	6.8	20
B006446	Total Silicon (Si)	2023/06/22	111	80 - 120	106	80 - 120	<0.50	mg/L	5.7	20
B006446	Total Sodium (Na)	2023/06/22	NC	80 - 120	101	80 - 120	<0.50	mg/L	18	20
B006446	Total Strontium (Sr)	2023/06/22	98	80 - 120	98	80 - 120	<0.020	mg/L	12	20
B006446	Total Sulphur (S)	2023/06/22	101	80 - 120	99	80 - 120	<0.20	mg/L	5.0	20
B009164	Total Aluminum (Al)	2023/06/24	NC	80 - 120	105	80 - 120	<0.0030	mg/L	0.56	20
B009164	Total Molybdenum (Mo)	2023/06/24	110	80 - 120	108	80 - 120	<0.00020	mg/L	9.4	20
B009164	Total Nickel (Ni)	2023/06/24	104	80 - 120	104	80 - 120	<0.00050	mg/L	9.4	20
B009164	Total Thallium (Tl)	2023/06/24	110	80 - 120	109	80 - 120	<0.00020	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

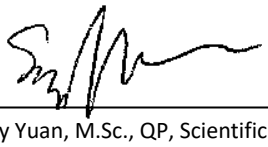
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist



Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#7500 KGS Group	Company Name		Quotation #	C21675	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Ed Collins	P.O. #		C344341	696997
Address	3rd Floor 865 Waverly St	Address		Project #	21-1357-005	Chain Of Custody Record	Project Manager
	Winnipeg MB R3T 5T4			Project Name		C#696997-02-01	Janelle Kochan
Phone	(204) 896-1209 Fax:	Phone	Fax:	Site #	OAM - Sherridon Mine Site		
Email	payables@kgsgroup.com	Email	Ecollins@kgsgroup.com, mmiemczyk@kgsgroup.com	Sampled By	RED, JWR		

Regulatory Criteria: MWQSOG

Special Instructions:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT (X)

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____

Rush Confirmation Number _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	Routine + Diss. Reg. Metals – Lab Filt	Regulated Metals (CCME/AT1) - Total	Mercury (Total) by CV	Mercury (Dissolved) by CV	# of Bottles	Comments
1		TRIP BLANK	23/06/14	—	—	N	N	X	X	X	X	4	
2		MW-06-BR		10:00	GW	N	N	X	X	X	X	4	
3		MW-07-BR		10:15		N	N	X	X	X	X	4	
4		MW-08-BR		10:45	↓	N	N	X	X	X	X	4	
5		FIELD BLANK	↓	11:00	DI	N	N	X	X	X	X	4	
6													
7													
8													
9													
10													

Analysis Requested

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Rachel Dyck / Rachel Dyck	23/06/15		Jason Ba	23/06/16	0845	

Lab Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt 2 2.0 | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 21-1357-005

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 1/1, 707520-01-01, 707520-02-01

Report Date: 2023/10/23
Report #: R3414399
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380951
Received: 2023/10/05, 12:15

Sample Matrix: Water
Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity @25C (pp, total), CO3,HCO3,OH (1)	15	N/A	2023/10/17	AB SOP-00005	SM 24 2320 B m
Cadmium - low level CCME - Dissolved (1)	15	N/A	2023/10/08		Auto Calc
Cadmium - low level CCME (Total) (1)	15	N/A	2023/10/13		Auto Calc
Chloride/Sulphate by Auto Colourimetry (1)	15	N/A	2023/10/10	AB SOP-00020	SM24-4500-Cl/SO4-E m
Conductivity @25C (1)	15	N/A	2023/10/17	AB SOP-00005	SM 24 2510 B m
Hardness (1)	4	N/A	2023/10/12		Auto Calc
Hardness (1)	11	N/A	2023/10/13		Auto Calc
Mercury (Dissolved) by CV (1, 2)	15	2023/10/09	2023/10/12	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Total) by CV (1)	15	2023/10/09	2023/10/12	AB SOP-00084	BCMOE BCLM Oct2013 m
Elements by ICP - Dissolved (1, 2)	4	N/A	2023/10/11	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Dissolved (1, 2)	11	N/A	2023/10/12	AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	1	2023/10/12	2023/10/12	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICP - Total (1)	14	2023/10/12	2023/10/13	AB SOP-00014 / AB SOP-00042	EPA 6010d R5 m
Elements by ICPMS - Dissolved (1, 2)	14	N/A	2023/10/07	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Dissolved (1, 2)	1	N/A	2023/10/15	AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	9	2023/10/12	2023/10/12	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	5	2023/10/12	2023/10/13	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Elements by ICPMS - Total (1)	1	2023/10/18	2023/10/19	AB SOP-00014 / AB SOP-00043	EPA 6020b R2 m
Ion Balance (1)	15	N/A	2023/10/18		Auto Calc
Sum of cations, anions (1)	4	N/A	2023/10/12		Auto Calc
Sum of cations, anions (1)	11	N/A	2023/10/13		Auto Calc
Nitrate and Nitrite (1)	15	N/A	2023/10/07		Auto Calc
NO2 (N); NO2 (N) + NO3 (N) in Water (1)	15	N/A	2023/10/06	AB SOP-00091	SM 24 4500 NO3m
Nitrate (as N) (1)	15	2023/10/06	2023/10/07		Auto Calc
pH @25°C (1, 3)	15	N/A	2023/10/17	AB SOP-00005	SM 24 4500-H+B m

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

Your Project #: 21-1357-005

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 1/1, 707520-01-01, 707520-02-01

Report Date: 2023/10/23
Report #: R3414399
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380951
Received: 2023/10/05, 12:15

Sample Matrix: Water
Samples Received: 15

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Dissolved Solids (Calculated) (1)	15	N/A	2023/10/18		Auto Calc

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(3) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.

Your Project #: 21-1357-005

Attention: Ed Collins

KGS Group
865 Waverly St., 3rd Floor
Winnipeg, MB
Canada R3T 5P4

Your C.O.C. #: 1/1, 707520-01-01, 707520-02-01

Report Date: 2023/10/23
Report #: R3414399
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C380951
Received: 2023/10/05, 12:15

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Janelle Kochan, B.Sc., Key Account Specialist
Email: Janelle.KOCHAN@bureauveritas.com
Phone# (204)223-7173

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This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG388			CBG389			CBG390		
Sampling Date		2023/10/03 14:50			2023/10/03 15:15			2023/10/03 15:35		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-05-BR	RDL	QC Batch	MW-04-OB	RDL	QC Batch	MW-02-BR	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	3.0	N/A	B143016	14	N/A	B143016	7.2	N/A	B143016
Cation Sum	meq/L	2.7	N/A	B143016	15	N/A	B143016	7.2	N/A	B143016
Hardness (CaCO3)	mg/L	130	0.50	B142929	660	0.50	B142929	130	0.50	B143049
Ion Balance (% Difference)	%	4.7	N/A	B143015	2.2	N/A	B143015	0.23	N/A	B143015
Nitrate (N)	mg/L	0.044	0.010	B143018	<0.010	0.010	B143018	<0.010	0.010	B143018
Nitrate (NO3)	mg/L	0.19	0.044	B142938	<0.044	0.044	B142938	<0.044	0.044	B142938
Nitrite (NO2)	mg/L	<0.033	0.033	B142938	<0.033	0.033	B142938	<0.033	0.033	B142938
Calculated Total Dissolved Solids	mg/L	160	10	B143020	810	10	B143020	420	10	B143020
Elements										
Dissolved Cadmium (Cd)	ug/L	0.057	0.020	B143013	0.034	0.020	B143013	<0.020	0.020	B143013
Misc. Inorganics										
Conductivity	uS/cm	260	2.0	B154269	1200	2.0	B154269	670	2.0	B154269
pH	pH	6.51	N/A	B154268	7.77	N/A	B154268	7.64	N/A	B154268
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Alkalinity (Total as CaCO3)	mg/L	100	1.0	B154267	380	1.0	B154267	190	1.0	B154267
Bicarbonate (HCO3)	mg/L	130	1.0	B154267	460	1.0	B154267	240	1.0	B154267
Carbonate (CO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Hydroxide (OH)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Chloride (Cl)	mg/L	<1.0	1.0	B145451	16	1.0	B145451	29	1.0	B145449
Sulphate (SO4)	mg/L	44	1.0	B145451	300	5.0	B145451	120	1.0	B145449
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	B143805	<0.010	0.010	B143813	<0.010	0.010	B143813
Nitrate plus Nitrite (N)	mg/L	0.044	0.010	B143805	<0.010	0.010	B143813	<0.010	0.010	B143813
Elements										
Dissolved Aluminum (Al)	mg/L	0.017	0.0030	B144057	1.8	0.0030	B153726	0.0059	0.0030	B144057
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B144057	<0.00060	0.00060	B153726	<0.00060	0.00060	B144057
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B144057	0.00051	0.00020	B153726	0.00060	0.00020	B144057
Dissolved Barium (Ba)	mg/L	0.031	0.010	B145458	0.13	0.010	B145458	0.034	0.010	B145458
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B153726	<0.0010	0.0010	B144057
Dissolved Boron (B)	mg/L	<0.020	0.020	B145458	0.15	0.020	B145458	0.54	0.020	B145458
Dissolved Calcium (Ca)	mg/L	40	0.30	B145458	170	0.30	B145458	27	0.30	B145458

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG388			CBG389			CBG390		
Sampling Date		2023/10/03 14:50			2023/10/03 15:15			2023/10/03 15:35		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-05-BR	RDL	QC Batch	MW-04-OB	RDL	QC Batch	MW-02-BR	RDL	QC Batch
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B144057	0.0055	0.0010	B153726	<0.0010	0.0010	B144057
Dissolved Cobalt (Co)	mg/L	0.0027	0.00030	B144057	0.0016	0.00030	B153726	0.0024	0.00030	B144057
Dissolved Copper (Cu)	mg/L	0.0029	0.0010	B144057	0.0040	0.0010	B153726	<0.0010	0.0010	B144057
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B145458	5.0	0.060	B154287	0.15	0.060	B145458
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B144057	0.0013	0.00020	B153726	<0.00020	0.00020	B144057
Dissolved Lithium (Li)	mg/L	<0.020	0.020	B145458	0.043	0.020	B145458	0.078	0.020	B145458
Dissolved Magnesium (Mg)	mg/L	6.4	0.20	B145458	58	0.20	B145458	15	0.20	B145458
Dissolved Manganese (Mn)	mg/L	0.20	0.0040	B145458	0.59	0.0040	B145458	0.057	0.0040	B145458
Dissolved Molybdenum (Mo)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B153726	0.00080	0.00020	B144057
Dissolved Nickel (Ni)	mg/L	0.0015	0.00050	B144057	0.0042	0.00050	B153726	<0.00050	0.00050	B144057
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B145458	0.11	0.10	B145458	<0.10	0.10	B145458
Dissolved Potassium (K)	mg/L	4.1	0.30	B145458	5.4	0.30	B145458	6.2	0.30	B145458
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B153726	<0.00020	0.00020	B144057
Dissolved Silicon (Si)	mg/L	5.7	0.50	B145458	11	0.50	B145458	6.6	0.50	B145458
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B144057	<0.00010	0.00010	B153726	<0.00010	0.00010	B144057
Dissolved Sodium (Na)	mg/L	1.8	0.50	B145458	30	0.50	B145458	100	0.50	B145458
Dissolved Strontium (Sr)	mg/L	0.041	0.020	B145458	0.85	0.020	B145458	0.37	0.020	B145458
Dissolved Sulphur (S)	mg/L	14	0.20	B145458	100	0.20	B145458	40	0.20	B145458
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B153726	<0.00020	0.00020	B144057
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B153726	<0.0010	0.0010	B144057
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B144057	0.16	0.0010	B153726	<0.0010	0.0010	B144057
Dissolved Uranium (U)	mg/L	0.0017	0.00010	B144057	0.0018	0.00010	B153726	0.0064	0.00010	B144057
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B144057	0.0061	0.0010	B153726	<0.0010	0.0010	B144057
Dissolved Zinc (Zn)	mg/L	0.015	0.0030	B144057	0.032	0.0030	B153726	<0.0030	0.0030	B144057
RDL = Reportable Detection Limit										

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG391			CBG392			CBG393		
Sampling Date		2023/10/03 15:50			2023/10/03 16:00			2023/10/03 16:20		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-08-BR	RDL	QC Batch	MW-07-BR	RDL	QC Batch	MW-03-BR	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	4.7	N/A	B143016	7.8	N/A	B143016	9.4	N/A	B143016
Cation Sum	meq/L	4.3	N/A	B143016	8.4	N/A	B143016	9.4	N/A	B143016
Hardness (CaCO3)	mg/L	200	0.50	B143049	390	0.50	B143049	420	0.50	B143049
Ion Balance (% Difference)	%	5.0	N/A	B143015	3.4	N/A	B143015	0.34	N/A	B143015
Nitrate (N)	mg/L	0.32	0.010	B143018	0.92	0.010	B143018	<0.010	0.010	B143018
Nitrate (NO3)	mg/L	1.4	0.044	B143054	4.1	0.044	B143054	<0.044	0.044	B143054
Nitrite (NO2)	mg/L	<0.033	0.033	B143054	<0.033	0.033	B143054	<0.033	0.033	B143054
Calculated Total Dissolved Solids	mg/L	290	10	B143020	540	10	B143020	550	10	B143020
Elements										
Dissolved Cadmium (Cd)	ug/L	2.9	0.020	B143013	61	0.020	B143013	<0.020	0.020	B143013
Misc. Inorganics										
Conductivity	uS/cm	450	2.0	B154269	770	2.0	B154269	820	2.0	B154269
pH	pH	6.36	N/A	B154268	4.80	N/A	B154268	6.95	N/A	B154268
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Alkalinity (Total as CaCO3)	mg/L	59	1.0	B154267	1.2	1.0	B154267	210	1.0	B154267
Bicarbonate (HCO3)	mg/L	72	1.0	B154267	1.5	1.0	B154267	260	1.0	B154267
Carbonate (CO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Hydroxide (OH)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Chloride (Cl)	mg/L	<1.0	1.0	B145451	<1.0	1.0	B145449	2.0	1.0	B146494
Sulphate (SO4)	mg/L	170	5.0	B145451	370	5.0	B145449	250	5.0	B146494
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	B143813	<0.010	0.010	B143813	<0.010	0.010	B143813
Nitrate plus Nitrite (N)	mg/L	0.32	0.010	B143813	0.92	0.010	B143813	<0.010	0.010	B143813
Elements										
Dissolved Aluminum (Al)	mg/L	0.11	0.0030	B144057	2.1	0.0030	B144057	<0.0030	0.0030	B144057
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B144057	<0.00060	0.00060	B144057	0.00071	0.00060	B144057
Dissolved Arsenic (As)	mg/L	<0.00020	0.00020	B144057	0.00025	0.00020	B144057	0.0022	0.00020	B144057
Dissolved Barium (Ba)	mg/L	0.026	0.010	B145436	0.019	0.010	B145458	0.092	0.010	B145458
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Boron (B)	mg/L	0.032	0.020	B145436	0.021	0.020	B145458	0.069	0.020	B145458
Dissolved Calcium (Ca)	mg/L	58	0.30	B145436	120	0.30	B145458	130	0.30	B145458

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG391			CBG392			CBG393		
Sampling Date		2023/10/03 15:50			2023/10/03 16:00			2023/10/03 16:20		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-08-BR	RDL	QC Batch	MW-07-BR	RDL	QC Batch	MW-03-BR	RDL	QC Batch
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Cobalt (Co)	mg/L	0.052	0.00030	B144057	0.018	0.00030	B144057	0.00095	0.00030	B144057
Dissolved Copper (Cu)	mg/L	0.23	0.0010	B144057	3.2	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Iron (Fe)	mg/L	<0.060	0.060	B145436	<0.060	0.060	B145458	3.3	0.060	B145458
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B144057	0.00051	0.00020	B144057	<0.00020	0.00020	B144057
Dissolved Lithium (Li)	mg/L	0.035	0.020	B145436	0.025	0.020	B145458	0.040	0.020	B145458
Dissolved Magnesium (Mg)	mg/L	13	0.20	B145436	20	0.20	B145458	25	0.20	B145458
Dissolved Manganese (Mn)	mg/L	0.36	0.0040	B145436	0.36	0.0040	B145458	0.98	0.0040	B145458
Dissolved Molybdenum (Mo)	mg/L	0.00033	0.00020	B144057	<0.00020	0.00020	B144057	0.00050	0.00020	B144057
Dissolved Nickel (Ni)	mg/L	0.024	0.00050	B144057	0.015	0.00050	B144057	0.0012	0.00050	B144057
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B145436	<0.10	0.10	B145458	<0.10	0.10	B145458
Dissolved Potassium (K)	mg/L	5.7	0.30	B145436	13	0.30	B145458	7.9	0.30	B145458
Dissolved Selenium (Se)	mg/L	0.00031	0.00020	B144057	0.0012	0.00020	B144057	<0.00020	0.00020	B144057
Dissolved Silicon (Si)	mg/L	9.9	0.50	B145436	11	0.50	B145458	9.0	0.50	B145458
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B144057	<0.00010	0.00010	B144057	<0.00010	0.00010	B144057
Dissolved Sodium (Na)	mg/L	3.9	0.50	B145436	3.8	0.50	B145458	14	0.50	B145458
Dissolved Strontium (Sr)	mg/L	0.13	0.020	B145436	0.13	0.020	B145458	0.39	0.020	B145458
Dissolved Sulphur (S)	mg/L	52	0.20	B145436	140	0.20	B145458	82	0.20	B145458
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Uranium (U)	mg/L	0.0037	0.00010	B144057	0.0043	0.00010	B144057	0.0017	0.00010	B144057
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Zinc (Zn)	mg/L	1.6	0.0030	B144057	14	0.012	B144057	0.33	0.0030	B144057
RDL = Reportable Detection Limit										

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG394			CBG394			CBG395		
Sampling Date		2023/10/03			2023/10/03			2023/10/03 16:30		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-100	RDL	QC Batch	MW-100 Lab-Dup	RDL	QC Batch	MW-06-BR	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	9.3	N/A	B143016				6.3	N/A	B143016
Cation Sum	meq/L	9.5	N/A	B143016				5.8	N/A	B143016
Hardness (CaCO3)	mg/L	430	0.50	B143049				260	0.50	B143049
Ion Balance (% Difference)	%	1.2	N/A	B143015				4.1	N/A	B143015
Nitrate (N)	mg/L	<0.050	0.050	B143018				<0.010	0.010	B143018
Nitrate (NO3)	mg/L	<0.22	0.22	B143054				<0.044	0.044	B143054
Nitrite (NO2)	mg/L	<0.033	0.033	B143054				<0.033	0.033	B143054
Calculated Total Dissolved Solids	mg/L	550	10	B143020				400	10	B143020
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	B143013				100	0.020	B143013
Misc. Inorganics										
Conductivity	uS/cm	820	2.0	B154269	820	2.0	B154269	620	2.0	B154269
pH	pH	7.10	N/A	B154268	7.02	N/A	B154268	5.81	N/A	B154268
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Alkalinity (Total as CaCO3)	mg/L	210	1.0	B154267	210	1.0	B154267	22	1.0	B154267
Bicarbonate (HCO3)	mg/L	250	1.0	B154267	260	1.0	B154267	27	1.0	B154267
Carbonate (CO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Hydroxide (OH)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Chloride (Cl)	mg/L	2.2	1.0	B146494				<1.0	1.0	B146303
Sulphate (SO4)	mg/L	240	5.0	B146494				280	5.0	B146303
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	B143813				<0.010	0.010	B143813
Nitrate plus Nitrite (N)	mg/L	<0.050 (1)	0.050	B143813				<0.010	0.010	B143813
Elements										
Dissolved Aluminum (Al)	mg/L	<0.0030	0.0030	B144057				0.070	0.0030	B144057
Dissolved Antimony (Sb)	mg/L	0.0011	0.00060	B144057				0.0014	0.00060	B144057
Dissolved Arsenic (As)	mg/L	0.0021	0.00020	B144057				0.00025	0.00020	B144057
Dissolved Barium (Ba)	mg/L	0.093	0.010	B145458				0.018	0.010	B145458
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B144057				<0.0010	0.0010	B144057
Dissolved Boron (B)	mg/L	0.068	0.020	B145458				0.041	0.020	B145458

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Detection limits raised due to matrix interference.

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG394			CBG394			CBG395		
Sampling Date		2023/10/03			2023/10/03			2023/10/03 16:30		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	**MW-100**	**RDL**	**QC Batch**	**MW-100 Lab-Dup**	**RDL**	**QC Batch**	**MW-06-BR**	**RDL**	**QC Batch**
Dissolved Calcium (Ca)	mg/L	130	0.30	B145458				74	0.30	B145458
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B144057				<0.0010	0.0010	B144057
Dissolved Cobalt (Co)	mg/L	0.00090	0.00030	B144057				0.041	0.00030	B144057
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	B144057				0.48	0.0010	B144057
Dissolved Iron (Fe)	mg/L	3.4	0.060	B145458				4.5	0.060	B145458
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B144057				0.0052	0.00020	B144057
Dissolved Lithium (Li)	mg/L	0.037	0.020	B145458				0.044	0.020	B145458
Dissolved Magnesium (Mg)	mg/L	26	0.20	B145458				18	0.20	B145458
Dissolved Manganese (Mn)	mg/L	1.0	0.0040	B145458				1.5	0.0040	B145458
Dissolved Molybdenum (Mo)	mg/L	0.00047	0.00020	B144057				<0.00020	0.00020	B144057
Dissolved Nickel (Ni)	mg/L	0.0011	0.00050	B144057				0.014	0.00050	B144057
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B145458				<0.10	0.10	B145458
Dissolved Potassium (K)	mg/L	8.0	0.30	B145458				7.6	0.30	B145458
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B144057				<0.00020	0.00020	B144057
Dissolved Silicon (Si)	mg/L	9.3	0.50	B145458				7.5	0.50	B145458
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B144057				<0.00010	0.00010	B144057
Dissolved Sodium (Na)	mg/L	14	0.50	B145458				4.5	0.50	B145458
Dissolved Strontium (Sr)	mg/L	0.40	0.020	B145458				0.14	0.020	B145458
Dissolved Sulphur (S)	mg/L	84	0.20	B145458				98	0.20	B145458
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B144057				0.00025	0.00020	B144057
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B144057				<0.0010	0.0010	B144057
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B144057				<0.0010	0.0010	B144057
Dissolved Uranium (U)	mg/L	0.0016	0.00010	B144057				0.0019	0.00010	B144057
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B144057				<0.0010	0.0010	B144057
Dissolved Zinc (Zn)	mg/L	0.30	0.0030	B144057				28	0.030	B144057

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG396			CBG397			CBG397		
Sampling Date		2023/10/03 16:40			2023/10/03 16:50			2023/10/03 16:50		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-10-OB	RDL	QC Batch	MW-09-OB	RDL	QC Batch	MW-09-OB Lab-Dup	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	9.7	N/A	B143016	10	N/A	B143053			
Cation Sum	meq/L	10	N/A	B143016	10	N/A	B143053			
Hardness (CaCO3)	mg/L	430	0.50	B143049	450	0.50	B143049			
Ion Balance (% Difference)	%	1.7	N/A	B143015	0.26	N/A	B143015			
Nitrate (N)	mg/L	<0.050	0.050	B143018	<0.050	0.050	B143018			
Nitrate (NO3)	mg/L	<0.22	0.22	B143054	<0.22	0.22	B143054			
Nitrite (NO2)	mg/L	<0.16	0.16	B143054	<0.16	0.16	B143054			
Calculated Total Dissolved Solids	mg/L	630	10	B143020	640	10	B143056			
Elements										
Dissolved Cadmium (Cd)	ug/L	1.6	0.020	B143013	0.39	0.020	B143013			
Misc. Inorganics										
Conductivity	uS/cm	880	2.0	B154269	900	2.0	B154269			
pH	pH	6.19	N/A	B154268	6.29	N/A	B154268			
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267			
Alkalinity (Total as CaCO3)	mg/L	77	1.0	B154267	100	1.0	B154267			
Bicarbonate (HCO3)	mg/L	94	1.0	B154267	130	1.0	B154267			
Carbonate (CO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267			
Hydroxide (OH)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267			
Chloride (Cl)	mg/L	<1.0	1.0	B145451	<1.0	1.0	B145451			
Sulphate (SO4)	mg/L	390	5.0	B145451	390	5.0	B145451			
Nutrients										
Nitrite (N)	mg/L	<0.050 (1)	0.050	B143813	<0.050 (1)	0.050	B143805			
Nitrate plus Nitrite (N)	mg/L	0.035	0.010	B143813	0.014	0.010	B143805			
Elements										
Dissolved Aluminum (Al)	mg/L	0.0031	0.0030	B144057	0.057	0.0030	B144057			
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B153726	<0.00060	0.00060	B144057			
Dissolved Arsenic (As)	mg/L	0.00067	0.00020	B144057	0.0015	0.00020	B144057			
Dissolved Barium (Ba)	mg/L	0.021	0.010	B145458	0.023	0.010	B145436	0.021	0.010	B145436
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable
(1) Detection limits raised due to matrix interference.

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG396			CBG397			CBG397		
Sampling Date		2023/10/03 16:40			2023/10/03 16:50			2023/10/03 16:50		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	**MW-10-OB**	**RDL**	**QC Batch**	**MW-09-OB**	**RDL**	**QC Batch**	**MW-09-OB Lab-Dup**	**RDL**	**QC Batch**
Dissolved Boron (B)	mg/L	0.084	0.020	B145458	0.068 (1)	0.020	B145436	0.058	0.020	B145436
Dissolved Calcium (Ca)	mg/L	130	0.30	B145458	130	0.30	B145436	130	0.30	B145436
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057			
Dissolved Cobalt (Co)	mg/L	0.037	0.00030	B144057	0.035	0.00030	B144057			
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057			
Dissolved Iron (Fe)	mg/L	20	0.060	B145458	14	0.060	B145436	15	0.060	B145436
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057			
Dissolved Lithium (Li)	mg/L	0.055	0.020	B145458	0.052	0.020	B145436	0.053	0.020	B145436
Dissolved Magnesium (Mg)	mg/L	27	0.20	B145458	30	0.20	B145436	30	0.20	B145436
Dissolved Manganese (Mn)	mg/L	2.3	0.0040	B145458	2.1	0.0040	B145436	2.1	0.0040	B145436
Dissolved Molybdenum (Mo)	mg/L	0.00075	0.00020	B144057	<0.00020	0.00020	B144057			
Dissolved Nickel (Ni)	mg/L	0.017	0.00050	B144057	0.013	0.00050	B144057			
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B145458	<0.10	0.10	B145436	<0.10	0.10	B145436
Dissolved Potassium (K)	mg/L	7.2	0.30	B145458	6.8	0.30	B145436	6.9	0.30	B145436
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057			
Dissolved Silicon (Si)	mg/L	9.5	0.50	B145458	9.4	0.50	B145436	9.5	0.50	B145436
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B144057	<0.00010	0.00010	B144057			
Dissolved Sodium (Na)	mg/L	12	0.50	B145458	7.3 (1)	0.50	B145436	7.4	0.50	B145436
Dissolved Strontium (Sr)	mg/L	0.25	0.020	B145458	0.25	0.020	B145436	0.25	0.020	B145436
Dissolved Sulphur (S)	mg/L	140	0.20	B145458	130	0.20	B145436	130	0.20	B145436
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057			
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057			
Dissolved Titanium (Ti)	mg/L	<0.0010	0.0010	B144057	0.0053	0.0010	B144057			
Dissolved Uranium (U)	mg/L	0.00073	0.00010	B144057	<0.00010	0.00010	B144057			
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057			
Dissolved Zinc (Zn)	mg/L	18	0.012	B144057	24	0.030	B144057			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate
(1) Matrix spike exceeds acceptance limits due to probable matrix interference.

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG398			CBG399			CBG400		
Sampling Date		2023/10/03 17:00			2023/10/03 17:30			2023/10/03 10:45		
COC Number		707520-02-01			707520-02-01			707520-02-01		
	UNITS	MW-11-OB	RDL	QC Batch	MW-01-BR	RDL	QC Batch	MW-04-BR	RDL	QC Batch
Calculated Parameters										
Anion Sum	meq/L	12	N/A	B143053	31	N/A	B143053	10	N/A	B143053
Cation Sum	meq/L	12	N/A	B143053	31	N/A	B143053	10	N/A	B143053
Hardness (CaCO3)	mg/L	550	0.50	B143049	1400	0.50	B143049	100	0.50	B143049
Ion Balance (% Difference)	%	1.4	N/A	B143015	0.38	N/A	B143015	0.067	N/A	B143015
Nitrate (N)	mg/L	0.019	0.010	B143018	0.023	0.010	B143018	0.11	0.010	B143018
Nitrate (NO3)	mg/L	0.083	0.044	B143054	0.10	0.044	B143054	0.51	0.044	B143054
Nitrite (NO2)	mg/L	<0.033	0.033	B143054	<0.033	0.033	B143054	<0.033	0.033	B143054
Calculated Total Dissolved Solids	mg/L	710	10	B143056	1900	25	B143056	630	10	B143056
Elements										
Dissolved Cadmium (Cd)	ug/L	<0.020	0.020	B143013	<0.020	0.020	B143041	<0.020	0.020	B143041
Misc. Inorganics										
Conductivity	uS/cm	1000	2.0	B154269	2300	2.0	B154269	990	2.0	B154269
pH	pH	6.77	N/A	B154268	7.60	N/A	B154268	8.08	N/A	B154268
Anions										
Alkalinity (PP as CaCO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Alkalinity (Total as CaCO3)	mg/L	170	1.0	B154267	370	1.0	B154267	240	1.0	B154267
Bicarbonate (HCO3)	mg/L	210	1.0	B154267	450	1.0	B154267	290	1.0	B154267
Carbonate (CO3)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Hydroxide (OH)	mg/L	<1.0	1.0	B154267	<1.0	1.0	B154267	<1.0	1.0	B154267
Chloride (Cl)	mg/L	1.1	1.0	B145449	65	1.0	B145471	30	1.0	B146303
Sulphate (SO4)	mg/L	390	5.0	B145449	1100	25	B145471	230	5.0	B146303
Nutrients										
Nitrite (N)	mg/L	<0.010	0.010	B143813	<0.010	0.010	B143813	<0.010	0.010	B143813
Nitrate plus Nitrite (N)	mg/L	0.019	0.010	B143813	0.023	0.010	B143813	0.11	0.010	B143813
Elements										
Dissolved Aluminum (Al)	mg/L	0.047	0.0030	B144057	<0.0030	0.0030	B144057	0.0039	0.0030	B144057
Dissolved Antimony (Sb)	mg/L	<0.00060	0.00060	B144057	<0.00060	0.00060	B144057	0.00086	0.00060	B144057
Dissolved Arsenic (As)	mg/L	0.0025	0.00020	B144057	0.0016	0.00020	B144057	0.0058	0.00020	B144057
Dissolved Barium (Ba)	mg/L	0.082	0.010	B145436	0.050	0.010	B145436	0.027	0.010	B145458
Dissolved Beryllium (Be)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Boron (B)	mg/L	0.063	0.020	B145436	0.21	0.020	B145436	0.49	0.020	B145458
Dissolved Calcium (Ca)	mg/L	160	0.30	B145436	300	0.30	B145436	20	0.30	B145458

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG398			CBG399			CBG400		
Sampling Date		2023/10/03 17:00			2023/10/03 17:30			2023/10/03 10:45		
COC Number		707520-02-01			707520-02-01			707520-02-01		
	UNITS	MW-11-OB	RDL	QC Batch	MW-01-BR	RDL	QC Batch	MW-04-BR	RDL	QC Batch
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Cobalt (Co)	mg/L	0.0044	0.00030	B144057	0.0060	0.00030	B144057	0.00035	0.00030	B144057
Dissolved Copper (Cu)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Iron (Fe)	mg/L	4.0	0.060	B145436	2.9	0.060	B145436	<0.060	0.060	B145458
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057
Dissolved Lithium (Li)	mg/L	0.045	0.020	B145436	0.048	0.020	B145436	0.11	0.020	B145458
Dissolved Magnesium (Mg)	mg/L	36	0.20	B145436	170	0.20	B145436	13	0.20	B145458
Dissolved Manganese (Mn)	mg/L	1.8	0.0040	B145436	1.1	0.0040	B145436	0.093	0.0040	B145458
Dissolved Molybdenum (Mo)	mg/L	0.00030	0.00020	B144057	0.0033	0.00020	B144057	0.0074	0.00020	B144057
Dissolved Nickel (Ni)	mg/L	0.0021	0.00050	B144057	0.0032	0.00050	B144057	0.0012	0.00050	B144057
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	B145436	<0.10	0.10	B145436	<0.10	0.10	B145458
Dissolved Potassium (K)	mg/L	5.8	0.30	B145436	19	0.30	B145436	5.2	0.30	B145458
Dissolved Selenium (Se)	mg/L	<0.00020	0.00020	B144057	0.00055	0.00020	B144057	0.00023	0.00020	B144057
Dissolved Silicon (Si)	mg/L	9.3	0.50	B145436	6.6	0.50	B145436	5.6	0.50	B145458
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	B144057	<0.00010	0.00010	B144057	<0.00010	0.00010	B144057
Dissolved Sodium (Na)	mg/L	9.7	0.50	B145436	48	0.50	B145436	190	0.50	B145458
Dissolved Strontium (Sr)	mg/L	0.57	0.020	B145436	2.1	0.020	B145436	0.36	0.020	B145458
Dissolved Sulphur (S)	mg/L	130	0.20	B145436	340	0.20	B145436	78	0.20	B145458
Dissolved Thallium (Tl)	mg/L	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057	<0.00020	0.00020	B144057
Dissolved Tin (Sn)	mg/L	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Titanium (Ti)	mg/L	0.0033	0.0010	B144057	<0.0010	0.0010	B144057	<0.0010	0.0010	B144057
Dissolved Uranium (U)	mg/L	0.00017	0.00010	B144057	0.12	0.00010	B144057	0.010	0.00010	B144057
Dissolved Vanadium (V)	mg/L	<0.0010	0.0010	B144057	0.0011	0.0010	B144057	0.0022	0.0010	B144057
Dissolved Zinc (Zn)	mg/L	1.3	0.0030	B144057	<0.0030	0.0030	B144057	<0.0030	0.0030	B144057
RDL = Reportable Detection Limit										

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG401	CBG402		
Sampling Date		2023/10/03	2023/10/03		
COC Number		707520-02-01	707520-02-01		
	UNITS	FIELD BLANK	TRIP BLANK	RDL	QC Batch
Calculated Parameters					
Anion Sum	meq/L	0.0000	0.0000	N/A	B143053
Cation Sum	meq/L	0.011	0.012	N/A	B143053
Hardness (CaCO3)	mg/L	<0.50	<0.50	0.50	B143049
Ion Balance (% Difference)	%	NC	NC	N/A	B143015
Nitrate (N)	mg/L	<0.010	<0.010	0.010	B143018
Nitrate (NO3)	mg/L	<0.044	<0.044	0.044	B143054
Nitrite (NO2)	mg/L	<0.033	<0.033	0.033	B143054
Calculated Total Dissolved Solids	mg/L	<10	<10	10	B143056
Elements					
Dissolved Cadmium (Cd)	ug/L	<0.020	<0.020	0.020	B143041
Misc. Inorganics					
Conductivity	uS/cm	<2.0	<2.0	2.0	B154269
pH	pH	4.95	4.93	N/A	B154268
Anions					
Alkalinity (PP as CaCO3)	mg/L	<1.0	<1.0	1.0	B154267
Alkalinity (Total as CaCO3)	mg/L	<1.0	<1.0	1.0	B154267
Bicarbonate (HCO3)	mg/L	<1.0	<1.0	1.0	B154267
Carbonate (CO3)	mg/L	<1.0	<1.0	1.0	B154267
Hydroxide (OH)	mg/L	<1.0	<1.0	1.0	B154267
Chloride (Cl)	mg/L	<1.0	<1.0	1.0	B145451
Sulphate (SO4)	mg/L	<1.0	<1.0	1.0	B145451
Nutrients					
Nitrite (N)	mg/L	<0.010	<0.010	0.010	B143805
Nitrate plus Nitrite (N)	mg/L	<0.010	<0.010	0.010	B143805
Elements					
Dissolved Aluminum (Al)	mg/L	<0.0030	<0.0030	0.0030	B144057
Dissolved Antimony (Sb)	mg/L	0.00079	<0.00060	0.00060	B144057
Dissolved Arsenic (As)	mg/L	<0.00020	<0.00020	0.00020	B144057
Dissolved Barium (Ba)	mg/L	<0.010	<0.010	0.010	B145458
Dissolved Beryllium (Be)	mg/L	<0.0010	<0.0010	0.0010	B144057
Dissolved Boron (B)	mg/L	<0.020	<0.020	0.020	B145458
Dissolved Calcium (Ca)	mg/L	<0.30	<0.30	0.30	B145458

RDL = Reportable Detection Limit
N/A = Not Applicable

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ROUTINE WATER & DISS. REGULATED METALS (WATER)

Bureau Veritas ID		CBG401	CBG402		
Sampling Date		2023/10/03	2023/10/03		
COC Number		707520-02-01	707520-02-01		
	UNITS	FIELD BLANK	TRIP BLANK	RDL	QC Batch
Dissolved Chromium (Cr)	mg/L	<0.0010	<0.0010	0.0010	B144057
Dissolved Cobalt (Co)	mg/L	<0.00030	<0.00030	0.00030	B144057
Dissolved Copper (Cu)	mg/L	<0.0010	<0.0010	0.0010	B144057
Dissolved Iron (Fe)	mg/L	<0.060	<0.060	0.060	B145458
Dissolved Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	B144057
Dissolved Lithium (Li)	mg/L	<0.020	<0.020	0.020	B145458
Dissolved Magnesium (Mg)	mg/L	<0.20	<0.20	0.20	B145458
Dissolved Manganese (Mn)	mg/L	<0.0040	<0.0040	0.0040	B145458
Dissolved Molybdenum (Mo)	mg/L	<0.00020	<0.00020	0.00020	B144057
Dissolved Nickel (Ni)	mg/L	<0.00050	<0.00050	0.00050	B144057
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	0.10	B145458
Dissolved Potassium (K)	mg/L	<0.30	<0.30	0.30	B145458
Dissolved Selenium (Se)	mg/L	<0.00020	<0.00020	0.00020	B144057
Dissolved Silicon (Si)	mg/L	<0.50	<0.50	0.50	B145458
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	0.00010	B144057
Dissolved Sodium (Na)	mg/L	<0.50	<0.50	0.50	B145458
Dissolved Strontium (Sr)	mg/L	<0.020	<0.020	0.020	B145458
Dissolved Sulphur (S)	mg/L	<0.20	<0.20	0.20	B145458
Dissolved Thallium (Tl)	mg/L	<0.00020	<0.00020	0.00020	B144057
Dissolved Tin (Sn)	mg/L	0.0019	<0.0010	0.0010	B144057
Dissolved Titanium (Ti)	mg/L	<0.0010	<0.0010	0.0010	B144057
Dissolved Uranium (U)	mg/L	<0.00010	<0.00010	0.00010	B144057
Dissolved Vanadium (V)	mg/L	<0.0010	<0.0010	0.0010	B144057
Dissolved Zinc (Zn)	mg/L	<0.0030	<0.0030	0.0030	B144057
RDL = Reportable Detection Limit					

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG388		CBG389		CBG390	CBG391		
Sampling Date		2023/10/03 14:50		2023/10/03 15:15		2023/10/03 15:35	2023/10/03 15:50		
COC Number		707520-01-01		707520-01-01		707520-01-01	707520-01-01		
	UNITS	MW-05-BR	QC Batch	MW-04-OB	QC Batch	MW-02-BR	MW-08-BR	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	0.087	B143043	<0.020	B143043	<0.020	2.9	0.020	B143043
Total Aluminum (Al)	mg/L	2.9	B150189	0.0049	B160591	0.47	4.3	0.0030	B150189
Total Antimony (Sb)	mg/L	<0.00060	B150189	<0.00060	B160591	<0.00060	<0.00060	0.00060	B150189
Total Arsenic (As)	mg/L	0.00052	B150189	0.00021	B160591	0.00074	0.00079	0.00020	B150189
Total Barium (Ba)	mg/L	0.046	B150194	0.15	B150194	0.046	0.039	0.010	B150194
Total Beryllium (Be)	mg/L	<0.0010	B150189	<0.0010	B160591	<0.0010	<0.0010	0.0010	B150189
Total Boron (B)	mg/L	<0.020	B150194	0.15	B150194	0.48	0.035	0.020	B150194
Total Calcium (Ca)	mg/L	42	B150194	180	B150194	27	67	0.30	B150194
Total Chromium (Cr)	mg/L	0.0021	B150189	<0.0010	B160591	<0.0010	0.0023	0.0010	B150189
Total Cobalt (Co)	mg/L	0.014	B150189	<0.00030	B160591	0.0031	0.064	0.00030	B150189
Total Copper (Cu)	mg/L	0.019	B150189	<0.0010	B160591	0.0046	0.42	0.0010	B150189
Total Iron (Fe)	mg/L	3.1	B150194	0.56	B150194	0.46	2.0	0.060	B150194
Total Lead (Pb)	mg/L	0.0013	B150189	<0.00020	B160591	<0.00020	0.0024	0.00020	B150189
Total Lithium (Li)	mg/L	<0.020	B150194	0.050	B150194	0.083	0.049	0.020	B150194
Total Magnesium (Mg)	mg/L	7.4	B150194	63	B150194	15	16	0.20	B150194
Total Manganese (Mn)	mg/L	0.33	B150194	0.58	B150194	0.066	0.42	0.0040	B150194
Total Molybdenum (Mo)	mg/L	0.00021	B150189	<0.00020	B160591	0.00076	0.00052	0.00020	B150189
Total Nickel (Ni)	mg/L	0.0033	B150189	<0.00050	B160591	0.00059	0.032	0.00050	B150189
Total Phosphorus (P)	mg/L	<0.10	B150194	<0.10	B150194	<0.10	<0.10	0.10	B150194
Total Potassium (K)	mg/L	5.0	B150194	5.6	B150194	6.1	6.6	0.30	B150194
Total Selenium (Se)	mg/L	<0.00020	B150189	<0.00020	B160591	<0.00020	0.00037	0.00020	B150189
Total Silicon (Si)	mg/L	10	B150194	9.5	B150194	7.3	14	0.50	B150194
Total Silver (Ag)	mg/L	<0.00010	B150189	<0.00010	B160591	<0.00010	<0.00010	0.00010	B150189
Total Sodium (Na)	mg/L	2.2	B150194	32	B150194	99	4.6	0.50	B150194
Total Strontium (Sr)	mg/L	0.036	B150194	0.83	B150194	0.35	0.14	0.020	B150194
Total Sulphur (S)	mg/L	14	B150194	110	B150194	39	57	0.20	B150194
Total Thallium (Tl)	mg/L	<0.00020	B150189	<0.00020	B160591	<0.00020	<0.00020	0.00020	B150189
Total Tin (Sn)	mg/L	0.0016	B150189	<0.0010	B160591	<0.0010	0.0017	0.0010	B150189
Total Titanium (Ti)	mg/L	0.14	B150189	<0.0010	B160591	0.017	0.057	0.0010	B150189
Total Uranium (U)	mg/L	0.0021	B150189	0.0014	B160591	0.0064	0.011	0.00010	B150189
Total Vanadium (V)	mg/L	0.0033	B150189	<0.0010	B160591	<0.0010	0.0023	0.0010	B150189
Total Zinc (Zn)	mg/L	0.029	B150189	<0.0030	B160591	0.0039	1.7	0.0030	B150189

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG392		CBG393			CBG394		
Sampling Date		2023/10/03 16:00		2023/10/03 16:20			2023/10/03		
COC Number		707520-01-01		707520-01-01			707520-01-01		
	UNITS	MW-07-BR	RDL	MW-03-BR	RDL	QC Batch	MW-100	RDL	QC Batch
Elements									
Total Cadmium (Cd)	ug/L	77	0.020	0.55	0.040	B143043	0.57	0.020	B143043
Total Aluminum (Al)	mg/L	3.7	0.0030	40	0.0060	B150196	47	0.0030	B150189
Total Antimony (Sb)	mg/L	<0.00060	0.00060	<0.0012	0.0012	B150196	0.00082	0.00060	B150189
Total Arsenic (As)	mg/L	0.00023	0.00020	0.012	0.00040	B150196	0.013	0.00020	B150189
Total Barium (Ba)	mg/L	0.020	0.010	0.49	0.050	B150207	0.57	0.10	B150194
Total Beryllium (Be)	mg/L	<0.0010	0.0010	0.0021	0.0020	B150196	0.0023	0.0010	B150189
Total Boron (B)	mg/L	0.023	0.020	0.28	0.10	B150207	<0.20	0.20	B150194
Total Calcium (Ca)	mg/L	110	0.30	160	1.5	B150207	160	3.0	B150194
Total Chromium (Cr)	mg/L	<0.0010	0.0010	0.12	0.0020	B150196	0.12	0.0010	B150189
Total Cobalt (Co)	mg/L	0.030	0.00030	0.030	0.00060	B150196	0.031	0.00030	B150189
Total Copper (Cu)	mg/L	5.5	0.0010	0.089	0.0020	B150196	0.092	0.0010	B150189
Total Iron (Fe)	mg/L	<0.060	0.060	65	0.30	B150207	76	0.60	B150194
Total Lead (Pb)	mg/L	0.00080	0.00020	0.023	0.00040	B150196	0.024	0.00020	B150189
Total Lithium (Li)	mg/L	<0.020	0.020	0.12	0.10	B150207	<0.20	0.20	B150194
Total Magnesium (Mg)	mg/L	19	0.20	53	1.0	B150207	60	2.0	B150194
Total Manganese (Mn)	mg/L	0.54	0.0040	1.9	0.020	B150207	2.0	0.040	B150194
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	0.0013	0.00040	B150196	0.0015	0.00020	B150189
Total Nickel (Ni)	mg/L	0.020	0.00050	0.080	0.0010	B150196	0.082	0.00050	B150189
Total Phosphorus (P)	mg/L	0.11	0.10	1.2	0.50	B150207	1.2	1.0	B150194
Total Potassium (K)	mg/L	11	0.30	24	1.5	B150207	28	3.0	B150194
Total Selenium (Se)	mg/L	0.0013	0.00020	0.00048	0.00040	B150196	0.00049	0.00020	B150189
Total Silicon (Si)	mg/L	12	0.50	67	2.5	B150207	83	5.0	B150194
Total Silver (Ag)	mg/L	<0.00010	0.00010	0.00022	0.00020	B150196	0.00024	0.00010	B150189
Total Sodium (Na)	mg/L	3.6	0.50	19	2.5	B150207	19	5.0	B150194
Total Strontium (Sr)	mg/L	0.11	0.020	0.48	0.10	B150207	0.48	0.20	B150194
Total Sulphur (S)	mg/L	130	0.20	90	1.0	B150207	91	2.0	B150194
Total Thallium (Tl)	mg/L	<0.00020	0.00020	0.00046	0.00040	B150196	0.00048	0.00020	B150189
Total Tin (Sn)	mg/L	<0.0010	0.0010	0.0036	0.0020	B150196	0.0040	0.0010	B150189
Total Titanium (Ti)	mg/L	<0.0010	0.0010	2.8	0.0020	B150196	3.1	0.0010	B150189
Total Uranium (U)	mg/L	0.0059	0.00010	0.0077	0.00020	B150196	0.0081	0.00010	B150189
Total Vanadium (V)	mg/L	<0.0010	0.0010	0.12	0.0020	B150196	0.13	0.0010	B150189
Total Zinc (Zn)	mg/L	19	0.030	7.0	0.0060	B150196	7.0	0.0060	B150189

RDL = Reportable Detection Limit

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG395			CBG395			CBG396		
Sampling Date		2023/10/03 16:30			2023/10/03 16:30			2023/10/03 16:40		
COC Number		707520-01-01			707520-01-01			707520-01-01		
	UNITS	MW-06-BR	RDL	QC Batch	MW-06-BR Lab-Dup	RDL	QC Batch	MW-10-OB	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	130	0.020	B143043				4.2	0.020	B143043
Total Aluminum (Al)	mg/L	0.12	0.0030	B150196	0.11	0.0030	B150196	1.1	0.0030	B150179
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150196	<0.00060	0.00060	B150196	<0.00060	0.00060	B150179
Total Arsenic (As)	mg/L	0.00021	0.00020	B150196	0.00023	0.00020	B150196	0.00087	0.00020	B150179
Total Barium (Ba)	mg/L	0.021	0.010	B150207	0.021	0.010	B150207	0.029	0.010	B150182
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150196	<0.0010	0.0010	B150196	<0.0010	0.0010	B150179
Total Boron (B)	mg/L	0.040	0.020	B150207	0.040	0.020	B150207	0.084	0.020	B150182
Total Calcium (Ca)	mg/L	77	0.30	B150207	77	0.30	B150207	120	0.30	B150182
Total Chromium (Cr)	mg/L	<0.0010	0.0010	B150196	<0.0010	0.0010	B150196	0.0026	0.0010	B150179
Total Cobalt (Co)	mg/L	0.056	0.00030	B150196	0.048	0.00030	B150196	0.047	0.00030	B150179
Total Copper (Cu)	mg/L	0.68	0.0010	B150196	0.59	0.0010	B150196	0.0066	0.0010	B150179
Total Iron (Fe)	mg/L	4.8	0.060	B150207	4.9	0.060	B150207	22	0.060	B150182
Total Lead (Pb)	mg/L	0.011	0.00020	B150196	0.0096	0.00020	B150196	0.00038	0.00020	B150179
Total Lithium (Li)	mg/L	0.040	0.020	B150207	0.039	0.020	B150207	0.053	0.020	B150182
Total Magnesium (Mg)	mg/L	18	0.20	B150207	18	0.20	B150207	26	0.20	B150182
Total Manganese (Mn)	mg/L	1.5	0.0040	B150207	1.5	0.0040	B150207	2.4	0.0040	B150182
Total Molybdenum (Mo)	mg/L	<0.00020	0.00020	B150196	<0.00020	0.00020	B150196	0.00081	0.00020	B150179
Total Nickel (Ni)	mg/L	0.020	0.00050	B150196	0.017	0.00050	B150196	0.023	0.00050	B150179
Total Phosphorus (P)	mg/L	<0.10	0.10	B150207	<0.10	0.10	B150207	<0.10	0.10	B150182
Total Potassium (K)	mg/L	7.6	0.30	B150207	7.7	0.30	B150207	7.5	0.30	B150182
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150196	<0.00020	0.00020	B150196	<0.00020	0.00020	B150179
Total Silicon (Si)	mg/L	7.8	0.50	B150207	8.0	0.50	B150207	12	0.50	B150182
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150196	<0.00010	0.00010	B150196	<0.00010	0.00010	B150179
Total Sodium (Na)	mg/L	4.5	0.50	B150207	4.5	0.50	B150207	12	0.50	B150182
Total Strontium (Sr)	mg/L	0.14	0.020	B150207	0.14	0.020	B150207	0.24	0.020	B150182
Total Sulphur (S)	mg/L	95	0.20	B150207	98	0.20	B150207	140	0.20	B150182
Total Thallium (Tl)	mg/L	0.00027	0.00020	B150196	0.00022	0.00020	B150196	<0.00020	0.00020	B150179
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150196	<0.0010	0.0010	B150196	<0.0010	0.0010	B150179
Total Titanium (Ti)	mg/L	0.0011	0.0010	B150196	<0.0010	0.0010	B150196	0.071	0.0010	B150179
Total Uranium (U)	mg/L	0.0028	0.00010	B150196	0.0024	0.00010	B150196	0.00099	0.00010	B150179
Total Vanadium (V)	mg/L	<0.0010	0.0010	B150196	<0.0010	0.0010	B150196	0.0027	0.0010	B150179
Total Zinc (Zn)	mg/L	26	0.030	B150196	27	0.030	B150196	17	0.030	B150179

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG397			CBG398		CBG399	CBG400		
Sampling Date		2023/10/03 16:50			2023/10/03 17:00		2023/10/03 17:30	2023/10/03 10:45		
COC Number		707520-01-01			707520-02-01		707520-02-01	707520-02-01		
	UNITS	MW-09-OB	RDL	QC Batch	MW-11-OB	QC Batch	MW-01-BR	MW-04-BR	RDL	QC Batch
Elements										
Total Cadmium (Cd)	ug/L	0.58	0.020	B143043	0.053	B143043	0.14	0.037	0.020	B143043
Total Aluminum (Al)	mg/L	1.7	0.0030	B150189	1.0	B150196	4.3	2.7	0.0030	B150189
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150189	<0.00060	B150196	<0.00060	<0.00060	0.00060	B150189
Total Arsenic (As)	mg/L	0.0017	0.00020	B150189	0.0030	B150196	0.0030	0.0077	0.00020	B150189
Total Barium (Ba)	mg/L	0.035	0.010	B150194	0.091	B150207	0.12	0.039	0.010	B150194
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150189	<0.0010	B150196	<0.0010	<0.0010	0.0010	B150189
Total Boron (B)	mg/L	0.058	0.020	B150194	0.063	B150207	0.21	0.48	0.020	B150194
Total Calcium (Ca)	mg/L	140	0.30	B150194	170	B150207	310	22	0.30	B150194
Total Chromium (Cr)	mg/L	0.0035	0.0010	B150189	0.0026	B150196	0.0069	0.0031	0.0010	B150189
Total Cobalt (Co)	mg/L	0.040	0.00030	B150189	0.0052	B150196	0.012	0.0016	0.00030	B150189
Total Copper (Cu)	mg/L	0.0024	0.0010	B150189	0.0032	B150196	0.021	0.0049	0.0010	B150189
Total Iron (Fe)	mg/L	18	0.060	B150194	5.0	B150207	9.8	1.6	0.060	B150194
Total Lead (Pb)	mg/L	0.00062	0.00020	B150189	0.00047	B150196	0.0058	0.0022	0.00020	B150189
Total Lithium (Li)	mg/L	0.069	0.020	B150194	0.046	B150207	0.059	0.12	0.020	B150194
Total Magnesium (Mg)	mg/L	35	0.20	B150194	38	B150207	190	16	0.20	B150194
Total Manganese (Mn)	mg/L	2.3	0.0040	B150194	1.9	B150207	1.0	0.13	0.0040	B150194
Total Molybdenum (Mo)	mg/L	0.00027	0.00020	B150189	0.00037	B150196	0.0030	0.0086	0.00020	B150189
Total Nickel (Ni)	mg/L	0.016	0.00050	B150189	0.0037	B150196	0.0078	0.0035	0.00050	B150189
Total Phosphorus (P)	mg/L	<0.10	0.10	B150194	<0.10	B150207	0.22	0.14	0.10	B150194
Total Potassium (K)	mg/L	7.9	0.30	B150194	6.5	B150207	21	6.0	0.30	B150194
Total Selenium (Se)	mg/L	<0.00020	0.00020	B150189	<0.00020	B150196	0.0022	0.00040	0.00020	B150189
Total Silicon (Si)	mg/L	14	0.50	B150194	13	B150207	13	8.5	0.50	B150194
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150189	<0.00010	B150196	<0.00010	<0.00010	0.00010	B150189
Total Sodium (Na)	mg/L	7.9	0.50	B150194	10	B150207	47	200	0.50	B150194
Total Strontium (Sr)	mg/L	0.23	0.020	B150194	0.57	B150207	2.2	0.39	0.020	B150194
Total Sulphur (S)	mg/L	140	0.20	B150194	130	B150207	350	83	0.20	B150194
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150189	<0.00020	B150196	<0.00020	<0.00020	0.00020	B150189
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150189	<0.0010	B150196	0.0023	0.0011	0.0010	B150189
Total Titanium (Ti)	mg/L	0.10	0.0010	B150189	0.080	B150196	0.31	0.083 (1)	0.0010	B150189
Total Uranium (U)	mg/L	0.00014	0.00010	B150189	0.00026	B150196	0.15	0.012	0.00010	B150189
Total Vanadium (V)	mg/L	0.0035	0.0010	B150189	0.0025	B150196	0.015	0.0040	0.0010	B150189
Total Zinc (Zn)	mg/L	22	0.030	B150189	1.4	B150196	0.032	0.0080	0.0030	B150189

RDL = Reportable Detection Limit

(1) Duplicate exceeds acceptance criteria due to sample non homogeneity. Reanalysis yields similar results.

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG400			CBG401	CBG402		
Sampling Date		2023/10/03 10:45			2023/10/03	2023/10/03		
COC Number		707520-02-01			707520-02-01	707520-02-01		
	UNITS	MW-04-BR Lab-Dup	RDL	QC Batch	FIELD BLANK	TRIP BLANK	RDL	QC Batch
Elements								
Total Cadmium (Cd)	ug/L				<0.020	<0.020	0.020	B143043
Total Aluminum (Al)	mg/L	2.6	0.0030	B150189	<0.0030	0.0034	0.0030	B150189
Total Antimony (Sb)	mg/L	<0.00060	0.00060	B150189	<0.00060	<0.00060	0.00060	B150189
Total Arsenic (As)	mg/L	0.0075	0.00020	B150189	<0.00020	<0.00020	0.00020	B150189
Total Barium (Ba)	mg/L	0.039	0.010	B150194	<0.010	<0.010	0.010	B150194
Total Beryllium (Be)	mg/L	<0.0010	0.0010	B150189	<0.0010	<0.0010	0.0010	B150189
Total Boron (B)	mg/L	0.48	0.020	B150194	<0.020	<0.020	0.020	B150194
Total Calcium (Ca)	mg/L	22	0.30	B150194	<0.30	<0.30	0.30	B150194
Total Chromium (Cr)	mg/L	0.0029	0.0010	B150189	<0.0010	<0.0010	0.0010	B150189
Total Cobalt (Co)	mg/L	0.0015	0.00030	B150189	<0.00030	<0.00030	0.00030	B150189
Total Copper (Cu)	mg/L	0.0045	0.0010	B150189	<0.0010	<0.0010	0.0010	B150189
Total Iron (Fe)	mg/L	1.6	0.060	B150194	<0.060	<0.060	0.060	B150194
Total Lead (Pb)	mg/L	0.0024	0.00020	B150189	<0.00020	<0.00020	0.00020	B150189
Total Lithium (Li)	mg/L	0.12	0.020	B150194	<0.020	<0.020	0.020	B150194
Total Magnesium (Mg)	mg/L	15	0.20	B150194	<0.20	<0.20	0.20	B150194
Total Manganese (Mn)	mg/L	0.13	0.0040	B150194	<0.0040	<0.0040	0.0040	B150194
Total Molybdenum (Mo)	mg/L	0.0083	0.00020	B150189	<0.00020	<0.00020	0.00020	B150189
Total Nickel (Ni)	mg/L	0.0034	0.00050	B150189	<0.00050	<0.00050	0.00050	B150189
Total Phosphorus (P)	mg/L	0.14	0.10	B150194	<0.10	<0.10	0.10	B150194
Total Potassium (K)	mg/L	6.0	0.30	B150194	<0.30	<0.30	0.30	B150194
Total Selenium (Se)	mg/L	0.00027	0.00020	B150189	<0.00020	<0.00020	0.00020	B150189
Total Silicon (Si)	mg/L	8.4	0.50	B150194	<0.50	<0.50	0.50	B150194
Total Silver (Ag)	mg/L	<0.00010	0.00010	B150189	<0.00010	<0.00010	0.00010	B150189
Total Sodium (Na)	mg/L	200	0.50	B150194	<0.50	<0.50	0.50	B150194
Total Strontium (Sr)	mg/L	0.38	0.020	B150194	<0.020	<0.020	0.020	B150194
Total Sulphur (S)	mg/L	81	0.20	B150194	<0.20	<0.20	0.20	B150194
Total Thallium (Tl)	mg/L	<0.00020	0.00020	B150189	<0.00020	<0.00020	0.00020	B150189
Total Tin (Sn)	mg/L	<0.0010	0.0010	B150189	<0.0010	<0.0010	0.0010	B150189
Total Titanium (Ti)	mg/L	0.11 (1)	0.0010	B150189	<0.0010	<0.0010	0.0010	B150189
Total Uranium (U)	mg/L	0.011	0.00010	B150189	<0.00010	<0.00010	0.00010	B150189
Total Vanadium (V)	mg/L	0.0041	0.0010	B150189	<0.0010	<0.0010	0.0010	B150189

RDL = Reportable Detection Limit

Lab-Dup = Laboratory Initiated Duplicate

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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REGULATED METALS (CCME/AT1) - TOTAL

Bureau Veritas ID		CBG400			CBG401	CBG402		
Sampling Date		2023/10/03 10:45			2023/10/03	2023/10/03		
COC Number		707520-02-01			707520-02-01	707520-02-01		
	UNITS	**MW-04-BR Lab-Dup**	**RDL**	**QC Batch**	**FIELD BLANK**	**TRIP BLANK**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/L	0.0091	0.0030	B150189	<0.0030	<0.0030	0.0030	B150189

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CBG388		CBG389			CBG390		
Sampling Date		2023/10/03 14:50		2023/10/03 15:15			2023/10/03 15:35		
COC Number		707520-01-01		707520-01-01			707520-01-01		
	UNITS	MW-05-BR	RDL	MW-04-OB	RDL	QC Batch	MW-02-BR	RDL	QC Batch
Elements									
Dissolved Mercury (Hg)	mg/L	<0.0000019	0.0000019	<0.0000019	0.0000019	B147581	<0.0000019	0.0000019	B147572
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	<0.000019	0.000019	B148609	<0.0000019	0.0000019	B148600
RDL = Reportable Detection Limit									

Bureau Veritas ID		CBG391		CBG392			CBG392		
Sampling Date		2023/10/03 15:50		2023/10/03 16:00			2023/10/03 16:00		
COC Number		707520-01-01		707520-01-01			707520-01-01		
	UNITS	MW-08-BR	QC Batch	MW-07-BR	RDL	QC Batch	MW-07-BR Lab-Dup	RDL	QC Batch
Elements									
Dissolved Mercury (Hg)	mg/L	<0.0000019	B147581	0.0000025	0.0000019	B147581			
Total Mercury (Hg)	mg/L	0.0000028	B148600	<0.0000019	0.0000019	B148609	<0.0000019	0.0000019	B148609
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate									

Bureau Veritas ID		CBG393		CBG394			CBG394		
Sampling Date		2023/10/03 16:20		2023/10/03			2023/10/03		
COC Number		707520-01-01		707520-01-01			707520-01-01		
	UNITS	MW-03-BR	QC Batch	MW-100	RDL	QC Batch	MW-100 Lab-Dup	RDL	QC Batch
Elements									
Dissolved Mercury (Hg)	mg/L	<0.0000019	B147581	<0.0000019	0.0000019	B147572	<0.0000019	0.0000019	B147572
Total Mercury (Hg)	mg/L	0.000029	B148600	0.000025	0.000019	B148600			
RDL = Reportable Detection Limit Lab-Dup = Laboratory Initiated Duplicate									

Bureau Veritas ID		CBG395	CBG396		CBG397		
Sampling Date		2023/10/03 16:30	2023/10/03 16:40		2023/10/03 16:50		
COC Number		707520-01-01	707520-01-01		707520-01-01		
	UNITS	MW-06-BR	MW-10-OB	QC Batch	MW-09-OB	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	mg/L	<0.0000019	<0.0000019	B149774	<0.0000019	0.0000019	B147581
Total Mercury (Hg)	mg/L	0.0000025	<0.0000019	B148600	<0.0000019	0.0000019	B148600
RDL = Reportable Detection Limit							

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MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		CBG398			CBG398		
Sampling Date		2023/10/03 17:00			2023/10/03 17:00		
COC Number		707520-02-01			707520-02-01		
	UNITS	MW-11-OB	RDL	QC Batch	MW-11-OB Lab-Dup	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	mg/L	<0.0000019	0.0000019	B149774	<0.0000019	0.0000019	B149774
Total Mercury (Hg)	mg/L	0.0000019	0.0000019	B148600			

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		CBG399	CBG400		CBG401		
Sampling Date		2023/10/03 17:30	2023/10/03 10:45		2023/10/03		
COC Number		707520-02-01	707520-02-01		707520-02-01		
	UNITS	MW-01-BR	MW-04-BR	QC Batch	FIELD BLANK	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	mg/L	<0.0000019	<0.0000019	B149774	<0.0000019	0.0000019	B147581
Total Mercury (Hg)	mg/L	0.0000071	0.0000040	B148600	<0.0000019	0.0000019	B148600

RDL = Reportable Detection Limit

Bureau Veritas ID		CBG401			CBG402		
Sampling Date		2023/10/03			2023/10/03		
COC Number		707520-02-01			707520-02-01		
	UNITS	FIELD BLANK Lab-Dup	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Elements							
Dissolved Mercury (Hg)	mg/L				<0.0000019	0.0000019	B147581
Total Mercury (Hg)	mg/L	<0.0000019	0.0000019	B148600	<0.0000019	0.0000019	B148600

RDL = Reportable Detection Limit
Lab-Dup = Laboratory Initiated Duplicate

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	5.9°C

ROUTINE WATER & DISS. REGULATED METALS (WATER) Comments

Sample CBG389 [MW-04-OB] Elements by ICPMS - Dissolved: Client supplied dissolved metals bottle contained particulate.

REGULATED METALS (CCME/AT1) - TOTAL Comments

Sample CBG393 [MW-03-BR] Elements by ICPMS - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample CBG393 [MW-03-BR] Elements by ICP - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample CBG394 [MW-100] Elements by ICP - Total: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

MERCURY BY COLD VAPOR (WATER) Comments

Sample CBG389 [MW-04-OB] Mercury (Total) by CV: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample CBG393 [MW-03-BR] Mercury (Total) by CV: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample CBG394 [MW-100] Mercury (Total) by CV: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample CBG389, Elements by ICP - Dissolved: Test repeated.
Sample CBG396, Elements by ICPMS - Dissolved: Test repeated.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B143805	Nitrate plus Nitrite (N)	2023/10/06	106	80 - 120	105	80 - 120	<0.010	mg/L	NC	20
B143805	Nitrite (N)	2023/10/06	104	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
B143813	Nitrate plus Nitrite (N)	2023/10/06	97	80 - 120	101	80 - 120	<0.010	mg/L	NC	20
B143813	Nitrite (N)	2023/10/06	83	80 - 120	102	80 - 120	<0.010	mg/L	NC	20
B144057	Dissolved Aluminum (Al)	2023/10/07	102	80 - 120	107	80 - 120	<0.0030	mg/L	NC	20
B144057	Dissolved Antimony (Sb)	2023/10/07	105	80 - 120	103	80 - 120	<0.00060	mg/L	NC	20
B144057	Dissolved Arsenic (As)	2023/10/07	100	80 - 120	91	80 - 120	<0.00020	mg/L	2.8	20
B144057	Dissolved Beryllium (Be)	2023/10/07	106	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20
B144057	Dissolved Chromium (Cr)	2023/10/07	98	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20
B144057	Dissolved Cobalt (Co)	2023/10/07	97	80 - 120	92	80 - 120	<0.00030	mg/L	NC	20
B144057	Dissolved Copper (Cu)	2023/10/07	97	80 - 120	92	80 - 120	<0.0010	mg/L	NC	20
B144057	Dissolved Lead (Pb)	2023/10/07	103	80 - 120	105	80 - 120	<0.00020	mg/L	NC	20
B144057	Dissolved Molybdenum (Mo)	2023/10/07	106	80 - 120	100	80 - 120	<0.00020	mg/L	3.6	20
B144057	Dissolved Nickel (Ni)	2023/10/07	97	80 - 120	90	80 - 120	<0.00050	mg/L	NC	20
B144057	Dissolved Selenium (Se)	2023/10/07	103	80 - 120	91	80 - 120	<0.00020	mg/L	NC	20
B144057	Dissolved Silver (Ag)	2023/10/07	101	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
B144057	Dissolved Thallium (Tl)	2023/10/07	105	80 - 120	102	80 - 120	<0.00020	mg/L	NC	20
B144057	Dissolved Tin (Sn)	2023/10/07	105	80 - 120	100	80 - 120	<0.0010	mg/L	11	20
B144057	Dissolved Titanium (Ti)	2023/10/07	93	80 - 120	91	80 - 120	<0.0010	mg/L	NC	20
B144057	Dissolved Uranium (U)	2023/10/07	103	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B144057	Dissolved Vanadium (V)	2023/10/07	97	80 - 120	94	80 - 120	<0.0010	mg/L	NC	20
B144057	Dissolved Zinc (Zn)	2023/10/07	98	80 - 120	89	80 - 120	<0.0030	mg/L	NC	20
B145436	Dissolved Barium (Ba)	2023/10/11	114	80 - 120	100	80 - 120	<0.010	mg/L	10	20
B145436	Dissolved Boron (B)	2023/10/11	125 (1)	80 - 120	101	80 - 120	<0.020	mg/L	15	20
B145436	Dissolved Calcium (Ca)	2023/10/11	NC	80 - 120	100	80 - 120	<0.30	mg/L	0.66	20
B145436	Dissolved Iron (Fe)	2023/10/11	NC	80 - 120	106	80 - 120	<0.060	mg/L	0.56	20
B145436	Dissolved Lithium (Li)	2023/10/11	111	80 - 120	97	80 - 120	<0.020	mg/L	1.3	20
B145436	Dissolved Magnesium (Mg)	2023/10/11	116	80 - 120	102	80 - 120	<0.20	mg/L	0.19	20
B145436	Dissolved Manganese (Mn)	2023/10/11	NC	80 - 120	106	80 - 120	<0.0040	mg/L	0.63	20
B145436	Dissolved Phosphorus (P)	2023/10/11	120	80 - 120	99	80 - 120	<0.10	mg/L	NC	20
B145436	Dissolved Potassium (K)	2023/10/11	116	80 - 120	100	80 - 120	<0.30	mg/L	0.66	20
B145436	Dissolved Silicon (Si)	2023/10/11	98	80 - 120	98	80 - 120	<0.50	mg/L	1.7	20
B145436	Dissolved Sodium (Na)	2023/10/11	121 (1)	80 - 120	104	80 - 120	<0.50	mg/L	1.0	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B145436	Dissolved Strontium (Sr)	2023/10/11	112	80 - 120	100	80 - 120	<0.020	mg/L	0.52	20
B145436	Dissolved Sulphur (S)	2023/10/11	NC	80 - 120	95	80 - 120	<0.20	mg/L	1.3	20
B145449	Chloride (Cl)	2023/10/10	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.84	20
B145449	Sulphate (SO4)	2023/10/10	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.63	20
B145451	Chloride (Cl)	2023/10/10	101	80 - 120	100	80 - 120	<1.0	mg/L	0.65	20
B145451	Sulphate (SO4)	2023/10/10	NC	80 - 120	99	80 - 120	<1.0	mg/L	0.70	20
B145458	Dissolved Barium (Ba)	2023/10/12	107	80 - 120	100	80 - 120	<0.010	mg/L		
B145458	Dissolved Boron (B)	2023/10/12	115	80 - 120	105	80 - 120	<0.020	mg/L		
B145458	Dissolved Calcium (Ca)	2023/10/12	NC	80 - 120	98	80 - 120	<0.30	mg/L	0.52	20
B145458	Dissolved Iron (Fe)	2023/10/12	111	80 - 120	104	80 - 120	<0.060	mg/L	NC	20
B145458	Dissolved Lithium (Li)	2023/10/12	101	80 - 120	95	80 - 120	<0.020	mg/L		
B145458	Dissolved Magnesium (Mg)	2023/10/12	109	80 - 120	104	80 - 120	<0.20	mg/L	1.0	20
B145458	Dissolved Manganese (Mn)	2023/10/12	112	80 - 120	104	80 - 120	<0.0040	mg/L	0.53	20
B145458	Dissolved Phosphorus (P)	2023/10/12	116	80 - 120	104	80 - 120	<0.10	mg/L		
B145458	Dissolved Potassium (K)	2023/10/12	107	80 - 120	100	80 - 120	<0.30	mg/L	0.60	20
B145458	Dissolved Silicon (Si)	2023/10/12	105	80 - 120	100	80 - 120	<0.50	mg/L		
B145458	Dissolved Sodium (Na)	2023/10/12	NC	80 - 120	103	80 - 120	<0.50	mg/L	0.24	20
B145458	Dissolved Strontium (Sr)	2023/10/12	105	80 - 120	99	80 - 120	<0.020	mg/L		
B145458	Dissolved Sulphur (S)	2023/10/12	NC	80 - 120	100	80 - 120	<0.20	mg/L		
B145471	Chloride (Cl)	2023/10/10	103	80 - 120	100	80 - 120	<1.0	mg/L		
B145471	Sulphate (SO4)	2023/10/10	89	80 - 120	97	80 - 120	<1.0	mg/L	0.40	20
B146303	Chloride (Cl)	2023/10/10	NC	80 - 120	98	80 - 120	<1.0	mg/L	0.47	20
B146303	Sulphate (SO4)	2023/10/10	NC	80 - 120	101	80 - 120	<1.0	mg/L	0.78	20
B146494	Chloride (Cl)	2023/10/10	104	80 - 120	99	80 - 120	<1.0	mg/L	2.0	20
B146494	Sulphate (SO4)	2023/10/10	104	80 - 120	98	80 - 120	<1.0	mg/L	0.85	20
B147572	Dissolved Mercury (Hg)	2023/10/12	86	80 - 120	101	80 - 120	<0.0000019	mg/L	NC	20
B147581	Dissolved Mercury (Hg)	2023/10/12	95	80 - 120	101	80 - 120	<0.0000019	mg/L	NC	20
B148600	Total Mercury (Hg)	2023/10/12	97	80 - 120	100	80 - 120	<0.0000019	mg/L	NC	20
B148609	Total Mercury (Hg)	2023/10/12	100	80 - 120	105	80 - 120	<0.0000019	mg/L	NC	20
B149774	Dissolved Mercury (Hg)	2023/10/12	88	80 - 120	102	80 - 120	<0.0000019	mg/L	NC	20
B150179	Total Aluminum (Al)	2023/10/12	94	80 - 120	106	80 - 120	<0.0030	mg/L	3.7	20
B150179	Total Antimony (Sb)	2023/10/12	118	80 - 120	114	80 - 120	<0.00060	mg/L	NC	20
B150179	Total Arsenic (As)	2023/10/12	101	80 - 120	96	80 - 120	<0.00020	mg/L	17	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150179	Total Beryllium (Be)	2023/10/12	108	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Chromium (Cr)	2023/10/12	100	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Cobalt (Co)	2023/10/12	99	80 - 120	98	80 - 120	<0.00030	mg/L	10	20
B150179	Total Copper (Cu)	2023/10/12	98	80 - 120	98	80 - 120	<0.0010	mg/L	11	20
B150179	Total Lead (Pb)	2023/10/12	98	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Molybdenum (Mo)	2023/10/12	109	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Nickel (Ni)	2023/10/12	98	80 - 120	96	80 - 120	<0.00050	mg/L	6.0	20
B150179	Total Selenium (Se)	2023/10/12	99	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Silver (Ag)	2023/10/12	101	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B150179	Total Thallium (Tl)	2023/10/12	101	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B150179	Total Tin (Sn)	2023/10/12	105	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Titanium (Ti)	2023/10/12	104	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Uranium (U)	2023/10/12	101	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20
B150179	Total Vanadium (V)	2023/10/12	103	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B150179	Total Zinc (Zn)	2023/10/12	97	80 - 120	94	80 - 120	<0.0030	mg/L	9.0	20
B150182	Total Barium (Ba)	2023/10/12	99	80 - 120	99	80 - 120	<0.010	mg/L	5.8	20
B150182	Total Boron (B)	2023/10/12	102	80 - 120	101	80 - 120	<0.020	mg/L	NC	20
B150182	Total Calcium (Ca)	2023/10/12	92	80 - 120	94	80 - 120	<0.30	mg/L	0.41	20
B150182	Total Iron (Fe)	2023/10/12	101	80 - 120	102	80 - 120	<0.060	mg/L	0.14	20
B150182	Total Lithium (Li)	2023/10/12	91	80 - 120	92	80 - 120	<0.020	mg/L	NC	20
B150182	Total Magnesium (Mg)	2023/10/12	96	80 - 120	97	80 - 120	<0.20	mg/L	0.86	20
B150182	Total Manganese (Mn)	2023/10/12	102	80 - 120	102	80 - 120	<0.0040	mg/L	0	20
B150182	Total Phosphorus (P)	2023/10/12	101	80 - 120	100	80 - 120	<0.10	mg/L	NC	20
B150182	Total Potassium (K)	2023/10/12	94	80 - 120	94	80 - 120	<0.30	mg/L	0.23	20
B150182	Total Silicon (Si)	2023/10/12	97	80 - 120	97	80 - 120	<0.50	mg/L	0.52	20
B150182	Total Sodium (Na)	2023/10/12	95	80 - 120	96	80 - 120	<0.50	mg/L	1.5	20
B150182	Total Strontium (Sr)	2023/10/12	96	80 - 120	96	80 - 120	<0.020	mg/L	1.9	20
B150182	Total Sulphur (S)	2023/10/12	98	80 - 120	97	80 - 120	<0.20	mg/L	1.4	20
B150189	Total Aluminum (Al)	2023/10/12	NC	80 - 120	105	80 - 120	<0.0030	mg/L	4.8	20
B150189	Total Antimony (Sb)	2023/10/12	112	80 - 120	115	80 - 120	<0.00060	mg/L	NC	20
B150189	Total Arsenic (As)	2023/10/12	102	80 - 120	105	80 - 120	<0.00020	mg/L	3.5	20
B150189	Total Beryllium (Be)	2023/10/12	101	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B150189	Total Chromium (Cr)	2023/10/12	102	80 - 120	104	80 - 120	<0.0010	mg/L	7.6	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150189	Total Cobalt (Co)	2023/10/12	101	80 - 120	103	80 - 120	<0.00030	mg/L	6.3	20
B150189	Total Copper (Cu)	2023/10/12	NC	80 - 120	103	80 - 120	<0.0010	mg/L	10	20
B150189	Total Lead (Pb)	2023/10/12	102	80 - 120	104	80 - 120	<0.00020	mg/L	8.3	20
B150189	Total Molybdenum (Mo)	2023/10/12	105	80 - 120	104	80 - 120	<0.00020	mg/L	4.1	20
B150189	Total Nickel (Ni)	2023/10/12	101	80 - 120	102	80 - 120	<0.00050	mg/L	4.1	20
B150189	Total Selenium (Se)	2023/10/12	100	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20
B150189	Total Silver (Ag)	2023/10/12	102	80 - 120	103	80 - 120	<0.00010	mg/L	NC	20
B150189	Total Thallium (Tl)	2023/10/12	103	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B150189	Total Tin (Sn)	2023/10/12	103	80 - 120	103	80 - 120	<0.0010	mg/L	9.7	20
B150189	Total Titanium (Ti)	2023/10/12	102	80 - 120	99	80 - 120	<0.0010	mg/L	31 (1)	20
B150189	Total Uranium (U)	2023/10/12	102	80 - 120	104	80 - 120	<0.00010	mg/L	7.9	20
B150189	Total Vanadium (V)	2023/10/12	103	80 - 120	104	80 - 120	<0.0010	mg/L	2.4	20
B150189	Total Zinc (Zn)	2023/10/12	NC	80 - 120	103	80 - 120	<0.0030	mg/L	12	20
B150194	Total Barium (Ba)	2023/10/13	104	80 - 120	101	80 - 120	<0.010	mg/L	1.8	20
B150194	Total Boron (B)	2023/10/13	100	80 - 120	96	80 - 120	<0.020	mg/L	0.93	20
B150194	Total Calcium (Ca)	2023/10/13	NC	80 - 120	94	80 - 120	<0.30	mg/L	1.3	20
B150194	Total Iron (Fe)	2023/10/13	NC	80 - 120	96	80 - 120	<0.060	mg/L	0.51	20
B150194	Total Lithium (Li)	2023/10/13	107	80 - 120	95	80 - 120	<0.020	mg/L	3.7	20
B150194	Total Magnesium (Mg)	2023/10/13	NC	80 - 120	99	80 - 120	<0.20	mg/L	1.1	20
B150194	Total Manganese (Mn)	2023/10/13	115	80 - 120	97	80 - 120	<0.0040	mg/L	1.7	20
B150194	Total Phosphorus (P)	2023/10/13	107	80 - 120	94	80 - 120	<0.10	mg/L	4.5	20
B150194	Total Potassium (K)	2023/10/13	108	80 - 120	93	80 - 120	<0.30	mg/L	0.26	20
B150194	Total Silicon (Si)	2023/10/13	NC	80 - 120	90	80 - 120	<0.50	mg/L	0.64	20
B150194	Total Sodium (Na)	2023/10/13	NC	80 - 120	95	80 - 120	<0.50	mg/L	3.1	20
B150194	Total Strontium (Sr)	2023/10/13	NC	80 - 120	97	80 - 120	<0.020	mg/L	2.8	20
B150194	Total Sulphur (S)	2023/10/13	NC	80 - 120	91	80 - 120	<0.20	mg/L	2.3	20
B150196	Total Aluminum (Al)	2023/10/13	120	80 - 120	110	80 - 120	<0.0030	mg/L	15	20
B150196	Total Antimony (Sb)	2023/10/13	129 (1)	80 - 120	125 (1)	80 - 120	<0.00060	mg/L	NC	20
B150196	Total Arsenic (As)	2023/10/13	112	80 - 120	108	80 - 120	<0.00020	mg/L	8.6	20
B150196	Total Beryllium (Be)	2023/10/13	110	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Chromium (Cr)	2023/10/13	113	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Cobalt (Co)	2023/10/13	111	80 - 120	108	80 - 120	<0.00030	mg/L	15	20
B150196	Total Copper (Cu)	2023/10/13	111	80 - 120	106	80 - 120	<0.0010	mg/L	14	20

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			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B150196	Total Lead (Pb)	2023/10/13	112	80 - 120	109	80 - 120	<0.00020	mg/L	15	20
B150196	Total Molybdenum (Mo)	2023/10/13	117	80 - 120	112	80 - 120	<0.00020	mg/L	NC	20
B150196	Total Nickel (Ni)	2023/10/13	111	80 - 120	105	80 - 120	<0.00050	mg/L	14	20
B150196	Total Selenium (Se)	2023/10/13	109	80 - 120	106	80 - 120	<0.00020	mg/L	NC	20
B150196	Total Silver (Ag)	2023/10/13	111	80 - 120	107	80 - 120	<0.00010	mg/L	NC	20
B150196	Total Thallium (Tl)	2023/10/13	112	80 - 120	109	80 - 120	<0.00020	mg/L	18	20
B150196	Total Tin (Sn)	2023/10/13	117	80 - 120	111	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Titanium (Ti)	2023/10/13	112	80 - 120	108	80 - 120	<0.0010	mg/L	6.0	20
B150196	Total Uranium (U)	2023/10/13	113	80 - 120	108	80 - 120	<0.00010	mg/L	14	20
B150196	Total Vanadium (V)	2023/10/13	113	80 - 120	108	80 - 120	<0.0010	mg/L	NC	20
B150196	Total Zinc (Zn)	2023/10/13	115	80 - 120	107	80 - 120	<0.0030	mg/L	2.1	20
B150207	Total Barium (Ba)	2023/10/13	100	80 - 120	94	80 - 120	<0.010	mg/L	0.49	20
B150207	Total Boron (B)	2023/10/13	100	80 - 120	92	80 - 120	<0.020	mg/L	0.25	20
B150207	Total Calcium (Ca)	2023/10/13	NC	80 - 120	95	80 - 120	<0.30	mg/L	0.37	20
B150207	Total Iron (Fe)	2023/10/13	104	80 - 120	94	80 - 120	<0.060	mg/L	2.2	20
B150207	Total Lithium (Li)	2023/10/13	103	80 - 120	94	80 - 120	<0.020	mg/L	2.5	20
B150207	Total Magnesium (Mg)	2023/10/13	103	80 - 120	93	80 - 120	<0.20	mg/L	0.062	20
B150207	Total Manganese (Mn)	2023/10/13	107	80 - 120	97	80 - 120	<0.0040	mg/L	2.3	20
B150207	Total Phosphorus (P)	2023/10/13	101	80 - 120	92	80 - 120	<0.10	mg/L	NC	20
B150207	Total Potassium (K)	2023/10/13	102	80 - 120	93	80 - 120	<0.30	mg/L	1.6	20
B150207	Total Silicon (Si)	2023/10/13	NC	80 - 120	92	80 - 120	<0.50	mg/L	2.6	20
B150207	Total Sodium (Na)	2023/10/13	105	80 - 120	96	80 - 120	<0.50	mg/L	0.23	20
B150207	Total Strontium (Sr)	2023/10/13	96	80 - 120	91	80 - 120	<0.020	mg/L	1.0	20
B150207	Total Sulphur (S)	2023/10/13	NC	80 - 120	92	80 - 120	<0.20	mg/L	2.6	20
B153726	Dissolved Aluminum (Al)	2023/10/14	107	80 - 120	103	80 - 120	<0.0030	mg/L	NC	20
B153726	Dissolved Antimony (Sb)	2023/10/14	122 (1)	80 - 120	116	80 - 120	<0.00060	mg/L	NC	20
B153726	Dissolved Arsenic (As)	2023/10/14	110	80 - 120	99	80 - 120	<0.00020	mg/L	8.2	20
B153726	Dissolved Beryllium (Be)	2023/10/14	97	80 - 120	93	80 - 120	<0.0010	mg/L	NC	20
B153726	Dissolved Chromium (Cr)	2023/10/14	100	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B153726	Dissolved Cobalt (Co)	2023/10/14	98	80 - 120	95	80 - 120	<0.00030	mg/L	NC	20
B153726	Dissolved Copper (Cu)	2023/10/14	95	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B153726	Dissolved Lead (Pb)	2023/10/14	99	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B153726	Dissolved Molybdenum (Mo)	2023/10/14	113	80 - 120	100	80 - 120	<0.00020	mg/L	8.6	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B153726	Dissolved Nickel (Ni)	2023/10/14	95	80 - 120	93	80 - 120	<0.00050	mg/L	6.4	20
B153726	Dissolved Selenium (Se)	2023/10/14	106	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
B153726	Dissolved Silver (Ag)	2023/10/14	99	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20
B153726	Dissolved Thallium (Tl)	2023/10/14	100	80 - 120	96	80 - 120	<0.00020	mg/L	NC	20
B153726	Dissolved Tin (Sn)	2023/10/14	110	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B153726	Dissolved Titanium (Ti)	2023/10/14	102	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20
B153726	Dissolved Uranium (U)	2023/10/14	103	80 - 120	97	80 - 120	<0.00010	mg/L	6.6	20
B153726	Dissolved Vanadium (V)	2023/10/14	102	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20
B153726	Dissolved Zinc (Zn)	2023/10/14	103	80 - 120	95	80 - 120	<0.0030	mg/L	NC	20
B154267	Alkalinity (PP as CaCO3)	2023/10/17					<1.0	mg/L	NC	20
B154267	Alkalinity (Total as CaCO3)	2023/10/17			100	80 - 120	<1.0	mg/L	1.4	20
B154267	Bicarbonate (HCO3)	2023/10/17					<1.0	mg/L	1.4	20
B154267	Carbonate (CO3)	2023/10/17					<1.0	mg/L	NC	20
B154267	Hydroxide (OH)	2023/10/17					<1.0	mg/L	NC	20
B154268	pH	2023/10/17			100	97 - 103			1.1	N/A
B154269	Conductivity	2023/10/17			101	90 - 110	<2.0	uS/cm	0	10
B154287	Dissolved Iron (Fe)	2023/10/15	98	80 - 120	102	80 - 120	<0.060	mg/L	9.5	20
B160591	Total Aluminum (Al)	2023/10/19	103	80 - 120	101	80 - 120	<0.0030	mg/L	NC	20
B160591	Total Antimony (Sb)	2023/10/19	112	80 - 120	108	80 - 120	<0.00060	mg/L	NC	20
B160591	Total Arsenic (As)	2023/10/19	100	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
B160591	Total Beryllium (Be)	2023/10/19	102	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20
B160591	Total Chromium (Cr)	2023/10/19	101	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B160591	Total Cobalt (Co)	2023/10/19	101	80 - 120	101	80 - 120	<0.00030	mg/L	NC	20
B160591	Total Copper (Cu)	2023/10/19	100	80 - 120	101	80 - 120	<0.0010	mg/L	3.6	20
B160591	Total Lead (Pb)	2023/10/19	101	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B160591	Total Molybdenum (Mo)	2023/10/19	106	80 - 120	101	80 - 120	<0.00020	mg/L	10	20
B160591	Total Nickel (Ni)	2023/10/19	100	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
B160591	Total Selenium (Se)	2023/10/19	99	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20
B160591	Total Silver (Ag)	2023/10/19	102	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20
B160591	Total Thallium (Tl)	2023/10/19	102	80 - 120	99	80 - 120	<0.00020	mg/L	NC	20
B160591	Total Tin (Sn)	2023/10/19	104	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20
B160591	Total Titanium (Ti)	2023/10/19	104	80 - 120	103	80 - 120	<0.0010	mg/L	NC	20
B160591	Total Uranium (U)	2023/10/19	103	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20

Bureau Veritas Winnipeg: Unit D, 675 Berry Street R3H 1A7 Telephone (204) 772-7276 Fax (204) 772-2386

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		Spiked Blank		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
B160591	Total Vanadium (V)	2023/10/19	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20
B160591	Total Zinc (Zn)	2023/10/19	98	80 - 120	98	80 - 120	<0.0030	mg/L	NC	20

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

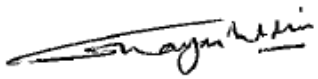
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

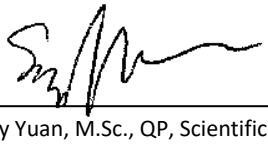
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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics



Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas Proprietary Software
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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Manitoba Environmental laboratory operations.

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Bureau Veritas
4000 19st N.E, Calgary, Alberta Canada T2E 6P8 Tel:(403) 291-3077 Toll-free:800-563-6266 Fax:(403) 291-9468 www.bvna.com

Page of

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#7500 KGS Group	Company Name:		Quotation #:	C21675	Bureau Veritas Job #:	Bottle Order #:
Attention:	Accounts Payable	Attention:	Ed Collins	P.O. #:			707520
Address:	865 Waverly St., 3rd Floor Winnipeg MB R3T 5P4	Address:		Project:	21-1357-005	COC #:	Project Manager:
Tel:	(204) 896-1209 Fax:	Tel:	Fax:	Project Name:		C#707520-02-01	
Email:	payables@kgsgroup.com	Email:	Ecollins@kgsgroup.com, rdyck@kgsgroup.com	Site #:			
				Sampled By:	RED, RP		

Regulatory Criteria:
- [ ] ATI
- [ ] CCME
- [x] Other MB Water Quality Guidelines

Special Instructions: mniemczyk@kgsgroup.com

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Turnaround Time (TAT) Required:

Please provide advance notice for rush projects

Regular (Standard) TAT: [X]
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests..
Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission)
Date Required: _____ [ ]
Rush Confirmation Number: _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	Routine Water & Diss. Regulated Metals	Regulated Metals (CCME/AT1) - Total	Mercury (Total) by CV	Mercury (Dissolved) by CV							# of Bottles	Comments
1		MW-11-OB	23/10/03	17:00	GW	Y	X	X	X	X							5	
2		MW-01-BR	23/10/03	17:30	GW	Y	X	X	X	X							5	
3		MW-04-BR	23/10/04	10:45	GW	Y	X	X	X	X							5	
4		FIELD BLANK	23/10/03	PM	DI	Y	X	X	X	X							5	
5		TRIP BLANK	23/10/03	—	—	-	X	X	X	X							5	
6																		
7																		
8																		
9																		
10																		

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/10/05	12:10	BIA Brooklyn Hiebert	23/10/05	1215		[ ]	6.9/5.6/5.2	[ ] Yes [ ] No
			ATRRIVER Gill	2023/10/06	08:30				

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** ALL SAMPLES ARE HELD FOR 60 DAYS AFTER SAMPLE RECEIPT, FOR SPECIAL REQUESTS CONTACT YOUR PROJECT MANAGER

White: Bureau Veritas Yellow: Client

Cool-Yice-Y
4/5/5

ICE-yes

Bureau Veritas
4000 19st N.E, Calgary, Alberta Canada T2E 6P8 Tel:(403) 291-3077 Toll-free:800-563-6266 Fax:(403) 291-9468 www.bvna.com

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#7500 KGS Group	Company Name:		Quotation #:	C21675	Bureau Veritas Job #:	Bottle Order #:
Attention:	Accounts Payable	Attention:	Ed Collins	P.O. #:			707520
Address:	865 Waverly St., 3rd Floor Winnipeg MB R3T 5P4	Address:		Project:	21-1357-005	COC #:	Project Manager:
Tel:	(204) 896-1209 Fax:	Tel:	Fax:	Project Name:		C#707520-01-01	
Email:	payables@kgsgroup.com	Email:	Ecollins@kgsgroup.com, rdyck@kgsgroup.com	Site #:			
				Sampled By:	RED, RP		

Regulatory Criteria:
- [ ] ATI
- [ ] CCME
- [x] Other MB Water Quality Guidelines

Special Instructions: mmierczyk@kgsgroup.com

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals Field Filtered ? (Y / N)	Routine Water & Diss. Regulated Metals	Regulated Metals (CCME/AT1) - Total	Mercury (Total) by CV	Mercury (Dissolved) by CV	# of Bottles	Comments
1		MW-05-BR	23/10/03	14:50	GW	Y	X	X	X	X	5	
2		MW-04-OB		15:15	GW	Y	X	X	X	X	5	
3		MW-02-BR		15:35	GW	Y	X	X	X	X	5	
4		MW-08-BR		15:50	GW	Y	X	X	X	X	5	
5		MW-07-BR		16:00	GW	Y	X	X	X	X	5	
6		MW-03-BR		16:20	GW	Y	X	X	X	X	5	
7		MW-100		PM	GW	Y	X	X	X	X	5	
8		MW-06-BR		16:30	GW	Y	X	X	X	X	5	
9		MW-10-OB		16:40	GW	Y	X	X	X	X	5	
10		MW-09-OB		16:50	GW	Y	X	X	X	X	5	

Turnaround Time (TAT) Required:

Please provide advance notice for rush projects

Regular (Standard) TAT: [x]
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests..
Please note: Standard TAT for certain tests are > 5 days - contact your Project Manager for details

Job Specific Rush TAT (if applies to entire submission) [ ]
Date Required:
Rush Confirmation Number: *(call lab for #)*

mcal-10-521

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Rachel Dyck / Rachel Dyck	23/10/05	12:10	Brooklyn Hiebert	23/10/05	1215		[ ]	6.9/5.6/5.2	[ ] Yes [ ] No
			ATRAVGR Gill	2023/10/06	08:30				

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White: Bureau Veritas Yellow: Client

Seal-Y ice-Y
4/5/5

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