Marine Avenue Site, Powell River, BC
2025 Environmental Monitoring Program Annual Report



PRESENTED TO
qathet Regional District

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EXECUTIVE SUMMARY

Tetra Tech Canada Inc. (Tetra Tech) was retained by the qathet Regional District (qRD) to support quarterly environmental monitoring and to prepare the 2025 Annual Environmental Monitoring Report for the Marine Avenue Site (Site), in Powell River, British Columbia (BC). This report summarizes the results of the 2025 quarterly groundwater and surface water monitoring events, which were conducted on the following dates: March 10, May 26, July 14, and December 2, 2025.

The landfill was previously operated under Permit PR-509 as issued by the BC Ministry of Environment and Parks (Ministry). The qRD elected to abandon their right to discharge waste at the Site under Permit PR-509 in 2024. Environmental monitoring has been conducted in accordance with the permit abandonment conditions and the *Updated Environmental Monitoring Plan (EMP) for the Powell River Marine Avenue Site Closure Plan* (Tetra Tech 2018; "Updated EMP").

There have been significant activities at the Site since 2020, including general site clean up, material processing, closure activities, and construction of the Resource Recovery Centre (RRC). Work on the RRC started in July 2023 and was completed in 2024.

Groundwater flow was interpreted to be toward the south-southwest for all monitoring events under an average hydraulic gradient of 0.10 m/m. This gradient has remained relatively consistent since the onset of monitoring.

The potential for migration of landfill and solid waste-related compounds from the Site can be assessed from evaluation of groundwater composition at the Site and Site boundary, and surface water composition from waters adjacent to the Site. The background Site conditions are monitored by groundwater well MW13-01 and surface water location SW-1.

Based on the results of the monitoring program, there are indications of reducing (anoxic) conditions in hydraulically down-gradient and cross-gradient groundwater monitoring wells (MW13-02 and MW19-04, respectively) which may be related to historical site operations, however, there are no significant trends noted or indications of site impact to the adjacent McFall Creek.

At MW13-02 and MW19-04, concentrations of dissolved cobalt, iron, and manganese were found to be in exceedance of the Contaminated Sites Regulation (CSR) Standards during one or more monitoring events in 2025. Monitoring wells MW13-02 and MW19-04 are interpreted as being hydraulically down-gradient and cross-gradient, respectively, of the historical site operations and vulnerable to potential impacts from leachate. Monitoring well MW13-02 has been interpreted as being on the edge of the waste footprint and the measured concentrations may not be representative of the surrounding groundwater. Groundwater quality at these wells should continue to be monitored for potential leachate impact and trends in indicator parameters. The adjacent surface water chemistry did not show substantial differences or trends in the concentrations of total cobalt, iron, and manganese between upstream and downstream locations.

Exceedances of the CSR Standards for several dissolved metal parameters (i.e., cadmium, cobalt, and copper) were noted at MW24-05 in June 2024, after the well was installed in May 2024. However, concentrations of these dissolved metal parameters had decreased to below the Standards by December 2024, with concentrations remaining below the Standards during both events in 2025.

The laboratory pH levels of the surface water samples were outside the range set by the BC Approved Water Quality Guidelines (AWQG) for Marine Aquatic Life (pH 7.0 to 8.7) during the July (SW-1, SW-2, SW-4) and December (SW-4) monitoring events. Historically, there was a decreasing trend between 2019 and June 2024, but pH values have since increased to values that are mostly within the acceptable range in 2025.

Exceedances of the BC AWQG for the Freshwater Aquatic Life guideline for dissolved copper was noted at SW-2 and SW-3 in December 2025. Exceedances of the dissolved copper guideline have been noted intermittently, typically in December; however, concentrations have historically remained relatively low at all sampling locations. At SW-1, SW-2, and SW-3, dissolved iron concentrations exceeded BC AWQG for Freshwater Aquatic Life guideline in December. Exceedances of the dissolved iron guideline have been noted for previous fall events (e.g., October to December events).

In 2025, total aluminum concentrations reached 5-year historical highs at all surface water sampling locations in May 2025 (concentrations between 218 µg/L at SW-4 and 372 µg/L at SW-2) and exceeded the BC AWQG for Freshwater Aquatic Life for total aluminum (162 µg/L); however, the exceedances were seen in both the upstream and downstream locations and are not interpreted to be a result of historical site operations. Total iron concentrations also reached a 5-year historical high at SW-4 in May 2025 (1,170 µg/L) and exceeded the BC AWQG for Freshwater Aquatic Life for total iron (1,000 µg/L). Total aluminum and total iron concentrations decreased in December 2025 to concentrations within the 5-year historical range at each location.

As the exceedances of laboratory pH, dissolved metals, and total metals parameters in the surface water samples were generally seen in both the upstream and downstream locations and at both watercourses, these exceedances are not interpreted to be a result of historical site operations.

The following recommendations have been developed based on the data presented within this report:

- Request a revision to the monitoring program frequency and scope from the Ministry based on the findings to date. This proposed revision would include a reduction in frequency from quarterly to semi-annually (twice per year) and removal of select parameters that have been observed at concentrations close to or below the detection limits in the sampling (including polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, and resins and fatty acids). A separate letter with the proposed updated EMP will be prepared for submission to the Ministry with justification for the proposed changes. The existing EMP should be followed until acceptance of the revised EMP is received from the Ministry. Tetra Tech trained qRD staff to assist with the environmental monitoring program during the 2020 and 2021 monitoring events and qRD staff will continue to be responsible for monitoring and sampling in 2026.
- Consider addition of a surface water sampling location to further assess water quality in the western ephemeral watercourse on the Site. Addition of the sampling location should be considered if chemical trends at other surface water sampling locations indicate changes in the surface water quality. Additionally, surface water sampling locations on the Site should be reassessed and potentially adjusted based on final site development and surface water flows.
- To better evaluate the reliability of the analytical results, two duplicates are recommended to be collected during each sampling event for the 2026 environmental monitoring program (i.e., one duplicate for groundwater, one duplicate for surface water).

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LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of the qathet Regional District and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than qathet Regional District, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by the qathet Regional District (qRD) to support quarterly environmental monitoring and to prepare the 2025 Annual Environmental Monitoring Report for the Marine Avenue Site (Site), in Powell River, British Columbia (BC). This report summarizes the results of the 2025 quarterly groundwater and surface water monitoring events, which were conducted on the following dates: March 10, May 26, July 14, and December 2, 2025.

The landfill was previously operated under Permit PR-509 as issued by the BC Ministry of Environment and Parks (Ministry). The qRD elected to abandon their right to discharge waste at the Site under Permit PR-509 in 2024. Environmental monitoring has been conducted in accordance with the permit abandonment conditions and the *Updated Environmental Monitoring Plan (EMP) for the Powell River Marine Avenue Site Closure Plan* (Tetra Tech 2018; "Updated EMP"). Permit PR-509 and the Abandonment Letter are included as Appendix B.

1.1 Background

This section presents the Site's description and location with respect to nearby watercourses and current activities on the Site. The Site's history as an incinerator landfill, and historical site investigations have been previously discussed in detail in the *2021 Marine Avenue Site Environmental Monitoring Program Annual Report* (Tetra Tech 2022).

1.1.1 Site Description

A site location plan and a site plan showing the locations of groundwater and surface water monitoring locations are presented on Figure 1 and Figure 2, respectively.

The Site currently has two entrance points; one situated on the south side of the Site directly off Marine Avenue, with an unmanned gate that is padlocked by the qRD and another on the northwest corner of the Site, directly off Marine Avenue that is a manned gate. The Site is approximately 7 hectares in size and irregular in shape as shown on Figure 2.

Access roads are found throughout the Site as well as clearings that extend into the forested ravine area of McFall Creek, southeast of the Site. As described in Tetra Tech's memo, *Preliminary Riparian Areas Assessment Results and Environmental Regulatory Constraints Analysis for Powell River Regional District Transfer Station Site on Marine Avenue* (2017; "Constraints Memo"), McFall Creek (also known as Squatter Creek) is a fish-bearing stream flowing from Cranberry Lake to the Strait of Georgia. At its closest point, McFall Creek is within 65 metres (m) of the Site's cleared area flowing to the southwest.

A surface water source was uncovered as a seep located near SW-4 during site cleanup and landfill closure work in 2020 and 2021 (Figure 2). However, there are additional seeps that emerge from the banks in multiple locations. Some of these seeps are rich in dissolved iron as observed by the presence of orange microbial mats. The channel widens in some areas where the ground is fully saturated and multiple very small flow paths braid through aquatic or semi-aquatic vegetation. The channel with flow enters a culvert at the corner of Marine Avenue and the Site entrance and flows downslope towards McFall Creek. Following this analysis, the Updated EMP added a surface water sampling location near the headwaters of the unnamed watercourse running through the centre of the Site. This watercourse was known colloquially within tender and design documents as the "central drainage".

A second drainage path was identified on the Site running parallel to, and east of, the westernmost road on the Site and joining the central drainage in a low-lying area before leaving the Site through a culvert under the current site entrance to meet McFall Creek.

Infrastructure from the former incinerator facility/landfill remains in place in some locations. This infrastructure includes short portions of the paved access road and the historical incinerator.

1.1.2 Site History

The Site was a gravel pit that was subsequently used as a landfill with a solid waste incinerator. The incinerator operated from the 1970s to approximately 1995. The Site has operated under Permit PR-509 (Appendix B) since 1971 with amendments in 1993 and 1994 reflecting changes in site operations. The permit was again amended to reflect a name change of the permit holder from The Corporation of the District of Powell River to qathet Regional District (application approved on March 12, 2024, effective date backdated to March 15, 2022). The qRD elected to abandon their right to discharge waste at the Site under Permit PR-509 in 2024.

Since closure of the incinerator in 1995, municipal solid waste has been transferred to the Roosevelt Regional Landfill (colloquially known as the Rabanco Landfill) in Washington, United States and construction and demolition waste has been transferred to the Ecowaste Landfill in Richmond, BC.

The Site has been altered from its original state, having been a gravel pit and subsequently the site of a City-operated incinerator and bottom ash residual landfill. Ash generated in the incineration process was disposed of on site in four distinct piles previously identified by Keystone Environmental Ltd. in 2003 and Sperling Hansen Associates Inc. (SHA) in 2014 as Pile D, Pile F, Pile M, and Pile Q. Previous site investigative work included classification and documentation of the stockpiled materials on site and installation of groundwater monitoring wells MW13-01, MW13-02, and MW13-03, as summarized in the *Powell River Marine Avenue Site Closure Plan Final Report* (SHA 2014; “Closure Plan”).

Following the time when the Site was an incinerator and a landfill, the Site operated as the commercial transfer station for the City of Powell River. The Site was used as a truck wash-out for the City of Powell River and private waste collection vehicles through early 2020 and until 2018 was used as a public works yard with minor material stockpiles and uncontrolled dumping of construction and roadworks maintenance materials. Since initiation of site works in 2020, the qRD has taken over care and control of the Site. Currently, the Site is used as a Resource Recovery Centre (RRC), accepting municipal solid waste dropped off by local residents and businesses prior to transfer offsite for disposal.

1.2 Regional Context

The Site’s geology and hydrogeology were discussed in the Closure Plan. The regional geology is described as an area covered by marine and glaciomarine sediments of the Capilano Group. Three boreholes were drilled during development of the Closure Plan to confirm local geology and hydrogeology. These boreholes and test pits found that sand was the “predominant material encountered beneath the waste piles and in test pits that did not encounter waste”.

The Closure Plan interpreted groundwater flow as following regional topography toward the south-southwest. Inferred groundwater table contours were based on water level measurements in existing wells on-site and measurement of the water level in McFall Creek at three locations adjacent to the Site.

As identified on Figure 2, the primary surface water receptors include an unnamed watercourse flowing on the Site and McFall Creek adjacent to the Site. This creek discharges to the Strait of Georgia, which is approximately 150 m southwest of the Site (Figure 1).

The nearest dwelling or building structure is located approximately 100 m south of the Site. A check of the BC Water Resources Atlas on January 20, 2026, identified two water wells within 1.6 kilometres (km) of the Site.

The groundwater wells are approximately 1 km northeast and 1.5 km northwest of the Site and both are unlicensed and classed as dewatering and drainage wells.

1.3 Conceptual Site Model

A Conceptual Site Model (CSM) was created as a component of the initial environmental monitoring program completed in 2019, as detailed in the report *Marine Avenue Site Environmental Monitoring Program Annual Report* (Tetra Tech 2020). A CSM is a representation of an environmental system and the processes that determine the transport of contaminants from sources through the environmental media to environmental receptors within the system. This CSM was created prior to the site development activities and landfill closure decreased and thus its description in the following subsections and may no longer be fully applicable to the Site.

The potential release mechanisms for chemicals of potential concern at the Site include:

- Leachate migration through foundation soils beneath stockpiled or landfilled waste to the groundwater (or laterally through the covering soils and/or direct leaching from stockpiles to surface water runoff).
- Landfill gas (LFG) emission laterally and vertically through cover soils driven by pressure differentials within the waste where LFG pressures are greater than atmospheric.

Exposure pathways were identified as follows:

- P1 – Leachate mixed with groundwater migrating to potential water wells or to nearby surface water via discharge.
- P2 – Waste movement from stockpiles due to erosion or slope failure. Erosion is of heightened concern if waste or soil is exposed during high precipitation events common in autumn to spring months.
- P3 – Encapsulated waste generating LFG from the decomposition of organics, and subsequent exposure to site users via surface emissions or to adjacent receptors from lateral subsurface migration.

1.4 Recent Site Developments

Major changes to the Site have occurred from 2020 to the present in four phases, which are all now complete:

- Phase 1 – General Site Work and Material Processing (2020);
- Phase 2 – Landfill Closure (2020);
- Phase 3 – RRC Site Preparation (2021); and
- Phase 4 – RRC Construction (2022 to 2024).

Phase 1 to Phase 3 were discussed in the *2021 Marine Avenue Site Environmental Monitoring Program Annual Report* (Tetra Tech 2022). Phase 4 activities were discussed in the *2023 Marine Avenue Site Environmental Monitoring Program Annual Report* (Tetra Tech 2024). Drawings for the landfill closure and related works are included as Appendix C. Storm drainage design around the encapsulated landfill are included as Appendix D.

2.0 METHODOLOGY

In 2020 and 2021, Tetra Tech partnered with qRD staff to complete monitoring events while training qRD staff in the appropriate methodology and techniques to conduct field sampling. qRD staff conducted all sampling events in 2025. Tetra Tech continued to provide office support and quality checks of field data collection, chain of custody (COC) forms, and analytical data for the 2025 monitoring events.

2.1 Groundwater Sampling

Monitoring well locations are shown on Figure 2. All water level measuring, well purging, and sample collection including preservation and storage techniques were conducted using standard environmental industry protocols. Observations of each monitoring well, including well integrity and site activity, were conducted by qRD staff.

Groundwater samples were collected from the following monitoring wells:

- Monitoring well MW13-01 is hydraulically up-gradient of most site features, based on the interpreted southwesterly groundwater flow.
- Monitoring well MW13-02 is hydraulically down-gradient of most site features but is installed at the edge of the waste footprint and of questionable monitoring value in terms of evaluating groundwater characteristics off-site.
- Monitoring well MW13-03 is hydraulically down-gradient of the site features.
- Monitoring well MW19-04 is hydraulically down-gradient or cross-gradient from historical stockpile locations.
- Monitoring well MW24-05 is hydraulically down-gradient of site features. The well was installed in May 2024 to replace the decommissioned well (MW19-05). The borehole log for MW24-05 has been included as Appendix E.

Monitoring wells were purged and sampled using a dedicated bailer at MW13-03 and a peristaltic pump at all other wells on site. During purging, field parameters (i.e., pH, temperature, electrical conductivity [EC], total dissolved solids [TDS], dissolved oxygen [DO], and oxidation-reduction potential [ORP]) were measured with a YSI multi-probe device with a Quatro cable and flow-through cell rented from Hoskin Scientific (Hoskin) of Burnaby, BC. The YSI was calibrated by Hoskin prior to shipping to qRD. Prior to use, qRD staff verified the calibration in the field using buffer solutions for pH and EC.

When using the peristaltic pump, the intake line was submerged to a depth within the approximate middle of the well screen. Measurements of field parameters were taken after every well volume was removed until well water had stabilized to variations of less than 10% between successive well volumes.

When using the bailer, qRD staff used the bailer to remove three well volumes of water from the well. The water was subsequently allowed to recover for a short period of time. Staff then used the bailer to collect several litres of water in a 20-litre bucket that had been previously cleaned and rinsed with distilled water. The YSI multi-probe device was used to take field measurements from the water in the bucket.

After sufficient time had passed allowing the wells to recover, samples were taken using a dedicated bailer or dedicated inertial pump (Waterra) system and placed in clean labelled bottles supplied by the laboratory, CARO Analytical Services (CARO). The samples were preserved as directed by CARO and stored in coolers with ice packs for transport to CARO's laboratory in Richmond, BC under the COC protocol.

When groundwater samples needed to be filtered (e.g., for dissolved metals analysis), the groundwater was field filtered. When using the peristaltic pump, a new, disposable 0.45 µm in-line filter was attached to the pump

discharge tubing. When using a bailer, the water was collected using the bailer and then hand-pumped through a Nalgene filter into the laboratory-supplied sample bottles.

Groundwater sampling was conducted on the following dates: March 10, May 26, July 14, and December 2, 2025. The samples were submitted to CARO according to the suite of parameters identified in the Updated EMP (Tetra Tech 2018) and described in Table 2-1.

Table 2-1: Groundwater Analytical Suite

Parameters	March 2025	May 2025	July 2025	December 2025
General Chemistry (pH; conductivity; alkalinity; ammonia; sulphide; anions – chloride, sulphate, fluoride, nitrate, nitrite)	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05
Dissolved Metals Other Parameters (Hardness, TDS, DOC) BOD and COD	▪ Not analyzed	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05	▪ Not analyzed	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05
Total Metals	▪ Not analyzed	▪ Not analyzed	▪ Not analyzed	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05
Total Phenols Resins and Fatty Acids Hydrocarbons (EPH_{10-32}, LEPH, HEPH, VH_{6-10}) PAHs	▪ MW13-01 ▪ MW13-02 ▪ MW13-03 ▪ MW19-04 ▪ MW24-05	▪ Not analyzed	▪ Not analyzed	▪ Not analyzed

Abbreviations:
BOD – Biological Oxygen Demand.
COD – Chemical Oxygen Demand.
DOC – Dissolved Organic Carbon.
EPH – Extractable Petroleum Hydrocarbon.
HEPH – Heavy Extractable Petroleum Hydrocarbon.
LEPH – Light Extractable Petroleum Hydrocarbon.
PAH – Polycyclic Aromatic Hydrocarbon.
VH – Volatile Hydrocarbon.

2.2 Surface Water Sampling

Surface water samples were collected from the locations shown on Figure 2. Locations for surface water samples are as follows:

- SW-1 is on McFall Creek upstream of the Site.
- SW-2 is on McFall Creek upstream of the Site watercourse outlet.
- SW-3 is on McFall Creek downstream of the Site watercourse outlet.
- SW-4 is near the headwaters of the on-site watercourse.

Location SW-1 represents an upstream location on McFall Creek; Locations SW-2 and SW-3 represent locations on McFall Creek that are upstream and downstream, respectively, from the Site watercourse outlet. Location SW-4 represents an upstream location on the unnamed watercourse across the Site.

Samples were collected as grab samples near mid-stream (using an extension pole, if necessary) and halfway between the water surface and bottom of the creek with the mouth of the sample bottle facing upstream. Care was taken to avoid accidental sediment disruption during sampling. For each surface water sample, field parameters (i.e., pH, temperature, EC, TDS, DO, and ORP) were measured with a YSI multi-probe device.

Surface water sampling was conducted on the following dates: March 10, May 26, July 14, and December 2, 2025. The samples were stored in coolers with ice packs and submitted to CARO according to the suite of parameters identified in the Updated EMP (Tetra Tech 2018) and described in Table 2-2.

Table 2-2: Surface Water Analytical Suite

Parameters	March 2025	May 2025	July 2025	December 2025
General Chemistry (pH; conductivity; alkalinity; ammonia; sulphide; anions – chloride, sulphate, fluoride, nitrate, nitrite)	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4
Total Metals, Dissolved Metals	▪ Not analyzed	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4	▪ Not analyzed	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4
Other Parameters (Hardness, TDS, DOC)				
COD and BOD				
Total Phenols	▪ SW-1 ▪ SW-2 ▪ SW-3 ▪ SW-4	▪ Not analyzed	▪ Not analyzed	▪ Not analyzed
Resins and Fatty Acids				
Hydrocarbons (EPH_{10-32}, LEPH, HEPH, VH_{6-10})				
PAHs				

2.3 Quality Assurance/Quality Control

The qRD implemented a quality assurance/quality control (QA/QC) program to assess the integrity of the sampling methodology and analytical testing. The QA/QC program adhered to the Tetra Tech In-house Quality Management System, which was designed to generate representative samples, mitigate potential cross-contamination between sampling locations and samples, and reduce the potential for systematic bias. Tetra Tech trained qRD staff on the sampling methodology portions of the QA/QC program during sampling events in 2020 and 2021. For the 2025 sampling events, qRD staff implemented the QA/QC program for sampling methodology while Tetra Tech staff remained responsible for QA/QC protocol during the analytical review stage of the program.

The QA/QC protocol included the following:

- Logging of site conditions during monitoring and sampling of environmental media.
- Recording the results of field activities in the field concurrently with the activities.
- Using clean, new sampling gloves at each sampling location.
- Placing samples into new and labelled laboratory-supplied containers, and when warranted, preserving the samples using laboratory-measured and supplied preservatives.
- Transporting temperature-sensitive samples to the analytical laboratory in chilled coolers using COC procedures either on the same day of sampling or within one day of sampling and analyzing the samples within the appropriate holding times.
- When appropriate, collecting duplicate samples using industry accepted splitting methods.

- Submitting duplicate samples to the laboratory as “blind” samples meaning that the source of the sample (e.g., groundwater monitoring well, surface water location) was not identified.
- Using Canadian Association for Laboratory Accreditation (CALA)-affiliated laboratories that are qualified to analyze the samples using Ministry-approved procedures.
- Decontaminating sampling equipment between sample locations.
- Reviewing the results of QA/QC analyses, assessing the significance of the analytical results, and identifying this information in this report.
- Comparing the laboratory certificates and the applicable standards to confirm the accuracy of the information presented with the analytical tables provided in the report.
- Reviewing this report by a qualified senior Tetra Tech professional to ensure that the report meets Tetra Tech technical and reporting requirements.

Part of the QA/QC program involved calculating the relative percent difference (RPD) between sample concentrations of paired blind duplicates. Results were calculated as follows:

$$RPD(\%) = 2 \times \frac{|X - Y|}{X + Y} \times 100\%$$

Where:

- X is the measured concentration in the original sample; and
- Y is the measured concentration in the duplicate sample.

RPD values were not calculated if one or both of the sample-duplicate concentrations were less than the reporting detection limit (RDL). In these cases, duplicate samples were still considered as having passed the QA/QC reproducibility procedure if the sample-duplicate concentration difference was less than five times the RDL value.

2.4 Data Analysis and Evaluation

Analytical results for groundwater were compared to the Aquatic Life (AW) and Drinking Water (DW) Standards defined by the BC Contaminated Sites Regulation (CSR), B.C. Reg. 375/96 (including amendments up to BC Reg 171/2025, effective October 27, 2025). The AW Standards are further divided into Freshwater Aquatic Life (Fresh AW) and Marine Aquatic Life (Marine AW). The groundwater quality at monitoring well MW13-01, located hydraulically up-gradient of most Site features, is assumed to be representative of background groundwater quality for the Site. The background average concentration for a particular parameter is calculated from the concentrations of that parameter from concentrations measured and recorded from 2019 to 2025 at MW13-01.

The Government of BC has a published database of background concentrations in groundwater for various regions throughout the province (iMapBC). A check of the iMapBC database on January 20, 2026 found that the Site is not a part of this database due to insufficient data; however, the South Vancouver Island region is the nearest region at approximately 80 km away. Data on background groundwater concentrations from the South Vancouver Island region have been used to aid in the interpretation of results.

Analytical results for surface water were compared to guidelines set out by the 2025 BC Water Quality Guidelines (WQG). Specifically, results were compared with the BC Approved Water Quality Guidelines (AWQG): Aquatic Life, Wildlife & Agriculture, May 2025 edition, and BC Working Water Quality Guidelines (WWQG): Aquatic Life, Wildlife & Agriculture, March 2025 edition. The guidelines for Fresh AW and Marine AW were referenced. The long-term chronic guidelines are referenced when possible, and the short-term acute guidelines referenced when the long-term chronic guideline does not exist for a parameter. The surface water quality at surface water location

SW-1, located up-stream of the Site, is assumed to be representative of background surface water quality for the Site. The background average concentration for a particular parameter is calculated from the concentrations of that parameter from previous measurements at SW-1, from 2019 to 2025.

3.0 RESULTS

3.1 Groundwater Conditions

The following sections summarize the groundwater elevations, interpreted flow, and the groundwater analytical results.

3.1.1 Water Levels

Table 3-1 summarizes the groundwater elevations measured in the groundwater monitoring wells at the Site in 2025. Additional well information is presented in attached Table 1. The groundwater elevations and interpreted contours for each 2025 monitoring event are shown on Figure 3 (March), Figure 4 (May), Figure 5 (July), and Figure 6 (December). Monitoring well hydrographs for the years 2019 to 2025 are presented on Figure 7.

Table 3-1: Groundwater Levels at the Site

Well ID	Groundwater Elevations (Metres Above Mean Sea Level)			
	March 2025	May 2025	July 2025	December 2025
MW13-01	51.63	51.57	51.54	51.54
MW13-02	33.62	33.18	32.75	32.78
MW13-03	16.73	16.68	16.65	16.70
MW19-04	38.76	38.38	38.17	38.44
MW24-05	40.64	38.97	38.54	39.69

The greatest seasonal fluctuations in groundwater level are at MW13-02 and MW24-05, which is consistent with historical readings. Tetra Tech interprets the groundwater flow direction to be toward the south-southwest for all monitoring events under an average hydraulic gradient of 0.10 m/m. This gradient has remained relatively consistent since the onset of monitoring.

3.1.2 Analytical Results

The available historical groundwater analytical data includes data from well installations in 2013 and 2019, and data collection from 2019 to the present. Groundwater analytical results are presented in attached Table 2 and summarized in Table 3-2. The laboratory analytical certificates are included as Appendix F. Trend plots for selected parameters are included as Figure 8 to Figure 13.

Table 3-2: Summary of Groundwater Analytical Results

Parameter	Most Stringent Standard*	Average Background Quality**	Measured Concentrations in 2025		Comments on Overall Trend
			Groundwater Concentration Range in 2025	Greater than the Standard	
pH – laboratory	None	6.94	▪ Minimum: 6.10 at MW13-03 (Dec) ▪ Maximum: 7.29 at MW19-04 (May)	▪ N/A	The 2025 pH values at the wells decreased in July and December compared to the values measured during the May 2025 event. However, values were generally within the 5-year historical range, with the exception of MW13-03 (5-year historical low of pH 6.10 in December 2025) and MW24-05 (pH 6.17 in December 2025 was the lowest value since well installation in 2024).
EC	None	122 µS/cm	▪ Minimum: 93.9 µS/cm at MW13-01 (Mar) ▪ Maximum: 1,210 µS/cm at MW13-02 (Dec)	▪ N/A	Historically, EC values at MW13-02 are higher than at other wells on site. EC values at MW13-02 had a decreasing trend between December 2022 and March 2025, but increased between May and December 2025; however, EC values at this well remained within the 5-year historical range in 2025. EC values at the other wells on site remained relatively low and stable over time.
TDS	None	95,700 µg/L	▪ Minimum: 78,000 µg/L at MW13-01 (Dec) ▪ Maximum: 725,000 µg/L at MW13-02 (Dec)	▪ N/A	Historically, TDS concentrations at MW13-02 are higher than at other wells on site. TDS values at MW13-02 had a decreasing trend between May 2023 and December 2024, but increased slightly in 2025; however, TDS values at this well remained within the 5-year historical range. The TDS values at the other wells on site remained relatively low and stable over time.
Sulphate (Figure 8)	500,000 µg/L (CSR-DW)	5,674 µg/L	▪ Minimum: less than the analytical detection limit (1,000 µg/L) at MW19-04 (July) ▪ Maximum: 120,000 µg/L at MW13-02 (Mar)	▪ None	Sulphate concentrations have not exceeded the CSR-DW Standard since monitoring started in 2019. Concentrations at MW13-02 are higher than at other wells on site. Sulphate concentrations at MW13-02 increased between 2021 and 2022 and reached a 5-year historical high in October 2022 (491,000 µg/L), but have since decreased to concentrations similar to concentrations at other groundwater wells. Sulphate concentrations at the other wells remained relatively low and stable over time.
Chloride (Figure 9)	250,000 µg/L (CSR-DW)	7,004 µg/L	▪ Minimum: 370 µg/L at MW24-05 (Dec) ▪ Maximum: 80,500 µg/L at MW13-03 (Mar)	▪ None	At MW13-03, chloride concentrations reached a 5-year historical peak at MW13-03 in March 2025 (80,500 µg/L), but decreased to within the 5-year historical range in subsequent monitoring events in 2025. Chloride concentrations at other wells in 2025 were consistent with the 5-year historical range. Concentrations have remained relatively stable and well below the Standards at all wells since monitoring started in 2019.
Nitrate (as N)	10,000 µg/L (CSR-DW)	402 µg/L	▪ Minimum: less than the analytical detection limit (10 or 100 µg/L) at multiple wells ▪ Maximum:2,100 µg/L at MW13-03 (Mar)	▪ None	Nitrate concentrations in 2025 were consistent with the 5-year historical range. Concentrations have remained relatively stable and well below the Standards at all wells since monitoring started in 2019.
Ammonia (as N)	18,400 µg/L (CSR-Fresh AW)	Less than the analytical detection limit (50 µg/L)	▪ Minimum: less than the analytical detection limit (50 µg/L) at multiple wells ▪ Maximum: 8,110 µg/L at MW13-02 (Jul)	▪ None	Ammonia concentrations in 2025 were consistent with the 5-year historical range. Concentrations have remained relatively stable and well below the Standards at all wells since monitoring started in 2019. Ammonia concentrations are slightly higher at MW13-02 than at other wells on site, although concentrations are still well below the Standards at this well.
Dissolved Cobalt (Figure 10)	1 µg/L (CSR-DW)	Less than the analytical detection limit (0.10 µg/L)	▪ Minimum: Less than the analytical detection limit (0.1 µg/L) at multiple wells ▪ Maximum: 4.3 µg/L at MW13-02 (Dec)	▪ MW13-02 (May, Dec) ▪ MW19-04 (May, Dec)	Dissolved cobalt concentrations have historically exceeded the CSR-DW Standard at MW13-02, MW19-04, and MW19-05 (prior to decommissioning). In 2025, concentrations at MW13-02 and MW19-04 were in exceedance of the CSR-DW Standard but remained within the 5-year historical range. The dissolved cobalt concentration at MW24-05 exceeded the CSR-DW Standard in June 2024 after well installation in May 2024, but decreased to less than 0.2 µg/L in subsequent monitoring events.
Dissolved Cadmium	1.5 µg/L (CSR-Fresh AW)	Less than the analytical detection limit (0.01 µg/L)	▪ Minimum: Less than the analytical detection limit (0.01 µg/L) at multiple wells ▪ Maximum: 0.071 µg/L at MW24-05 (Dec)	▪ None	Dissolved cadmium concentrations have historically remained at or below 0.1 µg/L at the Site's wells. The dissolved cadmium concentration at MW24-05 exceeded the CSR-DW Standard in June 2024 after well installation in May 2024, but decreased to less than 0.1 µg/L in subsequent monitoring events.
Dissolved Copper	20 µg/L (CSR-Fresh AW, CSR-Marine AW)	6.2 µg/L	▪ Minimum: Less than the analytical detection limit (0.4 µg/L) at multiple wells ▪ Maximum: 15.2 µg/L at MW24-05 (Dec)	▪ None	Dissolved copper concentrations have generally remained below the CSR-AW Standard at the Site's wells. The dissolved copper concentration at MW24-05 exceeded the CSR-AW Standard in June 2024 after well installation in May 2024, but decreased to less the CSR-AW Standard in subsequent monitoring events.
Dissolved Arsenic (Figure 11)	10 µg/L (CSR-DW)	Less than the analytical detection limit (0.50 µg/L)	▪ Minimum: Less than the analytical detection limit (0.50 µg/L) at multiple wells ▪ Maximum: 9.91 µg/L at MW13-02 (Dec)	▪ None	Dissolved arsenic concentrations have previously exceeded the CSR-DW Standard at MW13-02 but have decreased to below the Standard since 2023. The dissolved arsenic concentrations at MW13-02, MW19-04, and MW24-05 showed seasonal fluctuations in 2025, decreasing in May and increasing in December. At MW19-04, the December 2025 concentration (3 µg/L) was higher than the 5-year historical range but remained well below the Standard. Concentrations at the other on-site wells remained well below the Standards and generally within the 5-year historical range.
Dissolved Iron (Figure 12)	6,500 µg/L (CSR-DW)	Less than the analytical detection limit (10 µg/L)	▪ Minimum: Less than the analytical detection limit (10 µg/L) at multiple wells Maximum: 80,400 µg/L at MW13-02 (Dec)	▪ MW13-02 (Dec) ▪ MW19-04 (Dec)	Dissolved iron concentrations have previously exceeded the CSR-DW Standard at MW13-02 and MW19-04. The dissolved iron concentrations at MW13-02 and MW19-04 showed seasonal fluctuations in 2025, decreasing to below 1,000 µg/L in May 2025 and increasing to above the CSR-DW Standard in December 2025. Concentrations at the other wells on site remain well below the Standards and within the 5-year historical range.

Parameter	Most Stringent Standard*	Average Background Quality**	Measured Concentrations in 2025		Comments on Overall Trend
			Groundwater Concentration Range in 2025	Greater than the Standard	
Dissolved Manganese (Figure 13)	1,500 µg/L (CSR-DW)	0.29 µg/L	▪ Minimum: Less than the analytical detection limit (0.2 µg/L) at MW13-01 (May, Dec) ▪ Maximum: 1,650 µg/L at MW13-02 (May)	▪ MW13-02 (May, Dec) ▪ MW19-04 (May)	Dissolved manganese concentrations have previously exceeded the CSR-DW Standard at MW13-02 and MW19-04. The 2025 concentrations at these two wells were in exceedance of the CSR-DW Standard but remained within 5-year historical range. Concentrations at the other wells on site remained well below the Standards and within the 5-year historical range.
EPHs and VHs	Various	Less than the detection limits for all parameters	▪ Detection of EPH_{19-32} (259 µg/L) at MW13-01 (Mar) ▪ Detection of HEPH (259 µg/L) at MW13-01 (Mar) ▪ Less than the detection limits for other parameters at all other monitoring wells (Mar)	▪ None	Trace amounts of EPH_{19-32} (259 µg/L) and HEPH (259 µg/L) were detected at MW13-01 in March 2025 but values were close to the detection limit (250 µg/L for both parameters). Other EPH and VH parameters at all wells were below the detection limits in 2025, which was consistent with historical results.
PAHs	Various	Less than the detection limits for all parameters	▪ Detection of acenaphthene (0.1 µg/L) at MW13-02 (Mar) ▪ Less than the detection limits for other parameters at all other monitoring wells (Mar)	▪ None	Trace amounts of acenaphthene (0.1 µg/L) were detected at MW13-02 in March 2025 but the concentration is well below the CSR-AW Standard (60 µg/L). Other PAHs at all wells were below the detection limits in 2025, which was consistent with historical results.
Resins and Fatty Acids	None	Less than the detection limits for all parameters (Except oleic acid, 10 µg/L)	▪ Less than the detection limits at all monitoring wells (Mar)	▪ N/A	Resins and fatty acids at all wells were below the detection limits in 2025, which was consistent with historical results.

Notes:

* Groundwater monitoring wells results are compared to CSR-Fresh AW, CSR-Marine AW, and CSR-DW Standards.

**Background quality is the average of all available measurements, including non-detectable (value of half the detection limit) results at MW13-01, from 2019 to 2025.

Abbreviations:

Mar – March.
Jul – July.
Dec – December.
N/A – Not Applicable.

3.2 Surface Water Conditions

3.2.1 Analytical Results

Surface water sampling has included data collection in March 2014 and from 2019 to the present. Surface water analytical results are presented in attached Table 3 and summarized in Table 3-3. The laboratory analytical certificates are included as Appendix F. Trend plots for selected parameters are included as Figure 14 to Figure 16.

Table 3-3: Summary of Surface Water Analytical Results

Parameter	Most Stringent Guideline*	Average Background Quality**	Measured Concentrations in 2025		Comments on Overall Trends
			Surface water Concentration Range in 2025	Greater than the Guideline	
pH – laboratory (Figure 14)	7.0 to 8.7 (BC WQG – Marine AW)	7.17	▪ Minimum: 6.90 at SW-1 (Jul) ▪ Maximum: 7.42 at SW-3 (Mar, Dec), SW-4 (Mar)	▪ SW-1 (Jul) ▪ SW-2 (Jul) ▪ SW-4 (Jul, Dec)	The pH values were marginally outside (less than) the range specified by the BC WQG guidelines in July (SW-1, SW-2, SW-4) and December (SW-4), including at the background location (SW-1). Historically, there was a decreasing trend between 2019 and June 2024, but pH values have since increased to values that are mostly within the acceptable range in 2025. Seasonal fluctuations were observed in 2025, with pH values being relatively high in March and December and relatively low in May and July.
EC	None	96 µS/cm	▪ Minimum: 43 µS/cm at SW-1 (Mar) ▪ Maximum: 170 µS/cm at SW-4 (May)	▪ N/A	EC values at each location reached 5-year historical lows at all locations in March 2025, but increased to values within the 5-year historical range in subsequent events in 2025.
TDS	None	70,409 µg/L	▪ Minimum: 55,000 µg/L at SW-2 (Dec) and SW-3 (Dec) ▪ Maximum: 98,000 µg/L at SW-4 (Dec)	▪ N/A	TDS values have historically fluctuated with no obvious trends; however, values were within the historical range in 2025.
Sulphate (Figure 15)	218,000 µg/L (BC WQG – Fresh AW, long-term chronic)	2,893 µg/L	▪ Minimum: 1,400 µg/L at SW-1 (May) ▪ Maximum: 5,500 µg/L at SW-4 (Dec)	▪ None	Sulphate concentrations at SW-4 have historically been higher at SW-4 than at other sampling locations; however, sulphate concentrations have remained well below the guideline at all locations. Concentrations at the sampling locations decreased overall in 2025 and reached 5-year historical lows at all locations in March, May, or July 2025.
Chloride (Figure 16)	150,000 µg/L (BC WQG – Fresh AW, long-term chronic)	9,141 µg/L	▪ Minimum: 7,170 µg/L at SW-1 (Mar) ▪ Maximum: 12,800 µg/L at SW-4 (Mar)	▪ None	Chloride concentrations have historically remained well below the guidelines at the sampling locations. The chloride concentration at SW-4 reached a 5-year historical high in March 2025 (12,800 µg/L); however, values were an order of magnitude below the guidelines. The 2025 concentrations at the other sampling locations remained within the 5-year historical range with no obvious trends noted.
Nitrate (as N)	3,000 µg/L (BC WQG – Fresh AW, long-term chronic)	112 µg/L	▪ Minimum: less than the analytical detection limit (10 µg/L) at SW-4 (Jul) ▪ Maximum: 154 µg/L at SW-3 (Mar)	▪ None	Nitrate concentrations have historically remained well below the BC WQG guideline at the sampling locations. The 2025 concentrations remained within the 5-year historical range.
Ammonia (as N)	1,850 µg/L (BC WQG – Fresh AW, long-term chronic)	Less than the analytical detection limit (50 µg/L)	▪ Less than the detection limits at all locations (Mar, May, Jul, Dec)	▪ None	Ammonia concentrations have historically remained well below the BC WQG guideline at the sampling locations. The ammonia concentrations at all sampling locations were less than the detection limits during all sampling events in 2025.
Dissolved Copper	0.862 µg/L (BC WQG – Fresh AW, long-term chronic)	Less than the analytical detection limit (0.4 µg/L)	▪ Minimum: less than the analytical detection limit (0.4 µg/L) at multiple locations ▪ Maximum: 1.18 µg/L at SW-2 (Dec)	▪ SW-2 (Dec) ▪ SW-3 (Dec)	Dissolved copper concentrations have historically remained relatively low at all sampling locations. Exceedances of the guideline have been noted intermittently, typically in December; however, concentrations generally remain below 1.2 µg/L. The 2025 concentrations were generally consistent with the 5-year historical range at each location, with the exception of a 5-year historical high at SW-2 in December 2025 (1.18 µg/L).
Dissolved Iron	350 µg/L (BC WQG – Fresh AW, short-term acute)	423 µg/L	▪ Minimum: 15 µg/L at SW-4 (May) ▪ Maximum: 506 µg/L at SW-1 (Dec)	▪ SW-1 (Dec) ▪ SW-2 (Dec) ▪ SW-3 (Dec)	Dissolved iron concentrations have historically exceeded the guidelines during the fall event (i.e., October to December monitoring event) at SW-1, SW-2, and SW-3. The 2025 concentrations were generally within the 5-year historical range at each location.
Total Aluminum	162 µg/L (BC WQG – Fresh AW, long-term chronic)	123 µg/L	▪ Minimum: 59.5 µg/L at SW-4 (Dec) ▪ Maximum: 372 µg/L at SW-2 (May)	▪ SW-1 (May) ▪ SW-2 (May) ▪ SW-3 (May) ▪ SW-4 (May)	In 2025, total aluminum concentrations reached 5-year historical highs at all sampling locations in May 2025 (concentrations between 218 µg/L at SW-4 and 372 µg/L at SW-2). Concentrations decreased in December 2025 to concentrations within the 5-year historical range at each location.
Total Iron	1,000 µg/L (BC WQG – Fresh AW, short-term acute)	652 µg/L	▪ Minimum: 588 µg/L at SW-4 (Dec) ▪ Maximum: 1,170 µg/L at SW-4 (May)	▪ SW-4 (May)	The total iron concentration at SW-4 reached a 5-year historical high in May 2025 (1,170 µg/L), but the concentration decreased to within the 5-year historical range in December 2025. The 2025 concentrations at the other sampling locations were generally within the 5-year historical range at each location.

Parameter	Most Stringent Guideline*	Average Background Quality**	Measured Concentrations in 2025		Comments on Overall Trends
			Surface water Concentration Range in 2025	Greater than the Guideline	
EPHs and VHs	None	Less than the detection limits for all parameters	▪ Less than the detection limits at all sampling locations (Mar)	▪ N/A	EPHs and VHs at all sampling locations were below the detection limits in 2025, which was consistent with historical results.
PAHs	Various	Less than the detection limits for all parameters	▪ Less than the detection limits at all sampling locations (Mar)	▪ None	PAHs at all sampling locations were below the detection limits in 2025, which was consistent with historical results.
Resins and Fatty Acids	Various	Less than the detection limits for all parameters (Except oleic acid, 1.1 µg/L)	▪ Less than the detection limits at all sampling locations (Mar)	▪ None	Resins and fatty acids at all sampling locations were below the detection limits in 2025, which was consistent with historical results.

Notes:
* Surface water results are compared to the BC WQG for Fresh AW and Marine AW.
**Background quality is the average of all available measurements, including non-detectable (value of half the detection limit) results at SW-1, from 2019 to 2025.
Abbreviations:
Mar – March.
Jul – July.
Dec – December.
N/A – Not Applicable.

3.3 Quality Assurance/Quality Control Results

The field QA/QC program included the collection of one duplicate sample during each event and the use of COC forms to track sample handling between the field and the laboratory. In addition, sample hold times and temperatures were evaluated to determine if these parameters exceeded laboratory or method QA/QC limits. The duplicates were submitted to CARO and tested for routine parameters (e.g., pH, EC, major ions – for all events), dissolved metals (in July and December), and total phenols, hydrocarbons, PAHs, and resins and fatty acids (March only). The samples in March and December were received by the laboratory at temperatures below the alert limit of 10ºC, while the samples in May and July were received by the laboratory at 10.4ºC and 14.2 ºC, respectively. Samples were analyzed within the method hold time, except for resins and fatty acids, which was sublet to another laboratory, and pH, which has a recommended hold time of 15 minutes and cannot practically be met.

Duplicate results were considered as having passed the QA/QC reproducibility procedure if the RPD was less than or equal to 30%, indicating a close correlation between the sample-duplicate pair. In poor precision situations (e.g., RPD >50%), the results cannot be distinguished as to whether it is due to the non-homogenous nature of the samples or poor sampling method or laboratory technique. Therefore, RPD is usually used for flagging data for further review, rather than for taking corrective action. The RPD calculations are summarized in Table 3-4 and detailed in attached Table 4.

Table 3-4: Parameters with RPD greater than Screening Thresholds

Monitoring Event	March 2025	May 2025	July 2025	December 2025
Duplicate collected at:	**SW-3**	**SW-4**	**SW-3**	**MW24-05**
Parameters with RPD >30%	EC = 34%	TDS = 40% Total aluminum = 61% Total iron = 87% Total manganese = 59% Total titanium = 60% Total uranium = 58%	None	None

The reason for the elevated RPD value in March 2025 is unclear. However, the RPD for EC is marginally greater than the threshold and no other RPD values above the 30% threshold were noted in March 2025.

The were RPD exceedances for May 2025 for several total metal parameters (i.e., aluminum, iron, manganese, titanium, and uranium). In all cases except for total iron, both the parent and duplicate concentrations were within the same order of magnitude. For total aluminum and iron, the parent concentrations were above the guidelines while the duplicate concentration was under the guideline. Thus, results interpretation was not affected by the RPD exceedances. The reason for the elevated RPD values for the total metal parameters in May 2025 is unclear but may be related to the heterogeneity of the water sample and the amount of suspended material in the unfiltered water samples. This is supported by the lack of RPD values greater than the 20% threshold in the various dissolved metal parameters in May 2025. The elevated RPD value for TDS may also be related to the heterogeneity of the water sample.

The majority of the calculated RPD values were within the RPD thresholds, with the exceptions noted in Table 3-4. Based on the results of the QA/QC program, Tetra Tech considers the analytical results reliable.

To better evaluate the reliability of the analytical results, two duplicates are recommended to be collected during each sampling event for the 2026 environmental monitoring program (i.e., one duplicate for groundwater, one duplicate for surface water).

4.0 DISCUSSION

4.1 Groundwater Trends

Groundwater was assessed based on analysis of routine parameters, nutrients, phenols, dissolved metals, total metals, petroleum hydrocarbons, PAHs, and resins and fatty acids.

Groundwater at the Site appears to have a moderate concentration of minerals, with TDS values ranging from 78,000 µg/L to 725,000 µg/L in 2025. Sulphate did not exceed the CSR-AW and CSR-DW Standards at any well in 2025. Sulphate concentrations at MW13-02 increased between 2021 and 2022 and reached a 5-year historical high in October 2022 (491,000 µg/L) but have since decreased to concentrations similar to those at other groundwater wells. Sulphate concentrations at the other wells have been relatively low and stable over time. The concentrations of other typical leachate indicator parameters such as chloride, ammonia, and dissolved boron remain less than Standards with no obvious trends.

The concentrations of several compounds are indicative of anaerobic conditions in the groundwater hydraulically cross-gradient or down-gradient of the former site operations. This includes concentrations at MW13-02 (located at the edge of the historical waste footprint) and at MW19-04, situated along the west side of the Site. These findings are further discussed below.

Dissolved iron exceeded the CSR-DW Standard of 6,500 µg/L at MW13-02 (down-gradient) and MW19-04 (cross-gradient) in December. The dissolved iron concentrations at MW13-02 and MW19-04 show seasonal fluctuations in 2025, decreasing to below 1,000 µg/L in May 2025 and increasing to above the CSR-DW Standard in December 2025. At MW19-04, the December 2025 dissolved iron concentration was higher than the 5-year historical range. In addition to the above noted exceedances, the concentrations of ammonia and dissolved arsenic at MW13-02 and to a lesser extent at MW19-04 are also higher when compared to levels found at other wells. These findings are interpreted to be related to reducing (anoxic) conditions in the local groundwater which may be related to the historical waste operations at the Site. MW13-02 is located at the edge of the waste footprint and the measured concentrations may not be representative of the surrounding groundwater. The concentrations at MW19-04 are lower, often by an order of magnitude, than those observed at MW13-02. The groundwater at both of these wells should continue to be monitored for potential leachate impact.

Dissolved manganese exceeded the CSR-DW Standard of 1,500 µg/L at MW13-02 in May and December and at MW19-04 in May but remained within 5-year historical range. Dissolved manganese concentrations have previously exceeded the CSR-DW Standard at MW13-02 and MW19-04. Concentrations at the other wells on site remained well below the Standards and within the 5-year historical range.

Dissolved cobalt concentrations have historically exceeded the CSR-DW Standard of 1 µg/L at MW13-02, MW19-04, and MW19-05 (prior to decommissioning). The 2025 and historical dissolved cobalt concentrations at all wells were below the CSR-Fresh AW and Marine AW Standards (40 µg/L). In 2025, concentrations at MW13-02 and MW19-04 are in exceedance of the Standards but remain within the 5-year historical range. The maximum concentration of dissolved concentration in 2025 at the Site (4.3 µg/L at MW13-02 in December) is lower than the background concentration of dissolved cobalt in groundwater (14 µg/L) for the South Vancouver Island region, which is approximately 80 km away from the Site (iMapBC). Cobalt can be bound with iron and manganese oxides, and the relatively higher iron and manganese concentrations at MW13-02 and MW19-04, indicative of anaerobic conditions, are likely related to the dissolution of these oxides. Arsenic behaves in a similar manner, and similar trends in arsenic concentrations are noted at MW19-04 and MW13-02. The adjacent surface water chemistry,

described in Section 4.2, did not show substantial differences or trends in the concentrations of total cobalt, iron, and manganese between upstream and downstream locations.

Exceedances of the CSR Standards for several dissolved metal parameters (i.e., cadmium, cobalt, and copper) were noted at MW24-05 in June 2024, after the well was installed in May 2024. However, concentrations of these dissolved metal parameters decreased to below the Standards by December 2024, with concentrations of these parameters remaining below the Standards at this well during both events in 2025.

Concentrations of petroleum hydrocarbons, PAHs, and resins and fatty acids continued to be less than analytical detection limits for most parameters in 2025 and can be summarized as follows:

- Petroleum hydrocarbons: detection of EPH_{19-32} (259 µg/L) and HEPH (259 µg/L) at MW13-01 in March 2025 but values were close to the detection limit (250 µg/L for both parameters). There are no CSR-AW or CSR-DW Standards for both EPH_{19-32} and HEPH. Other EPH and VH parameters at all wells were below the detection limits in 2025, which was consistent with historical results.
- PAHs: Trace amounts of acenaphthene (0.1 µg/L) were detected at MW13-02 in March 2025 but the concentration is well below the CSR-AW Standard (60 µg/L). Other PAHs at all wells were below the detection limits in 2025, which was consistent with historical results.
- Resins and fatty acids: below the detection limits at all wells in 2025, which was consistent with historical results.

4.2 Surface Water Trends

Surface water was assessed based on analysis of routine parameters, nutrients, phenols, dissolved metals, total metals, petroleum hydrocarbons, PAHs, and resins and fatty acids.

The laboratory pH levels of the surface water samples were outside the range set by the BC AWQG for Marine AW (pH 7.0 to 8.7) during the July (SW-1, SW-2, SW-4) and December (SW-4) monitoring events. Historically, there was a decreasing trend between 2019 and June 2024, but pH values have since increased to values that are mostly within the acceptable range in 2025. Seasonal fluctuations were observed in 2025, with pH values being relatively high in March and December and relatively low in May and July. As similar patterns are seen in the upstream and downstream locations and at both watercourses, the measured pH values are interpreted to not be related to site activities. pH is susceptible to shifts when the water being analyzed is of low hardness, and with the presence of dissolved iron and longer hold times, there is a potential for an acidifying effect due to the oxidation of the dissolved iron in the samples (Nilsson and Sandberg 2017). The pH of the surface water should continue to be closely monitored.

Exceedances of the BC AWQG for Fresh AW guideline for dissolved copper (0.852 µg/L) was noted at SW-2 and SW-3 in December 2025. Exceedances of the guideline have been noted intermittently, typically in December; however, concentrations have historically remained relatively low at all sampling locations (generally below 1.2 µg/L). The 2025 concentrations are generally consistent with the 5-year historical range at each location, with the exception of a 5-year historical high at SW-2 in December 2025 (1.18 µg/L).

Exceedances of the BC AWQG for Fresh AW for dissolved iron of 350 µg/L were noted at SW-1, SW-2, and SW-3 in December 2025. Dissolved iron concentrations have historically exceeded the guideline during the fall event (i.e., October to December monitoring event) at SW-1, SW-2, and SW-3.

In 2025, total aluminum concentrations reached 5-year historical highs at all surface water sampling locations in May 2025 (concentrations between 218 µg/L at SW-4 and 372 µg/L at SW-2) and exceeded the BC AWQG for Fresh AW guideline for total aluminum (162 µg/L); however, the exceedances are seen in both the upstream and

downstream locations and are not interpreted to be a result of historical site operations. Concentrations decreased in December 2025 to concentrations within the 5-year historical range at each location.

Total iron concentrations reached a 5-year historical high at SW-4 in May 2025 (1,170 µg/L) and exceeded the BC AWQG for Fresh AW guideline for total iron (1,000 µg/L). The concentration at SW-4 decreased to within the 5-year historical range in December 2025. The 2025 concentrations at the other sampling locations were generally within the 5-year historical range at each location. It should be noted that the May 2025 sample at SW-4 was duplicated and the total iron concentration was found to be 1,170 µg/L in the original sample, but 461 µg/L in the duplicate sample, with the concentration of the duplicate sample being more inline with historical results at SW-4. The difference may be related to the heterogeneity of the water sample, as discussed in Section 3.3.

As the exceedances of laboratory pH, dissolved metals, and total metals parameters in the surface water samples were generally seen in both the upstream and downstream locations and at both watercourses, these exceedances are not interpreted to be a result of historical site operations.

Sulphate and chloride concentrations have remained well below the BC AWQG for Fresh AW guideline at all locations. Sulphate concentrations at the sampling locations decreased overall in 2025 and reached 5-year historical lows at all locations in March, May, or July 2025. The chloride concentration at SW-4 reached a 5-year historical high in March 2025 (12,800 µg/L); however, values remain an order of magnitude below the guidelines. The chloride concentrations at the other sampling locations remained within the 5-year historical range with no obvious trends noted.

Concentrations of PAHs, petroleum hydrocarbons, and resins and fatty acids were less than the detection limits in the surface water samples, which was consistent with historical results.

5.0 CONCLUSIONS AND RECOMMENDATIONS

In 2025, quarterly groundwater and surface water monitoring events were carried out by qRD staff on the following dates: March 10, May 26, July 14, and December 2, 2025. Tetra Tech provided office support and quality checks of field data collection, COC forms, and analytical data for the monitoring events.

Tetra Tech interprets the groundwater flow direction to be toward the south-southwest for all monitoring events under an average hydraulic gradient of 0.10 m/m. This gradient has remained relatively consistent since the onset of monitoring.

The potential for migration of landfill and solid waste-related compounds from the Site can be assessed from evaluation of groundwater composition at the Site and Site boundary, and surface water composition from waters adjacent to the Site. The background Site conditions are monitored by groundwater well MW13-01 and surface water location SW-1.

Based on the results of the monitoring program, there are indications of reducing (anoxic) conditions in hydraulically down-gradient and cross-gradient groundwater monitoring wells (MW13-02 and MW19-04, respectively) which may be related to historical site operations, however, there are no significant trends noted or indications of site impact to the adjacent McFall Creek.

At MW13-02 and MW19-04, concentrations of dissolved cobalt, iron, and manganese were found to be in exceedance of the Standards during one or more monitoring events in 2025. Monitoring wells MW13-02 and MW19-04 are interpreted as being hydraulically down-gradient and cross-gradient, respectively, of the historical site operations and vulnerable to potential impacts from leachate. Monitoring well MW13-02 has been interpreted

as being on the edge of the waste footprint and the measured concentrations may not be representative of the surrounding groundwater. Groundwater quality at these wells should continue to be monitored for potential leachate impact and trends in indicator parameters. The adjacent surface water chemistry did not show substantial differences or trends in the concentrations of total cobalt, iron, and manganese between upstream and downstream locations.

Exceedances of the CSR Standards for several dissolved metal parameters (i.e., cadmium, cobalt, and copper) were noted at MW24-05 in June 2024, after the well was installed in May 2024. However, concentrations of these dissolved metal parameters had decreased to below the Standards by December 2024, with concentrations remaining below the Standards during both events in 2025.

The laboratory pH levels of the surface water samples were outside the range set by the BC AWQG for Marine AW (pH 7.0 to 8.7) during the July (SW-1, SW-2, SW-4) and December (SW-4) monitoring events. Historically, there was a decreasing trend between 2019 and June 2024, but pH values have since increased to values that are mostly within the acceptable range in 2025. Seasonal fluctuations were observed in 2025, with pH values being relatively high in March and December and relatively low in May and July.

Exceedances of the BC AWQG for Fresh AW guideline for dissolved copper was noted at SW-2 and SW-3 in December 2025. Exceedances of the dissolved copper guideline have been noted intermittently, typically in December; however, concentrations have historically remained relatively low at all sampling locations. At SW-1, SW-2, and SW-3, dissolved iron concentrations exceeded BC AWQG for Fresh AW guideline in December. Exceedances of the dissolved iron guideline have been noted for previous fall events (e.g., October to December events).

In 2025, total aluminum concentrations reached 5-year historical highs at all surface water sampling locations in May 2025 (concentrations between 218 µg/L at SW-4 and 372 µg/L at SW-2) and exceeded the BC AWQG for Freshwater Aquatic Life for total aluminum (162 µg/L); however, the exceedances were seen in both the upstream and downstream locations and are not interpreted to be a result of historical site operations. Total iron concentrations also reached a 5-year historical high at SW-4 in May 2025 (1,170 µg/L) and exceeded the BC AWQG for Freshwater Aquatic Life for total iron (1,000 µg/L). Total aluminum and total iron concentrations decreased in December 2025 to concentrations within the 5-year historical range at each location.

As the exceedances of laboratory pH, dissolved metals, and total metals parameters in the surface water samples were generally seen in both the upstream and downstream locations and at both watercourses, these exceedances are not interpreted to be a result of historical site operations.

5.1 Recommendations

The following recommendations have been developed based on the data presented within this report:

- Request a revision to the monitoring program frequency and scope from the Ministry based on the findings to date. This proposed revision would include a reduction in frequency from quarterly to semi-annually (twice per year) and removal of select parameters that have been observed at concentrations close to or below the detection limits in the sampling (including PAHs, petroleum hydrocarbons, and resins and fatty acids). A separate letter with the proposed updated EMP will be prepared for submission to the Ministry with justification for the proposed changes. The existing EMP should be followed until acceptance of the revised EMP is received from the Ministry. Tetra Tech trained qRD staff to assist with the environmental monitoring program during the 2020 and 2021 monitoring events and qRD staff will continue to be responsible for monitoring and sampling in 2026.

- Consider addition of a surface water sampling location to further assess water quality in the western ephemeral watercourse on the Site. Addition of the sampling location should be considered if chemical trends at other surface water sampling locations indicate changes in the surface water quality. Additionally, surface water sampling locations on the Site should be reassessed and potentially adjusted based on final site development and surface water flows.
- To better evaluate the reliability of the analytical results, two duplicates are recommended to be collected during each sampling event for the 2026 environmental monitoring program (i.e., one duplicate for groundwater, one duplicate for surface water).

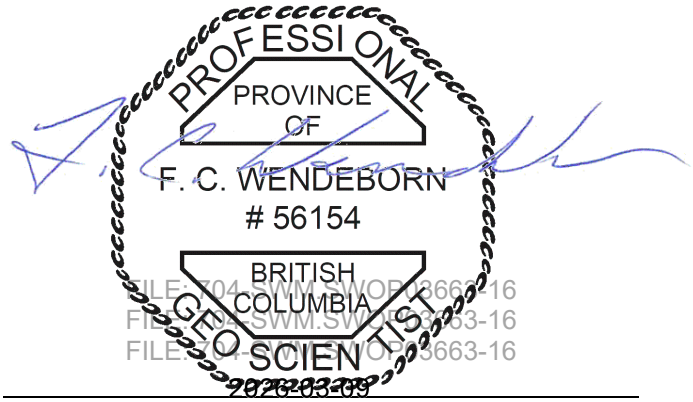
6.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of qathet Regional District and their agents. Tetra Tech Canada Inc. (operating as Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than qathet Regional District, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

7.0 CLOSURE

We trust this document meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.



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TABLES

Table 1 Groundwater Monitoring Summary
Table 2 Groundwater Analytical Results
Table 3 Surface Water Analytical Results
Table 4 Groundwater and Surface Water QA/QC Analytical Results

Table 1: Groundwater Monitoring Summary

Monitoring Well		MW13-01	MW13-02	MW13-03	MW19-04	MW19-05	MW24-05
Year Installed		2013	2013	2013	2019	2019	2024
Year Decommissioned		--	--	--	--	2020	--
Year of Well Extension		--	2023	--	--	--	--
Pipe Length (m)		8.4	10.1	15.4	4.5	7.0	5.2
Pipe Stickup (m)		0.62	0.53	0.57	0.73	0.98	0.40
Pipe Stickup (m) - After Well Extension***		--	0.62	--	--	--	--
Screened Section length (m)		3.0	3.0	3.0	3.0	5.0	5.0
Screened Interval (m-TPC)		5.3 to 8.4	7.1 to 10.1	12.4 to 15.4	1.4 to 4.5	2.0 to 7.0	--
Ground Elevation (m)		55.97	40.15	29.08	39.64	44.73	42.94
Ground Elevation (m) - After Well Extension***		--	40.93	--	--	--	--
TPC Elevation (m)		56.59	40.68	29.65	40.37	45.71	43.34
TPC Elevation (m) - After Well Extension***		--	41.55	--	--	--	--
Depth to Groundwater (m-TPC)	Dec 1, 2013	5.25	8.04	13.46	*	*	*
	Apr 3, 2019	5.41	7.28	13.97	3.25	3.42	*
	Jul 1, 2019	5.61	8.06	13.07	2.81	4.00	*
	Oct 16, 2019	5.68	8.44	13.14	2.49	4.26	*
	Jan 27, 2020	5.49	6.62	12.83	2.00	2.64	*
	Apr 23, 2020	5.65	7.44	13.00	2.28	3.72	*
	Jul 22, 2020	6.01	8.14	13.08	2.26	4.10	*
	Oct 1, 2020	5.07	8.84	13.01	2.16	**	*
	Feb 24, 2021	4.57	7.02	12.97	2.15	**	*
	May 11, 2021	4.68	7.59	13.11	2.12	**	*
	Jul 19, 2021	4.76	8.00	12.97	2.19	**	*
	Dec 1, 2021	4.62	6.58	12.80	1.80	**	*
	Mar 2, 2022	4.85	7.90	12.94	1.97	**	*
	Jul 12, 2022	4.42	7.27	12.98	2.75	**	*
	Oct 11, 2022	4.51	8.17	13.70	2.16	**	*
	Dec 12, 2022	4.44	8.19	13.40	2.05	**	*
	Feb 28, 2023	4.47	7.83	13.98	2.00	**	*
	May 23, 2023	4.98	8.10	13.00	2.06	**	*
	Sep 27, 2023	5.07	9.09	13.02	2.05	**	*
	Dec 18, 2023	5.00	7.75	12.95	2.80	**	*
	Feb 22, 2024	4.93	7.78	12.90	1.88	**	*
	Jun 24, 2024	5.03	8.10	12.97	2.00	**	3.20
	Sep 16, 2024	5.09	8.84	13.00	2.00	**	4.87
	Dec 9, 2024	5.40	8.15	12.92	1.90	**	5.19
	Mar 10, 2025	4.96	7.93	12.92	1.61	**	2.70
	May 26, 2025	5.02	8.37	12.97	1.99	**	4.37
	Jul 14, 2025	5.05	8.80	13.00	2.20	**	4.80
	Dec 2, 2025	5.05	8.77	12.95	1.93	**	3.65
Groundwater Elevation (mamsl)	Dec 1, 2013	51.34	32.64	16.19	*	*	*
	Apr 1, 2019	51.18	33.40	15.69	37.12	42.29	*
	Jul 1, 2019	50.98	32.62	16.58	37.56	41.71	*
	Oct 1, 2019	50.91	32.24	16.51	37.88	41.45	*
	Jan 27, 2020	51.10	34.07	16.82	38.37	43.07	*
	Apr 23, 2020	50.94	33.25	16.66	38.09	41.99	*
	Jul 22, 2020	50.58	32.54	16.57	38.12	41.62	*
	Oct 1, 2020	51.52	31.84	16.64	38.22	**	*
	Feb 24, 2021	52.02	33.66	16.68	38.22	**	*
	May 11, 2021	51.91	33.09	16.54	38.25	**	*
	Jul 19, 2021	51.83	32.68	16.68	38.18	**	*
	Dec 1, 2021	51.97	34.10	16.85	38.57	**	*
	Mar 2, 2022	51.74	32.78	16.72	38.40	**	*
	Jul 12, 2022	52.17	33.41	16.67	37.62	**	*
	Oct 11, 2022	52.08	32.51	15.95	38.21	**	*
	Dec 12, 2022	52.15	32.49	16.25	38.32	**	*
	Feb 28, 2023	52.12	33.72	15.67	38.37	**	*
	May 23, 2023	51.61	33.45	16.65	38.31	**	*
	Sep 27, 2023	51.52	32.46	16.63	38.32	**	*
	Dec 18, 2023	51.59	33.80	16.70	37.57	**	*
	Feb 22, 2024	51.66	33.77	16.75	38.49	**	*
	Jun 24, 2024	51.56	33.45	16.68	38.37	**	40.14
	Sep 16, 2024	51.50	32.71	16.65	38.37	**	38.47
	Dec 9, 2024	51.19	33.40	16.73	38.47	**	38.15
	Mar 10, 2025	51.63	33.62	16.73	38.76	**	40.64
	May 26, 2025	51.57	33.18	16.68	38.38	**	38.97
	Jul 14, 2025	51.54	32.75	16.65	38.17	**	38.54
	Dec 2, 2025	51.54	32.78	16.70	38.44	**	39.69

Notes:
m-TPC - Metres below TPC.
mamsl - Metres above Mean Sea Level.
TPC - Top of plastic pipe casing.
* Monitoring well not installed at time of monitoring event.
** Monitoring well decommisioned prior to event.
*** New elevations for MW13-02 after well extension work completed on February 22, 2022.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW13-01													
						Field ID	MW13-01	MW13-01	DUP	MW13-1	MW13-01									
						Sample Date	14-Dec-2013	2-Apr-2019	DUP (2-Apr-2019)	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2252890	L2252890	L2318207	L2367392	\20A0908280120	\20A5363250420	\20B1139240720	\20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
						Laboratory Sample ID	-	L2252890-3	L2252890-1	L2318207-1	L2367392-1	VA20A0908-001	VA20A5363-001	VA20B1139-001	VA20B9565-001	21B2866-02	21E1432-01	21G2459-02	21L0641-02	22C0773-02	22G1537-02
Field Measurements																					
Temperature	°C		-	-	-		-	9.34	-	11.60	11.3	10.1	10.42	10.7	10.8	9.3	10.1	11.9	11.4	9.8	11.4
Electrical Conductivity	µS/cm		-	-	-		-	124	-	96	143.9	95.9	94	132	127	83.5	125.4	94.9	84.8	78.4	84.4
Total Dissolved Solids (TDS)	mg/L		-	-	-		-	-	-	84	-	87.1	85	85	82.6	78	81.9	82.55	74.5	71.5	74.5
Salinity	-		15	10	-		-	-	-	0.06	-	-	-	-	-		-	-	-	-	-
Dissolved Oxygen	%		-	-	-		-	11.2	-	-	-	-	-	-	-		-	-	-	-	-
Dissolved Oxygen	mg/L		-	-	-		-	1.26	-	12.28	-	8.03	12.23	7.11	10.8	11.1	8.86	9.48	10.63	9.47	11.1
pH	pH Units		-	-	-		-	6.31	-	6.61	6.78	6.26	6.05	6.47	6.43	6.42	6.32	6.56	6.10	6.33	6.91
Oxidation Reduction Potential (ORP)	-		-	-	-		-	-	-	249.3	-	156	139.6	95.2	80.6	96.7	114	116.8	56.5	119.3	25.5
Physical Parameters																					
pH	pH Units	0.1	-	-	-		7.05	6.85	6.86	7.69	7.06	7.18	7.72	7.42	6.99	-	6.35	-	7.22	-	7.49
Electrical Conductivity (EC)	µS/cm	2	-	-	-		126	128	131	121	121	-	131	-	138	-	139	-	120	-	115
Total Suspended Solids (TSS)	µg/L	3000	-	-	-		709,000	<3,000	33,300	143,000	<3,000	-	<3000	-	<3000	-	<3300	-	<2500	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-		100,000	-	-	-	-	107,000	116,000	-	103,000	-	-	-	-	-	71,000
Hardness as $CaCO_3$	µg/L	500	-	-	-		45,300	46,100	43,700	52,100	40,900	-	44,000	-	49,400	-	43,500	43,900	37,800	40,600	41,300
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	47,800	-	-	-	-
Alkalinity (P)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Bicarbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	47,800	-	-	-	-
Carbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Hydroxide	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Bromide	µg/L	50	-	-	-		<50	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000		9,720	8,860	8,890	8,830	7,270	7,210	8,970	8,550	7,770	7180	6950	7490	4700	7,510	7,690
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500		27	33	35	29	30	27	29	28	31	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000		5,980	5,630	5790	6,750	6,340	6,020	5,490	6,390	6,370	5800	6000	6100	5300	5,800	5,600
Sulphide (as S)	µg/L	10	-	-	-		<20	<18	<18	<2.0	31	<2.0	2.3	<2.0	<2.0	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50		-	-	-	-	-	<2.0	2.4	<2.0	<2.0	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-		-	-	-	-	-	-	-	-	-	<20	-	<20	<20	<20	<20
Turbidity	NTU	0.1	-	-	-		-	17.8	23.8	-	0.58	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-		-	-	-	-	-	-	4,000	-	3,700	-	-	-	-	-	-
Nutrients																					
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-		<5.0	<5.0	<5.0	5.8	<5.0	<5.0	<5.0	8	<5.0	<50	<50	<50	<50	<50	<50
Nitrate (as N)	µg/L	5	400,000	400,000	10,000		171	407	347	139	87.3	492	497	205	208	889	628	368	876	1,150	554
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000		<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1	<1.0	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000		-	-	-	-	-	-	497	-	-	-	-	-	-	-	554
Demand Parameters																					
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-		-	<2,000	2900	-	<2,000	-	<2,000	-	<2,000	-	<1200	-	<1200	-	<6,200
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-		<20,000	<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000
Carbon																					
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-		-	-	-	-	-	-	-	-	-	-	610	-	4850	-	-
Total Organic Carbon (TOC)	µg/L	500	-	-	-		-	1,810	3950	-	<500	-	-	-	-	-	-	-	-	-	-
Phenols																					
Phenols (4AAP)	µg/L	1	-	-	-		<1.0	<1.0	<1.0	-	-	-	-	<1	-	<2	-	-	-	<2.0	-
Phenolics	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																					
Aluminum	µg/L	1	-	-	9,500		<5.0	6.1	4.5	-	4.1	-	<1.0	-	<1.0	-	<5.0	-	<5.0	-	<5.0
Antimony	µg/L	0.1	90	2,500	6		<0.50	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.20
Arsenic	µg/L	0.1	50	125	10		<0.50	<0.10	<0.10	-	0.1	-	<0.10	-	<0.10	-	<0.50	-	<0.50	-	<0.50
Barium	µg/L	0.1	10,000	5,000	1,000		<20	1.2	1.2	-	1.3	-	1.4	-	1.3	-	<5.0	-	<5.0	-	<5.0
Beryllium	µg/L	0.1	1.5	1,000	8		<1.0	<0.10	<0.10	-	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.10
Bismuth	µg/L	0.05	-	-	-		-	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.10
Boron	µg/L	10	12,000	12,000	5,000		<100	<10	<10	-	<10	-	<10	-	<10	-	<50	-	<50	-	<50
Cadmium	µg/L	0.005	1.5 [#1]	15	5		<0.010	0.0	<0.0050	-	<0.0050	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	-	<0.010
Calcium	µg/L	50	-	-	-		13300.0	13900.0	13000.0	-	12100.0	-	13000.0	-	14100.0	-	12800.0	-	10700.0	-	121000.0
Cesium	µg/L	0.01	-	-	-		-	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.010	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]		<1.0	<0.10	<0.10	-	<0.10	-	<0.50	-	<0.10	-	<0.50	-	<0.50	-	1.0
Cobalt	µg/L	0.1	40	40	1		<0.30	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10
Copper	µg/L	0.2	20 [#1]	20	1,500		<1.0	0.2	<0.20	-	0.3	-	<0.20	-	0.0	-	<0.40	-	<0.40	-	<0.40
Iron	µg/L	10	-	-	6,500		<30	<10	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10
Lead	µg/L	0.05	40 [#1]	20	10		<0.50	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.050	-	<0.20	-	<0.20	-	<0.2
Lithium	µg/L	1	-	-	8		<5.0	<1.0	<1.0	-	<1.0	-	<1	-	<1	-	0.8	-	0.7	-	0.8
Magnesium	µg/L	5	-	-	-		2940.0	2750.0	2720.0	-	2610.0	-	2880.0	-	3000.0	-	2780.0	-	2720.0	-	2680.0
Manganese	µg/L	0.1	-	-	1,500		10.2	0.5	0.2	-	0.2	-	<0.10	-	<0.10	-	0.3	-	0.4	-	<0.20
Mercury	µg/L		0.25	0.25	1		<0.010	-	-	-	<0.0050	-	-	-	<0.0050	-	<0.010	-	<0.010	-	<0.010
Molybdenum	µg/L	0.05	10,000	10,000	250		<1.0	0.1	0.1	-	0.1	-	0.1	-	0.1	-	0.2	-	0.1	-	<0.010
Nickel	µg/L	0.5	250 [#1]	83	80		<1.0	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-	<0.40
Phosphorus	µg/L	50	-	-	-		-	<50	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50
Potassium	µg/L	50	-	-	-		<2000	1410.0	1350.0	-	1290.0	-	1240.0	-	1280.0	-	1260.0	-	1290.0	-	1210.0
Rubidium	µg/L	0.2	-	-	-		-	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.20	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10		0.1	0.1	0.1	-	0.2	-	0.1	-	0.1	-	<0.50	-	<0.50	-	<0.50
Silicon	µg/L	50	-	-	-		-	12000.0	12900.0	-	13300.0	-	13100.0	-	12000.0	-	14300.0	-	14300.0	-	12600.0
Silver	µg/L	0.01	0.5 [#1]	15	20		<0.020	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.050
Sodium	µg/L	50	-	-	200,000		7900.0	7650.0	7690.0	-	7590.0	-	7220.0	-	7820.0	-	7390.0	-	7120.0	-	6940.0
Strontium	µg/L	0.2	-	-	2,500		-	71.1	72.8	-	72.4	-	77.2	-	79.2	-	68.0	-	55.4	-	67.6
Sulphur	µg/L	500	-	-	-		-	2040.0	2030.0	-	2280.0	-	1690.0	-	1990.0	-	<3000	-	<3000	-	<3000
Tellurium	µg/L	0.2	-	-	-		-	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.50
Thallium	µg/L	0.01	3	3	-		<0.20	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-	<0.020
Thorium	µg/L	0.1	-	-	-		-	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10
Tin	µg/L	0.1	-	-	2,500		<0.50	0.5	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.20
Titanium	µg/L	0.3	1,000	1,000	-		<10	<0.30	<0.30	-	<0.30	-	<0.30	-	<0.30	-	<5.0	-	<5.0	-	<5.0
Tungsten	µg/L	0.1	-	-	3		-	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<1.0
Uranium	µg/L	0.01	85	85	20		<0.20	0.1	0.1	-	0.0	-	0.1	-	0.1	-	0.1	-	0.1	-	0.1
Vanadium	µg/L	0.5	-	-	20		<1.0	0.9	0.8	-	0.9	-	0.8	-	0.9	-	1.1	-	<1.0	-	<5.0
Zinc	µg/L	1	75 [#1]	100	3,000		<5.0	2.6	<1.0	-	2.1	-	<1.0	-	<1.0	-	<4.0	-	<4.0	-	<4.0
Zirconium	µg/L	0.06	-	-	-		-	<0.060	<0.060	-	<0.20	-	<0.3	-	<0.2	-	<0.10	-	<0.10	-	<0.10

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW13-01													
						Field ID							DUP (18-Dec-2023)							
						Sample Date	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023		22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
						Laboratory Sample ID	22J1342-05	22L1310-02	23C0154-01	23E2913-01	23I3541-01	23L2282-01	23L2282-09	24B2509-01	24F3072-01	24I2276-01	24L1123-01	25C1419-01	25E3516-01	25G2084-01	25L0435-01
Field Measurements																				
Temperature	°C		-	-	-		12.3	10.7	9.7	11.7	11.5	10.6	10.6	10.2	11.2	11.4	11	9.6	14	11.2	11
Electrical Conductivity	µS/cm		-	-	-		126.2	85.8	76.2	89.2	99.2	9.8	9.8	11.4	82.8	3.1	84.9	3.9	6.7	101.3	6.6
Total Dissolved Solids (TDS)	mg/L		-	-	-		82.2	76.8	70.2	77.7	89.7	8.45	8.45	10.3	72.8	1.95	75.6	3	5.4	88.8	5.85
Salinity	-		15	10	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-		-	-	-	-	-	-	-	-	-	-	-	37.2	-	-	-
Dissolved Oxygen	mg/L		-	-	-		10.70	9.72	9.91	1.06	4.73	4.16	4.16	4.59	12.05	5.8	9.92	-	3.99	6.9	7.5
pH	pH Units		-	-	-		6.61	6.45	6.21	6.81	5.06	4.33	4.33	4.31	6.49	6.19	6.27	6.85	4.64	9.54	6.64
Oxidation Reduction Potential (ORP)	-		-	-	-		15.7	99.3	22.4	62.2	206.8	152	152	24	113.2	199.6	81.2	337.2	-168.8	102.7	132.2
Physical Parameters																				
pH	pH Units	0.1	-	-	-		-	6.55	7.42	6.55	6.71	6.58	6.57	6.47	6.4	6.87	6.86	7	6.97	6.68	6.5
Electrical Conductivity (EC)	µS/cm	2	-	-	-		-	124	111	116	125	122	120	108	126	128	117	93.9	125	127	127
Total Suspended Solids (TSS)	µg/L	3000	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-		-	-	-	102,000	-	100,000	-	-	85,000	-	112000	-	83000	-	78,000
Hardness as $CaCO_3$	µg/L	500	-	-	-		40,800	41,200	-	42,700	-	44,600	44,100	-	43,800	-	40,000	-	-	-	43,400
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-		-	-	40,400	46,400	53,200	49,000	48,600	46,600	46,200	45,200	40,100	42,300	43,700	42,700	53,600
Alkalinity (P)	µg/L	1000	-	-	-		-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	1000	-	-	-		-	-	40,400	46,400	53,200	49,000	48,600	46,600	46,200	45,200	40,100	42,300	43,700	42,700	53,600
Carbonate	µg/L	1000	-	-	-		-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	1000	-	-	-		-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	50	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000		8,150	7,400	6,700	6,280	6,730	6,830	6,380	4,420	6,030	6,650	5,700	4,920	6,600	6,900	6,830
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000		6,500	6,800	5,800	6,000	6,000	5,300	5,300	4,600	5,100	6,100	5,000	3,600	4,400	4,700	5,700
Sulphide (as S)	µg/L	10	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50		-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-
Sulphide, total	µg/L	20	-	-	-		<20	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	<0.02	<0.01	<0.01	<0.01
Turbidity	NTU	0.1	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																				
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-		<50	<50	<50	<50	<50	<50	<50	-	<50	54	<50	<50	<50	<50	<50
Nitrate (as N)	µg/L	5	400,000	400,000	10,000		218	135	395	470	223	441	418	977	264	175	202	255	231	189	166
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																				
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-		-	<2,200	-	<4,800	-	<2,800	-	-	<3,200	-	4000	-	<4,000	-	<4,000
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-		-	<20,000	-	<20,000	-	<20,000	-	-	<20,000	-	<20,000	-	<20,000	-	<20,000
Carbon																				
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-		-	-	-	-	-	-	-	-	1,250	-	1460	-	1010	-	<500
Total Organic Carbon (TOC)	µg/L	500	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenols (4AAP)	µg/L	1	-	-	-		-	<2.0	<2.00	-	-	-	-	<0.50	-	-	-	-	-	-	-
Phenolics	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-
Dissolved Metals																				
Aluminum	µg/L	1	-	-	9,500		-	<5.0	-	<5.0	-	<5	<5	-	<5.0	-	<5.0	-	<5	-	<5
Antimony	µg/L	0.1	90	2,500	6		-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Arsenic	µg/L	0.1	50	125	10		-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Barium	µg/L	0.1	10,000	5,000	1,000		-	<5.0	-	<5.0	-	<5	<5	-	<5.0	-	<5.0	-	<5	-	<5
Beryllium	µg/L	0.1	1.5	1,000	8		-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Bismuth	µg/L	0.05	-	-	-		-	<0.10	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000		-	<50	-	<50.0	-	<50	<50	-	<50.0	-	<50.0	-	<50	-	<50
Cadmium	µg/L	0.005	1.5 [#1]	15	5		-	<0.010	-	<0.010	-	<0.01	<0.01	-	<0.010	-	<0.010	-	<0.01	-	<0.01
Calcium	µg/L	50	-	-	-		-	12000.0	-	12800.0	-	13200.0	13100.0	-	12,800	-	11900.0	-	12700.0	-	13,000
Cesium	µg/L	0.01	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]		-	<0.50	-	1.1	-	<0.5	<0.5	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Cobalt	µg/L	0.1	40	40	1		-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Copper	µg/L	0.2	20 [#1]	20	1,500		-	**84.0**	-	<0.40	-	<0.4	1.9	-	<0.40	-	<0.40	-	<0.4	-	0.9
Iron	µg/L	10	-	-	6,500		-	<10	-	<10	-	<10	<10	-	<10	-	<10	-	<10	-	<10
Lead	µg/L	0.05	40 [#1]	20	10		-	<0.2	-	<0.20	-	<0.2	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Lithium	µg/L	1	-	-	8		-	0.8	-	0.8	-	0.8	0.8	-	0.88	-	0.8	-	0.7	-	0.84
Magnesium	µg/L	5	-	-	-		-	2710.0	-	2600.0	-	2800.0	2780.0	-	2,890	-	2500.0	-	2490.0	-	2,740
Manganese	µg/L	0.1	-	-	1,500		-	<0.20	-	<0.20	-	1.5	<0.2	-	0.78	-	0.2	-	<0.2	-	<0.2
Mercury	µg/L		0.25	0.25	1		-	-	-	<0.010	-	<0.01	<0.01	-	<0.010	-	<0.010	-	<0.04	-	<0.01
Molybdenum	µg/L	0.05	10,000	10,000	250		-	0.1	-	0.1	-	0.1	0.2	-	<0.10	-	0.1	-	0.1	-	0.13
Nickel	µg/L	0.5	250 [#1]	83	80		-	<0.40	-	<0.40	-	15.7	<0.4	-	<0.40	-	<0.40	-	<0.4	-	<0.4
Phosphorus	µg/L	50	-	-	-		-	<50	-	<50	-	-	-	-	<50	-	<50	-	<50	-	<50
Potassium	µg/L	50	-	-	-		-	1420.0	-	1330.0	-	-	-	-	1,330	-	1290.0	-	1250.0	-	1,370
Rubidium	µg/L	0.2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10		-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Silicon	µg/L	50	-	-	-		-	13900.0	-	13800.0	-	-	-	-	13,300	-	13600.0	-	13100	-	14,100
Silver	µg/L	0.01	0.5 [#1]	15	20		-	<0.050	-	<0.050	-	<0.05	<0.05	-	<0.050	-	<0.050	-	<0.05	-	<0.05
Sodium	µg/L	50	-	-	200,000		-	7520.0	-	7430.0	-	7770.0	7740.0	-	7,920	-	7120.0	-	6900	-	7,340
Strontium	µg/L	0.2	-	-	2,500		-	69.9	-	71.5	-	69.7	68.5	-	69.8	-	60.6	-	65.9	-	67
Sulphur	µg/L	500	-	-	-		-	<3000	-	<3,000	-	-	-	-	<3,000	-	<3,000	-	<3,000	-	<3,000
Tellurium	µg/L	0.2	-	-	-		-	<0.50	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Thallium	µg/L	0.01	3	3	-		-	<0.020	-	<0.020	-	<0.02	<0.02	-	<0.020	-	<0.020	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-		-	<0.10	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Tin	µg/L	0.1	-	-	2,500		-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Titanium	µg/L	0.3	1,000	1,000	-		-	<5.0	-	<5.0	-	<5	<5	-	<5.0	-	<5.0	-	<5	-	<5
Tungsten	µg/L	0.1	-	-	3		-	<1.0	-	<1.0	-	<1	<1	-	<1.0	-	<1.0	-	<1	-	<1
Uranium	µg/L	0.01	85	85	20		-	0.1	-	0.1	-	0.1	0.1	-	0.055	-	0.1	-	0.1	-	0.064
Vanadium	µg/L	0.5	-	-	20		-	<5.0	-	<5.0	-	<5	<5	-	<5.0	-	<5.0	-	<5	-	<5
Zinc	µg/L	1	75 [#1]	100	3,000		-	8.2	-	<4.0	-	<4	<4	-	<4.0	-	<4.0	-	<4	-	<4
Zirconium	µg/L	0.06	-	-	-		-	<0.10	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

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Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW13-02													
						Field ID	MW13-02	MW13-02	MW13-2	MW13-02										
						Sample Date	14-Dec-2013	2-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2252890	L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
						Laboratory Sample ID	-	L2252890-2	L2318207-2	L2367392-2	VA20A0908-003	VA20A5363-002	VA20B1139-002	VA20B9565-002	21B2866-03	21E1432-02	21G2459-03	21L0641-03	22C0773-03	22G1537-03
Field Measurements																				
Temperature	°C		-	-	-		-	9.77	11.81	11.7	10.4	10.68	12.7	11.8	11.6	12	12.8	12.7	12.4	13.3
Electrical Conductivity	µS/cm		-	-	-		-	361	674	639	297.3	400	826	1,294	605	9.81	1,022	125	1179	1145
Total Dissolved Solids (TDS)	mg/L		-	-	-		-	-	438	-	267.2	358	539	845	526.5	637	864.5	106	1007.5	960
Salinity	-		15	10	-		-	-	0.33	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-		-	100	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L		-	-	-		-	11.45	5.07	-	0.59	3.84	0.22	2.52	2.3	0.35	0.79	0.86	0.4	5.03
pH	pH Units		-	-	-		-	6.67	4.76	6.62	6.59	6.39	9.07	6.67	6.43	6.47	6.67	6.56	6.38	7.63
Oxidation Reduction Potential (ORP)	-		-	-	-		-	-	88.2	-	20.9	-34.4	-95.3	-58.1	-75.1	-10.1	-64.4	-86.2	8.7	-341.0
Physical Parameters																				
pH	pH Units	0.1	-	-	-		6.9	7.04	7.88	7.23	7.03	7.65	6.71	7.46	-	6.19	-	6.62	-	7.49
Electrical Conductivity (EC)	µS/cm	2	-	-	-		347	330	529	653	-	470	-	1,190	-	899	-	1520	-	1330
Total Suspended Solids (TSS)	µg/L	3000	-	-	-		418,000	207,000	1,150,000	609,000	-	10,000	-	88,200	-	131,000	-	170,000	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-		192,000	-	-	-	260,000	344,000	-	793,000	-	-	-	-	-	948,000
Hardness as $CaCO_3$	µg/L	500	-	-	-		151,000	160,000	311,000	305,000	-	230,000	-	583,000	-	398,000	618,000	691,000	622,000	669,000
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	467,000	-	-	-	-
Alkalinity (P)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Bicarbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	467,000	-	-	-	-
Carbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Hydroxide	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Bromide	µg/L	50	-	-	-		<50	<50	<50	<250	<50	<50	-	<250	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000		7,060	2,190	5,540	5,200	1,380	1,960	3,880	23,000	3510	5650	9360	12,900	12,400	9,000
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500		142	59	70	<100	39	51	<100	<100	<100	<100	120	230	180	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000		3,060	920	11,900	3,200	480	<300	5,230	13,700	2500	39,800	181,000	226,000	326,000	381,000
Sulphide (as S)	µg/L	10	-	-	-		<20	19	<2.0	32	71.5	13.8	<2.0	4.8	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50		-	-	-	-	76	14.7	<2.0	5.1	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-		-	-	-	-	-	-	-	-	66	-	40	44	41	<20
Turbidity	NTU	0.1	-	-	-		-	181	-	1,050	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-		-	-	-	-	-	19,100	-	47,600	-	-	-	-	-	-
Nutrients																				
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-		1,420	564	1500	1540	408	715	1,360	4,330	1000	1290	3120	6930	3410	6180
Nitrate (as N)	µg/L	5	400,000	400,000	10,000		64.2	6.0	36.2	<25	<5	<5	<25	<25	<10	<10	<10	<10	<10	<10
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000		5.2	<1.0	2.2	<5	<1	<1	<5.0	<25	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000		-	-	-	-	-	<50	-	-	-	-	-	-	-	<20
Demand Parameters																				
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-		-	<2,000	-	<2,000	-	2,000	-	4,600	-	<2200	-	10,600	-	<6,200
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-		74,000	47,000	-	63,000	-	<20,000	-	81,000	-	35,000	-	107,000	-	92,000
Carbon																				
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-		-	-	-	-	-	-	-	-	-	26,300	-	31,700	-	-
Total Organic Carbon (TOC)	µg/L	500	-	-	-		-	21,000	-	10,900	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenols (4AAP)	µg/L	1	-	-	-		4.0	<1.0	-	-	-	-	<1.0	-	2	-	-	-	<2.0	-
Phenolics	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																				
Aluminum	µg/L	1	-	-	9,500		26.9	19.9	-	1.6	-	13.1	-	8.9	-	18.9	-	12.7	-	18.4
Antimony	µg/L	0.1	90	2,500	6		<0.50	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2
Arsenic	µg/L	0.1	50	125	10		2.9	0.6	-	0.4	-	0.9	-	14.8	-	2.9	-	10.5	-	5.0
Barium	µg/L	0.1	10,000	5,000	1,000		32.0	15.0	-	24.7	-	20.7	-	112.0	-	50.3	-	158.0	-	141.0
Beryllium	µg/L	0.1	1.5	1,000	8		<1.0	<0.10	-	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.1
Bismuth	µg/L	0.05	-	-	-		-	<0.050	-	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000		<100	32.0	-	85.0	-	34.0	-	287.0	-	86.3	-	311.0	-	399.0
Cadmium	µg/L	0.005	1.5 [#1]	15	5		0.076	<0.0050	-	<0.0050	-	<0.050	-	<0.0050	-	<0.010	-	<0.010	-	<0.01
Calcium	µg/L	50	-	-	-		52800.0	60700.0	-	112000.0	-	82900.0	-	192000.0	-	149000.0	-	220000.0	-	233000.0
Cesium	µg/L	0.01	-	-	-		-	<0.010	-	<0.010	-	<0.010	-	<0.010	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]		<1.0	0.8	-	0.2	-	0.8	-	1.1	-	1.5	-	2.1	-	2.9
Cobalt	µg/L	0.1	40	40	1		3.4	<0.10	-	2.4	-	0.2	-	5.8	-	1.0	-	5.7	-	2.4
Copper	µg/L	0.2	20 [#1]	20	1,500		<1.0	<0.20	-	<0.20	-	<0.20	-	<0.20	-	<0.40	-	1.2	-	<0.4
Iron	µg/L	10	-	-	6,500		13700.0	14500.0	-	<10	-	24000.0	-	82500.0	-	64300.0	-	97200.0	-	96800.0
Lead	µg/L	0.05	40 [#1]	20	10		<0.50	<0.050	-	<0.050	-	<0.050	-	<0.050	-	<0.20	-	<0.20	-	<0.2
Lithium	µg/L	1	-	-	8		<5.0	<1.0	-	<1.0	-	<1.0	-	2.1	-	0.5	-	1.5	-	0.7
Magnesium	µg/L	5	-	-	-		4710.0	2110.0	-	5990.0	-	2870.0	-	13300.0	-	6190.0	-	34100.0	-	21000.0
Manganese	µg/L	0.1	-	-	1,500		627.0	656.0	-	1350.0	-	1040.0	-	1860.0	-	1560.0	-	1710.0	-	1920.0
Mercury	µg/L		0.25	0.25	1		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.010	-	<0.010	-	<0.01
Molybdenum	µg/L	0.05	10,000	10,000	250		1.9	0.2	-	1.4	-	0.2	-	3.3	-	0.5	-	3.0	-	0.9
Nickel	µg/L	0.5	250 [#1]	83	80		1.5	<0.50	-	<0.50	-	<0.50	-	0.6	-	<0.40	-	0.9	-	0.4
Phosphorus	µg/L	50	-	-	-		-	<50	-	<50	-	<50	-	236.0	-	<50	-	171.0	-	76.0
Potassium	µg/L	50	-	-	-		12000.0	6390.0	-	15800.0	-	6460.0	-	22200.0	-	11300.0	-	27500.0	-	24200.0
Rubidium	µg/L	0.2	-	-	-		-	3.6	-	6.0	-	3.8	-	8.9	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10		<0.10	0.1	-	<0.050	-	0.1	-	0.2	-	<0.50	-	<0.50	-	<0.5
Silicon	µg/L	50	-	-	-		-	8160.0	-	11700.0	-	10500.0	-	15300.0	-	11600.0	-	16300.0	-	11500.0
Silver	µg/L	0.01	0.5 [#1]	15	20		<0.020	<0.010	-	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.05
Sodium	µg/L	50	-	-	200,000		9600.0	4940.0	-	11800.0	-	4850.0	-	32300.0	-	11600.0	-	45200.0	-	36200.0
Strontium	µg/L	0.2	-	-	2,500		-	157.0	-	307.0	-	235.0	-	698.0	-	407.0	-	950.0	-	1000.0
Sulphur	µg/L	500	-	-	-		-	670.0	-	1960.0	-	<500	-	6210.0	-	8800.0	-	84600.0	-	129000.0
Tellurium	µg/L	0.2	-	-	-		-	<0.20	-	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.5
Thallium	µg/L	0.01	3	3	-		<0.20	<0.010	-	<0.010	-	<0.010	-	<0.010	-	<0.02	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-		-	0.1	-	<0.10	-	<0.10	-	<0.10	-	0.1	-	<0.10	-	0.1
Tin	µg/L	0.1	-	-	2,500		<0.50	0.2	-	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2
Titanium	µg/L	0.3	1,000	1,000	-		<10	2.7	-	<0.30	-	1.4	-	1.1	-	<5.0	-	<5.0	-	<5
Tungsten	µg/L	0.1	-	-	3		-	<0.10	-	<0.10	-	<0.10	-	0.2	-	<1.0	-	<1.0	-	<1
Uranium	µg/L	0.01	85	85	20		1.6	0.1	-	0.3	-	0.1	-	1.0	-	0.3	-	1.3	-	0.4
Vanadium	µg/L	0.5	-	-	20		<1.0	4.5	-	<0.50	-	2.9	-	4.9	-	3.7	-	7.3	-	7.6
Zinc	µg/L	1	75 [#1]	100	3,000		10.1	1.1	-	<1.0	-	1.6	-	1.1	-	<4.0	-	<4.0	-	<4
Zirconium	µg/L	0.06	-	-	-		-	0.2	-	<0.20	-	<0.30	-	0.4	-	0.3	-	0.6	-	0.5

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

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Table 2: Groundwater Analytical Results

						Location	MW13-02												
						Field ID													
						Sample Date	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
						Laboratory Sample ID	22J1342-06	22L1310-03	23C0154-02	23E2913-02	23I3541-02	23L2282-02	24B2509-02	24F3072-02	24I2276-02	24L1123-02	25C1419-02	25E3516-02	25G2084-02	25L0435-02
Parameter	Unit	RDL	CSR - AW		CSR - DW														
			Freshwater	Marine															
Field Measurements																			
Temperature	°C		-	-	-	12.6	12.1	12.2	13.1	12.5	12.4	12.4	12.6	12.3	12.2	11.8	14.4	12.7	12.1
Electrical Conductivity	µS/cm		-	-	-	3260	1221	1,151	1,285	1,189	3	8.4	90.8	12.7	840	4.6	5.4	63.4	31.9
Total Dissolved Solids (TDS)	mg/L		-	-	-	2127	1053	988	1,083	1,015	2.6	7.2	773.5	9.1	721	5	4.4	52.5	32.5
Salinity	-		15	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-
Dissolved Oxygen	mg/L		-	-	-	2.17	0.32	0.41	1.23	1.35	1.09	1.91	9.57	2.94	0.5	-	2.32	1.32	1.38
pH	pH Units		-	-	-	7.54	6.49	6.4	6.64	4.54	6.45	6.98	6.7	6.02	6.12	6.91	5.4	6.77	6.57
Oxidation Reduction Potential (ORP)	-		-	-	-	-200.1	-24.7	94.1	27	58.4	94.8	31.8	221	-26.4	-34	-19.7	-98.6	20.4	51.5
Physical Parameters																			
pH	pH Units	0.1	-	-	-	-	6.4	6.97	6.74	6.87	6.69	7	6.96	7.05	6.87	6.56	7.03	6.96	6.33
Electrical Conductivity (EC)	µS/cm	2	-	-	-	-	1560	1,440	1,470	1,410	1,330	1,220	1,190	1,040	1,080	913	1,160	1,130	1,210
Total Suspended Solids (TSS)	µg/L	3000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-	-	-	-	1,180,000	-	1,060,000	-	790,000	-	622000	-	665000	-	725,000
Hardness as $CaCO_3$	µg/L	500	-	-	-	885,000	773,000	-	719,000	-	742,000	-	576,000	-	490,000	-	-	-	522,000
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-	-	-	416,000	488,000	501,000	520,000	437,000	452,000	347,000	479,000	471,000	482,000	415,000	657,000
Alkalinity (P)	µg/L	1000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	1000	-	-	-	-	-	416,000	488,000	501,000	520,000	437,000	452,000	347,000	479,000	471,000	482,000	415,000	657,000
Carbonate	µg/L	1000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	1000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000	16,100	10,500	8,590	7,390	8,740	8,890	9,770	11,000	14,700	6,920	12,600	15,100	23,400	23,900
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500	<100	<100	<100	<100	<100	<100	150	<1,000	<1,000	140	<100	<1,000	360	<1,000
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000	491,000	380,000	334,000	352,000	344,000	328,000	254,000	140,000	156,000	62,600	120,000	100,000	109,000	37,400
Sulphide (as S)	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-	<20	<20	30	41	<20	35	40	39	<20	36	0.04	0.04	0.03	0.05
Turbidity	NTU	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																			
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-	6700	8360	7,480	8,940	6,970	10,700	-	8,120	7,050	5,090	6,800	8,010	8,110	6,320
Nitrate (as N)	µg/L	5	400,000	400,000	10,000	<10	<10	<10	<10	<10	<10	<100	<100	<100	<100	<100	<100	<100	<100
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<100	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																			
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-	-	8,100	-	5,000	-	9,800	-	6,700	-	10,800	-	4,200	-	11,300
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-	-	85,000	-	73,000	-	95,000	-	72,000	-	60,000	-	73,000	-	47,000
Carbon																			
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-	-	-	-	-	-	-	-	26,800	-	17800	-	15500	-	16,400
Total Organic Carbon (TOC)	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																			
Phenols (4AAP)	µg/L	1	-	-	-	-	-	<2.00	-	-	-	<0.50	-	-	-	-	-	-	-
Phenolics	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-
Dissolved Metals																			
Aluminum	µg/L	1	-	-	9,500	-	9.2	-	16.7	-	18.2	-	14.2	-	19.1	-	<5	-	10.9
Antimony	µg/L	0.1	90	2,500	6	-	<0.2	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Arsenic	µg/L	0.1	50	125	10	-	17.8	-	6.6	-	7.0	-	6.36	-	3.6	-	<0.5	-	9.91
Barium	µg/L	0.1	10,000	5,000	1,000	-	143.0	-	151.0	-	154.0	-	109	-	71.7	-	50.4	-	123
Beryllium	µg/L	0.1	1.5	1,000	8	-	<0.1	-	<0.10	-	<0.1	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Bismuth	µg/L	0.05	-	-	-	-	<0.1	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000	-	482.0	-	365.0	-	310.0	-	423	-	172.0	-	374.0	-	223
Cadmium	µg/L	0.005	1.5 [#1]	15	5	-	<0.01	-	<0.010	-	<0.01	-	<0.010	-	<0.010	-	<0.01	-	<0.01
Calcium	µg/L	50	-	-	-	-	267000.0	-	244000.0	-	255000.0	-	197,000	-	178000.0	-	181000	-	176,000
Cesium	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]	-	1.9	-	2.8	-	3.1	-	1.43	-	1.6	-	<0.5	-	1.66
Cobalt	µg/L	0.1	40	40	1	-	6.7	-	2.9	-	2.5	-	1.67	-	0.9	-	1.5	-	4.3
Copper	µg/L	0.2	20 [#1]	20	1,500	-	<0.4	-	<0.40	-	<0.4	-	<0.40	-	<0.40	-	<0.4	-	<0.4
Iron	µg/L	10	-	-	6,500	-	95700.0	-	99100.0	-	91700.0	-	68,600	-	66500	-	12.0	-	80,400
Lead	µg/L	0.05	40 [#1]	20	10	-	<0.2	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Lithium	µg/L	1	-	-	8	-	1.9	-	0.8	-	1.0	-	0.71	-	0.5	-	0.8	-	1.17
Magnesium	µg/L	5	-	-	-	-	25500.0	-	26200.0	-	25200.0	-	19,900	-	10600.0	-	17200	-	16,800
Manganese	µg/L	0.1	-	-	1,500	-	1970.0	-	2170.0	-	2150.0	-	1,730	-	1580.0	-	1650	-	1,630
Mercury	µg/L		0.25	0.25	1	-	-	-	<0.010	-	<0.01	-	<0.010	-	<0.010	-	<0.04	-	<0.01
Molybdenum	µg/L	0.05	10,000	10,000	250	-	3.4	-	1.2	-	1.3	-	1.17	-	0.7	-	0.7	-	1.13
Nickel	µg/L	0.5	250 [#1]	83	80	-	0.8	-	<0.40	-	0.5	-	0.55	-	<0.40	-	<0.4	-	1.0
Phosphorus	µg/L	50	-	-	-	-	264.0	-	104.0	-	-	-	96	-	<50	-	<50	-	101.0
Potassium	µg/L	50	-	-	-	-	27400.0	-	28300.0	-	-	-	28,800	-	17600.0	-	27100.0	-	24,400
Rubidium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10	-	<0.5	-	<0.50	-	<0.5	-	<0.50	-	0.6	-	<0.5	-	<0.5
Silicon	µg/L	50	-	-	-	-	18300.0	-	11900.0	-	-	-	12,000	-	12500.0	-	10300	-	15,200
Silver	µg/L	0.01	0.5 [#1]	15	20	-	<0.05	-	<0.050	-	<0.05	-	<0.050	-	<0.050	-	<0.05	-	<0.05
Sodium	µg/L	50	-	-	200,000	-	27300.0	-	30200.0	-	28300.0	-	29,800	-	13100.0	-	25300	-	20,600
Strontium	µg/L	0.2	-	-	2,500	-	1170.0	-	1400.0	-	1420.0	-	1,010	-	615.0	-	1030	-	946
Sulphur	µg/L	500	-	-	-	-	132000.0	-	123000.0	-	-	-	58,300	-	21800.0	-	39800	-	14,500
Tellurium	µg/L	0.2	-	-	-	-	<0.5	-	<0.50	-	-	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Thallium	µg/L	0.01	3	3	-	-	<0.02	-	<0.020	-	<0.02	-	<0.020	-	<0.020	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-	-	<0.1	-	0.1	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Tin	µg/L	0.1	-	-	2,500	-	<0.2	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Titanium	µg/L	0.3	1,000	1,000	-	-	<5	-	<5.0	-	<5	-	<5.0	-	<5.0	-	<5	-	<5
Tungsten	µg/L	0.1	-	-	3	-	<1	-	<1.0	-	<1	-	<1.0	-	<1.0	-	<1	-	<1
Uranium	µg/L	0.01	85	85	20	-	1.1	-	0.7	-	0.6	-	0.455	-	0.3	-	0.3	-	0.387
Vanadium	µg/L	0.5	-	-	20	-	8.2	-	7.5	-	6.4	-	5.4	-	5.5	-	<5	-	5.2
Zinc	µg/L	1	75 [#1]	100	3,000	-	<4	-	<4.0	-	<4	-	8.5	-	<4.0	-	8.7	-	<4
Zirconium	µg/L	0.06	-	-	-	-	0.6	-	0.6	-	-	-	0.42	-	0.4	-	<0.1	-	0.52

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW13-03													
						Field ID	MW13-03	MW13-03	MW13-3	MW13-03	DUP1									
						Sample Date	14-Dec-2013	3-Apr-2019	25-Jul-2019	17-Oct-2019	DUP (17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2254197	L2318207	L2367392	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
						Laboratory Sample ID	-	L2254197-4	L2318207-3	L2367392-3	L2367392-10	VA20A0908-004	VA20A5363-003	VA20B1139-003	VA20B9565-003	21B2866-04	21E1432-03	21G2459-04	21L0641-04	22C0773-04	22G1537-04
Field Measurements																				
Temperature	°C		-	-	-		-	9.57	15.52	11.8	-	-	12.2	12.1	12	10.9	11.7	13.6	11.6	11.4	12.6
Electrical Conductivity	µS/cm		-	-	-		-	257	392	378.9	-	-	359	480	239	285	474.5	298.8	188.2	264.9	294.3
Total Dissolved Solids (TDS)	mg/L		-	-	-		-	-	310,000	-	-	-	308	312	155	254	305.5	247.65	164.5	232.7	250.6
Salinity	-		15	10	-		-	-	0.230	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-		-	102	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L		-	-	-		-	12.01	10.16	-	-	-	6.13	5	5.1	5.9	5.7	5.38	7.8	5.37	6.03
pH	pH Units		-	-	-		-	6.78	6.44	6.63	-	-	6.36	7.55	6.29	6.19	6.2	6.28	5.91	6.15	6.82
Oxidation Reduction Potential (ORP)	-		-	-	-		-	-	265.3	-	-	-	192.3	107	118.2	97.1	150.1	99.2	36	156.3	47.3
Physical Parameters																				
pH	pH Units	0.1	-	-	-		6.96	7.07	8.14	6.91	7.11	6.5	6.97	7.64	6.68	-	6.22	-	6.41	-	7.21
Electrical Conductivity (EC)	µS/cm	2	-	-	-		215	438	461	474	470	-	482	-	495	-	494	-	290	-	393
Total Suspended Solids (TSS)	µg/L	3000	-	-	-		869,000	2,530,000	1,640,000	1,260,000	2,350,000	-	52,600	-	29,500	-	283,000	-	83,000	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-		144,000	-	-	-	-	276,000	306,000	-	306,000	-	-	-	-	-	253,000
Hardness as $CaCO_3$	µg/L	500	-	-	-		87,300	118,000	361,000	152,000	162,000	-	154,000	-	167,000	-	152,000	126,000	79,900	134,000	151,000
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	186,000	-	-	-	-
Alkalinity (P)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Bicarbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	186,000	-	-	-	-
Carbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Hydroxide	µg/L	1000	-	-	-		-	-	-	-	-	-	-	-	-	-	<1000	-	-	-	-
Bromide	µg/L	50	-	-	-		<50	55	53	77	81	<50	77	90	68	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000		9,630	44,700	34,800	30,400	30,000	37,700	34,000	28,300	30,900	23,500	20,600	18,100	12,400	16,100	15,400
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500		60	41	42	35	35	36	35	34	34	<100	<100	<100	120	<100	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000		12,000	24,900	27,600	28,300	28,400	21,000	24,900	29,900	28,200	24,200	27,900	26,500	17,300	28,200	33,600
Sulphide (as S)	µg/L	10	-	-	-		<20	<90	<90	<18	<18	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50		-	-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-		-	-	-	-	-	-	-	-	-	25	-	<20	<20	<20	<20
Turbidity	NTU	0.1	-	-	-		-	>4000	-	1030	1350	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-		-	-	-	-		-	<2,000	-	8,300	-	-	-	-	-	-
Nutrients																				
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-		106	9.5	9.5	<5.0	<5.0	5.7	<5.0	15.5	<5.0	90	<50	<50	<50	<50	<50
Nitrate (as N)	µg/L	5	400,000	400,000	10,000		526	1,210	910	674	670	1,440	1,860	1260	1350	2300	1680	1010	1440	1,980	1,680
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000		2.1	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000			-	-	-		-	1,860	-	-	-	-	-	-	-	1,680
Demand Parameters																				
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-		-	<2000	-	<2,000	<2000	-	<2,000	-	<2,000	-	<2400	-	<3600	-	<17,500
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-		47,000	56,000	-	<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	26,000
Carbon																				
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-		-	-	-	-	-	-	-	-	-	-	5680	-	2600	-	-
Total Organic Carbon (TOC)	µg/L	500	-	-	-		-	5310	-	3,200	3950	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenols (4AAP)	µg/L	1	-	-	-		<1.0	<1.0	-	-	-	-	-	<1.0	<1.0	<2	-	-	-	<2	-
Phenolics	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																				
Aluminum	µg/L	1	-	-	9,500		37.7	23.7	-	9.5	11.5	-	2.6	-	2.0	-	<5.0	-	6.2	-	18.1
Antimony	µg/L	0.1	90	2,500	6		<0.50	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	0.3
Arsenic	µg/L	0.1	50	125	10		<0.50	0.1	-	0.2	0.1	-	0.1	-	0.1	-	<0.50	-	<0.50	-	<0.5
Barium	µg/L	0.1	10,000	5,000	1,000		<20	14.3	-	16.2	16.2	-	16.7	-	16.6	-	14.1	-	9.4	-	16.2
Beryllium	µg/L	0.1	1.5	1,000	8		<1.0	<0.10	-	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.1
Bismuth	µg/L	0.05	-	-	-		-	<0.050	-	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000		<100	84.0	-	117.0	130.0	-	92.0	-	115.0	-	100.0	-	87.0	-	88.0
Cadmium	µg/L	0.005	1.5 [#1]	15	5		0.034	0.0142	-	0.0104	0.0102	-	0.0135	-	0.0126	-	0.0590	-	0.011	-	0.091
Calcium	µg/L	50	-	-	-		25600.0	35600.0	-	45900.0	50900.0	-	44200.0	-	46500.0	-	48000.0	-	23700.0	-	47100.0
Cesium	µg/L	0.01	-	-	-		-	<0.010	-	<0.010	<0.010	-	<0.010	-	<0.010	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]		<1.0	<0.10	-	<0.10	<0.10	-	<0.50	-	<0.10	-	<0.50	-	0.9	-	1.4
Cobalt	µg/L	0.1	40	40	1		2.0	0.2	-	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1
Copper	µg/L	0.2	20 [#1]	20	1,500		1.0	1.3	-	1.8	1.9	-	1.6	-	1.9	-	6.2	-	0.9	-	13.4
Iron	µg/L	10	-	-	6,500		83.0	17.0	-	<10	<10	-	<0.01	-	<10	-	<10	-	<10	-	22.0
Lead	µg/L	0.05	40 [#1]	20	10		<0.50	<0.050	-	<0.050	<0.050	-	<0.050	-	<0.050	-	1.0	-	<0.20	-	0.7
Lithium	µg/L	1	-	-	8		<5.0	1.9	-	1.9	1.8	-	2.0	-	2.1	-	2.1	-	1.7	-	2.1
Magnesium	µg/L	5	-	-	-		5690.0	7130.0	-	9020.0	8520.0	-	8660.0	-	8330.0	-	7750.0	-	5000.0	-	8010.0
Manganese	µg/L	0.1	-	-	1,500		404.0	19.4	-	0.4	0.4	-	0.4	-	0.4	-	1.2	-	1.0	-	5.1
Mercury	µg/L		0.25	0.25	1		<0.010	-	-	<0.0050	<0.0050	-	-	-	<0.0050	-	<0.010	-	<0.010	-	<0.01
Molybdenum	µg/L	0.05	10,000	10,000	250		2.1	0.2	-	1.7	0.3	-	0.2	-	0.2	-	0.2	-	0.2	-	0.2
Nickel	µg/L	0.5	250 [#1]	83	80		1.8	<0.50	-	<0.50	<0.50	-	0.8	-	<0.50	-	<0.40	-	<0.40	-	1.6
Phosphorus	µg/L	50	-	-	-		-	<50	-	<50	<50	-	<50	-	<50	-	<50	-	<50	-	<50
Potassium	µg/L	50	-	-	-		4100.0	4300.0	-	4630.0	4980.0	-	4480.0	-	4850.0	-	3860.0	-	3670.0	-	6650.0
Rubidium	µg/L	0.2	-	-	-		-	0.2	-	<0.20	<0.20	-	<0.2	-	<0.20	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10		<0.10	<0.050	-	0.1	<0.050	-	<0.050	-	<0.050	-	<0.50	-	<0.50	-	<0.5
Silicon	µg/L	50	-	-	-		-	11500.0	-	13300.0	12400.0	-	12800.0	-	12700.0	-	12300.0	-	13800.0	-	12400.0
Silver	µg/L	0.01	0.5 [#1]	15	20		<0.020	<0.010	-	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.05
Sodium	µg/L	50	-	-	200,000		17400.0	43600.0	-	36600.0	39100.0	-	35800.0	-	35300.0	-	30400.0	-	26500.0	-	28700.0
Strontium	µg/L	0.2	-	-	2,500		-	264.0	-	321.0	329.0	-	309.0	-	331.0	-	266.0	-	159.0	-	284.0
Sulphur	µg/L	500	-	-	-		-	8640.0	-	10900.0	9750.0	-	8020.0	-	9650.0	-	6500.0	-	5700.0	-	10900.0
Tellurium	µg/L	0.2	-	-	-		-	<0.20	-	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.5
Thallium	µg/L	0.01	3	3	-		<0.20	<0.010	-	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.02	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-		-	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1
Tin	µg/L	0.1	-	-	2,500		<0.50	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	0.4
Titanium	µg/L	0.3	1,000	1,000	-		<10	<0.90	-	<0.30	<0.30	-	<0.30	-	<0.30	-	<5.0	-	<5.0	-	<5
Tungsten	µg/L	0.1	-	-	3		-	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<1
Uranium	µg/L	0.01	85	85	20		0.4	0.9	-	2.4	2.5	-	2.0	-	1.9	-	2.0	-	0.4	-	1.6
Vanadium	µg/L	0.5	-	-	20		<1.0	<0.5	-	0.6	0.6	-	<0.50	-	0.5	-	<1.0	-	<1.0	-	<5
Zinc	µg/L	1	75 [#1]	100	3,000		10.8	1.0	-	<1.0	<1.0	-	<1.0	-	21.7	-	19.4	-	15.1	-	**169.0**
Zirconium	µg/L	0.06	-	-	-		-	<0.060	-	<0.20	<0.20	-	<0.30	-	<0.20	-	<0.10	-	<0.10	-	<0.1

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Location						MW13-03													
Field ID																			
Sample Date						11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	)UP (27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
Laboratory Report Number						22J1342	22L1310	23C0154	23E2913	23I3541	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
Laboratory Sample ID						22J1342-07	22L1310-04	23C0154-03	23E2913-03	23I3541-03	23I3541-09	23L2282-03	24B2509-03	24F3072-03	24I2276-03	24L1123-03	25C1419-03	25E3516-03	25G2084-03	25L0435-03
Parameter	**Unit**	**RDL**	**CSR - AW**		**CSR - DW**															
			Freshwater	Marine																
Field Measurements																				
Temperature	°C		-	-	-	12.3	10.9	10.9	11.7	11.7	11.7	10.7	11.5	12.5	11.7	11.3	11.4	12.3	11.8	11.2
Electrical Conductivity	µS/cm		-	-	-	295.7	325.4	324.2	370.6	365.3	365.3	278	323.6	292.5	308.9	198.9	382.5	208	358.4	237.3
Total Dissolved Solids (TDS)	mg/L		-	-	-	192.5	289.7	289.25	323.6	319.2	319.2	249.6	283.3	48.96	268.8	175	336.4	178.4	311	209.9
Salinity	-		15	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.2	-	-	-
Dissolved Oxygen	mg/L		-	-	-	6.60	6.78	5.84	0.93	6.24	6.24	5.9	6.46	6.93	6.03	5.52	-	5.6	7.5	5.39
pH	pH Units		-	-	-	6.58	6.34	5.88	6.56	4.9	4.9	6.01	6.26	6.38	6.09	6.23	6.39	6.74	6.71	6.35
Oxidation Reduction Potential (ORP)	-		-	-	-	59.5	46.6	110.4	102.3	171	171	104.1	28.5	161.5	115.4	28.6	111.4	-24	-7.5	53.8
Physical Parameters																				
pH	pH Units	0.1	-	-	-	-	6.48	6.97	6.67	7.01	6.95	6.61	6.68	6.66	6.88	6.73	6.64	6.91	6.91	6.1
Electrical Conductivity (EC)	µS/cm	2	-	-	-	-	478	471	505	495	497	422	420	454	420	298	439	457	471	329
Total Suspended Solids (TSS)	µg/L	3000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-	-	-	-	322,000	-	-	310,000	-	258,000	-	222,000	-	290,000	-	212,000
Hardness as $CaCO_3$	µg/L	500	-	-	-	188,000	174,000	-	180,000	-	-	183,000	-	165,000	-	99,800	-	-	-	123,000
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-	-	-	144,000	175,000	194,000	197,000	151,000	147,000	142,000	137,000	95,600	99,600	128,000	139,000	126,000
Alkalinity (P)	µg/L	1000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	1000	-	-	-	-	-	144,000	175,000	194,000	197,000	151,000	147,000	142,000	137,000	95,600	99,600	128,000	139,000	126,000
Carbonate	µg/L	1000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	1000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000	17,900	22,000	27,300	22,600	22,700	23,400	22,300	25,500	19,200	16,600	12,600	80,500	31,900	27,400	16,500
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000	40,300	38,300	35,500	43,000	50,000	49,800	34,800	34,100	38,500	39,200	22,500	19,000	31,100	36,600	21,300
Sulphide (as S)	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	<20	<0.01	<0.01	0.01	0.02
Turbidity	NTU	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																				
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-	186	120	54	70	<50	<50	<50	-	<50	100	50	<50	<50	<50	<50
Nitrate (as N)	µg/L	5	400,000	400,000	10,000	1,130	1,130	2,280	2,130	1,800	1,740	1,640	2,170	1,190	746	628	2100	1070	803	676
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																				
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-	-	14,500	-	<1,400	-	-	<2,800	-	<3,200	-	<2,700	-	<4,000	-	<4,000
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-	-	44,000	-	45,000	-	-	50,000	-	36,000	-	25,000	-	<20,000	-	40,000
Carbon																				
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	4,620	-	2,980	-	4,270	-	2,800
Total Organic Carbon (TOC)	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenols (4AAP)	µg/L	1	-	-	-	-	-	<2.00	-	-	-	-	<0.50	-	-	-	-	-	-	-
Phenolics	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-
Dissolved Metals																				
Aluminum	µg/L	1	-	-	9,500	-	12.9	-	11.2	-	-	8.2	-	<5.0	-	14.4	-	<5	-	11.6
Antimony	µg/L	0.1	90	2,500	6	-	<0.2	-	<0.20	-	-	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Arsenic	µg/L	0.1	50	125	10	-	<0.5	-	<0.50	-	-	<0.5	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Barium	µg/L	0.1	10,000	5,000	1,000	-	16.3	-	17.0	-	-	16.0	-	15.7	-	9.4	-	14.8	-	11.3
Beryllium	µg/L	0.1	1.5	1,000	8	-	<0.1	-	<0.10	-	-	<0.1	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Bismuth	µg/L	0.05	-	-	-	-	<0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000	-	116.0	-	104.0	-	-	92.9	-	92.2	-	60.3	-	76.1	-	60.9
Cadmium	µg/L	0.005	1.5 [#1]	15	5	-	0.020	-	0.012	-	-	0.014	-	0.022	-	0.013	-	0.011	-	0.048
Calcium	µg/L	50	-	-	-	-	53800.0	-	54500.0	-	-	57700.0	-	50,500	-	31,200	-	49,900	-	35,500
Cesium	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]	-	1.1	-	1.0	-	-	1.3	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Cobalt	µg/L	0.1	40	40	1	-	<0.1	-	<0.10	-	-	<0.1	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Copper	µg/L	0.2	20 [#1]	20	1,500	-	2.1	-	2.4	-	-	2.2	-	2.13	-	1.27	-	1.85	-	2.18
Iron	µg/L	10	-	-	6,500	-	<10	-	<10	-	-	<10	-	<10	-	<10	-	<10	-	<10
Lead	µg/L	0.05	40 [#1]	20	10	-	<0.2	-	<0.20	-	-	<0.2	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Lithium	µg/L	1	-	-	8	-	2.1	-	2.2	-	-	2.2	-	2.14	-	1.79	-	1.89	-	1.89
Magnesium	µg/L	5	-	-	-	-	9570.0	-	10700.0	-	-	9490.0	-	9,480	-	5,260	-	7,920	-	5,950
Manganese	µg/L	0.1	-	-	1,500	-	0.8	-	0.8	-	-	0.9	-	1.55	-	0.96	-	0.25	-	1.59
Mercury	µg/L	1	0.25	0.25	1	-	-	-	<0.010	-	-	<0.01	-	<0.010	-	<0.010	-	<0.04	-	<0.01
Molybdenum	µg/L	0.05	10,000	10,000	250	-	0.2	-	0.2	-	-	0.2	-	0.12	-	0.12	-	0.17	-	0.13
Nickel	µg/L	0.5	250 [#1]	83	80	-	<0.4	-	<0.40	-	-	<0.4	-	0.6	-	0.62	-	<0.4	-	<0.4
Phosphorus	µg/L	50	-	-	-	-	<50	-	<50	-	-	-	-	<50	-	<50	-	<50	-	<50
Potassium	µg/L	50	-	-	-	-	4680.0	-	4590.0	-	-	-	-	4,290	-	3,480	-	4,530	-	3,820
Rubidium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10	-	<0.5	-	<0.50	-	-	<0.5	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Silicon	µg/L	50	-	-	-	-	13900.0	-	13500.0	-	-	-	-	13,700	-	13,100	-	12,300	-	13,100
Silver	µg/L	0.01	0.5 [#1]	15	20	-	<0.05	-	<0.050	-	-	<0.05	-	<0.050	-	<0.050	-	<0.05	-	<0.05
Sodium	µg/L	50	-	-	200,000	-	29200.0	-	31300.0	-	-	29600.0	-	28,500	-	21,100	-	25,000	-	23,900
Strontium	µg/L	0.2	-	-	2,500	-	348.0	-	401.0	-	-	355.0	-	329	-	195	-	352	-	230
Sulphur	µg/L	500	-	-	-	-	12700.0	-	14600.0	-	-	-	-	15,100	-	7,200	-	11,800	-	7,900
Tellurium	µg/L	0.2	-	-	-	-	<0.5	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Thallium	µg/L	0.01	3	3	-	-	<0.02	-	<0.020	-	-	<0.02	-	<0.020	-	<0.020	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-	-	<0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Tin	µg/L	0.1	-	-	2,500	-	<0.2	-	<0.20	-	-	<0.2	-	0.27	-	<0.20	-	<0.2	-	<0.2
Titanium	µg/L	0.3	1,000	1,000	-	-	<5	-	<5.0	-	-	<5	-	<5.0	-	<5.0	-	<5	-	<5
Tungsten	µg/L	0.1	-	-	3	-	<1	-	<1.0	-	-	<1	-	<1.0	-	<1.0	-	<1	-	<1
Uranium	µg/L	0.01	85	85	20	-	2.9	-	3.3	-	-	1.9	-	1.96	-	0.705	-	2.06	-	0.912
Vanadium	µg/L	0.5	-	-	20	-	<5	-	<5.0	-	-	<5	-	<5.0	-	<5.0	-	<5	-	<5
Zinc	µg/L	1	75 [#1]	100	3,000	-	<4	-	<4.0	-	-	6.6	-	5.5	-	<4.0	-	<4	-	17.8
Zirconium	µg/L	0.06	-	-	-	-	<0.1	-	<0.10	-	-	-	-	<0.10	-	<0.10	-	<0.1	-	<0.1

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
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Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04	MW19-04
						Field ID	MW19-4	MW19-04											
						Sample Date	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022
						Laboratory Report Number	L2318207	L2367392	\20A0908280120	\20A5363250420	\20B1139240720	\20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310
						Laboratory Sample ID	L2318207-4	L2367392-4	VA20A0908-005	VA20A5363-004	VA20B1139-004	VA20B9565-004	21B2866-05	21E1432-04	21G2459-05	21L0641-05	22C0773-05	22G1537-05	22J1342-08	22L1310-05
Field Measurements																			
Temperature	°C		-	-	-		16.94	13.1	9.1	11.35	16	13.7	7.6	11.1	16.2	10.1	7.6	13.3	14.8	8.2
Electrical Conductivity	µS/cm		-	-	-		180	197.1	-	236	308	337	310	352.2	322.3	260.7	262	340.1	380.6	280.0
Total Dissolved Solids (TDS)	mg/L		-	-	-		195	-	4.6	208	200	218.4	302	229.45	257.55	237.9	276	286	247.4	268.2
Salinity	-		15	10	-		0.11	-	-	-	-	-		-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	-
Dissolved Oxygen	mg/L		-	-	-		5.39	-	11.85	4.94	8.2	1.83	5.9	4.02	0.84	5.2	8.7	1.77	1.57	3.23
pH	pH Units		-	-	-		6.43	6.69	4.2	6.47	6.54	6.36	6.34	6.36	6.37	6.38	8.29	6.62	6.58	8.2
Oxidation Reduction Potential (ORP)	-		-	-	-		255.2	-	-	115.5	54.1	65.3	57.5	85.1	54.8	28.1	141.7	51.6	17.6	83.1
Physical Parameters																			
pH	pH Units	0.1	-	-	-		7.93	7.04	6.86	8.18	6.81	6.92	-	6.43	-	5.85	-	7.81	-	6.59
Electrical Conductivity (EC)	µS/cm	2	-	-	-		265	248	-	304	-	353	-	384	-	382	-	456	-	374
Total Suspended Solids (TSS)	µg/L	3000	-	-	-		1,930,000	959,000	-	264,000	-	6,900	-	3400	-	11,400	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-		-	-	179,000	223,000	-	245,000	-	-	-	-	-	293,000	-	-
Hardness as $CaCO_3$	µg/L	500	-	-	-		99,700	105,000	-	201,000	-	171,000	-	153,000	161,000	163,000	198,000	218,000	182,000	195,000
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	193,000	-	-	-	-	-	-
Alkalinity (P)	µg/L	1000	-	-	-		-	-	-	-	-	-	-	<1000	-	-	-	-	-	-
Bicarbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	193,000	-	-	-	-	-	-
Carbonate	µg/L	1000	-	-	-		-	-	-	-	-	-	-	<1000	-	-	-	-	-	-
Hydroxide	µg/L	1000	-	-	-		-	-	-	-	-	-	-	<1000	-	-	-	-	-	-
Bromide	µg/L	50	-	-	-		<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000		7,240	7,260	3,760	6,110	6,480	6,680	7220	7380	7400	4460	6,090	4,960	6,590	6,460
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500		50	37	39	40	42	45	<100	<100	<100	120	<100	<100	<100	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000		4,290	3,770	2,800	5,050	3,340	2,630	4900	4000	1600	4500	4,000	1,500	2,400	6,300
Sulphide (as S)	µg/L	10	-	-	-		<2.0	29	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50		-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-		-	-	-	-	-	-	<20	-	21	<20	<20	<20	<20	<20
Turbidity	NTU	0.1	-	-	-		-	668	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-		-	-	-	<2,000	-	5,300	-	-	-	-	-	-	-	-
Nutrients																			
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-		140	106	106	130	166	140	160	187	315	121	209	313	360	272
Nitrate (as N)	µg/L	5	400,000	400,000	10,000		182	204	160	121	25.6	49.3	<10	<10	<10	<10	312	<10	<10	19
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000		<1.0	<1.0	<1.0	1.6	84.4	7.7	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000		-	-	-	123.0	-	-	-	-	-	-	-	<20	-	-
Demand Parameters																			
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-		<2000	<2000	-	2,400	-	<2,000	-	<2400	-	<3600	-	<6,200	-	<7,400
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-		78,000	50,000	-	<20,000	-	<20,000	-	21,000	-	23,000	-	60,000	-	54,000
Carbon																			
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-		-	-	-	-	-	-	-	14,500	-	13,300	-	-	-	-
Total Organic Carbon (TOC)	µg/L	500	-	-	-		-	10,800	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																			
Phenols (4AAP)	µg/L	1	-	-	-		4.6	-	-	-	<1.0	-	4	-	-	-	<2	-	-	-
Phenolics	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																			
Aluminum	µg/L	1	-	-	9,500		6.6	8.9	-	4.5	-	6.2	-	8.4	-	13.9	-	12.8	-	21.5
Antimony	µg/L	0.1	90	2,500	6		0.2	0.2	-	0.2	-	0.2	-	0.3	-	0.5	-	0.6	-	0.5
Arsenic	µg/L	0.1	50	125	10		0.5	0.4	-	0.4	-	0.3	-	<0.50	-	0.5	-	0.6	-	1.0
Barium	µg/L	0.1	10,000	5,000	1,000		20.1	21.0	-	24.8	-	36.2	-	32.3	-	28.9	-	46.7	-	33.4
Beryllium	µg/L	0.1	1.5	1,000	8		<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Bismuth	µg/L	0.05	-	-	-		<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000		50.0	40.0	-	61.0	-	51.0	-	63.9	-	<50	-	78.3	-	53.3
Cadmium	µg/L	0.005	1.5 [#1]	15	5		0.0337	0.0505	-	0.0394	-	0.0552	-	0.073	-	0.072	-	0.081	-	0.100
Calcium	µg/L	50	-	-	-		31600.0	32500.0	-	38400.0	-	49300.0	-	46900.0	-	49100.0	-	68100.0	-	61400.0
Cesium	µg/L	0.01	-	-	-		<0.010	<0.010	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]		0.3	0.3	-	<0.50	-	0.3	-	0.6	-	<0.50	-	1.1	-	2.6
Cobalt	µg/L	0.1	40	40	1		0.6	1.0	-	1.4	-	1.5	-	2.8	-	1.3	-	3.8	-	2.0
Copper	µg/L	0.2	20 [#1]	20	1,500		4.3	3.3	-	4.0	-	3.7	-	5.5	-	5.6	-	6.2	-	4.3
Iron	µg/L	10	-	-	6,500		57.0	78.0	-	852.0	-	698.0	-	1140.0	-	963.0	-	1540.0	-	3170.0
Lead	µg/L	0.05	40 [#1]	20	10		<0.050	<0.050	-	<0.050	-	<0.050	-	<0.20	-	<0.20	-	<0.2	-	0.2
Lithium	µg/L	1	-	-	8		2.0	1.9	-	1.9	-	2.4	-	2.1	-	1.7	-	2.6	-	2.4
Magnesium	µg/L	5	-	-	-		5020.0	5780.0	-	7740.0	-	8420.0	-	8620.0	-	9820.0	-	11500.0	-	9990.0
Manganese	µg/L	0.1	-	-	1,500		190.0	396.0	-	460.0	-	748.0	-	995.0	-	679.0	-	2360.0	-	1700.0
Mercury	µg/L		0.25	0.25	1		<0.0050	<0.0050	-	-	-	<0.0050	-	<0.010	-	<0.010	-	<0.01	-	-
Molybdenum	µg/L	0.05	10,000	10,000	250		0.5	0.4	-	0.2	-	0.3	-	0.4	-	0.4	-	0.5	-	0.5
Nickel	µg/L	0.5	250 [#1]	83	80		0.5	<0.50	-	<0.50	-	<0.50	-	0.7	-	0.5	-	1.0	-	0.4
Phosphorus	µg/L	50	-	-	-		<50	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50
Potassium	µg/L	50	-	-	-		10200.0	10400.0	-	8570.0	-	9790.0	-	10300.0	-	7900.0	-	11800.0	-	10900.0
Rubidium	µg/L	0.2	-	-	-		2.5	2.0	-	1.7	-	2.5	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10		<0.050	<0.050	-	<0.050	-	<0.050	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Silicon	µg/L	50	-	-	-		15600.0	14400.0	-	13600.0	-	15200.0	-	16900.0	-	12800.0	-	17300.0	-	16200.0
Silver	µg/L	0.01	0.5 [#1]	15	20		<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.05	-	<0.05
Sodium	µg/L	50	-	-	200,000		6940.0	7950.0	-	7130.0	-	7640.0	-	7740.0	-	7640.0	-	9130.0	-	7930.0
Strontium	µg/L	0.2	-	-	2,500		149.0	169.0	-	211.0	-	254.0	-	255.0	-	242.0	-	355.0	-	341.0
Sulphur	µg/L	500	-	-	-		1610.0	1520.0	-	1720.0	-	980.0	-	<3000	-	<3000	-	<3000	-	<3000
Tellurium	µg/L	0.2	-	-	-		<0.20	<0.20	-	<0.010	-	<0.20	-	<0.50	-	<0.50	-	<0.5	-	<0.5
Thallium	µg/L	0.01	3	3	-		<0.010	<0.010	-	<0.010	-	<0.010	-	<0.02	-	<0.02	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-		<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1
Tin	µg/L	0.1	-	-	2,500		0.2	0.2	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2	-	<0.2
Titanium	µg/L	0.3	1,000	1,000	-		0.3	0.4	-	<0.30	-	<0.30	-	<5.0	-	<5.0	-	<5	-	<5
Tungsten	µg/L	0.1	-	-	3		<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<1	-	<1
Uranium	µg/L	0.01	85	85	20		0.1	0.1	-	0.3	-	0.4	-	0.5	-	0.7	-	1.1	-	0.9
Vanadium	µg/L	0.5	-	-	20		1.3	1.2	-	0.8	-	0.7	-	1.3	-	1.2	-	<5	-	<5
Zinc	µg/L	1	75 [#1]	100	3,000		2.7	1.5	-	2.2	-	1.1	-	<4.0	-	<4.0	-	45.9	-	<4
Zirconium	µg/L	0.06	-	-	-		<0.20	<0.20	-	<0.30	-	<0.2	-	<0.10	-	<0.10	-	0.2	-	<0.1

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW19-04													
						Field ID														
						Sample Date	28-Feb-2023	23-May-2023	DUP(23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	DUP (9-Dec-2024)	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	23C0154	23E2913	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	24L1123	25C1419	25E3516	25G2084	25L0435
						Laboratory Sample ID	23C0154-04	23E2913-04	23E2913-09	23I3541-04	23L2282-04	24B2509-04	24F3072-04	24I2276-04	24L1123-04	24L1123-09	25C1419-04	25E3516-04	25G2084-04	25L0435-04
Field Measurements																				
Temperature	°C		-	-	-		7.1	12.6	12.6	15.4	9.2	8.6	13.9	15.7	9.7	-	6.6	11	13.6	9.6
Electrical Conductivity	µS/cm		-	-	-		208.9	239.3	239.3	236.2	0.4	11.9	310.7	25	345.6	-	91	248.4	14.9	12.3
Total Dissolved Solids (TDS)	mg/L		-	-	-		207.35	204.6	204.6	187.7	0.65	11.2	258.7	22.1	316.5	-	91.1	221.3	12.6	11.05
Salinity	-		15	10	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-		-	-	-	-	-	-	-	-	-	-	43.1	-	-	-
Dissolved Oxygen	mg/L		-	-	-		4.8	0.81	0.81	7.27	6.86	7.15	9.81	7.6	7.41	-	-	7.86	7.11	3.8
pH	pH Units		-	-	-		6.18	6.73	6.73	4.85	6.55	4.28	6.7	6.48	6.47	-	6.8	6.48	7.95	4.3
Oxidation Reduction Potential (ORP)	-		-	-	-		32.5	55.6	55.6	142.4	127.8	41.5	97.7	175.9	70.6	-	20.6	149.1	121	-170
Physical Parameters																				
pH	pH Units	0.1	-	-	-		7.1	6.67	6.65	6.83	6.79	6.97	6.8	7.12	7.09	7.3	6.83	7.29	6.96	6.55
Electrical Conductivity (EC)	µS/cm	2	-	-	-		339	312	314	258	322	414	428	382	457	457	127	328	296	348
Total Suspended Solids (TSS)	µg/L	3000	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-		-	235,000	-	-	262,000	-	315,000	-	272,000	-	-	195,000	-	205,000
Hardness as $CaCO_3$	µg/L	500	-	-	-		-	140,000	144,000	-	174,000	-	192,000	-	210,000	204,000	-	-	-	150,000
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-		158,000	149,000	145,000	144,000	162,000	202,000	191,000	171,000	195,000	195,000	65,200	138,000	121,000	194,000
Alkalinity (P)	µg/L	1000	-	-	-		<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	1000	-	-	-		158,000	149,000	145,000	144,000	162,000	202,000	191,000	171,000	195,000	195,000	65,200	138,000	121,000	194,000
Carbonate	µg/L	1000	-	-	-		<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	1000	-	-	-		<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	50	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000		5,830	6,140	-	6,950	7,250	9,540	13,800	10,600	17,400	17,600	8,310	11,500	11,200	12,400
Fluoride	µg/L	20	2,000 [#1]	15,000	1,500		<100	<100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	300	2,180,000 [#1]	2,180,000 [#1]	500,000		2,900	1,700	-	1,600	2,600	2,700	1,200	2,000	2,600	2,600	1,400	1,300	<1,000	3,000
Sulphide (as S)	µg/L	10	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-		<20	<20	-	<20	<20	<20	<20	<20	<20	-	<0.01	<0.01	<0.01	<0.01
Turbidity	NTU	0.1	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																				
Ammonia as N	µg/L	5	18,400 [#2]	200,000 [#2]	-		92	158	-	158	113	-	238	306	298	213	<50	194	375	162
Nitrate (as N)	µg/L	5	400,000	400,000	10,000		<10	<10	-	<10	<10	<10	<10	<100	<100	<100	<10	<10	<10	<10
Nitrite (as N)	µg/L	1	800 [#3]	800 [#3]	1,000		<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																				
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-		-	<1,400	-	-	<2,800	-	<3,200	-	4,200	-	-	<4,000	-	<4,000
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-		-	36,000	-	-	41,000	-	56,000	-	50,000	-	-	32,000	-	80,000
Carbon																				
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-		-	-	-	-	-	-	14,800	-	13,300	-	-	8830	-	9830
Total Organic Carbon (TOC)	µg/L	500	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenols (4AAP)	µg/L	1	-	-	-		<2	-	-	-	-	<0.50	-	-	-	-	-	-	-	-
Phenolics	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	-	<2	-	-	-
Dissolved Metals																				
Aluminum	µg/L	1	-	-	9,500		-	17.3	16.3	-	11.6	-	9.5	-	8.4	8.6	-	5.4	-	7.6
Antimony	µg/L	0.1	90	2,500	6		-	0.4	0.4	-	0.3	-	0.38	-	0.42	0.44	-	0.21	-	0.25
Arsenic	µg/L	0.1	50	125	10		-	<0.50	<0.50	-	1.4	-	2.52	-	2.28	2.32	-	<0.5	-	3
Barium	µg/L	0.1	10,000	5,000	1,000		-	24.3	24.5	-	26.5	-	36.7	-	35.3	34.6	-	18.5	-	28.2
Beryllium	µg/L	0.1	1.5	1,000	8		-	<0.10	<0.10	-	<0.1	-	<0.10	-	<0.10	<0.10	-	<0.1	-	<0.1
Bismuth	µg/L	0.05	-	-	-		-	<0.10	<0.10	-	-	-	<0.10	-	<0.10	<0.10	-	<0.1	-	<0.1
Boron	µg/L	10	12,000	12,000	5,000		-	52.8	52.5	-	<50	-	64.2	-	<50.0	<50.0	-	<50	-	<50
Cadmium	µg/L	0.005	1.5 [#1]	15	5		-	0.083	0.079	-	0.036	-	0.041	-	0.044	0.037	-	0.024	-	0.018
Calcium	µg/L	50	-	-	-		-	43300.0	45100.0	-	55400.0	-	60,100	-	68,000	65,800	-	40,500	-	48,200
Cesium	µg/L	0.01	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	10 [#4]	15 [#4]	50 [#4]		-	1.0	1.2	-	0.9	-	0.65	-	0.65	0.62	-	<0.5	-	0.54
Cobalt	µg/L	0.1	40	40	1		-	2.9	2.9	-	2.3	-	2.85	-	3.01	3.03	-	1.57	-	2.24
Copper	µg/L	0.2	20 [#1]	20	1,500		-	7.4	7.4	-	1.6	-	1.25	-	3.88	1.74	-	5.57	-	0.55
Iron	µg/L	10	-	-	6,500		-	1500.0	1500.0	-	5960.0	-	12,600	-	14,400	14,400	-	913	-	16,900
Lead	µg/L	0.05	40 [#1]	20	10		-	<0.20	<0.20	-	<0.2	-	<0.20	-	<0.20	<0.20	-	<0.2	-	<0.2
Lithium	µg/L	1	-	-	8		-	2.4	2.4	-	2.0	-	2.86	-	2.09	2	-	1.69	-	1.8
Magnesium	µg/L	5	-	-	-		-	7590.0	7640.0	-	8600.0	-	10,200	-	9,700	9,850	-	5,910	-	7,170
Manganese	µg/L	0.1	-	-	1,500		-	1580.0	1580.0	-	1420.0	-	2,010	-	2,180	2,180	-	1,530	-	1,460
Mercury	µg/L		0.25	0.25	1		-	<0.010	<0.010	-	<0.01	-	<0.010	-	<0.010	<0.010	-	<0.04	-	<0.01
Molybdenum	µg/L	0.05	10,000	10,000	250		-	0.3	0.3	-	0.5	-	0.37	-	0.5	0.48	-	0.37	-	0.37
Nickel	µg/L	0.5	250 [#1]	83	80		-	0.4	0.4	-	0.7	-	1.43	-	0.59	0.55	-	0.78	-	0.4
Phosphorus	µg/L	50	-	-	-		-	<50	<50	-	-	-	79	-	121	117	-	<50	-	205
Potassium	µg/L	50	-	-	-		-	8870.0	9040.0	-	-	-	9,440	-	7,900	7,840	-	7,860	-	6,130
Rubidium	µg/L	0.2	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10		-	<0.50	<0.50	-	<0.5	-	<0.50	-	<0.50	<0.50	-	<0.5	-	<0.5
Silicon	µg/L	50	-	-	-		-	17400.0	17900.0	-	-	-	19,200	-	16,500	16,200	-	15,800	-	15,300
Silver	µg/L	0.01	0.5 [#1]	15	20		-	<0.050	<0.050	-	<0.05	-	<0.050	-	<0.050	<0.050	-	<0.05	-	<0.05
Sodium	µg/L	50	-	-	200,000		-	8640.0	8580.0	-	9250.0	-	11,200	-	10,300	10,100	-	12,700	-	9,860
Strontium	µg/L	0.2	-	-	2,500		-	284.0	286.0	-	257.0	-	360	-	340	336	-	221	-	248
Sulphur	µg/L	500	-	-	-		-	<3,000	<3,000	-	-	-	<3,000	-	<3,000	<3,000	-	<3,000	-	<3,000
Tellurium	µg/L	0.2	-	-	-		-	<0.50	<0.50	-	-	-	<0.50	-	<0.50	<0.50	-	<0.5	-	<0.5
Thallium	µg/L	0.01	3	3	-		-	<0.020	<0.020	-	<0.02	-	<0.020	-	<0.020	<0.020	-	<0.02	-	<0.02
Thorium	µg/L	0.1	-	-	-		-	<0.10	<0.10	-	-	-	<0.10	-	<0.10	<0.10	-	<0.1	-	<0.1
Tin	µg/L	0.1	-	-	2,500		-	<0.20	<0.20	-	<0.2	-	<0.20	-	<0.20	<0.20	-	<0.2	-	<0.2
Titanium	µg/L	0.3	1,000	1,000	-		-	<5.0	<5.0	-	<5	-	<5.0	-	<5.0	<5.0	-	<5	-	<5
Tungsten	µg/L	0.1	-	-	3		-	<1.0	<1.0	-	<1	-	<1.0	-	<1.0	<1.0	-	<1	-	<1
Uranium	µg/L	0.01	85	85	20		-	0.4	0.4	-	0.5	-	0.608	-	0.826	0.818	-	0.33	-	0.272
Vanadium	µg/L	0.5	-	-	20		-	<5.0	<5.0	-	<5	-	<5.0	-	<5.0	<5.0	-	<5	-	<5
Zinc	µg/L	1	75 [#1]	100	3,000		-	<4.0	<4.0	-	<4	-	4.2	-	<4.0	<4.0	-	<4	-	<4
Zirconium	µg/L	0.06	-	-	-		-	<0.10	<0.10	-	-	-	0.15	-	0.14	0.13	-	<0.1	-	0.12

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	MW19-05					MW24-05								
Location						MW19-05					MW24-05								
Field ID						MW19-5	MW19-05												
Sample Date						25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	24-Jun-2024	16-Sep-2024	DUP (16-Sep-2024)	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025	DUP (2-Dec-2025)
Laboratory Report Number						L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	24F3072	24I2276	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435	25L0435
Laboratory Sample ID						L2318207-5	L2367392-5	VA20A0908-006	VA20A5363-005	VA20B1139-005	24F3072-10	24I2276-10	24I2276-09	24L1123-10	25C1419-05	25E3516-05	25G2084-05	25L0435-05	25L0435-10
Field Measurements																			
Temperature	°C		-	-	-	14.40	11.4	9	9.38	11.7	12.9	13.7	-	9.9	7.2	8.9	14	10.1	-
Electrical Conductivity	µS/cm		-	-	-	705	625	200	392	88.4	153.4	161.4	-	82.8	0.9	112.3	19.6	10.6	-
Total Dissolved Solids (TDS)	mg/L		-	-	-	458	-	187.2	369	572	130.1	133.9	-	75.4	1.3	105.7	16.2	9.75	-
Salinity	-		15	10	-	0.35	-	-	-		-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%		-	-	-	-	-	-	-		-	-	-	-	54.2	-	-	-	-
Dissolved Oxygen	mg/L		-	-	-	5.68	-	8.63	5.64	4.91	3.49	1.47	-	0.96	-	1.54	5.93	7.59	-
pH	pH Units		-	-	-	5.92	6.94	6.34	6.26	6.53	6.34	6.18	-	6.1	6.82	6.03	9.68	4.12	-
Oxidation Reduction Potential (ORP)	-		-	-	-	249.7	-	156.2	101.9	111.8	113.9	70.9	-	-3.2	533.3	108.2	62.9	111.5	-
Physical Parameters																			
pH	pH Units	0.1	-	-	-	8.02	7.25	7.15	8.13	6.81	6.51	6.86	6.85	6.93	6.57	6.89	6.77	6.17	6.13
Electrical Conductivity (EC)	µS/cm	2	-	-	-	746	853	-	695	-	236	214	214	119	152	167	154	111	116
Total Suspended Solids (TSS)	µg/L	3000	-	-	-	2,760,000	1,880,000	-	114,000	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	10,000	-	-	-	-	-	178,000	506,000	-	252,000	-	-	78,000	-	102,000	-	112,000	105,000
Hardness as $CaCO_3$	µg/L	500	-	-	-	368,000	392,000	-	304,000	-	97,300	-	-	50,500	-	-	-	51,000	51,900
Alkalinity (total as $CaCO_3$)	µg/L	1000	-	-	-	-	-	-	-	-	103,000	87,400	87,200	50,700	50,200	72,400	63,600	61,100	72,400
Alkalinity (P)	µg/L	1000	-	-	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	1000	-	-	-	-	-	-	-	-	103,000	87,400	87,200	50,700	50,200	72,400	63,600	61,100	72,400
Carbonate	µg/L	1000	-	-	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	1000	-	-	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	50	-	-	-	<50	<250	<50	<50	<250	-	-	-	-	-	-	-	-	-
Chloride	µg/L	500	1,500,000	1,500,000	250,000	8,480	9,200	17,300	9,380	11,500	5,180	2,750	2,760	530	9680	2170	1260	370	310
Fluoride	µg/L	20	2,000 #1	15,000	1,500	29	<100	33	29	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	300	2,180,000 #1	2,180,000 #1	500,000	270,000	323,000	37,900	240,000	325,000	6,900	7,800	7,300	2,600	2,400	2,100	3,300	2,400	2,100
Sulphide (as S)	µg/L	10	-	-	-	<2.0	<18	<2.0	2	2.6	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	2	20	20	50	-	-	<2.0	2.1	2.8	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	20	-	-	-	-	-	-	-	-	<20	<20	-	<20	<0.01	<0.01	<0.01	<0.01	<0.01
Turbidity	NTU	0.1	-	-	-	-	1340	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L		-	-	-	-	-	-	<2,000	-	-	-	-	-	-	-	-	-	-
Nutrients																			
Ammonia as N	µg/L	5	18,400 #2	200,000 #2	-	81.5	13.2	<5.0	<5.0	12.8	131	<50	<50	<50	<50	<50	<50	<50	<50
Nitrate (as N)	µg/L	5	400,000	400,000	10,000	167	39	374	161	160	<10	1,260	1,260	111	126	351	300	81	72
Nitrite (as N)	µg/L	1	800 #3	800 #3	1,000	2.1	<5.0	<1.0	<1.0	<5.0	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	50	400,000	400,000	10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																			
Biochemical Oxygen Demand (BOD)	µg/L	2000	-	-	-	<2000	<2000	-	<2,000	-	17,100	-	-	<2,700	-	<4,000	-	<4,000	<4,000
Chemical Oxygen Demand (COD)	µg/L	20000	-	-	-	127,000	43,000	-	<20,000	-	288,000	-	-	38,000	-	<20,000	-	77,000	73,000
Carbon																			
Dissolved Organic Carbon (DOC) (Filtered)	µg/L	500	-	-	-	-	-	-	-	-	32,800	-	-	14,000	-	7,530	-	20,800	20,700
Total Organic Carbon (TOC)	µg/L	500	-	-	-	-	7520	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																			
Phenols (4AAP)	µg/L	1	-	-	-	5.9	-	-	-	<1.0	-	-	-	-	-	-	-	-	-
Phenolics	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-
Dissolved Metals																			
Aluminum	µg/L	1	-	-	9,500	3.9	4.6	-	4.8	-	83.1	-	-	170	-	52.7	-	227	217
Antimony	µg/L	0.1	90	2,500	6	0.2	0.2	-	0.2	-	0.73	-	-	0.84	-	0.58	-	1	1.03
Arsenic	µg/L	0.1	50	125	10	0.2	0.3	-	0.1	-	0.53	-	-	0.59	-	<0.5	-	0.67	0.67
Barium	µg/L	0.1	10,000	5,000	1,000	18.7	21.5	-	17.6	-	18.1	-	-	<5.0	-	<5	-	<5	<5
Beryllium	µg/L	0.1	1.5	1,000	8	<0.10	<0.10	-	<0.020	-	<0.10	-	-	<0.10	-	<0.1	-	<0.1	<0.1
Bismuth	µg/L	0.05	-	-	-	<0.050	<0.050	-	<0.050	-	<0.10	-	-	<0.10	-	<0.1	-	<0.1	<0.1
Boron	µg/L	10	12,000	12,000	5,000	821.0	770.0	-	637.0	-	<50.0	-	-	<50.0	-	<50	-	<50	<50
Cadmium	µg/L	0.005	1.5 #1	15	5	0.0967	0.125	-	0.0641	-	2.71	-	-	0.062	-	0.044	-	0.071	0.068
Calcium	µg/L	50	-	-	-	129000.0	137000.0	-	103000.0	-	29,800	-	-	15,700	-	21,300	-	17,300	16,500
Cesium	µg/L	0.01	-	-	-	<0.010	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	10 #4	15 #4	50 #4	<0.10	<0.10	-	<0.50	-	<0.50	-	-	1.05	-	<0.5	-	1.46	1.46
Cobalt	µg/L	0.1	40	40	1	1.0	1.1	-	2.1	-	4.82	-	-	0.12	-	<0.1	-	0.1	<0.1
Copper	µg/L	0.2	20 #1	20	1,500	2.5	1.8	-	1.4	-	**100**	-	-	11.9	-	4.86	-	15.2	15.7
Iron	µg/L	10	-	-	6,500	<10	<10	-	26.0	-	869	-	-	96	-	19	-	108	102
Lead	µg/L	0.05	40 #1	20	10	<0.050	<0.050	-	<0.050	-	5.6	-	-	<0.20	-	<0.2	-	<0.2	<0.2
Lithium	µg/L	1	-	-	8	1.3	1.1	-	<1.0	-	0.33	-	-	0.14	-	0.16	-	0.19	0.18
Magnesium	µg/L	5	-	-	-	11100.0	12000.0	-	9410.0	-	5,550	-	-	2,720	-	3,460	-	2,620	2,500
Manganese	µg/L	0.1	-	-	1,500	463.0	595.0	-	221.0	-	84.2	-	-	9.57	-	1.38	-	2.8	2.7
Mercury	µg/L		0.25	0.25	1	<0.0050	<0.0050	-	-	-	<0.010	-	-	<0.010	-	<0.04	-	0.018	0.019
Molybdenum	µg/L	0.05	10,000	10,000	250	1.1	1.1	-	0.5	-	0.64	-	-	0.48	-	0.38	-	0.31	0.3
Nickel	µg/L	0.5	250 #1	83	80	1.1	1.4	-	0.7	-	1.68	-	-	0.79	-	0.48	-	1.25	1.18
Phosphorus	µg/L	50	-	-	-	<50	<50	-	<50	-	<50	-	-	<50	-	<50	-	<50	<50
Potassium	µg/L	50	-	-	-	4540.0	4640.0	-	3420.0	-	4,100	-	-	1,940	-	2,420	-	2,130	2,070
Rubidium	µg/L	0.2	-	-	-	2.8	3.1	-	2.4	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	20	20	10	<0.050	0.1	-	0.1	-	<0.50	-	-	<0.50	-	<0.5	-	<0.5	<0.5
Silicon	µg/L	50	-	-	-	7350.0	8360.0	-	6680.0	-	10,800	-	-	6,900	-	7,000	-	6,400	6,100
Silver	µg/L	0.01	0.5 #1	15	20	<0.010	<0.010	-	<0.010	-	<0.050	-	-	<0.050	-	<0.05	-	<0.05	<0.05
Sodium	µg/L	50	-	-	200,000	24000.0	27700.0	-	21900.0	-	12,000	-	-	4,230	-	6,350	-	4,330	3,950
Strontium	µg/L	0.2	-	-	2,500	817.0	884.0	-	642.0	-	146	-	-	59.2	-	91.5	-	69.5	66.9
Sulphur	µg/L	500	-	-	-	102000.0	120000.0	-	83500.0	-	3,300	-	-	<3,000	-	<3,000	-	<3,000	<3,000
Tellurium	µg/L	0.2	-	-	-	<0.20	<0.20	-	<0.20	-	<0.50	-	-	<0.50	-	<0.5	-	<0.5	<0.5
Thallium	µg/L	0.01	3	3	-	<0.010	<0.010	-	<0.010	-	<0.020	-	-	<0.020	-	<0.02	-	<0.02	<0.02
Thorium	µg/L	0.1	-	-	-	<0.10	<0.10	-	<0.10	-	<0.10	-	-	<0.10	-	<0.1	-	0.1	<0.1
Tin	µg/L	0.1	-	-	2,500	0.2	0.1	-	<0.10	-	<0.20	-	-	<0.20	-	<0.2	-	<0.2	<0.2
Titanium	µg/L	0.3	1,000	1,000	-	<0.30	<0.30	-	<0.30	-	<5.0	-	-	<5.0	-	<5	-	<5	<5
Tungsten	µg/L	0.1	-	-	3	<0.10	<0.10	-	<0.10	-	<1.0	-	-	<1.0	-	<1	-	<1	<1
Uranium	µg/L	0.01	85	85	20	4.9	5.9	-	6.4	-	0.21	-	-	0.592	-	0.302	-	0.815	0.809
Vanadium	µg/L	0.5	-	-	20	0.8	0.6	-	<0.50	-	<5.0	-	-	<5.0	-	<5	-	<5	<5
Zinc	µg/L	1	75 #1	100	3,000	6.2	8.4	-	1.6	-	<10.7	-	-	<4.0	-	<4	-	<4	<4
Zirconium	µg/L	0.06	-	-	-	<0.20	<0.20	-	<0.30	-	<0.10	-	-	0.16	-	<0.1	-	0.24	0.2

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	MW13-01														
			Freshwater	Marine																
Location						MW13-01														
Field ID						MW13-01	MW13-01	DUP	MW13-1	MW13-01										
Sample Date						14-Dec-2013	2-Apr-2019	DUP (2-Apr-2019)	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
Laboratory Report Number						-	L2252890	L2252890	L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
Laboratory Sample ID						-	L2252890-3	L2252890-1	L2318207-1	L2367392-1	VA20A0908-001	VA20A5363-001	VA20B1139-001	VA20B9565-001	21B2866-02	21E1432-01	21G2459-02	21L0641-02	22C0773-02	22G1537-02
Total Metals																				
Aluminum	µg/L	3	-	-	-	-	-	-	7860.0	-	-	6.4	-	3.7	-	-	-	-	-	-
Antimony	µg/L	0.1	-	-	-	-	-	-	0.2	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Arsenic	µg/L	0.1	-	-	-	-	-	-	1.8	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Barium	µg/L	0.1	-	-	-	-	-	-	41.0	-	-	1.2	-	1.3	-	-	-	-	-	-
Beryllium	µg/L	0.1	-	-	-	-	-	-	0.1	-	-	<0.20	-	<0.10	-	-	-	-	-	-
Bismuth	µg/L	0.05	-	-	-	-	-	-	<0.050	-	-	<0.050	-	<0.050	-	-	-	-	-	-
Boron	µg/L	10	-	-	-	-	-	-	<10	-	-	<10	-	<10	-	-	-	-	-	-
Cadmium	µg/L	0.005	-	-	-	-	-	-	0.0	-	-	<0.0050	-	<0.0050	-	-	-	-	-	-
Calcium	µg/L	50	-	-	-	-	-	-	13800.0	-	-	13000.0	-	14600.0	-	-	12900.0	-	12400.0	-
Cesium	µg/L	0.01	-	-	-	-	-	-	0.4	-	-	<0.010	-	<0.010	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	-	-	-	5.3	-	-	<0.50	-	<0.10	-	-	-	-	-	-
Cobalt	µg/L	0.1	-	-	-	-	-	-	3.2	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Copper	µg/L	0.5	-	-	-	-	-	-	18.9	-	-	<0.50	-	<0.50	-	-	-	-	-	-
Iron	µg/L	10	-	-	-	-	-	-	9940.0	-	-	<10	-	<10	-	-	-	-	-	-
Lead	µg/L	0.05	-	-	-	-	-	-	4.2	-	-	<0.050	-	<0.050	-	-	-	-	-	-
Lithium	µg/L	1	-	-	-	-	-	-	3.7	-	-	<1.0	-	<1.0	-	-	-	-	-	-
Magnesium	µg/L	5	-	-	-	-	-	-	4300.0	-	-	2760.0	-	3160.0	-	-	2860.0	-	2350.0	-
Manganese	µg/L	0.1	-	-	-	-	-	-	139.0	-	-	0.2	-	0.3	-	-	-	-	-	-
Mercury	µg/L	1	-	-	-				-			-	-	0.1	-	-	-	-	-	-
Molybdenum	µg/L	0.05	-	-	-	-	-	-	0.7	-	-	0.1	-	0.1	-	-	-	-	-	-
Nickel	µg/L	0.5	-	-	-	-	-	-	3.6	-	-	<0.50	-	<0.50	-	-	-	-	-	-
Phosphorus	µg/L	50	-	-	-	-	-	-	178.0	-	-	<50	-	<50	-	-	-	-	-	-
Potassium	µg/L	50	-	-	-	-	-	-	2310.0	-	-	1210.0	-	1420.0	-	-	-	-	-	-
Rubidium	µg/L	0.2	-	-	-	-	-	-	5.7	-	-	<0.2	-	<0.2	-	-	-	-		
Selenium	µg/L	0.05	-	-	-	-	-	-	0.1	-	-	0.1	-	0.1	-	-	-	-	-	-
Silicon	µg/L	100	-	-	-	-	-	-	25200.0	-	-	13000.0	-	13700.0	-	-	-	-	-	-
Silver	µg/L	0.01	-	-	-	-	-	-	0.1	-	-	<0.010	-	<0.010	-	-	-	-	-	-
Sodium	µg/L	50	-	-	-	-	-	-	8090.0	-	-	6840.0	-	8600.0	-	-	-	-	-	-
Strontium	µg/L	0.2	-	-	-	-	-	-	94.6	-	-	79.4	-	77.2	-	-	-	-	-	-
Sulphur	µg/L	500	-	-	-	-	-	-	2500.0	-	-	1700.0	-	2360.0	-	-	-	-	-	-
Tellurium	µg/L	0.2	-	-	-	-	-	-	<0.20	-	-	<0.20	-	<0.20	-	-	-	-	-	-
Thallium	µg/L	0.01	-	-	-	-	-	-	0.0	-	-	<0.010	-	<0.010	-	-	-	-	-	-
Thorium	µg/L	0.1	-	-	-	-	-	-	2.5	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Tin	µg/L	0.1	-	-	-	-	-	-	1.0	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Titanium	µg/L	0.3	-	-	-	-	-	-	377.0	-	-	<0.30	-	<0.30	-	-	-	-	-	-
Tungsten	µg/L	0.1	-	-	-	-	-	-	0.3	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Uranium	µg/L	0.01	-	-	-	-	-	-	0.7	-	-	0.1	-	0.1	-	-	-	-	-	-
Vanadium	µg/L	0.5	-	-	-	-	-	-	21.5	-	-	1.0	-	1.5	-	-	-	-	-	-
Zinc	µg/L	3	-	-	-	-	-	-	28.6	-	-	<3.0	-	<3.0	-	-	-	-	-	-
Zirconium	µg/L	0.2	-	-	-	-	-	-	0.4	-	-	<0.20	-	<0.20	-	-	-	-	-	-
Hydrocarbons																				
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	-	<250	440.0	-	-	-	-	<250	-	<250	-	-	-	<250	-
EPH_{19-32}	µg/L	250	-	-	-	-	<250	460.0	-	-	-	-	<250	-	<250	-	-	-	<250	-
LEPH	µg/L	250	500	500	-	-	<250	440.0	-	-	-	-	<250	-	<250	-	-	-	<250	-
HEPH	µg/L	250	-	-	-	-	<250	460.0	-	-	-	-	<250	-	<250	-	-	-	<250	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	<100	<100	-	-	-	-	<100	-	-	-	-	-	<100	-
Polycyclic Aromatic Hydrocarbons (PAHs)																				
Acenaphthene	µg/L	0.01	60	60	250	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
Acenaphthylene	µg/L	0.01	-	-	-	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.20	-	-	-	<0.20	-
Acridine	µg/L	0.01	0.5	0.5	-	-	<0.010	<0.08	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
Anthracene	µg/L	0.01	1	1	1,000	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.010	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.010	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	-	<0.0050	<0.0050	-	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.010	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	-	<0.015	-	-	<0.0150	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.10	-
Chrysene	µg/L	0.01	1	1	7	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	-	<0.0050	<0.0050	-	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.010	-
Fluoranthene	µg/L	0.01	2	2	150	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.030	-	-	-	<0.030	-
Fluorene	µg/L	0.01	120	120	150	-	<0.010	0.027	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.050	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	-	<0.050	<0.050	-	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.10	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	-	<0.020	<0.020	-	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.10	-
Naphthalene	µg/L	0.02	10	10	80	-	<0.020	<0.020	-	<0.050	-	-	<0.050	-	<0.20	-	-	-	<0.20	-
Phenanthrene	µg/L	0.02	3	3	-	-	<0.020	0.063	-	<0.020	-	-	<0.020	-	<0.10	-	-	-	<0.10	-
Pyrene	µg/L	0.01	0.2	0.2	100	-	<0.010	<0.010	-	<0.010	-	-	<0.010	-	<0.020	-	-	-	<0.020	-
Quinoline	µg/L	0.05	34	34	0.05	-	<0.050	<0.050	-	<0.050	-	-	<0.050	-	<0.050	-	-	-	<0.050	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

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Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	MW13-01														
			Freshwater	Marine																
Location						MW13-01														
Field ID																				
Sample Date						11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	)UP (18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
Laboratory Report Number						22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
Laboratory Sample ID						22J1342-05	22L1310-02	23C0154-01	23E2913-01	23I3541-01	23L2282-01	23L2282-09	24B2509-01	24F3072-01	24I2276-01	24L1123-01	25C1419-01	25E3516-01	25G2084-01	25L0435-01
Total Metals																				
Aluminum	µg/L	3	-	-	-	-	-	-	-	-	<5	-	-	-	-	<5.0	-	-	-	56.4
Antimony	µg/L	0.1	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	<0.20	-	-	-	<0.2
Arsenic	µg/L	0.1	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	<0.50	-	-	-	<0.5
Barium	µg/L	0.1	-	-	-	-	-	-	-	-	<5	-	-	-	-	<5.0	-	-	-	<5
Beryllium	µg/L	0.1	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	<0.10	-	-	-	<0.1
Bismuth	µg/L	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1
Boron	µg/L	10	-	-	-	-	-	-	-	-	<50	-	-	-	-	<50.0	-	-	-	<50
Cadmium	µg/L	0.005	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	<0.010	-	-	-	<0.01
Calcium	µg/L	50	-	-	-	12200.0	-	-	-	-	11800.0	-	-	-	-	12000.0	-	-	-	12,700
Cesium	µg/L	0.01	-	-	-	-	-						-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	<0.50	-	-	-	<0.5
Cobalt	µg/L	0.1	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	<0.10	-	-	-	<0.1
Copper	µg/L	0.5	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	<0.40	-	-	-	<0.4
Iron	µg/L	10	-	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	88.0
Lead	µg/L	0.05	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	<0.20	-	-	-	<0.2
Lithium	µg/L	1	-	-	-	-	-	-	-	-	0.7	-	-	-	-	0.9	-	-	-	0.79
Magnesium	µg/L	5	-	-	-	2490.0	-	-	-	-	2670.0	-	-	-	-	2560.0	-	-	-	2,810
Manganese	µg/L	0.1	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	<0.20	-	-	-	1.9
Mercury	µg/L	1	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	<0.010	-	-	-	<0.01
Molybdenum	µg/L	0.05	-	-	-	-	-	-	-	-	0.2	-	-	-	-	0.1	-	-	-	0.14
Nickel	µg/L	0.5	-	-	-	-	-	-	-	-	<0.4	-	-	-	-	<0.40	-	-	-	<0.4
Phosphorus	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	-	-	<50
Potassium	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	-	1320.0	-	-	-	1,240
Rubidium	µg/L	0.2	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	<0.50	-	-	-	<0.5
Silicon	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-	13800.0	-	-	-	14,000
Silver	µg/L	0.01	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	<0.050	-	-	-	<0.05
Sodium	µg/L	50	-	-	-	-	-	-	-	-	6890.0	-	-	-	-	7150.0	-	-	-	6,800
Strontium	µg/L	0.2	-	-	-	-	-	-	-	-	66.3	-	-	-	-	61.8	-	-	-	65.1
Sulphur	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	-	-	<3,000	-	-	-	<3,000
Tellurium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	<0.5
Thallium	µg/L	0.01	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	<0.020	-	-	-	<0.02
Thorium	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1
Tin	µg/L	0.1	-	-	-	-	-	-	-	-	<0.2	-	-	-	-	<0.20	-	-	-	<0.2
Titanium	µg/L	0.3	-	-	-	-	-	-	-	-	<5	-	-	-	-	<5.0	-	-	-	<5
Tungsten	µg/L	0.1	-	-	-	-	-	-	-	-	<1	-	-	-	-	<1.0	-	-	-	<1
Uranium	µg/L	0.01	-	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-	-	0.066
Vanadium	µg/L	0.5	-	-	-	-	-	-	-	-	<5	-	-	-	-	<5.0	-	-	-	<5
Zinc	µg/L	3	-	-	-	-	-	-	-	-	<4	-	-	-	-	<4.0	-	-	-	<4
Zirconium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1
Hydrocarbons																				
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	-	-	<250	-	-	-	-	<250	-	-	-	<250	-	-	-
EPH_{19-32}	µg/L	250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	259	-	-	-
LEPH	µg/L	250	500	500	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	-	-	-
HEPH	µg/L	250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	259	-	-	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	-	<100	-	-	-	-	<100	-	-	-	<100	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																				
Acenaphthene	µg/L	0.01	60	60	250	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Acenaphthylene	µg/L	0.01	-	-	-	-	-	<0.200	-	-	-	-	<0.200	-	-	-	<0.2	-	-	-
Acridine	µg/L	0.01	0.5	0.5	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Anthracene	µg/L	0.01	1	1	1,000	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Chrysene	µg/L	0.01	1	1	7	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Fluoranthene	µg/L	0.01	2	2	150	-	-	<0.030	-	-	-	-	<0.030	-	-	-	<0.03	-	-	-
Fluorene	µg/L	0.01	120	120	150	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Naphthalene	µg/L	0.02	10	10	80	-	-	<0.200	-	-	-	-	<0.200	-	-	-	<0.2	-	-	-
Phenanthrene	µg/L	0.02	3	3	-	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Pyrene	µg/L	0.01	0.2	0.2	100	-	-	<0.020	-	-	-	-	<0.020	-	-	-	<0.02	-	-	-
Quinoline	µg/L	0.05	34	34	0.05	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	MW13-02													
			Freshwater	Marine															
Location						MW13-02	MW13-02	MW13-2	MW13-02										
Field ID						MW13-02	MW13-02	MW13-2	MW13-02										
Sample Date						14-Dec-2013	2-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
Laboratory Report Number						-	L2252890	L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
Laboratory Sample ID						-	L2252890-2	L2318207-2	L2367392-2	VA20A0908-003	VA20A5363-002	VA20B1139-002	VA20B9565-002	21B2866-03	21E1432-02	21G2459-03	21L0641-03	22C0773-03	22G1537-03
Total Metals																			
Aluminum	µg/L	3	-	-	-	-	-	65600.0	-	-	127.0	-	38.6	-	-	-	-	-	-
Antimony	µg/L	0.1	-	-	-	-	-	0.7	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Arsenic	µg/L	0.1	-	-	-	-	-	11.1	-	-	0.9	-	14.2	-	-	-	-	-	-
Barium	µg/L	0.1	-	-	-	-	-	410.0	-	-	23.2	-	96.3	-	-	-	-	-	-
Beryllium	µg/L	0.1	-	-	-	-	-	0.7	-	-	<0.020	-	<0.10	-	-	-	-	-	-
Bismuth	µg/L	0.05	-	-	-	-	-	0.3	-	-	<0.050	-	<0.05	-	-	-	-	-	-
Boron	µg/L	10	-	-	-	-	-	92.0	-	-	33.0	-	259.0	-	-	-	-	-	-
Cadmium	µg/L	0.005	-	-	-	-	-	0.4	-	-	<0.0050	-	<0.0050	-	-	-	-	-	-
Calcium	µg/L	50	-	-	-	-	-	98600.0	-	-	87700.0	-	209000.0	-	-	215000.0	-	224000.0	-
Cesium	µg/L	0.01	-	-	-	-	-	2.3	-	-	0.0	-	<0.010	-	-	-	-		
Chromium	µg/L	0.1	-	-	-	-	-	54.8	-	-	1.1	-	1.2	-	-	-	-	-	-
Cobalt	µg/L	0.1	-	-	-	-	-	17.9	-	-	0.2	-	6.0	-	-	-	-	-	-
Copper	µg/L	0.5	-	-	-	-	-	107.0	-	-	<0.50	-	<0.50	-	-	-	-	-	-
Iron	µg/L	10	-	-	-	-	-	85400.0	-	-	28300.0	-	87200.0	-	-	-	-	-	-
Lead	µg/L	0.05	-	-	-	-	-	34.4	-	-	0.2	-	<0.050	-	-	-	-	-	-
Lithium	µg/L	1	-	-	-	-	-	24.0	-	-	<1.0	-	2.1	-	-	-	-	-	-
Magnesium	µg/L	5	-	-	-	-	-	15700.0	-	-	2810.0	-	14600.0	-	-	19400.0	-	15100.0	-
Manganese	µg/L	0.1	-	-	-	-	-	1540.0	-	-	1040.0	-	1790.0	-	-	-	-	-	-
Mercury	µg/L	1	-	-	-	-	-	-	-	-	-	-	<0.0050	-	-	-	-	-	-
Molybdenum	µg/L	0.05	-	-	-	-	-	2.0	-	-	0.2	-	3.5	-	-	-	-	-	-
Nickel	µg/L	0.5	-	-	-	-	-	25.8	-	-	<0.50	-	<0.50	-	-	-	-	-	-
Phosphorus	µg/L	50	-	-	-	-	-	760.0	-	-	<50	-	230.0	-	-	-	-	-	-
Potassium	µg/L	50	-	-	-	-	-	18600.0	-	-	6680.0	-	23700.0	-	-	-	-	-	-
Rubidium	µg/L	0.2	-	-	-	-	-	43.7	-	-	3.9	-	9.4	-	-	-	-		
Selenium	µg/L	0.05	-	-	-	-	-	0.3	-	-	0.1	-	0.2	-	-	-	-	-	-
Silicon	µg/L	100	-	-	-	-	-	76000.0	-	-	10600.0	-	16700.0	-	-	-	-	-	-
Silver	µg/L	0.01	-	-	-	-	-	0.4	-	-	<0.01	-	<0.010	-	-	-	-	-	-
Sodium	µg/L	50	-	-	-	-	-	12400.0	-	-	4750.0	-	34300.0	-	-	-	-	-	-
Strontium	µg/L	0.2	-	-	-	-	-	364.0	-	-	248.0	-	710.0	-	-	-	-	-	-
Sulphur	µg/L	500	-	-	-	-	-	5000.0	-	-	<500	-	6760.0	-	-	-	-	-	-
Tellurium	µg/L	0.2	-	-	-	-	-	<1.0	-	-	<0.20	-	<0.20	-	-	-	-	-	-
Thallium	µg/L	0.01	-	-	-	-	-	0.4	-	-	<0.010	-	<0.010	-	-	-	-	-	-
Thorium	µg/L	0.1	-	-	-	-	-	22.9	-	-	0.2	-	<0.10	-	-	-	-	-	-
Tin	µg/L	0.1	-	-	-	-	-	1.1	-	-	<0.10	-	<0.10	-	-	-	-	-	-
Titanium	µg/L	0.3	-	-	-	-	-	2720.0	-	-	7.2	-	2.9	-	-	-	-	-	-
Tungsten	µg/L	0.1	-	-	-	-	-	<0.50	-	-	<0.10	-	0.2	-	-	-	-	-	-
Uranium	µg/L	0.01	-	-	-	-	-	3.6	-	-	0.1	-	1.1	-	-	-	-	-	-
Vanadium	µg/L	0.5	-	-	-	-	-	154.0	-	-	4.4	-	5.6	-	-	-	-	-	-
Zinc	µg/L	3	-	-	-	-	-	412.0	-	-	<3.0	-	24.8	-	-	-	-	-	-
Zirconium	µg/L	0.2	-	-	-	-	-	2.9	-	-	0.2	-	0.5	-	-	-	-	-	-
Hydrocarbons																			
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-
EPH_{19-32}	µg/L	250	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-
LEPH	µg/L	250	500	500	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-
HEPH	µg/L	250	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	<100	-	-	-	-	<100	-	-	-	-	-	<100	-
Polycyclic Aromatic Hydrocarbons (PAHs)																			
Acenaphthene	µg/L	0.01	60	60	250	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
Acenaphthylene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	-	-	<0.010	-	<0.20	-	-	-	<0.2	-
Acridine	µg/L	0.01	0.5	0.5	-	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
Anthracene	µg/L	0.01	1	1	1,000	-	<0.010	-	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.01	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	-	<0.010	-	<0.010	-	-	<0.010	-	0.015	-	-	-	<0.01	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	-	<0.0050	-	<0.0050	-	-	<0.0050	-	0.018	-	-	-	<0.01	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	<0.015	-	-	<0.0150	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1	-
Chrysene	µg/L	0.01	1	1	7	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	-	<0.0050	-	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-
Fluoranthene	µg/L	0.01	2	2	150	-	<0.010	-	<0.010	-	-	<0.010	-	<0.030	-	-	-	<0.03	-
Fluorene	µg/L	0.01	120	120	150	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	-	<0.050	-	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.1	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	-	<0.020	-	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.1	-
Naphthalene	µg/L	0.02	10	10	80	-	<0.020	-	<0.050	-	-	<0.050	-	<0.20	-	-	-	<0.2	-
Phenanthrene	µg/L	0.02	3	3	-	-	<0.020	-	<0.020	-	-	<0.020	-	<0.10	-	-	-	<0.1	-
Pyrene	µg/L	0.01	0.2	0.2	100	-	<0.010	-	<0.010	-	-	<0.010	-	<0.02	-	-	-	<0.02	-
Quinoline	µg/L	0.05	34	34	0.05	-	<0.050	-	<0.050	-	-	<0.050	-	<0.050	-	-	-	<0.05	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	MW13-02													
			Freshwater	Marine															
Location																			
Field ID																			
Sample Date						11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
Laboratory Report Number						22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
Laboratory Sample ID						22J1342-06	22L1310-03	23C0154-02	23E2913-02	23I3541-02	23L2282-02	24B2509-02	24F3072-02	24I2276-02	24L1123-02	25C1419-02	25E3516-02	25G2084-02	25L0435-02
Total Metals																			
Aluminum	µg/L	3	-	-	-	-	-	-	-	-	28.0	-	-	-	30.1	-	-	-	50.2
Antimony	µg/L	0.1	-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.20	-	-	-	<0.2
Arsenic	µg/L	0.1	-	-	-	-	-	-	-	-	7.1	-	-	-	3.7	-	-	-	8.5
Barium	µg/L	0.1	-	-	-	-	-	-	-	-	147.0	-	-	-	72.6	-	-	-	121
Beryllium	µg/L	0.1	-	-	-	-	-	-	-	-	<0.1	-	-	-	<0.10	-	-	-	<0.1
Bismuth	µg/L	0.05	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1
Boron	µg/L	10	-	-	-	-	-	-	-	-	348.0	-	-	-	187.0	-	-	-	228
Cadmium	µg/L	0.005	-	-	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	<0.01
Calcium	µg/L	50	-	-	-	310000.0	-	-	-	-	254000.0	-	-	-	177000.0	-	-	-	181,000
Cesium	µg/L	0.01	-	-	-							-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	-	-	-	-	-	1.7	-	-	-	1.7	-	-	-	1.71
Cobalt	µg/L	0.1	-	-	-	-	-	-	-	-	2.5	-	-	-	1.0	-	-	-	4.38
Copper	µg/L	0.5	-	-	-	-	-	-	-	-	<0.4	-	-	-	<0.40	-	-	-	<0.4
Iron	µg/L	10	-	-	-	-	-	-	-	-	88100.0	-	-	-	68200.0	-	-	-	85,200
Lead	µg/L	0.05	-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.20	-	-	-	<0.2
Lithium	µg/L	1	-	-	-	-	-	-	-	-	1.1	-	-	-	0.6	-	-	-	1.06
Magnesium	µg/L	5	-	-	-	26600.0	-	-	-	-	25900.0	-	-	-	11200.0	-	-	-	16,900
Manganese	µg/L	0.1	-	-	-	-	-	-	-	-	2040.0	-	-	-	1600.0	-	-	-	1,730
Mercury	µg/L	1	-	-	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	<0.01
Molybdenum	µg/L	0.05	-	-	-	-	-	-	-	-	1.4	-	-	-	0.8	-	-	-	1.19
Nickel	µg/L	0.5	-	-	-	-	-	-	-	-	0.4	-	-	-	<0.40	-	-	-	0.8
Phosphorus	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	-	-	98.0
Potassium	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	18300.0	-	-	-	23,500
Rubidium	µg/L	0.2	-	-	-						-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.50	-	-	-	<0.5
Silicon	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	13000.0	-	-	-	15,500
Silver	µg/L	0.01	-	-	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.05
Sodium	µg/L	50	-	-	-	-	-	-	-	-	28000.0	-	-	-	14100.0	-	-	-	19,800
Strontium	µg/L	0.2	-	-	-	-	-	-	-	-	1280.0	-	-	-	638.0	-	-	-	972
Sulphur	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	-	24300.0	-	-	-	14,900
Tellurium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	<0.5
Thallium	µg/L	0.01	-	-	-	-	-	-	-	-	<0.02	-	-	-	<0.020	-	-	-	<0.02
Thorium	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	<0.1
Tin	µg/L	0.1	-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.20	-	-	-	<0.2
Titanium	µg/L	0.3	-	-	-	-	-	-	-	-	<5	-	-	-	<5.0	-	-	-	<5
Tungsten	µg/L	0.1	-	-	-	-	-	-	-	-	<1	-	-	-	<1.0	-	-	-	<1
Uranium	µg/L	0.01	-	-	-	-	-	-	-	-	0.6	-	-	-	0.4	-	-	-	0.366
Vanadium	µg/L	0.5	-	-	-	-	-	-	-	-	6.5	-	-	-	5.7	-	-	-	5.4
Zinc	µg/L	3	-	-	-	-	-	-	-	-	<4	-	-	-	<4.0	-	-	-	<4
Zirconium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	0.5
Hydrocarbons																			
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
EPH_{19-32}	µg/L	250	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
LEPH	µg/L	250	500	500	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
HEPH	µg/L	250	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																			
Acenaphthene	µg/L	0.01	60	60	250	-	-	<0.050	-	-	-	<0.050	-	-	-	0.1	-	-	-
Acenaphthylene	µg/L	0.01	-	-	-	-	-	<0.200	-	-	-	<0.200	-	-	-	<0.2	-	-	-
Acridine	µg/L	0.01	0.5	0.5	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Anthracene	µg/L	0.01	1	1	1,000	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Chrysene	µg/L	0.01	1	1	7	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Fluoranthene	µg/L	0.01	2	2	150	-	-	<0.030	-	-	-	<0.030	-	-	-	<0.03	-	-	-
Fluorene	µg/L	0.01	120	120	150	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Naphthalene	µg/L	0.02	10	10	80	-	-	<0.200	-	-	-	<0.200	-	-	-	<0.2	-	-	-
Phenanthrene	µg/L	0.02	3	3	-	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Pyrene	µg/L	0.01	0.2	0.2	100	-	-	<0.020	-	-	-	<0.020	-	-	-	<0.02	-	-	-
Quinoline	µg/L	0.05	34	34	0.05	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW13-03													
						Field ID	MW13-03	MW13-03	MW13-3	MW13-03	DUP1									
						Sample Date	14-Dec-2013	3-Apr-2019	25-Jul-2019	17-Oct-2019	DUP (17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2254197	L2318207	L2367392	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
						Laboratory Sample ID	-	L2254197-4	L2318207-3	L2367392-3	L2367392-10	VA20A0908-004	VA20A5363-003	VA20B1139-003	VA20B9565-003	21B2866-04	21E1432-03	21G2459-04	21L0641-04	22C0773-04	22G1537-04
			Freshwater	Marine																
Total Metals																				
Aluminum	µg/L	3	-	-	-	-	-	94300.0	-	-	-	2760.0	-	824.0	-	-	-	-	-	-	
Antimony	µg/L	0.1	-	-	-	-	-	<1.0	-	-	-	<0.10	-	0.1	-	-	-	-	-	-	
Arsenic	µg/L	0.1	-	-	-	-	-	9.1	-	-	-	0.4	-	0.2	-	-	-	-	-	-	
Barium	µg/L	0.1	-	-	-	-	-	597.0	-	-	-	44.9	-	20.8	-	-	-	-	-	-	
Beryllium	µg/L	0.1	-	-	-	-	-	<1.0	-	-	-	0.0	-	<0.10	-	-	-	-	-	-	
Bismuth	µg/L	0.05	-	-	-	-	-	<0.5	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	
Boron	µg/L	10	-	-	-	-	-	100.0	-	-	-	91.0	-	98.0	-	-	-	-	-	-	
Cadmium	µg/L	0.005	-	-	-	-	-	0.4	-	-	-	0.0	-	0.0	-	-	-	-	-	-	
Calcium	µg/L	50	-	-	-	-	-	72700.0	-	-	-	45800.0	-	51200.0	-	-	-	37600.0	-	40200.0	-
Cesium	µg/L	0.01	-	-	-	-	-	3.6	-	-	-	0.1	-	0.0	-	-	-	-	-		
Chromium	µg/L	0.1	-	-	-	-	-	59.0	-	-	-	2.0	-	0.6	-	-	-	-	-	-	-
Cobalt	µg/L	0.1	-	-	-	-	-	55.6	-	-	-	2.1	-	0.5	-	-	-	-	-	-	-
Copper	µg/L	0.5	-	-	-	-	-	182.0	-	-	-	8.5	-	3.0	-	-	-	-	-	-	-
Iron	µg/L	10	-	-	-	-	-	96300.0	-	-	-	2940.0	-	830.0	-	-	-	-	-	-	-
Lead	µg/L	0.05	-	-	-	-	-	16.0	-	-	-	0.7	-	0.1	-	-	-	-	-	-	-
Lithium	µg/L	1	-	-	-	-	-	44.0	-	-	-	3.4	-	2.4	-	-	-	-	-	-	-
Magnesium	µg/L	5	-	-	-	-	-	43700.0	-	-	-	9710.0	-	9440.0	-	-	-	7770.0	-	8130.0	-
Manganese	µg/L	0.1	-	-	-	-	-	2340.0	-	-	-	93.9	-	20.6	-	-	-	-	-	-	-
Mercury	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-
Molybdenum	µg/L	0.05	-	-	-	-	-	3.1	-	-	-	0.3	-	0.2	-	-	-	-	-	-	-
Nickel	µg/L	0.5	-	-	-	-	-	43.4	-	-	-	1.5	-	<0.50	-	-	-	-	-	-	-
Phosphorus	µg/L	50	-	-	-	-	-	3150.0	-	-	-	203.0	-	51.0	-	-	-	-	-	-	-
Potassium	µg/L	50	-	-	-	-	-	16700.0	-	-	-	4990.0	-	4880.0	-	-	-	-	-	-	-
Rubidium	µg/L	0.2	-	-	-	-	-	78.8	-	-	-	2.4	-	0.7	-	-	-	-	-		
Selenium	µg/L	0.05	-	-	-	-	-	<0.50	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	-
Silicon	µg/L	100	-	-	-	-	-	100000.0	-	-	-	16300.0	-	14700.0	-	-	-	-	-	-	-
Silver	µg/L	0.01	-	-	-	-	-	0.8	-	-	-	0.0	-	0.0	-	-	-	-	-	-	-
Sodium	µg/L	50	-	-	-	-	-	45200.0	-	-	-	34800.0	-	38500.0	-	-	-	-	-	-	-
Strontium	µg/L	0.2	-	-	-	-	-	581.0	-	-	-	331.0	-	342.0	-	-	-	-	-	-	-
Sulphur	µg/L	500	-	-	-	-	-	8800.0	-	-	-	8320.0	-	10400.0	-	-	-	-	-	-	-
Tellurium	µg/L	0.2	-	-	-	-	-	<2.0	-	-	-	<0.20	-	<0.20	-	-	-	-	-	-	-
Thallium	µg/L	0.01	-	-	-	-	-	0.5	-	-	-	0.0	-	<0.010	-	-	-	-	-	-	-
Thorium	µg/L	0.1	-	-	-	-	-	13.3	-	-	-	0.5	-	<0.10	-	-	-	-	-	-	-
Tin	µg/L	0.1	-	-	-	-	-	1.5	-	-	-	0.4	-	0.1	-	-	-	-	-	-	-
Titanium	µg/L	0.3	-	-	-	-	-	5780.0	-	-	-	167.0	-	55.7	-	-	-	-	-	-	-
Tungsten	µg/L	0.1	-	-	-	-	-	1.0	-	-	-	<0.10	-	<0.10	-	-	-	-	-	-	-
Uranium	µg/L	0.01	-	-	-	-	-	8.4	-	-	-	2.4	-	2.1	-	-	-	-	-	-	-
Vanadium	µg/L	0.5	-	-	-	-	-	201.0	-	-	-	7.1	-	2.5	-	-	-	-	-	-	-
Zinc	µg/L	3	-	-	-	-	-	1240.0	-	-	-	8.9	-	46.2	-	-	-	-	-	-	-
Zirconium	µg/L	0.2	-	-	-	-	-	<2.0	-	-	-	<0.20	-	<0.20	-	-	-	-	-	-	-
Hydrocarbons																					
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	-	<250	-	-	-	-	-	<250	-	<250	-	-	-	<250	-	
EPH_{19-32}	µg/L	250	-	-	-	-	<250	-	-	-	-	-	<250	-	<250	-	-	-	<250	-	
LEPH	µg/L	250	500	500	-	-	<250	-	-	-	-	-	<250	-	<250	-	-	-	<250	-	
HEPH	µg/L	250	-	-	-	-	<250	-	-	-	-	-	<250	-	<250	-	-	-	<250	-	
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	<100	-	-	-	-	-	<100	-	-	-	-	-	<100	-	
Polycyclic Aromatic Hydrocarbons (PAHs)																					
Acenaphthene	µg/L	0.01	60	60	250	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Acenaphthylene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.20	-	-	-	<0.2	-	
Acridine	µg/L	0.01	0.5	0.5	-	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Anthracene	µg/L	0.01	1	1	1,000	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	
Benz(a)anthracene	µg/L	0.01	1	1	0.07	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	-	<0.0050	-	<0.0050	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	<0.015	<0.015	-	-	<0.0150	-	-	-	-	-	-	-	
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1	-	
Chrysene	µg/L	0.01	1	1	7	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	-	<0.0050	-	<0.0050	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	
Fluoranthene	µg/L	0.01	2	2	150	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.030	-	-	-	<0.03	-	
Fluorene	µg/L	0.01	120	120	150	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	-	<0.050	-	<0.050	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.1	-	
2-Methylnaphthalene	µg/L	0.02	-	-	15	-	<0.020	-	<0.050	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.1	-	
Naphthalene	µg/L	0.02	10	10	80	-	<0.020	-	<0.050	<0.050	-	-	<0.050	-	<0.20	-	-	-	<0.2	-	
Phenanthrene	µg/L	0.02	3	3	-	-	<0.020	-	<0.020	<0.020	-	-	<0.020	-	<0.10	-	-	-	<0.1	-	
Pyrene	µg/L	0.01	0.2	0.2	100	-	<0.010	-	<0.010	<0.010	-	-	<0.010	-	<0.02	-	-	-	<0.02	-	
Quinoline	µg/L	0.05	34	34	0.05	-	<0.050	-	<0.050	<0.050	-	-	<0.050	-	<0.050	-	-	-	<0.05	-	

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW13-03													
						Field ID														
						Sample Date	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	)UP (27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	22J1342	22L1310	23C0154	23E2913	23I3541	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
						Laboratory Sample ID	22J1342-07	22L1310-04	23C0154-03	23E2913-03	23I3541-03	23I3541-09	23L2282-03	24B2509-03	24F3072-03	24I2276-03	24L1123-03	25C1419-03	25E3516-03	25G2084-03	25L0435-03
			Freshwater	Marine																	
Total Metals																					
Aluminum	µg/L	3	-	-	-	-	-	-	-	-	-	4210.0	-	-	-	8,330	-	-	-	6,680
Antimony	µg/L	0.1	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	<0.20	-	-	-	<0.2
Arsenic	µg/L	0.1	-	-	-	-	-	-	-	-	-	0.5	-	-	-	0.88	-	-	-	0.63
Barium	µg/L	0.1	-	-	-	-	-	-	-	-	-	47.1	-	-	-	64.9	-	-	-	53.8
Beryllium	µg/L	0.1	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	0.1	-	-	-	<0.1
Bismuth	µg/L	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1
Boron	µg/L	10	-	-	-	-	-	-	-	-	-	83.0	-	-	-	61	-	-	-	60.9
Cadmium	µg/L	0.005	-	-	-	-	-	-	-	-	-	0.0	-	-	-	0.035	-	-	-	0.029
Calcium	µg/L	50	-	-	-	56600.0	-	-	-	-	-	49000.0	-	-	-	33.600	-	-	-	36,200
Cesium	µg/L	0.01	-	-	-	-										-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	-	-	-	-	-	-	2.7	-	-	-	4.99	-	-	-	3.54
Cobalt	µg/L	0.1	-	-	-	-	-	-	-	-	-	2.5	-	-	-	4.59	-	-	-	3.14
Copper	µg/L	0.5	-	-	-	-	-	-	-	-	-	10.8	-	-	-	17	-	-	-	12.6
Iron	µg/L	10	-	-	-	-	-	-	-	-	-	4180.0	-	-	-	8,070	-	-	-	5,790
Lead	µg/L	0.05	-	-	-	-	-	-	-	-	-	0.9	-	-	-	1.44	-	-	-	1.2
Lithium	µg/L	1	-	-	-	-	-	-	-	-	-	3.4	-	-	-	6.4	-	-	-	4.37
Magnesium	µg/L	5	-	-	-	11300.0	-	-	-	-	-	10000.0	-	-	-	8,620	-	-	-	7,950
Manganese	µg/L	0.1	-	-	-	-	-	-	-	-	-	96.6	-	-	-	171	-	-	-	123
Mercury	µg/L	1	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	0.015	-	-	-	<0.01
Molybdenum	µg/L	0.05	-	-	-	-	-	-	-	-	-	0.3	-	-	-	0.4	-	-	-	0.32
Nickel	µg/L	0.5	-	-	-	-	-	-	-	-	-	2.3	-	-	-	3.9	-	-	-	2.81
Phosphorus	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	-	382	-	-	-	257
Potassium	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-	-	4,880	-	-	-	4,690
Rubidium	µg/L	0.2	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	<0.50	-	-	-	<0.5
Silicon	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-	24,800	-	-	-	22,300
Silver	µg/L	0.01	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.086	-	-	-	0.081
Sodium	µg/L	50	-	-	-	-	-	-	-	-	-	26800.0	-	-	-	22,100	-	-	-	22,600
Strontium	µg/L	0.2	-	-	-	-	-	-	-	-	-	360.0	-	-	-	225	-	-	-	277
Sulphur	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	-	-	7,600	-	-	-	7,800
Tellurium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	<0.5
Thallium	µg/L	0.01	-	-	-	-	-	-	-	-	-	0.0	-	-	-	0.046	-	-	-	0.034
Thorium	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	1.04	-	-	-	0.64
Tin	µg/L	0.1	-	-	-	-	-	-	-	-	-	<0.2	-	-	-	0.32	-	-	-	0.31
Titanium	µg/L	0.3	-	-	-	-	-	-	-	-	-	252.0	-	-	-	516	-	-	-	371
Tungsten	µg/L	0.1	-	-	-	-	-	-	-	-	-	<1	-	-	-	<1.0	-	-	-	<1
Uranium	µg/L	0.01	-	-	-	-	-	-	-	-	-	2.2	-	-	-	1.28	-	-	-	1.43
Vanadium	µg/L	0.5	-	-	-	-	-	-	-	-	-	9.1	-	-	-	16.9	-	-	-	12
Zinc	µg/L	3	-	-	-	-	-	-	-	-	-	36.9	-	-	-	34.5	-	-	-	23.7
Zirconium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	-	-	-	0.55
Hydrocarbons																				
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	-	-	<250	-	-	-	-	<250	-	-	-	<250	-	-	-
EPH_{19-32}	µg/L	250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	-	-	-
LEPH	µg/L	250	500	500	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	-	-	-
HEPH	µg/L	250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	-	-	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	-	<100	-	-	-	-	<100	-	-	-	<100	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																				
Acenaphthene	µg/L	0.01	60	60	250	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Acenaphthylene	µg/L	0.01	-	-	-	-	-	<0.200	-	-	-	-	<0.200	-	-	-	<0.2	-	-	-
Acridine	µg/L	0.01	0.5	0.5	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Anthracene	µg/L	0.01	1	1	1,000	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Chrysene	µg/L	0.01	1	1	7	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	-	-	-
Fluoranthene	µg/L	0.01	2	2	150	-	-	<0.030	-	-	-	-	<0.030	-	-	-	<0.03	-	-	-
Fluorene	µg/L	0.01	120	120	150	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Naphthalene	µg/L	0.02	10	10	80	-	-	<0.200	-	-	-	-	<0.200	-	-	-	<0.2	-	-	-
Phenanthrene	µg/L	0.02	3	3	-	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	-	-	-
Pyrene	µg/L	0.01	0.2	0.2	100	-	-	<0.020	-	-	-	-	<0.020	-	-	-	<0.02	-	-	-
Quinoline	µg/L	0.05	34	34	0.05	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW Freshwater	CSR - AW Marine	CSR - DW	Location	MW19-04													
						Field ID	MW19-4	MW19-04												
						Sample Date	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022
						Laboratory Report Number	L2318207	L2367392	\20A0908280120	\20A5363250420	\20B1139240720	\20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310
						Laboratory Sample ID	L2318207-4	L2367392-4	VA20A0908-005	VA20A5363-004	VA20B1139-004	VA20B9565-004	21B2866-05	21E1432-04	21G2459-05	21L0641-05	22C0773-05	22G1537-05	22J1342-08	22L1310-05
Total Metals																				
Aluminum	µg/L	3	-	-	-	-	-	-	4330.0	-	57.4	-	-	-	-	-	-	-	-	
Antimony	µg/L	0.1	-	-	-	-	-	-	0.9	-	0.3	-	-	-	-	-	-	-	-	
Arsenic	µg/L	0.1	-	-	-	-	-	-	3.7	-	0.7	-	-	-	-	-	-	-	-	
Barium	µg/L	0.1	-	-	-	-	-	-	122.0	-	36.2	-	-	-	-	-	-	-	-	
Beryllium	µg/L	0.1	-	-	-	-	-	-	0.1	-	<0.10	-	-	-	-	-	-	-	-	
Bismuth	µg/L	0.05	-	-	-	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	-	-	
Boron	µg/L	10	-	-	-	-	-	-	61.0	-	48.0	-	-	-	-	-	-	-	-	
Cadmium	µg/L	0.005	-	-	-	-	-	-	0.2	-	0.1	-	-	-	-	-	-	-	-	
Calcium	µg/L	50	-	-	-	-	-	-	58800.0	-	53700.0	-	-	-	50600.0	-	63600.0	-	58100.0	-
Cesium	µg/L	0.01	-	-	-	-	-	-	0.2	-	<0.010	-	-	-	-	-				
Chromium	µg/L	0.1	-	-	-	-	-	-	4.6	-	0.5	-	-	-	-	-	-	-	-	
Cobalt	µg/L	0.1	-	-	-	-	-	-	9.2	-	1.9	-	-	-	-	-	-	-	-	
Copper	µg/L	0.5	-	-	-	-	-	-	13.5	-	4.0	-	-	-	-	-	-	-	-	
Iron	µg/L	10	-	-	-	-	-	-	11900.0	-	2300.0	-	-	-	-	-	-	-	-	
Lead	µg/L	0.05	-	-	-	-	-	-	2.4	-	<0.050	-	-	-	-	-	-	-	-	
Lithium	µg/L	1	-	-	-	-	-	-	4.2	-	2.4	-	-	-	-	-	-	-	-	
Magnesium	µg/L	5	-	-	-	-	-	-	13200.0	-	8910.0	-	-	-	8360.0	-	9430.0	-	8850.0	-
Manganese	µg/L	0.1	-	-	-	-	-	-	1850.0	-	746.0	-	-	-	-	-	-	-	-	-
Mercury	µg/L	1	-	-	-	-	-	-	-	-	<0.0050	-	-	-	-	-	-	-	-	-
Molybdenum	µg/L	0.05	-	-	-	-	-	-	0.5	-	0.3	-	-	-	-	-	-	-	-	-
Nickel	µg/L	0.5	-	-	-	-	-	-	3.3	-	<0.50	-	-	-	-	-	-	-	-	-
Phosphorus	µg/L	50	-	-	-	-	-	-	3450.0	-	<50	-	-	-	-	-	-	-	-	-
Potassium	µg/L	50	-	-	-	-	-	-	8960.0	-	9940.0	-	-	-	-	-	-	-	-	-
Rubidium	µg/L	0.2	-	-	-	-	-	-	5.9	-	2.6	-	-	-	-	-				
Selenium	µg/L	0.05	-	-	-	-	-	-	0.1	-	<0.050	-	-	-	-	-	-	-	-	-
Silicon	µg/L	100	-	-	-	-	-	-	18600.0	-	16500.0	-	-	-	-	-	-	-	-	-
Silver	µg/L	0.01	-	-	-	-	-	-	0.0	-	<0.010	-	-	-	-	-	-	-	-	-
Sodium	µg/L	50	-	-	-	-	-	-	7170.0	-	8250.0	-	-	-	-	-	-	-	-	-
Strontium	µg/L	0.2	-	-	-	-	-	-	252.0	-	264.0	-	-	-	-	-	-	-	-	-
Sulphur	µg/L	500	-	-	-	-	-	-	1930.0	-	1120.0	-	-	-	-	-	-	-	-	-
Tellurium	µg/L	0.2	-	-	-	-	-	-	<0.20	-	<0.20	-	-	-	-	-	-	-	-	-
Thallium	µg/L	0.01	-	-	-	-	-	-	0.0	-	<0.010	-	-	-	-	-	-	-	-	-
Thorium	µg/L	0.1	-	-	-	-	-	-	2.8	-	<0.10	-	-	-	-	-	-	-	-	-
Tin	µg/L	0.1	-	-	-	-	-	-	0.2	-	<0.10	-	-	-	-	-	-	-	-	-
Titanium	µg/L	0.3	-	-	-	-	-	-	122.0	-	2.9	-	-	-	-	-	-	-	-	-
Tungsten	µg/L	0.1	-	-	-	-	-	-	0.1	-	<0.10	-	-	-	-	-	-	-	-	-
Uranium	µg/L	0.01	-	-	-	-	-	-	1.5	-	0.4	-	-	-	-	-	-	-	-	-
Vanadium	µg/L	0.5	-	-	-	-	-	-	12.0	-	1.7	-	-	-	-	-	-	-	-	-
Zinc	µg/L	3	-	-	-	-	-	-	15.6	-	<3.0	-	-	-	-	-	-	-	-	-
Zirconium	µg/L	0.2	-	-	-	-	-	-	0.4	-	<0.20	-	-	-	-	-	-	-	-	-
Hydrocarbons																				
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	<250	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	
EPH_{19-32}	µg/L	250	-	-	-	<250	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	
LEPH	µg/L	250	500	500	-	<250	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	
HEPH	µg/L	250	-	-	-	<250	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	<100	-	-	<100	-	-	-	-	-	<100	-	-	-	
Polycyclic Aromatic Hydrocarbons (PAHs)																				
Acenaphthene	µg/L	0.01	60	60	250	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
Acenaphthylene	µg/L	0.01	-	-	-	<0.010	<0.010	-	-	<0.010	-	<0.20	-	-	-	<0.2	-	-	-	
Acridine	µg/L	0.01	0.5	0.5	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
Anthracene	µg/L	0.01	1	1	1,000	<0.010	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	-	-	
Benz(a)anthracene	µg/L	0.01	1	1	0.07	<0.010	<0.010	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	-	-	
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	<0.0050	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	-	-	
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	<0.015	<0.015	-	-	<0.0150	-	-	-	-	-	-	-	-	-	
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	-	-	-	-	<0.10	-	-	-	<0.1	-	-	-	
Chrysene	µg/L	0.01	1	1	7	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	<0.005	<0.0050	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	-	-	
Fluoranthene	µg/L	0.01	2	2	150	0.036	<0.010	-	-	<0.010	-	<0.030	-	-	-	<0.03	-	-	-	
Fluorene	µg/L	0.01	120	120	150	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	<0.010	<0.010	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	<0.050	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.1	-	-	-	
2-Methylnaphthalene	µg/L	0.02	-	-	15	<0.050	<0.050	-	-	<0.010	-	<0.10	-	-	-	<0.1	-	-	-	
Naphthalene	µg/L	0.02	10	10	80	<0.050	<0.050	-	-	<0.050	-	<0.20	-	-	-	<0.2	-	-	-	
Phenanthrene	µg/L	0.02	3	3	-	<0.020	<0.020	-	-	<0.020	-	<0.10	-	-	-	<0.1	-	-	-	
Pyrene	µg/L	0.01	0.2	0.2	100	0.064	0.019	-	-	<0.010	-	<0.02	-	-	-	<0.02	-	-	-	
Quinoline	µg/L	0.05	34	34	0.05	<0.050	<0.050	-	-	<0.050	-	<0.050	-	-	-	<0.05	-	-	-	

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

						MW19-04													
Location																			
Field ID																			
Sample Date						28-Feb-2023	23-May-2023	DUP(23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	DUP (9-Dec-2024)	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
Laboratory Report Number						23C0154	23E2913	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	24L1123	25C1419	25E3516	25G2084	25L0435
Laboratory Sample ID						23C0154-04	23E2913-04	23E2913-09	23I3541-04	23L2282-04	24B2509-04	24F3072-04	24I2276-04	24L1123-04	24L1123-09	25C1419-04	25E3516-04	25G2084-04	25L0435-04
Parameter	**Unit**	**RDL**	**CSR - AW**		**CSR - DW**														
			Freshwater	Marine															
Total Metals																			
Aluminum	µg/L	3	-	-	-	-	-	-	-	254.0	-	-	-	552	-	-	-	-	153
Antimony	µg/L	0.1	-	-	-	-	-	-	-	0.3	-	-	-	0.48	-	-	-	-	0.3
Arsenic	µg/L	0.1	-	-	-	-	-	-	-	1.7	-	-	-	3.67	-	-	-	-	3.6
Barium	µg/L	0.1	-	-	-	-	-	-	-	27.4	-	-	-	39.3	-	-	-	-	30.6
Beryllium	µg/L	0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.10	-	-	-	-	<0.1
Bismuth	µg/L	0.05	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	-	<0.1
Boron	µg/L	10	-	-	-	-	-	-	-	<50	-	-	-	<50.0	-	-	-	-	<50
Cadmium	µg/L	0.005	-	-	-	-	-	-	-	0.0	-	-	-	0.053	-	-	-	-	0.0
Calcium	µg/L	50	-	-	-	-	-	-	-	47600.0	-	-	-	68,100	-	-	-	-	48300
Cesium	µg/L	0.01	-	-	-						-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	-	-	-	-	0.6	-	-	-	1.11	-	-	-	-	0.7
Cobalt	µg/L	0.1	-	-	-	-	-	-	-	2.0	-	-	-	3.15	-	-	-	-	2.5
Copper	µg/L	0.5	-	-	-	-	-	-	-	3.3	-	-	-	5.1	-	-	-	-	1.8
Iron	µg/L	10	-	-	-	-	-	-	-	6490.0	-	-	-	18,900	-	-	-	-	20100
Lead	µg/L	0.05	-	-	-	-	-	-	-	0.2	-	-	-	0.21	-	-	-	-	<0.2
Lithium	µg/L	1	-	-	-	-	-	-	-	1.5	-	-	-	2.48	-	-	-	-	1.7
Magnesium	µg/L	5	-	-	-	-	-	-	-	7540.0	-	-	-	10,200	-	-	-	-	7210
Manganese	µg/L	0.1	-	-	-	-	-	-	-	1240.0	-	-	-	2,140	-	-	-	-	1570
Mercury	µg/L	1	-	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	-	<0.01
Molybdenum	µg/L	0.05	-	-	-	-	-	-	-	0.5	-	-	-	0.59	-	-	-	-	0.5
Nickel	µg/L	0.5	-	-	-	-	-	-	-	0.6	-	-	-	0.83	-	-	-	-	0.6
Phosphorus	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	236	-	-	-	-	276
Potassium	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	7,920	-	-	-	-	6010
Rubidium	µg/L	0.2	-	-	-					-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	-	-	-	-	<0.5	-	-	-	<0.50	-	-	-	-	<0.5
Silicon	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	17,900	-	-	-	-	16100
Silver	µg/L	0.01	-	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	-	<0.05
Sodium	µg/L	50	-	-	-	-	-	-	-	8010.0	-	-	-	10,500	-	-	-	-	9230
Strontium	µg/L	0.2	-	-	-	-	-	-	-	247.0	-	-	-	342	-	-	-	-	267
Sulphur	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	<3,000	-	-	-	-	<3,000
Tellurium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	<0.5
Thallium	µg/L	0.01	-	-	-	-	-	-	-	<0.02	-	-	-	<0.020	-	-	-	-	<0.02
Thorium	µg/L	0.1	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	<0.1
Tin	µg/L	0.1	-	-	-	-	-	-	-	<0.2	-	-	-	<0.20	-	-	-	-	<0.2
Titanium	µg/L	0.3	-	-	-	-	-	-	-	13.2	-	-	-	28	-	-	-	-	7.8
Tungsten	µg/L	0.1	-	-	-	-	-	-	-	<1	-	-	-	<1.0	-	-	-	-	<1
Uranium	µg/L	0.01	-	-	-	-	-	-	-	0.6	-	-	-	1.05	-	-	-	-	0.3
Vanadium	µg/L	0.5	-	-	-	-	-	-	-	<5	-	-	-	7.2	-	-	-	-	5.8
Zinc	µg/L	3	-	-	-	-	-	-	-	338.0	-	-	-	38.6	-	-	-	-	52.4
Zirconium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	0.25	-	-	-	-	0.2
Hydrocarbons																			
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	<250	-	-	-	-	<250	-	-	-	-	<250	-	-	-
EPH_{19-32}	µg/L	250	-	-	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	-	-
LEPH	µg/L	250	500	500	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	-	-
HEPH	µg/L	250	-	-	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	-	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	<100	-	-	-	-	<100	-	-	-	-	<100	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																			
Acenaphthene	µg/L	0.01	60	60	250	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
Acenaphthylene	µg/L	0.01	-	-	-	<0.200	-	-	-	-	<0.200	-	-	-	-	<0.2	-	-	-
Acridine	µg/L	0.01	0.5	0.5	-	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
Anthracene	µg/L	0.01	1	1	1,000	<0.010	-	-	-	-	<0.010	-	-	-	-	<0.01	-	-	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	<0.010	-	-	-	-	<0.010	-	-	-	-	<0.01	-	-	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	<0.010	-	-	-	-	<0.010	-	-	-	-	<0.01	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	<0.100	-	-	-	-	<0.100	-	-	-	-	<0.1	-	-	-
Chrysene	µg/L	0.01	1	1	7	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	<0.010	-	-	-	-	<0.010	-	-	-	-	<0.01	-	-	-
Fluoranthene	µg/L	0.01	2	2	150	<0.030	-	-	-	-	<0.030	-	-	-	-	<0.03	-	-	-
Fluorene	µg/L	0.01	120	120	150	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	<0.100	-	-	-	-	<0.100	-	-	-	-	<0.1	-	-	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	<0.100	-	-	-	-	<0.100	-	-	-	-	<0.1	-	-	-
Naphthalene	µg/L	0.02	10	10	80	<0.200	-	-	-	-	<0.200	-	-	-	-	<0.2	-	-	-
Phenanthrene	µg/L	0.02	3	3	-	<0.100	-	-	-	-	<0.100	-	-	-	-	<0.1	-	-	-
Pyrene	µg/L	0.01	0.2	0.2	100	<0.020	-	-	-	-	<0.020	-	-	-	-	<0.02	-	-	-
Quinoline	µg/L	0.05	34	34	0.05	<0.050	-	-	-	-	<0.050	-	-	-	-	<0.05	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	MW19-05					MW24-05								
			Freshwater	Marine															
Location						MW19-05					MW24-05								
Field ID						MW19-5	MW19-05						DUP (16-Sep-2024						
Sample Date						25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	24-Jun-2024	16-Sep-2024		9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025	DUP (2-Dec-2025)
Laboratory Report Number						L2318207	L2367392	\20A0908280120\	\20A5363250420\	\20B1139240720\	24F3072	24I2276	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435	25L0435
Laboratory Sample ID						L2318207-5	L2367392-5	VA20A0908-006	VA20A5363-005	VA20B1139-005	24F3072-10	24I2276-10	24I2276-09	24L1123-10	25C1419-05	25E3516-05	25G2084-05	25L0435-05	25L0435-10
Total Metals																			
Aluminum	µg/L	3	-	-	-	-	-	-	976.0	-	-	-	-	336	-	-	-	425	458
Antimony	µg/L	0.1	-	-	-	-	-	-	0.2	-	-	-	-	0.8	-	-	-	0.97	0.99
Arsenic	µg/L	0.1	-	-	-	-	-	-	0.7	-	-	-	-	0.63	-	-	-	0.69	0.7
Barium	µg/L	0.1	-	-	-	-	-	-	29.3	-	-	-	-	<5.0	-	-	-	<5	<5
Beryllium	µg/L	0.1	-	-	-	-	-	-	0.0	-	-	-	-	<0.10	-	-	-	<0.1	<0.1
Bismuth	µg/L	0.05	-	-	-	-	-	-	<0.050	-	-	-	-	<0.10	-	-	-	<0.1	<0.1
Boron	µg/L	10	-	-	-	-	-	-	621.0	-	-	-	-	<50.0	-	-	-	<50	<50
Cadmium	µg/L	0.005	-	-	-	-	-	-	0.1	-	-	-	-	0.068	-	-	-	0.071	0.074
Calcium	µg/L	50	-	-	-	-	-	-	106000.0	-	-	-	-	16,200	-	-	-	16,200	16,500
Cesium	µg/L	0.01	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	-	-	-	1.0	-	-	-	-	1.16	-	-	-	1.52	1.57
Cobalt	µg/L	0.1	-	-	-	-	-	-	9.2	-	-	-	-	0.15	-	-	-	0.15	0.14
Copper	µg/L	0.5	-	-	-	-	-	-	4.3	-	-	-	-	12	-	-	-	15.7	16.2
Iron	µg/L	10	-	-	-	-	-	-	1490.0	-	-	-	-	195	-	-	-	257	286
Lead	µg/L	0.05	-	-	-	-	-	-	3.4	-	-	-	-	<0.20	-	-	-	<0.2	0.2
Lithium	µg/L	1	-	-	-	-	-	-	1.3	-	-	-	-	0.2	-	-	-	0.21	0.22
Magnesium	µg/L	5	-	-	-	-	-	-	9370.0	-	-	-	-	2,740	-	-	-	2,570	2,570
Manganese	µg/L	0.1	-	-	-	-	-	-	396.0	-	-	-	-	11.1	-	-	-	4.45	4.58
Mercury	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	<0.010	-	-	-	0.0	0.0
Molybdenum	µg/L	0.05	-	-	-	-	-	-	0.6	-	-	-	-	0.52	-	-	-	0.32	0.36
Nickel	µg/L	0.5	-	-	-	-	-	-	1.1	-	-	-	-	0.89	-	-	-	1.35	1.66
Phosphorus	µg/L	50	-	-	-	-	-	-	80.0	-	-	-	-	<50	-	-	-	<50	<50
Potassium	µg/L	50	-	-	-	-	-	-	3620.0	-	-	-	-	1,990	-	-	-	2,080	2,070
Rubidium	µg/L	0.2	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	-	-	-	0.1	-	-	-	-	<0.50	-	-	-	<0.5	<0.5
Silicon	µg/L	100	-	-	-	-	-	-	7820.0	-	-	-	-	7,300	-	-	-	6,200	6,400
Silver	µg/L	0.01	-	-	-	-	-	-	<0.010	-	-	-	-	<0.050	-	-	-	<0.05	<0.05
Sodium	µg/L	50	-	-	-	-	-	-	20800.0	-	-	-	-	4,320	-	-	-	3,700	3,810
Strontium	µg/L	0.2	-	-	-	-	-	-	672.0	-	-	-	-	62.5	-	-	-	65.8	66.3
Sulphur	µg/L	500	-	-	-	-	-	-	83300.0	-	-	-	-	<3,000	-	-	-	<3,000	<3,000
Tellurium	µg/L	0.2	-	-	-	-	-	-	<0.20	-	-	-	-	<0.50	-	-	-	<0.5	<0.5
Thallium	µg/L	0.01	-	-	-	-	-	-	0.0	-	-	-	-	<0.020	-	-	-	<0.02	<0.02
Thorium	µg/L	0.1	-	-	-	-	-	-	0.3	-	-	-	-	<0.10	-	-	-	0.1	0.1
Tin	µg/L	0.1	-	-	-	-	-	-	0.1	-	-	-	-	<0.20	-	-	-	<0.2	<0.2
Titanium	µg/L	0.3	-	-	-	-	-	-	51.8	-	-	-	-	6.6	-	-	-	7.5	8.9
Tungsten	µg/L	0.1	-	-	-	-	-	-	0.2	-	-	-	-	<1.0	-	-	-	<1	<1
Uranium	µg/L	0.01	-	-	-	-	-	-	7.2	-	-	-	-	0.616	-	-	-	0.865	0.9
Vanadium	µg/L	0.5	-	-	-	-	-	-	5.9	-	-	-	-	<5.0	-	-	-	<5	<5
Zinc	µg/L	3	-	-	-	-	-	-	5.5	-	-	-	-	<4.0	-	-	-	<4	<4
Zirconium	µg/L	0.2	-	-	-	-	-	-	<0.20	-	-	-	-	0.14	-	-	-	0.24	0.26
Hydrocarbons																			
EPH_{10-19}	µg/L	250	5,000	5,000	5,000	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-
EPH_{19-32}	µg/L	250	-	-	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-
LEPH	µg/L	250	500	500	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-
HEPH	µg/L	250	-	-	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-
VH_{6-10}	µg/L	100	15,000	15,000	15,000	-	<100	-	-	<100	-	-	-	-	<100	-	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																			
Acenaphthene	µg/L	0.01	60	60	250	0.0	<0.010	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
Acenaphthylene	µg/L	0.01	-	-	-	<0.010	<0.010	-	-	<0.010	-	-	-	-	<0.2	-	-	-	-
Acridine	µg/L	0.01	0.5	0.5	-	<0.010	<0.010	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
Anthracene	µg/L	0.01	1	1	1,000	0.042	<0.010	-	-	<0.010	-	-	-	-	<0.01	-	-	-	-
Benz(a)anthracene	µg/L	0.01	1	1	0.07	0.125	0.014	-	-	<0.010	-	-	-	-	<0.01	-	-	-	-
Benzo(a)pyrene	µg/L	0.005	0.1	0.1	0.01	0.083	0.012	-	-	<0.0050	-	-	-	-	<0.01	-	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	0.132	<0.015	-	-	<0.0150	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	-	-	0.07	0.098	0.012	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
Benzo(g,h,i)perylene	µg/L	0.01	-	-	-	0.066	0.011	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.01	-	-	-	0.034	<0.010	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
2-Chloronaphthalene	µg/L	0.1	-	-	300	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-
Chrysene	µg/L	0.01	1	1	7	0.149	0.0	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
Dibenz(a,h)anthracene	µg/L	0.005	-	-	0.01	0.016	<0.0050	-	-	<0.0050	-	-	-	-	<0.01	-	-	-	-
Fluoranthene	µg/L	0.01	2	2	150	0.192	0.019	-	-	<0.010	-	-	-	-	<0.03	-	-	-	-
Fluorene	µg/L	0.01	120	120	150	0.021	<0.010	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	-	-	-	0.058	<0.010	-	-	<0.010	-	-	-	-	<0.05	-	-	-	-
1-Methylnaphthalene	µg/L	0.05	-	-	5.5	<0.050	<0.050	-	-	<0.010	-	-	-	-	<0.1	-	-	-	-
2-Methylnaphthalene	µg/L	0.02	-	-	15	<0.050	<0.050	-	-	<0.010	-	-	-	-	<0.1	-	-	-	-
Naphthalene	µg/L	0.02	10	10	80	<0.050	<0.050	-	-	<0.050	-	-	-	-	<0.2	-	-	-	-
Phenanthrene	µg/L	0.02	3	3	-	0.178	<0.020	-	-	<0.020	-	-	-	-	<0.1	-	-	-	-
Pyrene	µg/L	0.01	0.2	0.2	100	**0.207**	0.022	-	-	<0.010	-	-	-	-	<0.02	-	-	-	-
Quinoline	µg/L	0.05	34	34	0.05	<0.050	<0.050	-	-	<0.050	-	-	-	-	<0.05	-	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Standard is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
EPHw	Extractable Petroleum Hydrocarbons.
LEPHw	Light Extractable Petroleum Hydrocarbons.
HEPHw	Heavy Extractable Petroleum Hydrocarbons.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW standard.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW standard.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than standard.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW13-01													
						Field ID	MW13-01	MW13-01	DUP	MW13-1	MW13-01									
						Sample Date	14-Dec-2013	2-Apr-2019	DUP (2-Apr-2019)	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2252890	L2252890	L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
						Laboratory Sample ID	-	L2252890-3	L2252890-1	L2318207-1	L2367392-1	VA20A0908-001	VA20A5363-001	VA20B1139-001	VA20B9565-001	21B2866-02	21E1432-01	21G2459-02	21L0641-02	22C0773-02	22G1537-02
			Freshwater	Marine																	
Resin/Fatty Acids																					
Abietic Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Arachidic Acid	µg/L	0.005	-	-	-		-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-		-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dehydroabietic Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
9,10-Dichlorostearic Acid	µg/L		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	<10
Isopimaric Acid	ug/L	10	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palustric Acid	ug/L	10	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauric Acid	µg/L	0.005	-	-	-		-	15.6	7.5	-	-	-	-	<5.0	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Lignoceric Acid	µg/L	0.005	-	-	-		-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-		-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Linolenic Acid	µg/L	0.005	-	-	-		-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Myristic Acid	µg/L	0.005	-	-	-		-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Octadecanoic Acid	µg/L		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
Oleic Acid	µg/L	0.005	-	-	-		-	61.4	40.0	-	-	-	-	<5.0	-	0.007	-	-	-	-	<10
Palmitic Acid	µg/L	100	-	-	-		-	<100	<100	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Sandaracopimaric Acid	µg/L	0.001	-	-	-		-	<1.0	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Stearic Acid	µg/L	20	-	-	-		-	<20	<20	-	-	-	-	-	-	-	-	-	-	-	<10
Total Fatty Acids	µg/L	0.1	-	-	-		-	<100	<100	-	-	-	-	<110	-	-	-	-	-	-	<10
Total Resin Acids	µg/L	0.01	-	-	-		-	<10	<10	-	-	-	-	<3.5	-	-	-	-	-	-	<10
Total Resin and Fatty Acid	µg/L	0.01	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
BTEXS & MTBE																					
Benzene	µg/L	0.5	400	1,000	5		-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Toluene	µg/L	1	5	2,000	60		-	-	-	-	-	-	-	-	-	*<1.0*	-	-	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Xylenes Total	µg/L	2	300	300	90		-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Styrene	µg/L	1	720	720	800		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Volatile Organic Compounds (VOCs)																					
Hexadecanoic Acid	µg/L	6	-	-	-		-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-
Bromodichloromethane	µg/L	1	-	-	100		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Bromoform	µg/L	1	-	-	100		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2		-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Chlorobenzene	µg/L	1	13	250	80		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Chloroethane	µg/L	2	-	-	-		-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Chloroform	µg/L	1	20	20	100		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Dibromochloromethane	µg/L	1	-	-	100		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5		-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-
Dibromomethane	µg/L	1	-	-	-		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200		-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methylene Chloride	µg/L	3	980	980	50		-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8		-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichloroethene	µg/L	1	200	200	5		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Vinyl chloride	µg/L	1	-	-	2		-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	Field ID	Sample Date	Laboratory Report Number	Laboratory Sample ID										
			Freshwater	Marine		MW13-01														
								11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	DUP (18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
								22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
								22J1342-05	22L1310-02	23C0154-01	23E2913-01	23I3541-01	23L2282-01	23L2282-09	24B2509-01	24F3072-01	24I2276-01	24L1123-01	25C1419-01	25E3516-01	25G2084-01	25L0435-01
Resin/Fatty Acids																						
Abietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Arachidic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Dehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
9,10-Dichlorostearic Acid	µg/L		-	-	-	-	-	<10	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	ug/L	10	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Palustric Acid	ug/L	10	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	-	-							-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Lignoceric Acid	µg/L	0.005	-	-	-	-	-							-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Linolenic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Myristic Acid	µg/L	0.005	-	-	-	-	-							-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Octadecanoic Acid	µg/L		-	-	-	-	-							-	-	-	-	-	-	-	-
Oleic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Palmitic Acid	µg/L	100	-	-	-	-	-							-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Sandaracopimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Stearic Acid	µg/L	20	-	-	-	-	-							-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	0.1	-	-	-	-	-	<10	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Total Resin Acids	µg/L	0.01	-	-	-	-	-	<10	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	-	-	<10	-	-	-	-	-	<10	-	-	-	<10	-	-	-
BTEXS & MTBE																						
Benzene	µg/L	0.5	400	1,000	5	-	-	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Toluene	µg/L	1	5	2,000	60	-	-	*<1.0*	-	-	-	-	-	-	-	-	-	<1	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Xylenes Total	µg/L	2	300	300	90	-	-	<2.0	-	-	-	-	-	-	-	-	-	<2	-	-	-
Styrene	µg/L	1	720	720	800	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Volatile Organic Compounds (VOCs)																						
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Bromoform	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	-	-	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Chlorobenzene	µg/L	1	13	250	80	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Chloroethane	µg/L	2	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	<2	-	-	-
Chloroform	µg/L	1	20	20	100	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	-	-	<0.3	-	-	-	-	-	-	-	-	-	<0.3	-	-	-
Dibromomethane	µg/L	1	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	-	-	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Methylene Chloride	µg/L	3	980	980	50	-	-	<3.0	-	-	-	-	-	-	-	-	-	<3	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	-	-	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Trichloroethene	µg/L	1	200	200	5	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Vinyl chloride	µg/L	1	-	-	2	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

Table 2: Groundwater Analytical Results

Location						MW13-02													
Field ID						MW13-02	MW13-02	MW13-2	MW13-02										
Sample Date						14-Dec-2013	2-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
Laboratory Report Number						-	L2252890	L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
Laboratory Sample ID						-	L2252890-2	L2318207-2	L2367392-2	VA20A0908-003	VA20A5363-002	VA20B1139-002	VA20B9565-002	21B2866-03	21E1432-02	21G2459-03	21L0641-03	22C0773-03	22G1537-03
Parameter	**Unit**	**RDL**	**CSR - AW**		**CSR - DW**														
			Freshwater	Marine															
Resin/Fatty Acids																			
Abietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Arachidic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
9,10-Dichlorostearic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	<10
Isopimaric Acid	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palustric Acid	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Lignoceric Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Linolenic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Myristic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Octadecanoic Acid	µg/L		-	-	-	-	-											-	<10
Oleic Acid	µg/L	0.005	-	-	-	-	6.0	-	-	-	-	<5.0	-	0.014	-	-	-	-	<10
Palmitic Acid	µg/L	100	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Sandaracopimaric Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Stearic Acid	µg/L	20	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	<10
Total Fatty Acids	µg/L	0.1	-	-	-	-	<100	-	-	-	-	<110	-	-	-	-	-	-	<10
Total Resin Acids	µg/L	0.01	-	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	<10
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
BTEXS & MTBE																			
Benzene	µg/L	0.5	400	1,000	5	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Toluene	µg/L	1	5	2,000	60	-	-	-	-	-	-	-	-	*<1.0*	-	-	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Xylenes Total	µg/L	2	300	300	90	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Styrene	µg/L	1	720	720	800	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Volatile Organic Compounds (VOCs)																			
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-
Bromodichloromethane	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Bromoform	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Chlorobenzene	µg/L	1	13	250	80	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Chloroethane	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Chloroform	µg/L	1	20	20	100	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-
Dibromomethane	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methylene Chloride	µg/L	3	980	980	50	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichloroethene	µg/L	1	200	200	5	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Vinyl chloride	µg/L	1	-	-	2	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW13-02												
			Freshwater	Marine		Field ID													
						Sample Date	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
						Laboratory Sample ID	22J1342-06	22L1310-03	23C0154-02	23E2913-02	23I3541-02	23L2282-02	24B2509-02	24F3072-02	24I2276-02	24L1123-02	25C1419-02	25E3516-02	25G2084-02	25L0435-02
Resin/Fatty Acids																			
Abietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Arachidic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Dehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
9,10-Dichlorostearic Acid	µg/L		-	-	-	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	µg/L	10	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Palustric Acid	µg/L	10	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Lignoceric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Linolenic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Myristic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Octadecanoic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Palmitic Acid	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Sandaracopimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Stearic Acid	µg/L	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	0.1	-	-	-	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-
Total Resin Acids	µg/L	0.01	-	-	-	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-
BTEXS & MTBE																			
Benzene	µg/L	0.5	400	1,000	5	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-
Toluene	µg/L	1	5	2,000	60	-	-	*<1.0*	-	-	-	-	-	-	-	<1	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Xylenes Total	µg/L	2	300	300	90	-	-	<2.0	-	-	-	-	-	-	-	<2	-	-	-
Styrene	µg/L	1	720	720	800	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Volatile Organic Compounds (VOCs)																			
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-	-				
Bromodichloromethane	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Bromoform	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-
Chlorobenzene	µg/L	1	13	250	80	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Chloroethane	µg/L	2	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2	-	-	-
Chloroform	µg/L	1	20	20	100	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	-	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-
Dibromomethane	µg/L	1	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Methylene Chloride	µg/L	3	980	980	50	-	-	<3.0	-	-	-	-	-	-	-	<3	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Trichloroethene	µg/L	1	200	200	5	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-
Vinyl chloride	µg/L	1	-	-	2	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW13-03													
						Field ID	MW13-03	MW13-03	MW13-3	MW13-03	DUP1									
						Sample Date	14-Dec-2013	3-Apr-2019	25-Jul-2019	17-Oct-2019	DUP (17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2254197	L2318207	L2367392	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	A20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537
						Laboratory Sample ID	-	L2254197-4	L2318207-3	L2367392-3	L2367392-10	VA20A0908-004	VA20A5363-003	VA20B1139-003	VA20B9565-003	21B2866-04	21E1432-03	21G2459-04	21L0641-04	22C0773-04	22G1537-04
			Freshwater	Marine																	
Resin/Fatty Acids																					
Abietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Arachidic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
9,10-Dichlorostearic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<6.0	-	-	-	-	<10
Isopimaric Acid	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palustric Acid	µg/L	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	-	96.4	-	-	-	-	-	<5.0	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Lignoceric Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Linolenic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Myristic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Octadecanoic Acid	µg/L		-	-	-														-	<10
Oleic Acid	µg/L	0.005	-	-	-	-	<5.0	-	-	-	-	-	<5.0	-	<0.0060	-	-	-	-	<10
Palmitic Acid	µg/L	100	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Sandaracopimaric Acid	µg/L	0.001	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Stearic Acid	µg/L	20	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	<10
Total Fatty Acids	µg/L	0.1	-	-	-	-	<100	-	-	-	-	-	<110	-	-	-	-	-	-	<10
Total Resin Acids	µg/L	0.01	-	-	-	-	<10	-	-	-	-	-	<3.5	-	-	-	-	-	-	<10
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
BTEXS & MTBE																				
Benzene	µg/L	0.5	400	1,000	5	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Toluene	µg/L	1	5	2,000	60	-	-	-	-	-	-	-	-	-	*<1.0*	-	-	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Xylenes Total	µg/L	2	300	300	90	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Styrene	µg/L	1	720	720	800	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Volatile Organic Compounds (VOCs)																				
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-
Bromodichloromethane	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Bromoform	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Chlorobenzene	µg/L	1	13	250	80	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Chloroethane	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Chloroform	µg/L	1	20	20	100	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-
Dibromomethane	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methylene Chloride	µg/L	3	980	980	50	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichloroethene	µg/L	1	200	200	5	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Vinyl chloride	µg/L	1	-	-	2	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
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Italic	Detection limit greater than guideline.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW13-03													
						Field ID														
						Sample Date	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	)UP (27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	22J1342	22L1310	23C0154	23E2913	23I3541	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435
						Laboratory Sample ID	22J1342-07	22L1310-04	23C0154-03	23E2913-03	23I3541-03	23I3541-09	23L2282-03	24B2509-03	24F3072-03	24I2276-03	24L1123-03	25C1419-03	25E3516-03	25G2084-03	25L0435-03
			Freshwater	Marine																	
Resin/Fatty Acids																					
Abietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Arachidic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Dehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
9,10-Dichlorostearic Acid	µg/L		-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	-	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	ug/L	10	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Palustric Acid	ug/L	10	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Lignoceric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Linolenic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Myristic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Octadecanoic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	0.005	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Palmitic Acid	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Sandaracopimaric Acid	µg/L	0.001	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-
Stearic Acid	µg/L	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	0.1	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	-	-	-
Total Resin Acids	µg/L	0.01	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	-	-	-
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	-	-	-
BTEXS & MTBE																				
Benzene	µg/L	0.5	400	1,000	5	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	-	-	-
Toluene	µg/L	1	5	2,000	60	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Xylenes Total	µg/L	2	300	300	90	-	-	<2.0	-	-	-	-	-	-	-	-	<2	-	-	-
Styrene	µg/L	1	720	720	800	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Volatile Organic Compounds (VOCs)																				
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Bromoform	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	-	-	-
Chlorobenzene	µg/L	1	13	250	80	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Chloroethane	µg/L	2	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	<2	-	-	-
Chloroform	µg/L	1	20	20	100	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	-	-
Dibromomethane	µg/L	1	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Methylene Chloride	µg/L	3	980	980	50	-	-	<3.0	-	-	-	-	-	-	-	-	<3	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Trichloroethene	µg/L	1	200	200	5	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-
Vinyl chloride	µg/L	1	-	-	2	-	-	<1.0	-	-	-	-	-	-	-	-	<1	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	Location	MW19-04													
						Field ID	MW19-4	MW19-04												
						Sample Date	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022
						Laboratory Report Number	L2318207	L2367392	\20A0908280120	\20A5363250420	\20B1139240720	\20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310
						Laboratory Sample ID	L2318207-4	L2367392-4	VA20A0908-005	VA20A5363-004	VA20B1139-004	VA20B9565-004	21B2866-05	21E1432-04	21G2459-05	21L0641-05	22C0773-05	22G1537-05	22J1342-08	22L1310-05
			Freshwater	Marine																
Resin/Fatty Acids																				
Abietic Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Arachidic Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Dehydroabietic Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
9,10-Dichlorostearic Acid	µg/L		-	-	-		-	-	-	-	-	-	-	-	-	-	-	<10	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<6.0	-	-	-	-	<10	-	-
Isopimaric Acid	µg/L	10	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palustric Acid	µg/L	10	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lauric Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Lignoceric Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	<10	-	-
Linolenic Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	<10	-	-
Myristic Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Octadecanoic Acid	µg/L		-	-	-		-	-	-	-	-	-	-	-	-	-	-	<10	-	-
Oleic Acid	µg/L	0.005	-	-	-		<0.0050	-	-	-	<5.0	-	<0.0060	-	-	-	-	<10	-	-
Palmitic Acid	µg/L	100	-	-	-		<100	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Sandaracopimaric Acid	µg/L	0.001	-	-	-		<0.0010	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-
Stearic Acid	µg/L	20	-	-	-		<20	-	-	-	-	-	-	-	-	-	-	<10	-	-
Total Fatty Acids	µg/L	0.1	-	-	-		<0.10	-	-	-	<110	-	-	-	-	-	-	<10	-	-
Total Resin Acids	µg/L	0.01	-	-	-		<0.010	-	-	-	<3.5	-	-	-	-	-	-	<10	-	-
Total Resin and Fatty Acid	µg/L	0.01	-	-	-		-	-	-	-	-	-	-	-	-	-	-	<10	-	-
BTEXS & MTBE																				
Benzene	µg/L	0.5	400	1,000	5		-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-
Toluene	µg/L	1	5	2,000	60		-	-	-	-	-	-	*<1.0*	-	-	-	-	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Xylenes Total	µg/L	2	300	300	90		-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-
Styrene	µg/L	1	720	720	800		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)																				
Hexadecanoic Acid	µg/L	6	-	-	-		-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	1	-	-	100		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Bromoform	µg/L	1	-	-	100		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2		-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-
Chlorobenzene	µg/L	1	13	250	80		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Chloroethane	µg/L	2	-	-	-		-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-
Chloroform	µg/L	1	20	20	100		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Dibromochloromethane	µg/L	1	-	-	100		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5		-	-	-	-	-	-	<0.30	-	-	-	-	-	-	-
Dibromomethane	µg/L	1	-	-	-		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200		-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Methylene Chloride	µg/L	3	980	980	50		-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8		-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Trichloroethene	µg/L	1	200	200	5		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-
Vinyl chloride	µg/L	1	-	-	2		-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

TETRA TECH

Table 2: Groundwater Analytical Results

Parameter	Unit	RDL	CSR - AW		CSR - DW	MW19-04													
			Freshwater	Marine															
Location						MW19-04													
Field ID																			
Sample Date						28-Feb-2023	23-May-2023	DUP(23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	DUP (9-Dec-2024)	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025
Laboratory Report Number						23C0154	23E2913	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	24L1123	25C1419	25E3516	25G2084	25L0435
Laboratory Sample ID						23C0154-04	23E2913-04	23E2913-09	23I3541-04	23L2282-04	24B2509-04	24F3072-04	24I2276-04	24L1123-04	24L1123-09	25C1419-04	25E3516-04	25G2084-04	25L0435-04
Resin/Fatty Acids																			
Abietic Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Arachidic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Dehydroabietic Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
9,10-Dichlorostearic Acid	µg/L		-	-	-	<10	-	-	-	-	<10	-	-	-	-	<10	-	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	ug/L	10	-	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-
Palustric Acid	ug/L	10	-	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Lignoceric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Linolenic Acid	µg/L	0.005	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Myristic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Octadecanoic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	0.005	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Palmitic Acid	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Sandaracopimaric Acid	µg/L	0.001	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	-	<0.00001	-	-	-
Stearic Acid	µg/L	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	0.1	-	-	-	<10	-	-	-	-	<10	-	-	-	-	<10	-	-	-
Total Resin Acids	µg/L	0.01	-	-	-	<10	-	-	-	-	<10	-	-	-	-	<10	-	-	-
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	<10	-	-	-	-	<10	-	-	-	-	<10	-	-	-
BTEXS & MTBE																			
Benzene	µg/L	0.5	400	1,000	5	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Toluene	µg/L	1	5	2,000	60	*<1.0*	-	-	-	-	-	-	-	-	-	<1	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Xylenes Total	µg/L	2	300	300	90	<2.0	-	-	-	-	-	-	-	-	-	<2	-	-	-
Styrene	µg/L	1	720	720	800	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Volatile Organic Compounds (VOCs)																			
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-	-				
Bromodichloromethane	µg/L	1	-	-	100	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Bromoform	µg/L	1	-	-	100	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Chlorobenzene	µg/L	1	13	250	80	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Chloroethane	µg/L	2	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	<2	-	-	-
Chloroform	µg/L	1	20	20	100	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	<0.3	-	-	-	-	-	-	-	-	-	<0.3	-	-	-
Dibromomethane	µg/L	1	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Methylene Chloride	µg/L	3	980	980	50	<3.0	-	-	-	-	-	-	-	-	-	<3	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	<0.5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Trichloroethene	µg/L	1	200	200	5	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-
Vinyl chloride	µg/L	1	-	-	2	<1.0	-	-	-	-	-	-	-	-	-	<1	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

Table 2: Groundwater Analytical Results

					Location	MW19-05					MW24-05									
					Field ID	MW19-5	MW19-05													
					Sample Date	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	24-Jun-2024	16-Sep-2024	DUP (16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025	DUP (2-Dec-2025)
					Laboratory Report Number	L2318207	L2367392	A20A0908280120	A20A5363250420	A20B1139240720	24F3072	24I2276	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435	25L0435
					Laboratory Sample ID	L2318207-5	L2367392-5	VA20A0908-006	VA20A5363-005	VA20B1139-005	24F3072-10	24I2276-10	24I2276-09	24L1123-10	25C1419-05	25E3516-05	25G2084-05	25L0435-05	25L0435-10
Parameter	**Unit**	**RDL**	**CSR - AW**		**CSR - DW**															
			Freshwater	Marine																
Resin/Fatty Acids																				
Abietic Acid	µg/L	0.001	-	-	-	0.0011	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Arachidic Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	0.0059	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Dehydroabietic Acid	µg/L	0.001	-	-	-	0.0017	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
9,10-Dichlorostearic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	0.0014	-	-	-	<1.0	-	-	-	-	-	-	-	-	-
Isopimaric Acid	ug/L	10	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-
Palustric Acid	ug/L	10	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-
Lauric Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Lignoceric Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	<0.00001	-	-	-	-
Linolenic Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	<0.00001	-	-	-	-
Myristic Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Octadecanoic Acid	µg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	0.005	-	-	-	<0.0050	-	-	-	<5.0	-	-	-	-	<0.00001	-	-	-	-
Palmitic Acid	µg/L	100	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Sandaracopimaric Acid	µg/L	0.001	-	-	-	<0.0010	-	-	-	<1.0	-	-	-	-	<0.00001	-	-	-	-
Stearic Acid	µg/L	20	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	0.1	-	-	-	<0.10	-	-	-	<110	-	-	-	-	<10	-	-	-	-
Total Resin Acids	µg/L	0.01	-	-	-	<0.010	-	-	-	<3.5	-	-	-	-	<10	-	-	-	-
Total Resin and Fatty Acid	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-
BTEXS & MTBE																				
Benzene	µg/L	0.5	400	1,000	5	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Toluene	µg/L	1	5	2,000	60	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Ethylbenzene	µg/L	1	2,000	2,500	140	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Xylenes Total	µg/L	2	300	300	90	-	-	-	-	-	-	-	-	-	<2	-	-	-	-
Styrene	µg/L	1	720	720	800	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	34,000	4,400	95	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Volatile Organic Compounds (VOCs)																				
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-						
Bromodichloromethane	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Bromoform	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Carbon tetrachloride	µg/L	0.5	130	130	2	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Chlorobenzene	µg/L	1	13	250	80	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Chloroethane	µg/L	2	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-
Chloroform	µg/L	1	20	20	100	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Dibromochloromethane	µg/L	1	-	-	100	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dibromoethane	µg/L	0.3	-	-	0.5	-	-	-	-	-	-	-	-	-	<0.3	-	-	-	-
Dibromomethane	µg/L	1	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	7	420	200	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,3-Dichlorobenzene	µg/L	1	1,500	1,500	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,4-Dichlorobenzene	µg/L	1	260	260	5	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,1-Dichloroethane	µg/L	1	-	-	30	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloroethane	µg/L	1	1,000	1,000	5	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,1-Dichloroethene	µg/L	1	-	-	14	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	-	-	8	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	-	-	80	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloropropane	µg/L	1	-	-	4.5	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,3-Dichloropropene	µg/L	1	-	-	1.5	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Methylene Chloride	µg/L	3	980	980	50	-	-	-	-	-	-	-	-	-	<3	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	-	-	0.8	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-
Tetrachloroethene	µg/L	1	1,100	1,100	30	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
1,1,1-Trichloroethane	µg/L	1	-	-	8000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	-	-	3	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Trichloroethene	µg/L	1	200	200	5	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Trichlorofluoromethane	µg/L	1	-	-	1000	-	-	-	-	-	-	-	-	-	<1	-	-	-	-
Vinyl chloride	µg/L	1	-	-	2	-	-	-	-	-	-	-	-	-	<1	-	-	-	-

Notes:

#1	Guideline varies with hardness. Values shown based on average hardness of 43 mg/L at background well MW13-01.
#2	Standard varies with pH. Value shown based on average laboratory pH of 6.2 at background well MW13-01.
#3	Standard varies with chloride concentration. Value shown based on average chloride concentration of 6.9 mg/L at background well MW13-01.
#4	Guideline is for Chromium VI.
-	Not analyzed or no applicable CSR standard.
<	Concentration is less than the laboratory detection limit indicated.
CSR	BC Contaminated Sites Regulation (BC Reg. 375/96, including amendments up to BC Reg. 171/2025, October 2025) Schedule 3.2.
AW	Freshwater and marine aquatic life standards.
DW	Drinking water standards.
Shaded	Shaded indicates an exceedance of the CSR Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the CSR Marine AW guidelines.
Red Text	Red text indicates an exceedance of the CSR DW standard.
Italic	Detection limit greater than guideline.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																				
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A090828012(20A536325042(20B113924072(20B9565301020		21B2866	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006		21B2866-06	21E1432-06	21G2459-06	21L0641-06	22C0773-06	22G1537-06	22J1342-01	22L1310-06	23C0154-05	23E2913-05	23I3541-05	23L2282-05
		Approved	Working	Approved	Working																						
Field Measurements																											
Temperature	°C	19 [#1]	-	-	-		-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	7.0	15.8	11.5	4.3	4	14.2	11.8	6.3
Electrical Conductivity	µS/cm	-	-	-	-		-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	42.7	81.3	116.8	59.3	51.4	80.8	80.5	50
Total Dissolved Solids (TDS)	mg/L	-	-	-	-		-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	42.25	64.4	75.9	63.8	55.9	66.1	70	50.7
Salinity	-	-	-	-	-		-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-		-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L	Minimum 5 [#2]	-	Minimum 5 [#2]	-		-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	12.28	9.66	16.42	12.97	12.29	8.74	10.16	12.3
pH	pH Units	6.5-9.0	-	7.0-8.7	-		-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	7.01	7.72	7.83	7.36	7.29	7.68	**5.41**	**6.27**
Oxidation Reduction Potential (ORP)	-	-	-	-	-		-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	168.0	96.7	107.5	77.0	76.8	71.8	196.5	100.8
Physical Parameters																											
pH	pH Units	6.5-9.0	-	7.0-8.7	-		7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	-	7.36	-	7.07	**6.72**	**6.59**	**6.77**	**6.59**
Electrical Conductivity (EC)	µS/cm	-	-	-	-		81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	-	101	-	103	88	98	102	89.4
Total Suspended Solids (TSS)	µg/L	-	-	-	-		20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	-	-	-	-		55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	-	64,000	-	-	-	70,000	-	92,000
Hardness as $CaCO_3$	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	23,000	33,400	36,300	29,700	-	33,300	-	27,700
Alkalinity (total as $CaCO_3$)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	-	-	-	-	25,200	33,300	37,500	31,400
Alkalinity (P)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	-	-	-	-	25,200	33,300	37,500	31,400
Carbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	-	-	-	-		26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	-	-	-	-		<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	150,000 [#5]	-	-	-		7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	9,870	8,620	10,100	9,680	9,730	9,440	9,550	9,020
Fluoride	µg/L	887 [#3,4]	-	1,500 [#3]	-		29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	218,000 [#4,5]	-	-	-		2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	2,400	3,600	3,600	2,400	2,200	3,000	2,600	2,100
Sulphide (as S)	µg/L	-	-	-	-		-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	-	2	-	-		-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<20	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Turbidity	NTU	-	-	-	-		-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L	-	-	-	-		-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																											
Ammonia as N	µg/L	1,850 [#5,6]	-	9,400 [#5,7]	-		5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	<50	<50	<50	148	<50	<50	<50	<50
Nitrate (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	178	152	104	66	93	123	75	82
Nitrite (as N)	µg/L	100 [#5,8]	-	-	-		1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		-	-	-	-	-	54.4	-	-	-	-	-	-	-	152	-	-	-	-	-	-
Demand Parameters																											
Biochemical Oxygen Demand (BOD)	µg/L	-	-	-	-		-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	-	<3,800	-	<2,200	-	<1,400	-	<2,800
Chemical Oxygen Demand (COD)	µg/L	-	-	-	-		<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	28000
Carbon																											
Dissolved Organic Carbon (DOC)	µg/L	-	-	-	-		-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	-	-	-	-	-	-	-	-
Total Organic Carbon (TOC)	µg/L	-	-	-	-		-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																											
Phenols (4AAP)	µg/L	-	-	-	-		1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	<2	-	-	-	<2.00	-	-	-
Phenolics	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																											
Aluminum	µg/L	-	-	-	-		-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	-	-	-	-	-	-	-	-
Antimony	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	-	-	-	-	-	-
Arsenic	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	-	-	-	-	-	-	-
Barium	µg/L	-	-	-	-		-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	-	-	-	-	-	-	-	-
Beryllium	µg/L	-	-	-	-		-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-
Bismuth	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	-	-	-	-	-	-	-
Boron	µg/L	-	-	-	-		-	-	-	-	-	<10	-	<10	-	-	-	<50	-	-	-	-	-	-	-	-
Cadmium	µg/L	0.0932 [#4,5]	-	-	-		-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	-	-	-	-	-	-	-
Calcium	µg/L	-	-	-	-		-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	-	-	-	-	-	-	-	-
Cesium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	-	-	-	-	-	-	-	-
Cobalt	µg/L	0.85 [#4,5]	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-
Copper	µg/L	0.862 [#5,10]	-	-	-		-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	-	-	-	-	-	-	-	-
Iron	µg/L	350 [#3]	-	-	-		-	-	-	-	-	172	-	784	-	-	-	404	-	-	-	-	-	-	-	-
Lead	µg/L	3.87 [#5,11]	-	-	-		-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	-	-	-	-	-	-	-	-
Lithium	µg/L	-	-	-	-		-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	-	-	-	-	-	-	-	-
Magnesium	µg/L	-	-	-	-		-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	-	-	-	-	-	-	-	-
Manganese	µg/L	-	-	-	-		-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	-	-	-	-	-	-	-	-
Mercury	µg/L	-	-	-	-		-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	-	-	-	-	-	-	-
Molybdenum	µg/L	-	-	-	-		-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	-	-	-	-	-	-	-	-
Nickel	µg/L	1.3 [#5,10,13]	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	-	-	-	-	-	-	-
Phosphorus	µg/L	-	-	-	-		-	-	-	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	-
Potassium	µg/L	-	-	-	-		-	-	-	-	-	789	-	624	-	-	-	770	-	-	-	-	-	-	-	-
Rubidium	µg/L	-	-	-	-		-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	-	-	-	-	-	-	-
Silicon	µg/L	-	-	-	-		-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	-	-	-	-	-	-	-	-
Silver	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	-	-	-	-	-	-	-
Sodium	µg/L	-	-	-	-		-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	-	-	-	-	-	-	-	-
Strontium	µg/L	-	1,250 [#5,10]	-	-		-	-	-	-	-	53	-	58.3	-	-	-	38.7	-	-	-	-	-	-	-	-
Sulphur	µg/L	-	-	-	-		-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	-	-	-	-	-	-	-	-
Tellurium	µg/L	-	-	-	-		-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	-	-	-	-	-	-	-
Thallium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-
Thorium	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-
Tin	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	-	-	-	-	-	-
Titanium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	-	-	-	-	-	-	-
Tungsten	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	-	-	-	-	-	-	-
Uranium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-
Vanadium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	-	-	-	-	-	-	-
Zinc	µg/L	7.55 [#5,10]	-	-	-		-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	-	-	-	-	-	-	-	-
Zirconium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-	-	-	-	-	-	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1												SW-1										SW-2								
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122(20A5363250422(20B1139240722(20B9565301020				21B2866	21E1432	21G2459	21L0641	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435	-	L2254181	L2318207	L2367392	20A0908280122(20A5363250422(20B1139240722(20B9565301020				21B2866
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	24B2509-05	24F3072-05	24I2276-05	24L1123-05	25C1419-06	25E3516-06	25G2084-06	25L0435-06	-	L2254181-2	L2318207-7	L2367392-7	VA20A0908-008VA20A5363-008VA20B1139-008VA20B9565-007				21B2866-07
Field Measurements																																					
Temperature	°C	19 [#1]	-	-	-		-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	6.7	15.7	13.6	6.3	6.5	14.4	16.1	6.3	-	9.87	15.89	10.4	5.9	13.01	16.2	9.4	4.1
Electrical Conductivity	µS/cm	-	-	-	-		-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	57.8	119.9	81.1	55.7	50.4	68.6	97.3	60	-	91	109	74.9	85	75	119	93.9	51.3
Total Dissolved Solids (TDS)	mg/L	-	-	-	-		-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	57.7	94.9	67.6	56.3	50.6	55.9	76.3	60.45	-	59	71	-	-	63	78	61.1	55.3
Salinity	-	-	-	-	-		-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	0.05	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-		-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111	-	-	-	-	111	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L	Minimum 5 [#2]	-	Minimum 5 [#2]	-		-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	12.7	10.48	9.67	11.58	-	9.19	13.38	16.93	-	12.57	9.97	-	12.91	10.8	8.63	10.6	14.3
pH	pH Units	6.5-9.0	-	7.0-8.7	-		-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	7	7.06	7.26	7.75	7.34	7.17	7.85	**6.8**	-	7.35	**6.86**	7.68	**6.29**	7.44	7.76	7.62	7.48
Oxidation Reduction Potential (ORP)	-	-	-	-	-		-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	11.1	156.5	93.1	28.6	133.4	109.5	73.1	97.1	-	84.8	255	-	124.2	131	126	72.6	76.9
Physical Parameters																																					
pH	pH Units	6.5-9.0	-	7.0-8.7	-		7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	**6.55**	**6.56**	**6.93**	7.17	7.37	7	**6.9**	7.36	7.90	7.71	7.84	7.44	7.38	7.74	7.71	7.52	-
Electrical Conductivity (EC)	µS/cm	-	-	-	-		81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	81.1	97.4	109	87.7	43	87	110	92.9	185	94.8	113	104	-	100	-	99.4	-
Total Suspended Solids (TSS)	µg/L	-	-	-	-		20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	-	-	-	-	-	-	-	-	34,900	5,800	7,900	26,100	-	6,600	-	6,300	-
Total Dissolved Solids (TDS)	µg/L	-	-	-	-		55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	-	58,000	-	58,000	-	60,000	-	75,000	101,000	-	-	-	68,000	63,000	-	76,000	-
Hardness as $CaCO_3$	mg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	-	29,500	-	27,200	-	27,000	-	29,500	-	-	-	-	-	-	-	-	-	-
Alkalinity (total as $CaCO_3$)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	23,600	31,400	34,800	26,200	23,100	26,800	33,900	36,400	-	-	-	-	-	-	-	-	-
Alkalinity (P)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	-	-	-	-	-	-	-	-	-
Bicarbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	23,600	31,400	34,800	26,200	23,100	26,800	33,900	36,400	-	-	-	-	-	-	-	-	-
Carbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	-	-	-	-	-	-	-	-	-
Hydroxide	µg/L	-	-	-	-		26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	71,600	28,800	35,600	33,800	-	30,200	-	32,400	-
Bromide	µg/L	-	-	-	-		<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	-
Chloride	µg/L	150,000 [#5]	-	-	-		7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	7,960	8,680	9,630	7,900	7,170	7,670	9,010	7,790	7,590	9,370	10,600	9,400	8,630	10,000	10,700	9,820	8,970
Fluoride	µg/L	887 [#3,4]	-	1,500 [#3]	-		29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	43	21	28	22	<20	23	28	<20	<100
Sulphate	µg/L	218,000 [#4,5]	-	-	-		2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	2,500	2,400	3,300	2,100	1,600	1,400	3,000	1,800	16,400	3,250	3,740	3,020	2,280	2,940	3,860	2,070	2,500
Sulphide (as S)	µg/L	-	-	-	-		-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<18	<2.0	22	<2.0	<2.0	<2.0	<2.0	2.2	-
Sulphide (as H2S)	µg/L	-	2	-	-		-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	<2.0	<2.0	2.3	-
Sulphide, total	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<20	-	<20	<20	<20	<20	<20	<20	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	<20
Turbidity	NTU	-	-	-	-		-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.94	-	11.2	-	-	-	-	-	-
Acidity	µg/L	-	-	-	-		-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,200	-	2,200	-	-
Nutrients																																					
Ammonia as N	µg/L	1,850 [#5,6]	-	9,400 [#5,7]	-		5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	-	<50	252	62	<50	<50	<50	<50	11.2	8.2	6.5	<5.0	24.6	10.5	9.4	9.2	<50
Nitrate (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	160	76	64	97	143	67	97	64	196	122	99	72.5	221	86.6	62	62	224
Nitrite (as N)	µg/L	100 [#5,8]	-	-	-		1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	1.9	1.1	3.0	<1.0	4.0	<1.0	<1.0	<1.0	<10
Nitrate and Nitrite (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		-	-	-	-	-	54.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	87.1	-	-	-	-
Demand Parameters																																					
Biochemical Oxygen Demand (BOD)	µg/L	-	-	-	-		-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	-	<3,200	-	5,100	-	<4,000	-	<4,000	-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,000	-
Chemical Oxygen Demand (COD)	µg/L	-	-	-	-		<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	23,000	-	<20,000	-	<20,000	-	30000	40,000	<20,000	-	33,000	-	<20,000	-	<20,000	-
Carbon																																					
Dissolved Organic Carbon (DOC)	µg/L	-	-	-	-		-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	-	4,690	-	4,970	-	4,670	-	4,620	-	-	-	-	-	3,610	-	3,930	-	-
Total Organic Carbon (TOC)	µg/L	-	-	-	-		-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3020	-	3520	-	-	-	-	-	-
Phenols																																					
Phenols (4AAP)	µg/L	-	-	-	-		1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	<0.50	-	-	-	-	-	-	-	4.5	<1.0	-	-	-	<1.0	-	2.3	
Phenolics	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																																					
Aluminum	µg/L	-	-	-	-		-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	-	10.9	-	30.2	-	15.6	-	19.4	-	-	-	-	-	13.3	-	13.1	-
Antimony	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	<0.20	-	<0.20	-	<0.2	-	<0.2	-	-	-	-	-	<0.10	-	<0.10	-
Arsenic	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	-	-	-	-	<0.10	-	<0.10	-
Barium	µg/L	-	-	-	-		-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	-	<5.0	-	<5.0	-	<5	-	<5	-	-	-	-	-	3.31	-	3.29	-
Beryllium	µg/L	-	-	-	-		-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	-	-	-	-	<0.020	-	<0.10	-
Bismuth	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	-	-	-	-	<0.050	-	<0.050	-
Boron	µg/L	-	-	-	-		-	-	-	-	-	<10	-	<10	-	-	-	<50	-	<50.0	-	<50.0	-	<50	-	<50	-	-	-	-	-	<10	-	<10	-
Cadmium	µg/L	0.0932 [#4,5]	-	-	-		-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	<0.010	-	<0.010	-	<0.01	-	<0.01	-	-	-	-	-	<0.0050	-	<0.0050	-
Calcium	µg/L	-	-	-	-		-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	-	8,780	-	8,290	-	7,640	-	8,540	-	-	-	-	-	8,990	-	10,000	-
Cesium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	<0.020	-	<0.020	-	<0.02	-	<0.02	-	-	-	-	-	<0.010	-	<0.010	-
Chromium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	<5.0	-	<5.0	-	<5	-	<5	-	-	-	-	-	<0.50	-	0.5	-
Cobalt	µg/L	0.85 [#4,5]	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	-	-	-	-	<0.10	-	<0.10	-
Copper	µg/L	0.862 [#5,10]	-	-	-		-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	-	<0.40	-	0.45	-	<0.4	-	<0.4	-	-	-	-	-	0.4	-	0.2	-
Iron	µg/L	350 [#3]	-	-	-		-	-	-	-	-	172	-	784	-	-	-	404	-	242	-	563	-	249	-	506	-	-	-	-	-	143	-	729	-
Lead	µg/L	3.67 [#5,11]	-	-	-		-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	-	<0.20	-	<0.20	-	<0.2	-	<0.2	-	-	-	-	-	<0.050	-	0.09	-
Lithium	µg/L	-	-	-	-		-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	-	0.34	-	0.24	-	0.26	-	0.24	-	-	-	-	-	<1.0	-	<1.0	-
Magnesium	µg/L	-	-	-	-		-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	-	1,850	-	1,580	-	1,410	-	1,650	-	-	-	-	-	1,790	-	1,720	-
Manganese	µg/L	-	-	-	-		-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	-	11.8	-	6.52	-	6.79	-	6.7	-	-	-	-	-	4.1	-	3.64	-
Mercury	µg/L	-	-	-	-		-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	<0.010	-	<0.010	-	<0.04	-	<0.01	-	-	-	-	-	-	-	<0.0050	-
Molybdenum	µg/L	-	-	-	-		-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	-	0.11	-	0.15	-	0.17	-	0.13	-	-	-	-	-	0.181	-	0.14	-
Nickel	µg/L	1.3 [#5,10,13]	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	<0.40	-	<0.40	-	<0.4	-	<0.4	-	-	-	-	-	<0.50	-	<0.50	-
Phosphorus	µg/L	-	-	-	-		-	-	-	-	-	<50	-	<50	-	-	-	<50	-	<50	-	<50	-	<50	-	<50	-	-	-	-	-	<50	-	<50	-
Potassium	µg/L	-	-	-	-		-	-	-	-	-	789	-	624	-	-	-	770	-	710	-	750	-	720	-	790	-	-	-	-	-	878	-	673	-
Rubidium	µg/L	-	-	-	-		-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.61	-	0.55	-
Selenium	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	-	-	-	-	<0.050	-	<0.050	-
Silicon	µg/L	-	-	-	-		-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	-	5,500	-	6,100	-	4,000	-	5,900	-	-	-	-	-	4,360	-	5,450	-
Silver	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	<0.050	-	<0.050	-	<0.05	-	<0.05	-	-	-	-	-	<0.010	-	<0.010	-
Sodium	µg/L	-	-	-	-		-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	-	7,500	-	6,530	-	5,960	-	6,580	-	-	-	-	-	6,790	-	7,030	-
Strontium	µg/L	-	1,250 [#5,10]	-	-		-	-	-	-	-	53	-	58.3	-	-	-	38.7	-	57.3	-	49.4	-	48	-	53	-	-	-	-	-	58.1	-	60.9	-
Sulphur	µg/L	-	-	-	-		-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	-	<3,000	-	<3,000	-	<3,000	-	<3,000	-	-	-	-	-	850	-	600	-
Tellurium	µg/L	-	-	-	-		-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	-	-	-	-	<0.20	-	<0.20	-
Thallium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	<0.020	-	<0.020	-	<0.02	-	<0.02	-	-	-	-	-	<0.010	-	<0.010	-
Thorium	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	-	-	-	-	<0.10	-	<0.10	-
Tin	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	<0.20	-	<0.20	-	<0.2	-	<0.2	-	-	-	-	-	<0.10	-	<0.10	-
Titanium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	<5.0	-	<5.0	-	<5	-	<5	-	-	-	-	-	<0.30	-	<0.30	-
Tungsten	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	<1.0	-	<1.0	-	<1	-	<1	-	-	-	-	-	<0.10	-	<0.10	-
Uranium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	<0.020	-	<0.020	-	<0.02	-	<0.02	-	-	-	-	-	0.022	-	0.011	-
Vanadium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	<5.0	-	<5.0	-	<5	-	<5	-	-	-	-	-	<0.50	-	0.5	-
Zinc	µg/L	7.55 [#5,10]	-	-	-		-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	-	<4.0	-	<4.0	-	<4	-	<4	-	-	-	-	-	1.2	-	<1.0	-
Zirconium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	-	-	-	-	<0.30	-	<0.20	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Location						SW-1														
Sample Date						25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	11-May-2021	19-Jul-2021	1-Dec-2021
Laboratory Report Number						-	L2254181	L2318207	L2367392	20A0908280120	20A5363250420	20B1139240720	20B9565301020	21B2866	21E1432	21G2459	21L0641	21E1432	21G2459	21L0641
Laboratory Sample ID						-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA20A5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	21E1432-07	21G2459-07	21L0641-07
Parameter	**Unit**	**BC WQG - Fresh AW** Approved	**BC WQG - Fresh AW** Working	**BC WQG - Marine AW** Approved	**BC WQG - Marine AW** Working															
Field Measurements																				
Temperature	°C	19 #1	-	-	-	-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	10.9	13.3	8.5
Electrical Conductivity	μS/cm	-	-	-	-	-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	145.9	116.6	51.4
Total Dissolved Solids (TDS)	mg/L	-	-	-	-	-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	94.9	97.5	49.1
Salinity	-	-	-	-	-	-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-	-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L	Minimum 5 #2	-	Minimum 5 #2	-	-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	10.59	10.6	12.7
pH	pH Units	6.5-9.0	-	7.0-8.7	-	-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	7.43	7.67	6.98
Oxidation Reduction Potential (ORP)	-	-	-	-	-	-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	142.7	44.6	51.7
Physical Parameters																				
pH	pH Units	6.5-9.0	-	7.0-8.7	-	7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	7.16	-	7.15
Electrical Conductivity (EC)	μS/cm	-	-	-	-	81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	160	-	80.2
Total Suspended Solids (TSS)	μg/L	-	-	-	-	20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	2,400	-	6,200
Total Dissolved Solids (TDS)	μg/L	-	-	-	-	55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	80400	-	-
Hardness as $CaCO_3$	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	51,300	51,500	25,700
Alkalinity (total as $CaCO_3$)	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	61,400	-	-	53,200	-	-
Alkalinity (P)	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	-	-
Bicarbonate	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	61,400	-	-	53,200	-	-
Carbonate	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	-	-
Hydroxide	μg/L	-	-	-	-	26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	<1,000	-	-
Bromide	μg/L	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-
Chloride	μg/L	150,000 #5	-	-	-	7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	11,400	12,600	6,420
Fluoride	μg/L	887 #3,4	-	1,500 #3	-	29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100
Sulphate	μg/L	218,000 #4,5	-	-	-	2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	5,900	6,500	2,100
Sulphide (as S)	μg/L	-	-	-	-	-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-
Sulphide (as H2S)	μg/L	-	2	-	-	-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-
Sulphide, total	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	<20	-	<20	<20	-	<20	<20
Turbidity	NTU	-	-	-	-	-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-
Acidity	μg/L	-	-	-	-	-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-
Nutrients																				
Ammonia as N	μg/L	1,850 #5,6	-	9,400 #5,7	-	5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	<50	<50	<50
Nitrate (as N)	μg/L	3,000 #5	-	3,700 #5	-	202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	260	229	152
Nitrite (as N)	μg/L	100 #5,8	-	-	-	1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	μg/L	3,000 #5	-	3,700 #5	-	-	-	-	-	-	54.4	-	-	-	-	-	-	-	-	-
Demand Parameters																				
Biochemical Oxygen Demand (BOD)	μg/L	-	-	-	-	-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	<2,400	-	<3,600
Chemical Oxygen Demand (COD)	μg/L	-	-	-	-	<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	<20,000	-	<20,000
Carbon																				
Dissolved Organic Carbon (DOC)	μg/L	-	-	-	-	-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	-	-	7,090
Total Organic Carbon (TOC)	μg/L	-	-	-	-	-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Phenols (4AAP)	μg/L	-	-	-	-	1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	-	-	-
Phenolics	μg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																				
Aluminum	μg/L	-	-	-	-	-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	-	-	65.9
Antimony	μg/L	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	<0.20
Arsenic	μg/L	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	-	<0.50
Barium	μg/L	-	-	-	-	-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	-	-	<5.00
Beryllium	μg/L	-	-	-	-	-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	-	<0.10
Bismuth	μg/L	-	-	-	-	-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	-	<0.10
Boron	μg/L	-	-	-	-	-	-	-	-	-	<10	-	<10	-	-	-	<50	-	-	<50
Cadmium	μg/L	0.0932 #4,5	-	-	-	-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	-	<0.010
Calcium	μg/L	-	-	-	-	-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	-	-	7,680
Cesium	μg/L	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-
Chromium	μg/L	-	-	-	-	-	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	-	-	0.84
Cobalt	μg/L	0.85 #4,5	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	<0.10
Copper	μg/L	0.862 #5,10	-	-	-	-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	-	-	0.6
Iron	μg/L	350 #3	-	-	-	-	-	-	-	-	172	-	784	-	-	-	404	-	-	398
Lead	μg/L	3.67 #5,11	-	-	-	-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	-	-	<0.20
Lithium	μg/L	-	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	-	-	0.21
Magnesium	μg/L	-	-	-	-	-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	-	-	1,570
Manganese	μg/L	-	-	-	-	-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	-	-	3.63
Mercury	μg/L	-	-	-	-	-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	-	<0.010
Molybdenum	μg/L	-	-	-	-	-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	-	-	0.16
Nickel	μg/L	1.3 #5,10,13	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	-	<0.40
Phosphorus	μg/L	-	-	-	-	-	-	-	-	-	<50	-	<50	-	-	-	<50	-	-	<50
Potassium	μg/L	-	-	-	-	-	-	-	-	-	789	-	624	-	-	-	770	-	-	810
Rubidium	μg/L	-	-	-	-	-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-
Selenium	μg/L	-	-	-	-	-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	-	<0.50
Silicon	μg/L	-	-	-	-	-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	-	-	6,000
Silver	μg/L	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	-	<0.050
Sodium	μg/L	-	-	-	-	-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	-	-	5,830
Strontium	μg/L	-	1,250 #5,10	-	-	-	-	-	-	-	53	-	58.3	-	-	-	38.7	-	-	42.9
Sulphur	μg/L	-	-	-	-	-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	-	-	<3,000
Tellurium	μg/L	-	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	-	<0.50
Thallium	μg/L	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	-	<0.020
Thorium	μg/L	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	<0.10
Tin	μg/L	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	<0.20
Titanium	μg/L	-	-	-	-	-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	-	<5.00
Tungsten	μg/L	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	-	<1.0
Uranium	μg/L	-	-	-	-	-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	-	0.023
Vanadium	μg/L	-	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	-	<1.0
Zinc	μg/L	7.55 #5,10	-	-	-	-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	-	-	4
Zirconium	μg/L	-	-	-	-	-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-	-	<0.10

Location	SW-2														
Sample Date	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	UP (22-Feb-202	24-Jun-2024	UP (24-Jun-202	16-Sep-2024	9-Dec-2024	10-Mar-2025
Laboratory Report Number	22C0773	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24B2509	24F3072	24F3072	24I2276	24L1123	25C1419
Laboratory Sample ID	2C0773-07	22G1537-07	22J1342-02	22L1310-07	23C0154-06	23E2913-06	23I3541-06	23L2282-06	24B2509-06	24B2509-09	24F3072-06	24F3072-09	24I2276-06	24L1123-06	25C1419-07
Field Measurements															
Temperature	7.0	15.5	11.3	4.5	3.8	13.3	11.5	6.5	6.9	-	14.9	-	13.2	6.5	6.6
Electrical Conductivity	46.4	94.1	128	63.3	54.4	87.9	81	48.6	61.1	-	95.7	-	96.1	58	52.7
Total Dissolved Solids (TDS)	46.15	74.6	83.2	67.5	59.15	73.6	71	48.1	60.7	-	77.6	-	80.6	58.4	53.1
Salinity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.5
Dissolved Oxygen (mg/L)	11.3	10.21	11.8	12.91	12.51	9.48	9.92	11.79	13.9	-	10.7	-	10	12.02	-
pH	8.33	7.85	7.88	7.53	7.42	7.72	**5.62**	6.85	7.5	-	7.61	-	7.24	7.05	7.68
Oxidation Reduction Potential (ORP)	141.0	80.1	55.8	63.2	59.4	71.1	167.4	101.8	6.3	-	96	-	85	26.2	133.3
Physical Parameters															
pH	-	7.51	-	7.1	**6.67**	**6.59**	**6.75**	**6.58**	**6.5**	**6.52**	**6.51**	6.78	**6.99**	7.21	7.37
Electrical Conductivity (EC)	-	127	-	108	93.1	110	104	92.2	86.2	85.4	109	162	130	94.4	67.4
Total Suspended Solids (TSS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	-	80,000	-	-	-	65,000	-	92000	-	-	85,000	-	-	50,000	-
Hardness as $CaCO_3$	25,600	43,400	39,700	32,000	-	38,100	-	28,800	-	-	34,700	33,800	-	29,600	-
Alkalinity (total as $CaCO_3$)	-	-	-	-	28400	37,200	39900	30800	27,400	27,000	33,100	59,000	42,700	28,500	24,100
Alkalinity (P)	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	-	-	-	-	28400	37,200	39900	30800	27,400	27,000	33,100	59,000	42,700	28,500	24,100
Carbonate	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	9,930	9,460	10,900	10,400	10,300	10,200	10,800	9,200	8,260	8,180	9,320	9,350	10,800	8,310	7,330
Fluoride	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	2,600	5,200	4,100	2,700	2,500	3,600	3,000	2,300	3,300	3,200	2,800	2,800	3,700	2,200	1,600
Sulphide (as S)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	<20	<20	<20	<20	<20	<20	<20	<20	<20	-	<20	-	<20	<20	<0.01
Turbidity	-	-	-	-	-	-	-	-	-	-	<20	-	<20	<20	-
Acidity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients															
Ammonia as N	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	100	<50	<50
Nitrate (as N)	203	187	162	96	111	156	131	95	174	175	106	104	141	122	149
Nitrite (as N)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	-	187	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters															
Biochemical Oxygen Demand (BOD)	-	<3,800	-	<2,200	-	<1,400	-	<2,800	-	-	<3,200	-	-	<2,700	-
Chemical Oxygen Demand (COD)	-	<20,000	-	48,000	-	<20,000	-	24,000	-	-	<20,000	-	-	<20,000	-
Carbon															
Dissolved Organic Carbon (DOC)	-	-	-	-	-	-	-	-	-	-	3,610	-	-	4,910	-
Total Organic Carbon (TOC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols															
Phenols (4AAP)	<2.0	-	-	-	<2.00	-	-	-	<0.50	-	-	-	-	-	-
Phenolics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2
Dissolved Metals															
Aluminum	-	-	-	-	-	-	-	-	-	-	13.6	11.8	-	29.6	-
Antimony	-	-	-	-	-	-	-	-	-	-	<0.20	<0.20	-	<0.20	-
Arsenic	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50	-	<0.50	-
Barium	-	-	-	-	-	-	-	-	-	-	<5.0	<5.0	-	<5.0	-
Beryllium	-	-	-	-	-	-	-	-	-	-	<0.10	<0.10	-	<0.10	-
Bismuth	-	-	-	-	-	-	-	-	-	-	<0.10	<0.10	-	<0.10	-
Boron	-	-	-	-	-	-	-	-	-	-	<50.0	<50.0	-	<50.0	-
Cadmium	-	-	-	-	-	-	-	-	-	-	<0.010	<0.010	-	<0.010	-
Calcium	-	-	-	-	-	-	-	-	-	-	10,100	9,860	-	9,010	-
Cesium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50	-	<0.50	-
Cobalt	-	-	-	-	-	-	-	-	-	-	<0.10	<0.10	-	<0.10	-
Copper	-	-	-	-	-	-	-	-	-	-	<0.40	<0.40	-	0.48	-
Iron	-	-	-	-	-	-	-	-	-	-	193	193	-	511	-
Lead	-	-	-	-	-	-	-	-	-	-	<0.20	<0.20	-	<0.20	-
Lithium	-	-	-	-	-	-	-	-	-	-	0.45	0.47	-	0.27	-
Magnesium	-	-	-	-	-	-	-	-	-	-	2,290	2,220	-	1,730	-
Manganese	-	-	-	-	-	-	-	-	-	-	5.39	5.47	-	5.61	-
Mercury	-	-	-	-	-	-	-	-	-	-	<0.010	<0.010	-	<0.010	-
Molybdenum	-	-	-	-	-	-	-	-	-	-	0.12	0.14	-	0.15	-
Nickel	-	-	-	-	-	-	-	-	-	-	<0.40	<0.40	-	<0.40	-
Phosphorus	-	-	-	-	-	-	-	-	-	-	<50	<50	-	<50	-
Potassium	-	-	-	-	-	-	-	-	-	-	870	910	-	810	-
Rubidium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50	-	<0.50	-
Silicon	-	-	-	-	-	-	-	-	-	-	6,800	6,400	-	6,300	-
Silver	-	-	-	-	-	-	-	-	-	-	<0.050	<0.050	-	<0.050	-
Sodium	-	-	-	-	-	-	-	-	-	-	8,420	7,910	-	6,810	-
Strontium	-	-	-	-	-	-	-	-	-	-	65.1	69.2	-	53.3	-
Sulphur	-	-	-	-	-	-	-	-	-	-	<3,000	<3,000	-	<3,000	-
Tellurium	-	-	-	-	-	-	-	-	-	-	<0.50	<0.50	-	<0.50	-
Thallium	-	-	-	-	-	-	-	-	-	-	<0.020	<0.020	-	<0.020	-
Thorium	-	-	-	-	-	-	-	-	-	-	<0.10	<0.10	-	<0.10	-
Tin	-	-	-	-	-	-	-	-	-	-	<0.20	<0.20	-	<0.20	-
Titanium	-	-	-	-	-	-	-	-	-	-	<5.0	<5.0	-	<5.0	-
Tungsten	-	-	-	-	-	-	-	-	-	-	<1.0	<1.0	-	<1.0	-
Uranium	-	-	-	-	-	-	-	-	-	-	<0.020	<0.020	-	<0.020	-
Vanadium	-	-	-	-	-	-	-	-	-	-	<5.0	<5.0	-	<5.0	-
Zinc	-	-	-	-	-	-	-	-	-	-	<4.0	<4.0	-	<4.0	-
Zirconium	-	-	-	-	-	-	-	-	-	-	<0.10	<0.10	-	<0.10	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		SW-1														SW-3									
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	26-May-2025	14-Jul-2025	2-Dec-2025	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122020A5363250420B113924072020B9565301020				21B2866	21E1432	21G2459	21L0641	25E3516	25G2084	25L0435	-	L2254182	L2318207	L2367392	20A0908280122020A5363250420B113924072020B9565301020								
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	25E3516-07	25G2084-07	25L0435-07	-	L2254182-1	L2318207-8	L2367392-8	VA20A0908-009VA20A5363-009VA20B1139-009VA20B9565-008								
		Approved	Working	Approved	Working																														
Field Measurements																																			
Temperature	°C	19 [#1]	-	-	-		-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	13.8	15.8	6.3	-	9.93	15.71	10.5	5.93	13.05	16.2	9.3	4.1	10.7	13.9	8.3	7.1	15.6
Electrical Conductivity	µS/cm	-	-	-	-		-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	78.9	108.7	62.9	-	96	98	84.4	85.7	79	176.7	96.6	53.5	128.8	127.8	54.1	47.7	102.5
Total Dissolved Solids (TDS)	mg/L	-	-	-	-		-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	65.1	85.3	63.7	-	62	770	-	-	67	82.5	63	57.9	83.85	105.3	51.6	47.45	81.2
Salinity	-	-	-	-	-		-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	0.06	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-		-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L	Minimum 5 [#2]	-	Minimum 5 [#2]	-		-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	9.32	14.71	11.15	-	12.41	9.96	-	12.87	10.69	7.74	11.3	14.7	10.9	9.68	13.3	11.78	10.81
pH	pH Units	6.5-9.0	-	7.0-8.7	-		-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	7.12	8.23	7.33	-	7.44	**6.84**	7.97	6.48	7.51	8.52	7.65	7.48	6.64	7.72	6.56	**6.3**	7.9
Oxidation Reduction Potential (ORP)	-	-	-	-	-		-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	96.9	67.1	90.8	-	83.7	262	-	126.1	129.7	-	34.6	67.6	163.6	100.3	-27.2	171.8	72.1
Physical Parameters																																			
pH	pH Units	6.5-9.0	-	7.0-8.7	-		7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	7.11	**6.95**	7.35	7.71	7.76	7.83	7.52	7.40	7.74	7.72	7.55	-	7.64	-	7.1	-	7.47
Electrical Conductivity (EC)	µS/cm	-	-	-	-		81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	102	124	100	88.6	99.1	123	120	-	106	-	102	-	140	-	83.3	-	174
Total Suspended Solids (TSS)	µg/L	-	-	-	-		20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	-	-	-	23,500	6,600	9,900	22,700	-	5,400	-	6,100	-	<3,300	-	6,800	-	-
Total Dissolved Solids (TDS)	µg/L	-	-	-	-		55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	60,000	-	55,000	68,000	-	-	-	69,000	72,000	-	82,000	-	70800	-	-	-	101,000
Hardness as $CaCO_3$	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	32,500	-	32,100	-	-	-	-	-	-	-	-	-	39,900	55,900	26,000	27,400	37,800
Alkalinity (total as $CaCO_3$)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	31,500	38,200	37,900	-	-	-	-	-	-	-	-	-	45,900	-	-	-	-
Alkalinity (P)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	<1,000	<1,000	-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-
Bicarbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	31,500	38,200	37,900	-	-	-	-	-	-	-	-	-	45,900	-	-	-	-
Carbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	<1,000	<1,000	-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-
Hydroxide	µg/L	-	-	-	-		26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	<1,000	<1,000	<1,000	29,500	30,300	38,000	38,500	-	30,200	-	33,500	-	<1,000	-	-	-	-
Bromide	µg/L	-	-	-	-		<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-
Chloride	µg/L	150,000 [#5]	-	-	-		7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	8,680	10,200	8,130	7,870	9,440	10,700	9,830	8,620	10,000	10,700	9,830	9,160	10,600	12,300	6,580	9,900	9,490
Fluoride	µg/L	887 [#3,4]	-	1,500 [#3]	-		29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100	25	22	33	25	<20	24	30	20	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	218,000 [#4,5]	-	-	-		2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	1,700	2,900	1,900	3,190	3,850	4,830	4,330	2,400	3,460	4,600	2,320	2,900	5,700	8,400	2,400	3,000	4,100
Sulphide (as S)	µg/L	-	-	-	-		-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	<18	<2.0	<18	<2.0	<2.0	3.1	<2.0	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	-	2	-	-		-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	<2.0	<2.0	3.3	<2.0	-	-	-	-	-	-	-
Sulphide, total	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<20	-	<20	<20	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	<20	-	<20	<20	<20	<20	<20
Turbidity	NTU	-	-	-	-		-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-	-	2.58	-	7.59	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L	-	-	-	-		-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-	6,300	-	<2,000	-	-	-	-	-	-	-
Nutrients																																			
Ammonia as N	µg/L	1,850 [#5,6]	-	9,400 [#5,7]	-		5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	<50	<50	<50	5.9	9.1	6.3	<5.0	23	6.9	12.3	6.2	<50	<50	<50	<50	64	<50
Nitrate (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	91	130	89	212	123	91.5	58.9	226	87.7	139	64.3	227	183	228	157	198	195
Nitrite (as N)	µg/L	100 [#5,8]	-	-	-		1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10	1.4	<1.0	3.0	<1.0	3.9	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		-	-	-	-	-	54.4	-	-	-	-	-	-	-	-	-	-	-	-	-	88.2	-	-	-	-	-	-	-	195
Demand Parameters																																			
Biochemical Oxygen Demand (BOD)	µg/L	-	-	-	-		-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	<4,000	-	<4,000	-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<1,200	-	<3,600	-	<3,800
Chemical Oxygen Demand (COD)	µg/L	-	-	-	-		<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	<20,000	-	30,000	<20,000	<20,000	-	25,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000
Carbon																																			
Dissolved Organic Carbon (DOC)	µg/L	-	-	-	-		-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	4,680	-	4,300	-	-	-	-	-	3,520	-	3,680	-	-	-	7,360	-	-
Total Organic Carbon (TOC)	µg/L	-	-	-	-		-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-	-	3,020	-	5,560	-	-	-	-	-	-	-	-	-	-
Phenols																																			
Phenols (4AAP)	µg/L	-	-	-	-		1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	-	-	-	4.3	<1.0	-	-	-	-	<1.0	-	<2.0	-	-	-	<2.0	-
Phenolics	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																																			
Aluminum	µg/L	-	-	-	-		-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	15.6	-	18.9	-	-	-	-	-	14	-	14.2	-	-	-	66.6	-	-
Antimony	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	<0.2	-	<0.2	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-
Arsenic	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	<0.5	-	<0.5	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	-
Barium	µg/L	-	-	-	-		-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	<5	-	<5	-	-	-	-	-	3.06	-	3.24	-	-	-	<5.00	-	-
Beryllium	µg/L	-	-	-	-		-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	<0.1	-	<0.1	-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	-
Bismuth	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	<0.1	-	<0.1	-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	-
Boron	µg/L	-	-	-	-		-	-	-	-	-	<10	-	<10	-	-	-	<50	<50	-	<50	-	-	-	-	-	<10	-	<10	-	-	-	<50	-	-
Cadmium	µg/L	0.0932 [#4,5]	-	-	-		-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	<0.01	-	<0.01	-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	-
Calcium	µg/L	-	-	-	-		-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	9,340	-	9,290	-	-	-	-	-	9,410	-	9,890	-	-	-	7,660	-	-
Cesium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-
Chromium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	<0.5	-	<0.5	-	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	-	-
Cobalt	µg/L	0.85 [#4,5]	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	<0.1	-	<0.1	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-
Copper	µg/L	0.862 [#5,10]	-	-	-		-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	<0.4	-	1.18	-	-	-	-	-	0.37	-	0.21	-	-	-	1.14	-	-
Iron	µg/L	350 [#3]	-	-	-		-	-	-	-	-	172	-	784	-	-	-	404	200	-	437	-	-	-	-	-	147	-	726	-	-	-	398	-	-
Lead	µg/L	3.67 [#5,11]	-	-	-		-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	<0.2	-	<0.2	-	-	-	-	-	<0.050	-	0.089	-	-	-	<0.20	-	-
Lithium	µg/L	-	-	-	-		-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	0.32	-	0.29	-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.23	-	-
Magnesium	µg/L	-	-	-	-		-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	1,750	-	1,790	-	-	-	-	-	1,840	-	1,770	-	-	-	1,670	-	-
Manganese	µg/L	-	-	-	-		-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	0.74	-	4.53	-	-	-	-	-	3.8	-	3.48	-	-	-	3.67	-	-
Mercury	µg/L	-	-	-	-		-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	<0.04	-	<0.01	-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	-
Molybdenum	µg/L	-	-	-	-		-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	0.17	-	0.14	-	-	-	-	-	0.195	-	0.154	-	-	-	0.15	-	-
Nickel	µg/L	1.3 [#5,10,13]	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	<0.4	-	<0.4	-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	-
Phosphorus	µg/L	-	-	-	-		-	-	-	-	-	<50	-	<50	-	-	-	<50	<50	-	<50	-	-	-	-	-	<50	-	<50	-	-	-	<50	-	-
Potassium	µg/L	-	-	-	-		-	-	-	-	-	789	-	624	-	-	-	770	870	-	850	-	-	-	-	-	958	-	714	-	-	-	880	-	-
Rubidium	µg/L	-	-	-	-		-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-	-	-	-	-	-	0.63	-	0.51	-	-	-	-	-	-
Selenium	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	<0.5	-	<0.5	-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	-
Silicon	µg/L	-	-	-	-		-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	4,900	-	6,500	-	-	-	-	-	4,460	-	5,490	-	-	-	5,400	-	-
Silver	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	<0.05	-	<0.05	-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	-
Sodium	µg/L	-	-	-	-		-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	6,740	-	6,890	-	-	-	-	-	7,790	-	7,210	-	-	-	6,130	-	-
Strontium	µg/L	-	1,250 [#5,10]	-	-		-	-	-	-	-	53	-	58.3	-	-	-	38.7	58.9	-	57.8	-	-	-	-	-	62.8	-	62.2	-	-	-	42.6	-	-
Sulphur	µg/L	-	-	-	-		-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	<3,000	-	<3,000	-	-	-	-	-	1,030	-	520	-	-	-	<3,000	-	-
Tellurium	µg/L	-	-	-	-		-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	<0.5	-	<0.5	-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	-
Thallium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	<0.02	-	<0.02	-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	-
Thorium	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	<0.1	-	<0.1	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-
Tin	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	<0.2	-	<0.2	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-
Titanium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	<5	-	<5	-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	-
Tungsten	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	<1	-	<1	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	-
Uranium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	0.022	-	<0.02	-	-	-	-	-	0.027	-	0.013	-	-	-	0.028	-	-
Vanadium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	<5	-	<5	-	-	-	-	-	<0.50	-	0.50	-	-	-	<1.0	-	-
Zinc	µg/L	7.55 [#5,10]	-	-	-		-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	<4	-	<4	-	-	-	-	-	1.5	-	<1.0	-	-	-	<4	-	-
Zirconium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	<0.1	-	<0.1	-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																						SW-3		
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	11-Oct-2022	12-Dec-2022	28-Feb-2023	UP (28-Feb-202	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	UP (10-Mar-202	26-May-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A090828012(20A536325042(20B113924072(20B956530102(		21B2866	21E1432	21G2459	21L0641	22J1342	22L1310	23C0154	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25C1419	25E3516
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007(VA20A5363-007(VA20B1139-007(VA20B9565-006		21B2866-06	21E1432-06	21G2459-06	21L0641-06	22J1342-03	22L1310-08	23C0154-07	23C0154-09	23E2913-07	23I3541-07	23L2282-07	24B2509-07	24F3072-07	24I2276-07	24L1123-07	25C1419-08	25C1419-10	25E3516-08
		Approved	Working	Approved	Working																										
Field Measurements																															
Temperature	°C	19 [#1]	-	-	-		-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	11.4	4.7	3.9	3.9	13.2	11.5	6.6	6.9	14.7	13.1	6.5	6.5	-	13.7
Electrical Conductivity	µS/cm	-	-	-	-		-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	136.7	67.4	58.5	58.5	92.9	87.3	54.7	63.4	117.8	101.4	62.9	55.4	-	84
Total Dissolved Solids (TDS)	mg/L	-	-	-	-		-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	88.9	71.5	63.7	63.7	78	76	54.6	63	94.9	85.15	63.2	55.5	-	69.6
Salinity	-	-	-	-	-		-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-		-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109.3	-	-
Dissolved Oxygen	mg/L	Minimum 5 [#2]	-	Minimum 5 [#2]	-		-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	11.63	13.46	12.53	12.53	11.3	10.85	11.52	12.46	10.4	9.82	12	-	-	9.51
pH	pH Units	6.5-9.0	-	7.0-8.7	-		-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	7.9	7.11	7.08	7.08	7.46	***5.64***	7.31	7.4	**6.8**	7.66	7.57	7.54	-	7.44
Oxidation Reduction Potential (ORP)	-	-	-	-	-		-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	83	28.9	76.6	76.6	67.4	188.6	107.2	10.9	171.4	94.7	33.2	136.5	-	92.1
Physical Parameters																															
pH	pH Units	6.5-9.0	-	7.0-8.7	-		7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	-	7.09	**6.61**	**6.74**	**6.63**	**6.78**	**6.6**	**6.52**	**6.56**	7.05	7.23	7.42	7.41	7.12
Electrical Conductivity (EC)	µS/cm	-	-	-	-		81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	-	115	103	101	117	113	97.1	89.2	120	138	98.1	60.6	85.8	100
Total Suspended Solids (TSS)	µg/L	-	-	-	-		20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	-	-	-	-		55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	-	-	-	-	75000	-	100000	-	72,000	-	58,000	-	-	65000
Hardness as $CaCO_3$	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	42,500	34,800	-	-	39,900	-	30,100	-	37,800	-	31,000	-	-	32,700
Alkalinity (total as $CaCO_3$)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	-	-	24600	29600	38300	43700	33000	28,700	38,500	46,500	29,300	26,000	26,700	31,300
Alkalinity (P)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	-	-	24600	29600	38300	43700	33000	28,700	38,500	46,500	29,300	26,000	26,700	31,300
Carbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	-	-	-	-		26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	-	-	-	-		<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	150,000 [#5]	-	-	-		7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	10,700	10,400	10,200	10,200	10,100	10,600	9,150	8,230	9,240	10,800	8,340	7,380	7,090	9,040
Fluoride	µg/L	887 [#3,4]	-	1,500 [#3]	-		29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	218,000 [#4,5]	-	-	-		2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	5,100	3,500	7,700	3,600	4,700	4,700	2,700	3,500	3,400	4,400	2,500	1,800	2,300	1,700
Sulphide (as S)	µg/L	-	-	-	-		-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	-	2	-	-		-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<20	-	<20	<20	<20	<20	<20	-	<20	<20	<20	<20	<20	<20	<20	<0.01	<0.01	<0.01
Turbidity	NTU	-	-	-	-		-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L	-	-	-	-		-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																															
Ammonia as N	µg/L	1,850 [#5,6]	-	9,400 [#5,7]	-		5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	<50	152	<50	<50	<50	<50	<50	-	<50	140	73	<50	<50	<50
Nitrate (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	161	91	117	115	153	132	94	177	108	140	121	154	159	93
Nitrite (as N)	µg/L	100 [#5,8]	-	-	-		1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		-	-	-	-	-	54.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																																
Biochemical Oxygen Demand (BOD)	µg/L	-	-	-	-		-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	-	<2,200	-	-	<1,400	-	<2,800	-	<3,200	-	<2,700	-	-	<4,000
Chemical Oxygen Demand (COD)	µg/L	-	-	-	-		<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	-	<20,000	-	47000	-	25,000	-	<20,000	-	-	<20,000
Carbon																																
Dissolved Organic Carbon (DOC)	µg/L	-	-	-	-		-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	-	-	-	-	-	-	-	-	3,810	-	5,240	-	-	4,410
Total Organic Carbon (TOC)	µg/L	-	-	-	-		-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																																
Phenols (4AAP)	µg/L	-	-	-	-		1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	-	-	<2.00	-	-	-	-	<0.50	-	-	-	-	-	-
Phenolics	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	<2	-
Dissolved Metals																																
Aluminum	µg/L	-	-	-	-		-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	-	-	-	-	-	-	-	-	13.7	-	28.9	-	-	16
Antimony	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	-	<0.2
Arsenic	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	<0.5
Barium	µg/L	-	-	-	-		-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	-	<5
Beryllium	µg/L	-	-	-	-		-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	<0.1
Bismuth	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	<0.1
Boron	µg/L	-	-	-	-		-	-	-	-	-	<10	-	<10	-	-	-	<50	-	-	-	-	-	-	-	-	<50.0	-	<50.0	-	-	<50
Cadmium	µg/L	0.0932 [#4,5]	-	-	-		-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	<0.01
Calcium	µg/L	-	-	-	-		-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	-	-	-	-	-	-	-	-	11,100	-	9,320	-	-	9,240
Cesium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-	0.021	-	0.021	-	-	<0.02
Chromium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.10	-	-	-	<1.0	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	-	<5
Cobalt	µg/L	0.85 [#4,5]	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	<0.1
Copper	µg/L	0.862 [#5,10]	-	-	-		-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	-	-	-	-	-	-	-	-	0.42	-	0.42	-	-	<0.4
Iron	µg/L	350 [#3]	-	-	-		-	-	-	-	-	172	-	784	-	-	-	404	-	-	-	-	-	-	-	-	186	-	519	-	-	195
Lead	µg/L	3.67 [#5,11]	-	-	-		-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	-	<0.2
Lithium	µg/L	-	-	-	-		-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	-	-	-	-	-	-	-	-	0.48	-	0.28	-	-	0.31
Magnesium	µg/L	-	-	-	-		-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	-	-	-	-	-	-	-	-	2,470	-	1,870	-	-	1,700
Manganese	µg/L	-	-	-	-		-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	-	-	-	-	-	-	-	-	6.79	-	5.81	-	-	0.75
Mercury	µg/L	-	-	-	-		-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	<0.04
Molybdenum	µg/L	-	-	-	-		-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	-	-	-	-	-	-	-	-	0.15	-	0.16	-	-	0.16
Nickel	µg/L	1.3 [#5,10,13]	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	-	-	-	-	-	-	-	<0.40	-	<0.40	-	-	<0.4
Phosphorus	µg/L	-	-	-	-		-	-	-	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	-	<50	-	<50	-	-	<50
Potassium	µg/L	-	-	-	-		-	-	-	-	-	789	-	624	-	-	-	770	-	-	-	-	-	-	-	-	980	-	910	-	-	850
Rubidium	µg/L	-	-	-	-		-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	<0.5
Silicon	µg/L	-	-	-	-		-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	-	-	-	-	-	-	-	-	6,600	-	6,300	-	-	4,800
Silver	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	-	-	-	-	-	-	-	<0.050	-	<0.050	-	-	<0.05
Sodium	µg/L	-	-	-	-		-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	-	-	-	-	-	-	-	-	9,100	-	7,340	-	-	6,510
Strontium	µg/L	-	1,250 [#5,10]	-	-		-	-	-	-	-	53	-	58.3	-	-	-	38.7	-	-	-	-	-	-	-	-	70.8	-	57.3	-	-	57
Sulphur	µg/L	-	-	-	-		-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	-	-	-	-	-	-	-	-	<3,000	-	<3,000	-	-	<3,000
Tellurium	µg/L	-	-	-	-		-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	<0.5
Thallium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-	<0.020	-	<0.020	-	-	<0.02
Thorium	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	<0.1
Tin	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	-	<0.2
Titanium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	-	<5
Tungsten	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	-	<1
Uranium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-	0.021	-	0.021	-	-	<0.02
Vanadium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	-	<5
Zinc	µg/L	7.55 [#5,10]	-	-	-		-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	-	-	-	-	-	-	-	-	<4.0	-	<4.0	-	-	<4
Zirconium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.20	-	-	-	0.61	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	<0.1

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																SW-4									
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	14-Jul-2025	UP (14-Jul-2025	2-Dec-2025	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280120A5363250420	20B1139240720	20B9565301020		21B2866	21E1432	21G2459	21L0641	25G2084	25G2084	25L0435	L2254182	L2318207	L2367392	20A0908280120A5363250420	20B1139240720	20B9565301020		21B2866	21E1432	21G2459	21L0641	22C0773
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007V	A20A5363-007V	A20B1139-007V	A20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	25G2084-08	25G2084-10	25L0435-08	L2254182-2	L2318207-9	L2367392-9	VA20A0908-010V	A20A5363-010V	A20B1139-010V	A20B9565-009	21B2866-09	21E1432-09	21G2459-09	21L0641-09	22C0773-09
Field Measurements																																
Temperature	°C	19 [#1]	-	-	-	-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	15.6	-	6.4	9.93	13.09	11	9.1	11.11	11.6	10.9	7.1	10.6	12.2	10.3	9.4
Electrical Conductivity	µS/cm	-	-	-	-	-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	114.9	-	69.3	125	132	145.3	182.2	136	180	176.5	106	153.2	121.5	115.8	106.4
Total Dissolved Solids (TDS)	mg/L	-	-	-	-	-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	90.4	-	65	114	111	-	-	120	117	114.4	105	100.75	104.65	104.65	98.8
Salinity	-	-	-	-	-	-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-	0.08	0.08	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-	-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	102.9	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	mg/L	Minimum 5 [#2]	-	Minimum 5 [#2]	-	-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	11.7	-	10.74	11.63	9.73	-	11.85	10.82	8.26	8.87	10	8.71	9.11	9.71	9.01
pH	pH Units	6.5-9.0	-	7.0-8.7	-	-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	8.2	-	7.46	**6.91**	**4.54**	7.32	5.75	7.18	7.23	7.25	7.07	7.13	7.17	6.22	**6.92**
Oxidation Reduction Potential (ORP)	-	-	-	-	-	-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	67.7	-	91.5	124.5	360	-	-	130.7	105.9	87.6	103	118	124.6	-5.2	153.2
Physical Parameters																																
pH	pH Units	6.5-9.0	-	7.0-8.7	-	-	7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	7.01	7.02	7.42	7.87	8.06	7.44	7.64	8.06	7.72	7.61	-	***6.86***	-	7.13	-
Electrical Conductivity (EC)	µS/cm	-	-	-	-	-	81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	131	131	106	180	182	160	-	187	-	184	-	169	-	170	-
Total Suspended Solids (TSS)	µg/L	-	-	-	-	-	20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	-	-	-	7,200	3,900	7,700	-	10,600	-	4,700	-	8,600	-	3,500	-
Total Dissolved Solids (TDS)	µg/L	-	-	-	-	-	55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	-	-	55,000	-	-	-	127,000	123,000	-	135,000	-	94700	-	-	-
Hardness as $CaCO_3$	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	-	-	31,300	-	-	-	-	-	-	-	-	55,400	59,400	60,200	59,000
Alkalinity (total as $CaCO_3$)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61,400	-	-	40,700	40,600	42,000	-	-	-	-	-	-	-	-	66,700	-	-	-
Alkalinity (P)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	<1,000	<1,000	-	-	-	-	-	-	-	-	<1,000	-	-	-
Bicarbonate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61,400	-	-	40,700	40,600	42,000	-	-	-	-	-	-	-	-	66,700	-	-	-
Carbonate	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1,000	-	-	<1,000	<1,000	<1,000	-	-	-	-	-	-	-	-	<1,000	-	-	-
Hydroxide	µg/L	-	-	-	-	-	26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	<1,000	<1,000	<1,000	69,100	63,200	53,800	-	65,500	-	68,400	-	<1,000	-	-	-
Bromide	µg/L	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-
Chloride	µg/L	150,000 [#5]	-	-	-	-	7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	10,900	10,200	7,920	9,430	10,100	7,990	9,220	9,760	10,000	10,200	9,330	9,520	10,200	8,670	9,840
Fluoride	µg/L	887 [#3,4]	-	1,500 [#3]	-	-	29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100	38	37	31	36	34	34	38	<100	<100	<100	<100	<100
Sulphate	µg/L	218,000 [#4,5]	-	-	-	-	2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	3,500	3,200	2,100	14,700	15,000	13,700	13,300	14,700	17,300	15,200	11,800	10,700	9,200	8,900	9,000
Sulphide (as S)	µg/L	-	-	-	-	-	-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	<18	<2.0	34	<2.0	2.5	<2.0	<2.0	-	-	-	-	-
Sulphide (as H2S)	µg/L	-	2	-	-	-	-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	<2.0	2.6	<2.0	<2.0	<20	-	-	-	-
Sulphide, total	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	-	<20	<20	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	<20	<20	<20	<20
Turbidity	NTU	-	-	-	-	-	-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-	0.96	-	3.85	-	-	-	-	-	-	-	-	-
Acidity	µg/L	-	-	-	-	-	-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-	-	-	-	-	12,200	-	2,100	-	-	-	-	-
Nutrients																																
Ammonia as N	µg/L	1,850 [#5,6]	-	9,400 [#5,7]	-	-	5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	<50	<50	<50	<5.0	<5.0	7.1	<5.0	6	16.4	<5.0	<50	<50	<50	<50	<50
Nitrate (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-	-	202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	142	138	100	117	76	155	105	126	72.7	89.8	106	32	37	62	100
Nitrite (as N)	µg/L	100 [#5,8]	-	-	-	-	1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10	<1.0	1.2	<1.0	1.3	<1.0	<1.0	<1.0	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-	-	-	-	-	-	-	54.4	-	-	-	-	-	-	-	-	-	-	-	-	-	126	-	-	-	-	-	-	-
Demand Parameters																																
Biochemical Oxygen Demand (BOD)	µg/L	-	-	-	-	-	-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	-	-	<4,000	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<2,400	-
Chemical Oxygen Demand (COD)	µg/L	-	-	-	-	-	<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	-	38000	<20,000	-	28,000	-	<20,000	-	20,000	-	<20,000	-	<20,000	-
Carbon																																
Dissolved Organic Carbon (DOC)	µg/L	-	-	-	-	-	-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	-	-	4,440	-	-	-	-	1,240	-	1,630	-	-	-	2,610	-
Total Organic Carbon (TOC)	µg/L	-	-	-	-	-	-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-	870	-	7,430	-	-	-	-	-	-	-	-	-
Phenols																																
Phenols (4AAP)	µg/L	-	-	-	-	-	1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<2.0	-	-	-	<2
Phenolics	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Metals																																
Aluminum	µg/L	-	-	-	-	-	-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	-	-	18.9	-	-	-	-	2.6	-	32.6	-	-	-	23.2	-
Antimony	µg/L	-	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	<0.2	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-
Arsenic	µg/L	-	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	-	<0.5	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-
Barium	µg/L	-	-	-	-	-	-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	-	-	<5	-	-	-	-	3.8	-	4.96	-	-	-	<5.00	-
Beryllium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	-	<0.1	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-
Bismuth	µg/L	-	-	-	-	-	-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	-	<0.1	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-
Boron	µg/L	-	-	-	-	-	-	-	-	-	-	<10	-	<10	-	-	-	<50	-	-	<50	-	-	-	-	36	-	32	-	-	-	<50	-
Cadmium	µg/L	0.0932 [#4,5]	-	-	-	-	-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	-	<0.01	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-
Calcium	µg/L	-	-	-	-	-	-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	-	-	9,690	-	-	-	-	19,600	-	20,600	-	-	-	17,000	-
Cesium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-
Chromium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	-	-	<0.5	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	-
Cobalt	µg/L	0.85 [#4,5]	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	<0.1	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-
Copper	µg/L	0.862 [#5,10]	-	-	-	-	-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	-	-	0.91	-	-	-	-	<0.20	-	0.31	-	-	-	0.89	-
Iron	µg/L	350 [#3]	-	-	-	-	-	-	-	-	-	172	-	784	-	-	-	404	-	-	444	-	-	-	-	<10	-	54	-	-	-	62	-
Lead	µg/L	3.67 [#5,11]	-	-	-	-	-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	-	-	<0.2	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.20	-
Lithium	µg/L	-	-	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	-	-	0.29	-	-	-	-	1	-	1.2	-	-	-	1.13	-
Magnesium	µg/L	-	-	-	-	-	-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	-	-	1,910	-	-	-	-	4,160	-	4,240	-	-	-	4,290	-
Manganese	µg/L	-	-	-	-	-	-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	-	-	4.74	-	-	-	-	2.14	-	10.3	-	-	-	7.8	-
Mercury	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	-	<0.01	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-
Molybdenum	µg/L	-	-	-	-	-	-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	-	-	0.17	-	-	-	-	0.162	-	0.171	-	-	-	0.19	-
Nickel	µg/L	1.3 [#5,10,13]	-	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	-	<0.4	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-
Phosphorus	µg/L	-	-	-	-	-	-	-	-	-	-	<50	-	<50	-	-	-	<50	-	-	<50	-	-	-	-	<50	-	<50	-	-	-	<50	-
Potassium	µg/L	-	-	-	-	-	-	-	-	-	-	789	-	624	-	-	-	770	-	-	920	-	-	-	-	2,060	-	2,000	-	-	-	2,130	-
Rubidium	µg/L	-	-	-	-	-	-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-	-	-	-	-	<0.20	-	0.25	-	-	-	-	-
Selenium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	-	<0.5	-	-	-	-	0.064	-	0.087	-	-	-	<0.50	-
Silicon	µg/L	-	-	-	-	-	-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	-	-	6,600	-	-	-	-	11,000	-	12,100	-	-	-	13,300	-
Silver	µg/L	-	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	-	<0.05	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-
Sodium	µg/L	-	-	-	-	-	-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	-	-	7,440	-	-	-	-	10,200	-	9,760	-	-	-	9,300	-
Strontium	µg/L	-	1,250 [#5,10]	-	-	-	-	-	-	-	-	53	-	58.3	-	-	-	38.7	-	-	58.7	-	-	-	-	118	-	116	-	-	-	90.9	-
Sulphur	µg/L	-	-	-	-	-	-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	-	-	<3,000	-	-	-	-	4,500	-	4,890	-	-	-	3,700	-
Tellurium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	-	<0.5	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-
Thallium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	-	<0.02	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-
Thorium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	<0.1	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-
Tin	µg/L	-	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	<0.2	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-
Titanium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	-	<5	-	-	-	-	<0.30	-	0.97	-	-	-	<5.00	-
Tungsten	µg/L	-	-	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	-	<1	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-
Uranium	µg/L	-	-	-	-	-	-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	-	<0.02	-	-	-	-	0.164	-	0.102	-	-	-	0.117	-
Vanadium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	-	<5	-	-	-	-	0.58	-	0.64	-	-	-	<1.0	-
Zinc	µg/L	7.55 [#5,10]	-	-	-	-	-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	-	-	<4	-	-	-	-	1.3	-	1.1	-	-	-	<4	-
Zirconium	µg/L	-	-	-	-	-	-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-	-	<0.1	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																			SW-4							
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	JP (26-May-202	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908028012	20A5363250421	20B1139240720	20B9565301020	21B2866	21E1432	21G2459	21L0641	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25E3516	25G2084	25L0435
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA20A5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	22G1537-09	22J1342-04	22L1310-09	23C0154-08	23E2913-08	23I3541-08	23L2282-08	24B2509-08	24F3072-08	24I2276-08	24L1123-08	25C1419-09	25E3516-09	25E3516-10	25G2084-09	25L0435-09
Field Measurements																																	
Temperature	°C	19 [#1]	-	-	-		-	10.14	16.83	10.5	5.7	-	16.8	9.3	4	11.2	12.3	8	12.1	11.3	9.0	8.9	14.3	11.6	8.1	9.1	14.6	12.7	9	8.7	10.4	-	15.5	10
Electrical Conductivity	µS/cm	-	-	-	-		-	85	84	71.2	80.7	-	107.3	91.4	47.5	164.1	104.9	49	116.7	163.8	113.1	103.4	124.6	126.7	133.4	121	162.3	151.2	108	123.4	122.3	-	189	122.8
Total Dissolved Solids (TDS)	mg/L	-	-	-	-		-	55	65	-	-	-	69	59.2	51.4	106.6	89.7	47.2	99.9	106.5	106.0	97.5	101.8	110.7	128.1	113	130.65	128.7	101	117	110.2	-	110.2	111.8
Salinity	-	-	-	-	-		-	0.04	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Oxygen	%	-	-	-	-		-	106.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99.6	-	-	-	-
Dissolved Oxygen	mg/L	Minimum 5 [#2]	-	Minimum 5 [#2]	-		-	12.68	8.79	-	13.31	-	7.56	11.5	14	10.34	10.9	13.2	9.68	9.78	8.80	8.91	0.85	3.19	0.79	8.62	1.96	0.5	16.85	-	8.29	-	6.08	7.64
pH	pH Units	6.5-9.0	-	7.0-8.7	-		-	7.33	**6.16**	7.53	-	-	7.43	7.6	7.48	7.74	7.29	6.68	7.33	7.66	**6.96**	**6.72**	7.18	**5.58**	**6.5**	**6.83**	**6.79**	**6.58**	8.1	7.05	**6.61**	-	**8.73**	6.97
Oxidation Reduction Potential (ORP)	-	-	-	-	-		-	81.8	300	-	-	-	108	60.5	79.4	133.5	106.6	-15.6	26.7	32	9.8	39.8	60.7	197.4	91.7	16.1	151.1	80.1	47.3	166.8	108.9	-	78.7	95.2
Physical Parameters																																	
pH	pH Units	6.5-9.0	-	7.0-8.7	-		7.64	7.63	7.80	7.73	7.38	7.72	7.68	7.48	-	7.17	-	7.34	7.12	-	**6.62**	**6.93**	**6.67**	**6.91**	**6.87**	6.61	6.57	7.11	7.43	7.42	7.29	7.27	**6.95**	**6.94**
Electrical Conductivity (EC)	µS/cm	-	-	-	-		81.3	85.8	103	101	-	91.9	-	96.9	-	181	-	75.9	157	-	165	153	152	156	165	163	162	165	166	142	170	166	162	162
Total Suspended Solids (TSS)	µg/L	-	-	-	-		20,100	4,600	7,100	8,900	-	4,400	-	8,500	-	5,400	-	4,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids (TDS)	µg/L	-	-	-	-		55,000	-	-	-	66,000	66,000	-	73,000	-	92500	-	-	107,000	-	-	-	108,000	-	148000	-	55,000	-	130,000	-	75,000	50,000	-	98000
Hardness as $CaCO_3$	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	51,200	46,700	23,400	55,100	56,100	57,000	-	59,000	-	61,400	-	58,500	-	59,500	-	62,000	58,800	-	57,100
Alkalinity (total as $CaCO_3$)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	-	-	-	66700	55,300	59500	66100	56,700	59,600	57,000	56,000	58,500	57,900	55,900	54,500	74,000
Alkalinity (P)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bicarbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	61,400	-	-	-	-	-	66700	55,300	59500	66100	56,700	59,600	57,000	56,000	58,500	57,900	55,900	54,500	74,000
Carbonate	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	<1,000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Hydroxide	µg/L	-	-	-	-		26,800	27,300	32,200	31,000	-	27,400	-	31,300	-	<1,000	-	-	-	-	-	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Bromide	µg/L	-	-	-	-		<50	<50	<50	<50	<50	<50	<50	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	150,000 [#5]	-	-	-		7,850	9,040	10,300	9,360	8,420	9,560	9,980	9,610	8,720	11,600	12,000	6,390	9,880	10,500	10,000	9,890	9,470	9,890	9,710	9,690	9,820	10,600	10,300	12,800	11,300	10,700	10,200	10,300
Fluoride	µg/L	887 [#3,4]	-	1,500 [#3]	-		29	<20	26	21	<20	21	25	<20	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sulphate	µg/L	218,000 [#4,5]	-	-	-		2,490	2,930	3,330	2,730	2,190	2,620	3,360	1,860	2,300	8,200	6,600	2,000	7,500	7,700	8,500	7,100	6,400	8,200	8,200	11,200	5,200	6,700	6,500	5,000	4,500	4,400	4,200	5,500
Sulphide (as S)	µg/L	-	-	-	-		-	18	<2.0	51	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (as H2S)	µg/L	-	2	-	-		-	-	-	-	<2.0	<2.0	<2.0	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide, total	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<20	-	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<0.01	<0.01	<0.01	<0.01	<0.01
Turbidity	NTU	-	-	-	-		-	2.5	-	4.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L	-	-	-	-		-	-	-	-	-	11,400	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients																																	
Ammonia as N	µg/L	1,850 [#5,6]	-	9,400 [#5,7]	-		5.7	17.3	14.6	5.1	27.1	9.7	20.6	10.4	<50	<50	<50	<50	<50	<50	74	<50	<50	<50	<50	-	<50	<50	<50	<50	<50	<50	<50	<50
Nitrate (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		202	84.8	81.3	31.5	216	53.8	103	44.7	201	257	172	137	15	29	70	28	<10	<10	57	43	<10	<10	38	54	33	38	<10	27
Nitrite (as N)	µg/L	100 [#5,8]	-	-	-		1.5	1.2	2.3	1.1	3.8	<1.0	1.6	<1.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Nitrate and Nitrite (as N)	µg/L	3,000 [#5]	-	3,700 [#5]	-		-	-	-	-	-	54.4	-	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters																																	
Biochemical Oxygen Demand (BOD)	µg/L	-	-	-	-		-	<2,000	-	<2,000	-	<2,000	-	<2,000	-	<2,400	-	<3,600	<3,800	-	<2,200	-	<1,400	-	<2,800	-	<3,200	-	<2,700	-	<4,000	<4,000	-	<4,000
Chemical Oxygen Demand (COD)	µg/L	-	-	-	-		<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	-	<20,000	<20,000	-	<20,000	-	<20,000	-	<20,000	-	20,000	-	<20,000	-	<20,000	<20,000	-	<20,000
Carbon																																	
Dissolved Organic Carbon (DOC)	µg/L	-	-	-	-		-	-	-	-	-	3,590	-	3,950	-	-	-	6,950	-	-	-	-	-	-	-	-	2,380	-	1,620	-	2,600	2,560	-	1570
Total Organic Carbon (TOC)	µg/L	-	-	-	-		-	3320	-	3810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																																	
Phenols (4AAP)	µg/L	-	-	-	-		1.5	<1.0	-	-	-	-	<2.0	-	2.1	-	-	-	-	-	-	<2.00	-	-	-	<0.50	-	-	-	-	-	-	-	-
Phenolics	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2	-	-	-	-
Dissolved Metals																																	
Aluminum	µg/L	-	-	-	-		-	-	-	-	-	12.2	-	12.1	-	-	-	63.3	-	-	-	-	-	-	-	-	10.5	-	6.2	-	<5	<5	-	5.5
Antimony	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.2
Arsenic	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Barium	µg/L	-	-	-	-		-	-	-	-	-	3.1	-	3.5	-	-	-	<5.00	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	<5	<5	-	<5
Beryllium	µg/L	-	-	-	-		-	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Bismuth	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Boron	µg/L	-	-	-	-		-	-	-	-	-	<10	-	<10	-	-	-	<50	-	-	-	-	-	-	-	-	<50.0	-	<50.0	-	<50	<50	-	<50
Cadmium	µg/L	0.0932 [#4,5]	-	-	-		-	-	-	-	-	<0.0050	-	<0.0050	-	-	-	<0.010	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	<0.01	<0.01	-	<0.01
Calcium	µg/L	-	-	-	-		-	-	-	-	-	8,110	-	9,060	-	-	-	6,970	-	-	-	-	-	-	-	-	16,900	-	17,700	-	17,800	17,700	-	18,200
Cesium	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.10	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Cobalt	µg/L	0.85 [#4,5]	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Copper	µg/L	0.862 [#5,10]	-	-	-		-	-	-	-	-	0.35	-	<0.20	-	-	-	0.61	-	-	-	-	-	-	-	-	<0.40	-	<0.40	-	<0.4	<0.4	-	0.69
Iron	µg/L	350 [#3]	-	-	-		-	-	-	-	-	172	-	784	-	-	-	404	-	-	-	-	-	-	-	-	199	-	28	-	15	12	-	140
Lead	µg/L	3.87 [#5,11]	-	-	-		-	-	-	-	-	0.087	-	0.091	-	-	-	<0.20	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.2
Lithium	µg/L	-	-	-	-		-	-	-	-	-	<1.0	-	<1.0	-	-	-	0.17	-	-	-	-	-	-	-	-	1.26	-	1.20	-	1.06	1.03	-	1.15
Magnesium	µg/L	-	-	-	-		-	-	-	-	-	1,580	-	1,640	-	-	-	1,450	-	-	-	-	-	-	-	-	3,910	-	3,720	-	3,580	3,460	-	3,810
Manganese	µg/L	-	-	-	-		-	-	-	-	-	6.95	-	5.45	-	-	-	3.47	-	-	-	-	-	-	-	-	21.8	-	3.39	-	2.8	2.22	-	37.7
Mercury	µg/L	-	-	-	-		-	-	-	-	-	-	-	<0.0050	-	-	-	<0.010	-	-	-	-	-	-	-	-	<0.010	-	<0.010	-	<0.04	<0.04	-	<0.01
Molybdenum	µg/L	-	-	-	-		-	-	-	-	-	0.185	-	0.134	-	-	-	0.14	-	-	-	-	-	-	-	-	0.14	-	0.15	-	0.14	0.14	-	0.15
Nickel	µg/L	1.3 [#5,10,13]	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<0.40	-	-	-	-	-	-	-	-	<0.40	-	<0.40	-	<0.4	<0.4	-	<0.4
Phosphorus	µg/L	-	-	-	-		-	-	-	-	-	<50	-	<50	-	-	-	<50	-	-	-	-	-	-	-	-	<50	-	<50	-	<50	<50	-	<50
Potassium	µg/L	-	-	-	-		-	-	-	-	-	789	-	624	-	-	-	770	-	-	-	-	-	-	-	-	1,600	-	1,860	-	1,690	1,640	-	1860
Rubidium	µg/L	-	-	-	-		-	-	-	-	-	0.6	-	0.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	-	-	-	-		-	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Silicon	µg/L	-	-	-	-		-	-	-	-	-	3,670	-	5,150	-	-	-	5,300	-	-	-	-	-	-	-	-	12,300	-	13,100	-	12,000	11,900	-	13,400
Silver	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.050	-	-	-	-	-	-	-	-	<0.050	-	<0.050	-	<0.05	<0.05	-	<0.05
Sodium	µg/L	-	-	-	-		-	-	-	-	-	6,370	-	6,910	-	-	-	5,680	-	-	-	-	-	-	-	-	9,570	-	9,100	-	8,410	8,380	-	9,170
Strontium	µg/L	-	1,250 [#5,10]	-	-		-	-	-	-	-	53	-	58.3	-	-	-	38.7	-	-	-	-	-	-	-	-	96.4	-	94.3	-	97.9	95.5	-	99.3
Sulphur	µg/L	-	-	-	-		-	-	-	-	-	720	-	<0.5	-	-	-	<3,000	-	-	-	-	-	-	-	-	<3,000	-	<3,000	-	<3,000	<3,000	-	<3,000
Tellurium	µg/L	-	-	-	-		-	-	-	-	-	<0.20	-	<0.20	-	-	-	<0.50	-	-	-	-	-	-	-	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Thallium	µg/L	-	-	-	-		-	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-	<0.020	-	<0.020	-	<0.02	<0.02	-	<0.02
Thorium	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Tin	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<0.20	-	-	-	-	-	-	-	-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.2
Titanium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.30	-	-	-	<5.00	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	<5	<5	-	<5
Tungsten	µg/L	-	-	-	-		-	-	-	-	-	<0.10	-	<0.10	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	<1	<1	-	<1
Uranium	µg/L	-	-	-	-		-	-	-	-	-	0.014	-	<0.010	-	-	-	<0.020	-	-	-	-	-	-	-	-	0.036	-	0.071	-	0.075	0.069	-	0.069
Vanadium	µg/L	-	-	-	-		-	-	-	-	-	<0.50	-	<0.50	-	-	-	<1.0	-	-	-	-	-	-	-	-	<5.0	-	<5.0	-	<5	<5	-	<5
Zinc	µg/L	7.55 [#5,10]	-	-	-		-	-	-	-	-	1.6	-	1.4	-	-	-	4.7	-	-	-	-	-	-	-	-	<4.0	-	<4.0	-	<4	<4	-	<4
Zirconium	µg/L	-	-	-	-		-	-	-	-	-	<0.30	-	<0.20	-	-	-	<0.10	-	-	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																				
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908028012	20A5363250422	20B1139240720	20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA20A5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	22C0773-06	22G1537-06	22J1342-01	22L1310-06	23C0154-05	23E2913-05	23I3541-05	23L2282-05
		Approved	Working	Approved	Working																						
Total Metals																											
Aluminum	µg/L	162 [#5,9]	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	-	106	-	45.1	-	137	-	106
Antimony	µg/L	74 [#5]	-	-	270 [#5]		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2	-	<0.2	-	<0.20	-	<0.2
Arsenic	µg/L	5 [#5]	-	12.5 [#5]	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	<0.5
Barium	µg/L	-	1,000 [#5]	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	-	<5	-	<5	-	<5.0	-	<5
Beryllium	µg/L	-	0.13 [#5]	-	100 [#5]		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	<0.1
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	-
Boron	µg/L	1,200 [#5]	-	1,200 [#5]	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	-	<50	-	<50	-	<50.0	-	<50
Cadmium	µg/L	-	-	-	0.12 [#5]		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	-	0.018	-	<0.01	-	<0.010	-	<0.01
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	7,220	10,100	11,000	8,980	-	10,100	-	8,450
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	-	2.5 [#5,12]	-	1.5 [#5,12]		<1.0	<0.10	0.13	0.18	-	<0.10	-	<0.10	-	<0.50	-	<0.50	-	0.87	-	<0.5	-	<0.50	-	<0.5
Cobalt	µg/L	4 [#5]	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	<0.1
Copper	µg/L	-	-	2 [#5]	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	-	<0.4	-	<0.4	-	0.58	-	0.52
Iron	µg/L	1,000 [#3]	-	-	-		1,070	407	702	821	-	360	-	1,080	-	391	-	493	-	589	-	804	-	612	-	664
Lead	µg/L	-	-	2 [#5]	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	-	<0.2	-	<0.2	-	<0.20	-	<0.2
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	-	0.5	-	0.29	-	0.47	-	0.27
Magnesium	µg/L	-	-	-	-		1,660	1,620	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	1,210	2,000	2,160	1,770	-	1,970	-	1,600
Manganese	µg/L	750 [#4,5]	-	-	100 [#5]		29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	-	28.6	-	11.7	-	32.4	-	16
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	<0.04	-	<0.04	-	-	-	<0.010	-	<0.01
Molybdenum	µg/L	7,600 [#5]	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	-	0.17	-	0.13	-	0.17	-	0.15
Nickel	µg/L	-	-	-	8.3 [#5]		<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-	<0.4	-	<0.4	-	<0.40	-	<0.4
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	<50	-	50	-	<50	-	<50	-	<50	-	-
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	-	770	-	920	-	1,010	-	-
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-		-		-	-	-	-
Selenium	µg/L	2 [#5]	-	2 [#5]	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	<0.5
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	-	8,000	-	6,200	-	5,900	-	-
Silver	µg/L	0.05 [#4,5]	-	1.5 [#4,5]	0.5 [#5]		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.05	-	<0.05	-	<0.050	-	<0.05
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	-	6,950	-	7,480	-	7,430	-	6,760
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	-	61.6	-	54.7	-	61.5	-	51.7
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<0.5	-	3,600	-	<3,000	-	<3,000	-	<3,000	-	<3,000	-	-
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	-
Thallium	µg/L	-	0.03 [#5]	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-	<0.02	-	<0.02	-	<0.020	-	<0.02
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	-
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2	-	<0.2	-	<0.20	-	<0.2
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	-	5.3	-	<5.0	-	7.1	-	<5
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<0.2	-	<1.0	-	<1.0	-	<1
Uranium	µg/L	-	7.5 [#5]	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	-	0.036	-	<0.02	-	0.024	-	<0.02
Vanadium	µg/L	-	60 [#5]	-	5 [#5]		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	-	<5.0	-	<5.0	-	<5.0	-	<5
Zinc	µg/L	-	-	10 [#5]	-		<5.0	<3.0	**72.3**	<3.0	-	<3	-	<3	-	<4	-	<4	-	<4.0	-	<4.0	-	4	-	<4
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	-	<0.1	-	<0.1	-	<0.10	-	-
Hydrocarbons																											
EPH_{10-19}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
EPH_{19-32}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-
VH_{6-10}	µg/L	-	-	-	-		-	<100	-	-	-	-	<100	-	-	-	-	-	<100	-	-	-	<100	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																											
Acenaphthene	µg/L	6 [#5]	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	<0.2	-	-	-	<0.200	-	-	-
Acridine	µg/L	3 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
Anthracene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	-	-	<0.010	-	-	-
Benz(a)anthracene	µg/L	0.1 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	-	-	<0.010	-	-	-
Benzo(a)pyrene	µg/L	0.01 [#5]	-	0.01	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	-	-	<0.010	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1	-	-	-	<0.100	-	-	-
Chrysene	µg/L	-	-	0.1	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	-	-	<0.010	-	-	-
Fluoranthene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	<0.03	-	-	-	<0.030	-	-	-
Fluorene	µg/L	12 [#5]	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-
1-Methylnaphthalene	µg/L	-	-	1	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	<0.1	-	-	-	<0.100	-	-	-
2-Methylnaphthalene	µg/L	-	-	1	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	<0.1	-	-	-	<0.100	-	-	-
Naphthalene	µg/L	1 [#5]	-	1	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	<0.2	-	-	-	<0.200	-	-	-
Phenanthrene	µg/L	0.3 [#5]	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.1	-	-	-	<0.100	-	-	-
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	<0.02	-	-	-	<0.020	-	-	-
Quinoline	µg/L	-	50 [#5]	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.05	-	-	-	<0.050	-	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																		SW-1										SW-2									
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122020A5363250422020B1139240722020B9565301020				21B2866	21E1432	21G2459	21L0641	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435	-	L2254181	L2318207	L2367392	20A0908280122020A5363250422020B1139240722020B9565301020				21B2866
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	24B2509-05	24F3072-05	24I2276-05	24L1123-05	25C1419-06	25E3516-06	25G2084-06	25L0435-06	-	L2254181-2	L2318207-7	L2367392-7	VA20A0908-008VA20A5363-008VA20B1139-008VA20B9565-007				21B2866-07
		Approved	Working	Approved	Working																																					
Total Metals																																										
Aluminum	µg/L	162 [#5,3]	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	-	134	-	75.6	-	264	-	72.2	774	133	170	439	-	132	-	134	-									
Antimony	µg/L	74 [#5]	-	-	270 [#5]		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.20	-	<0.20	-	<0.2	-	<0.2	0.54	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-									
Arsenic	µg/L	5 [#5]	-	12.5 [#5]	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	0.50	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	0.7	<0.10	0.14	0.17	-	0.13	-	2.56	-									
Barium	µg/L	-	1,000 [#5]	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	-	<5.0	-	<5.0	-	<5	-	<5	<20	4.09	4.45	6.89	-	4.26	-	4.75	-									
Beryllium	µg/L	-	0.13 [#5]	-	100 [#5]		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-									
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-									
Boron	µg/L	1,200 [#5]	-	1,200 [#5]	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	-	<50.0	-	<50.0	-	<50	-	<50	<100	<10	<10	<10	-	<10	-	<10	-									
Cadmium	µg/L	-	-	-	0.12 [#5]		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	-	<0.010	-	<0.010	-	<0.01	-	<0.01	0.033	<0.0050	<0.0050	0.0104	-	<0.0050	-	<0.0050	-									
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	-	9,030	-	8,430	-	8,050	-	8,830	21,400	8,530	10,500	9,950	-	9,070	-	9,890	-									
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.010	0.012	0.027	-	<0.010	-	0.01	-									
Chromium	µg/L	-	2.5 [#5,12]	-	1.5 [#5,12]		<1.0	<0.10	0.13	0.18	-	<0.50	-	<0.10	-	<0.50	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	<1.0	0.11	0.23	0.40	-	<0.50	-	0.10	-									
Cobalt	µg/L	4 [#5]	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	0.13	-	<0.1	0.34	<0.10	<0.10	0.20	-	<0.10	-	<0.10	-									
Copper	µg/L	-	2 [#5]	-	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	-	0.48	-	0.50	-	0.77	-	<0.4	***5.7***	0.51	<1.0	1.49	-	0.64	-	0.53	-									
Iron	µg/L	1,000 [#3]	-	-	-		1,070	407	702	821	-	360	-	1,050	-	391	-	493	-	612	-	712	-	781	-	807	3,010	427	594	1,120	-	366	-	1,060	-									
Lead	µg/L	-	-	2 [#5]	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	-	<0.20	-	<0.20	-	0.3	-	<0.2	***2.73***	0.142	0.152	0.380	-	0.145	-	0.195	-									
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	-	0.38	-	0.27	-	0.42	-	0.25	<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-									
Magnesium	µg/L	-	-	-	-		1,660	1,620	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	-	1,970	-	1,530	-	1670	-	1800	4390	1810	2280	2170	-	1,820	-	1870	-									
Manganese	µg/L	750 [#4,5]	-	-	100 [#5]		29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	-	31.2	-	12.0	-	37.3	-	14	***139***	12.0	19.3	50.7	-	14.2	-	14.6	-									
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	<0.04	-	<0.010	-	<0.010	-	-	-	<0.01	<0.010	-	-	<0.0050	-	-	-	<0.0050	-									
Molybdenum	µg/L	7,600 [#5]	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	-	0.16	-	0.16	-	0.18	-	0.15	<1.0	0.155	0.180	0.212	-	0.218	-	0.155	-									
Nickel	µg/L	-	-	-	8.3 [#5]		<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-	<0.40	-	<0.40	-	<0.4	-	<0.4	<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-									
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	<50	-	50	-	<50	-	<50	-	<50	-	<50	-	<50	<50	<50	-	<50	-	<50	-									
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	-	810	-	750	-	830	-	730	3100	922	887	1160	-	904	-	725	-									
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	0.68	0.54	0.98	-	0.74	-	0.61	-									
Selenium	µg/L	2 [#5]	-	2 [#5]	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	<0.10	0.067	<0.050	<0.050	-	<0.050	-	<0.050	-									
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	-	5,800	-	6,000	-	4,600	-	6,100	-	5170	7830	6890	-	4,530	-	6,130	-									
Silver	µg/L	0.05 [#4,5]	-	1.5 [#4,5]	0.5 [#5]		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.050	-	<0.050	-	<0.05	-	<0.05	<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-									
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	-	7,270	-	6,160	-	6,300	-	6,410	9600	7050	7510	7380	-	6,920	-	7,320	-									
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	-	59.0	-	50.3	-	52	-	53	-	55.6	68.8	66.3	-	60.4	-	64.1	-									
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<0.5	-	3,600	-	<3,000	-	<3,000	-	<3,000	-	<3,000	-	<3,000	-	1,110	1,300	1,010	-	1,000	-	700	-									
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-									
Thallium	µg/L	-	0.03 [#5]	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-	<0.020	-	<0.020	-	<0.02	-	<0.02	<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-									
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-									
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.20	-	<0.20	-	<0.2	-	<0.2	<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-									
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	-	6.2	-	<5.0	-	13.3	-	<5	36	6.51	7.45	21.7	-	7.1	-	6.72	-									
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<1.0	-	<1.0	-	<1	-	<1	-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-									
Uranium	µg/L	-	7.5 [#5]	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	-	<0.020	-	<0.020	-	0.031	-	<0.02	0.46	0.033	0.036	0.074	-	0.034	-	0.025	-									
Vanadium	µg/L	-	60 [#5]	-	5 [#5]		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	-	<5.0	-	<5.0	-	<5	-	<5	2.5	0.85	1.00	1.69	-	0.92	-	1.01	-									
Zinc	µg/L	-	-	10 [#5]	-		<5.0	<3.0	***72.3***	<3.0	-	<3	-	<3	-	<4	-	<4	-	<4.0	-	<4.0	-	<4	-	<4	***14.2***	<3.0	<3.0	3.2	-	<3.0	-	<3.0	-									
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	-	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-									
Hydrocarbons																																										
EPH$_{10-19}$	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	<250								
EPH$_{19-32}$	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	<250								
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	<250								
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	<250	-	-	-	-	<250	-	<250								
VH$_{6-10}$	µg/L	-	-	-	-		-	<100	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	<100	-	-	-	-	<100	-	-	-	-	<100	-	-								
Polycyclic Aromatic Hydrocarbons (PAHs)																																										
Acenaphthene	µg/L	6 [#5]	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	<0.200	-	-	-	<0.2	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.20								
Acridine	µg/L	3 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
Anthracene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.010								
Benz(a)anthracene	µg/L	0.1 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.010								
Benzo(a)pyrene	µg/L	0.01 [#5]	-	0.01	-		-	<0.0050	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-	<0.0050	-	-	-	-	<0.0050	-	<0.010								
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0150	-	-								
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
Benzo(g,h,i)perylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	<0.10								
Chrysene	µg/L	-	-	0.1	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-	<0.0050	-	-	-	-	<0.0050	-	<0.010								
Fluoranthene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	<0.030	-	-	-	<0.03	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.030								
Fluorene	µg/L	12 [#5]	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050								
1-Methylnaphthalene	µg/L	-	-	1	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-	<0.050	-	-	-	-	<0.010	-	<0.10								
2-Methylnaphthalene	µg/L	-	-	1	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-	<0.020	-	-	-	-	<0.010	-	<0.10								
Naphthalene	µg/L	1 [#5]	-	1	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	<0.200	-	-	-	<0.2	-	-	-	-	<0.020	-	-	-	-	<0.050	-	<0.20								
Phenanthrene	µg/L	0.3 [#5]	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.10								
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	<0.020	-	-	-	<0.02	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.020								
Quinoline	µg/L	-	50 [#5]	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-	<0.050	-	-	-	-	<0.050	-	<0.050								

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																									SW-2						
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	UP (22-Feb-202	24-Jun-2024	UP (24-Jun-202	16-Sep-2024	9-Dec-2024	10-Mar-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122(20A5363250420B113924072(20B9565301020				21B2866	21E1432	21G2459	21L0641	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24B2509	24F3072	24F3072	24I2276	24L1123	25C1419
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	21E1432-07	21G2459-07	21L0641-07	2C0773-07	22G1537-07	22J1342-02	22L1310-07	23C0154-06	23E2913-06	23I3541-06	23L2282-06	24B2509-06	24B2509-09	24F3072-06	24F3072-09	24I2276-06	24L1123-06	25C1419-07
		Approved	Working	Approved	Working																																
Total Metals																																					
Aluminum	µg/L	162 #5,9	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	47.9	-	118	-	147	-	67.1	-	176	-	152	-	-	177	-	-	183	-
Antimony	µg/L	74 #5	-	-	270 #5		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	0.22	-	<0.20	-	<0.2	-	<0.2	-	<0.20	-	<0.2	-	-	<0.20	-	-	<0.20	-
Arsenic	µg/L	5 #5	-	12.5 #5	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	<0.50	-	<0.50	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	<0.5	-	-	<0.50	-	-	<0.50	-
Barium	µg/L	-	1,000 #5	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	5.7	-	<5.00	-	5	-	<5	-	<5.0	-	<5	-	-	<5.0	-	-	<5.0	-
Beryllium	µg/L	-	0.13 #5	-	100 #5		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	<0.1	-	-	<0.10	-	-	<0.10	-
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	-	-	-	<0.10	-	-	<0.10	-
Boron	µg/L	1,200 #5	-	1,200 #5	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	<50	-	<50	-	<50	-	<50	-	<50.0	-	<50	-	-	<50.0	-	-	<50.0	-
Cadmium	µg/L	-	-	-	0.12 #5		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	<0.010	-	<0.010	-	<0.01	-	<0.01	-	<0.010	-	<0.01	-	-	<0.010	-	-	<0.010	-
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	15,100	15,100	7,010	7,970	13,200	11,800	9,660	-	11,400	-	8,690	-	-	10,100	-	-	9,090	-
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	-	2.5 #5,12	-	1.5 #5,12		<1.0	<0.10	0.13	0.18	-	<0.50	-	<0.10	-	<0.50	-	<0.50	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	<0.5	-	-	<0.50	-	-	<0.50	-
Cobalt	µg/L	4 #5	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	<0.1	-	-	<0.10	-	-	<0.10	-
Copper	µg/L	-	-	2 #5	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	<0.40	-	1.07	-	0.49	-	0.42	-	0.61	-	0.61	-	-	0.61	-	-	0.63	-
Iron	µg/L	1,000 #3	-	-	-		1,070	407	702	821	-	360	-	1,050	-	391	-	493	142	-	508	-	572	-	721	-	568	-	681	-	-	584	-	-	805	-
Lead	µg/L	-	-	2 #5	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	<0.20	-	<0.20	-	0.23	-	<0.2	-	<0.20	-	<0.2	-	-	<0.20	-	-	<0.20	-
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	1.62	-	0.24	-	0.61	-	0.35	-	0.56	-	0.31	-	-	0.48	-	-	0.35	-
Magnesium	µg/L	-	-	-	-		1,660	1,620	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	3,400	3,350	1,450	1,370	2,500	2,470	1,910	-	2,310	-	1,710	-	-	2,250	-	-	1,740	-
Manganese	µg/L	750 #4,5	-	-	100 #5		29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	8.05	-	4.62	-	26	-	11	-	25.4	-	16.4	-	-	28.2	-	-	20.9	-
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	<0.04	<0.04	-	<0.04	-	<0.04	-	-	-	<0.01	-	<0.01	-	-	<0.010	-	-	<0.010	-
Molybdenum	µg/L	7,600 #5	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	0.3	-	0.3	-	0.23	-	0.16	-	0.18	-	0.15	-	-	0.17	-	-	0.16	-
Nickel	µg/L	-	-	8.3 #5	-		<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	<0.40	-	<0.40	-	<0.4	-	<0.4	-	<0.40	-	<0.4	-	-	<0.40	-	-	<0.40	-
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	<50	-	50	<50	-	92	-	<50	-	<50	-	<50	-	-	-	-	<50	-	-	<50	-
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	1,370	-	820	-	1,070	-	970	-	1,110	-	-	-	-	950	-	-	830	-
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	2 #5	-	2 #5	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	<0.5	-	-	<0.50	-	-	<0.50	-
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	13,200	-	5,500	-	9,000	-	6,600	-	7,000	-	-	-	-	6,700	-	-	6,600	-
Silver	µg/L	0.05 #4,5	-	1.5 #4,5	0.5 #5		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	<0.050	-	<0.050	-	<0.05	-	<0.05	-	<0.050	-	<0.05	-	-	<0.050	-	-	<0.050	-
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	9,640	-	5,990	-	8,340	-	7,760	-	8,100	-	6,890	-	-	7,820	-	-	6,760	-
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	91.9	-	46.2	-	76.4	-	57.8	-	70.2	-	54.6	-	-	67.1	-	-	54.9	-
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<500	-	3,600	-	<3,000	3,900	-	3,100	-	<3000	-	<3000	-	<3,000	-	-	-	-	<3,000	-	-	<3,000	-
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	<0.50	-	<0.50	-	<0.5	-	<0.5	-	<0.50	-	-	-	-	<0.50	-	-	<0.50	-
Thallium	µg/L	-	0.03 #5	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	<0.020	-	<0.020	-	<0.02	-	<0.02	-	<0.020	-	<0.02	-	-	<0.020	-	-	<0.020	-
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	-	<0.10	-	<0.1	-	<0.1	-	<0.10	-	-	-	-	<0.10	-	-	<0.10	-
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	<0.20	-	<0.20	-	<0.2	-	<0.2	-	<0.20	-	<0.2	-	-	<0.20	-	-	<0.20	-
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	<5.00	-	<5.00	-	7.2	-	<5	-	11.6	-	6.5	-	-	8.7	-	-	8.9	-
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	<1.0	-	<1.0	-	<0.2	-	<1	-	<1.0	-	<1	-	-	<1.0	-	-	<1.0	-
Uranium	µg/L	-	7.5 #5	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	0.059	-	0.023	-	0.059	-	0.026	-	0.042	-	0.027	-	-	0.034	-	-	0.034	-
Vanadium	µg/L	-	60 #5	-	5 #5		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	1.5	-	1.8	-	<5	-	<5	-	<5.0	-	<5	-	-	<5.0	-	-	<5.0	-
Zinc	µg/L	-	-	10 #5	-		<5.0	<3.0	**72.3**	<3.0	-	<3	-	<3	-	<4	-	<4	<4	-	<4	-	<4	-	<4	-	<4.0	-	<4	-	-	<4.0	-	-	<4.0	-
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	<0.10	-	0.19	-	<0.1	-	<0.1	-	<0.10	-	<0.1	-	-	<0.10	-	-	<0.10	-
Hydrocarbons																																					
EPH_{10-19}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	-	<250
EPH_{19-32}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	-	<250
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	-	<250
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-	-	<250
VH_{6-10}	µg/L	-	-	-	-		-	<100	-	-	-	-	<100	-	-	-	-	-	-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	-	-	<100
Polycyclic Aromatic Hydrocarbons (PAHs)																																					
Acenaphthene	µg/L	6 #5	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	-	-	-	<0.2	-	-	-	<0.200	-	-	-	<0.200	-	-	-	-	-	<0.2
Acridine	µg/L	3 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
Anthracene	µg/L	4 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	<0.010	-	-	-	-	-	<0.01
Benz(a)anthracene	µg/L	0.1 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	<0.010	-	-	-	-	-	<0.01
Benzo(a)pyrene	µg/L	0.01 #5	-	0.01	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	<0.010	-	-	-	-	-	<0.01
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
Benzo(g,h,i)perylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.1	-	-	-	<0.100	-	-	-	<0.100	-	-	-	-	-	<0.1
Chrysene	µg/L	-	-	0.1	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	-	<0.01	-	-	-	<0.010	-	-	-	<0.010	-	-	-	-	-	<0.01
Fluoranthene	µg/L	4 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	-	-	-	<0.03	-	-	-	<0.030	-	-	-	<0.030	-	-	-	-	-	<0.03
Fluorene	µg/L	12 #5	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05
1-Methylnaphthalene	µg/L	-	-	1	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	<0.1	-	-	-	<0.100	-	-	-	<0.100	-	-	-	-	-	<0.1
2-Methylnaphthalene	µg/L	-	-	1	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	<0.1	-	-	-	<0.100	-	-	-	<0.100	-	-	-	-	-	<0.1
Naphthalene	µg/L	1 #5	-	1	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	-	-	-	<0.2	-	-	-	<0.200	-	-	-	<0.200	-	-	-	-	-	<0.2
Phenanthrene	µg/L	0.3 #5	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	-	-	-	<0.1	-	-	-	<0.100	-	-	-	<0.100	-	-	-	-	-	<0.1
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	-	-	-	<0.02	-	-	-	<0.020	-	-	-	<0.020	-	-	-	-	-	<0.02
Quinoline	µg/L	-	50 #5	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	<0.05	-	-	-	<0.050	-	-	-	<0.050	-	-	-	-	-	<0.05

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																				SW-3								
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	26-May-2025	14-Jul-2025	2-Dec-2025	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122020A5363250420B1139240720B9565301020				21B2866	21E1432	21G2459	21L0641	25E3516	25G2084	25L0435	-	L2254182	L2318207	L2367392	20A0908280122020A5363250420B1139240720B9565301020								
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	25E3516-07	25G2084-07	25L0435-07	-	L2254182-1	L2318207-8	L2367392-8	VA20A0908-009VA20A5363-009VA20B1139-009VA20B9565-008								
		Approved	Working	Approved	Working																														
Total Metals																																			
Aluminum	µg/L	162 [#5,9]	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	372	-	95.7	566	95.8	188	554	-	200	-	170	-	29	-	120	-	117	
Antimony	µg/L	74 [#5]	-	-	270 [#5]		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	<0.2	-	<0.2	<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	1.12	-	<0.20	-	<0.2	
Arsenic	µg/L	5 [#5]	-	12.5 [#5]	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	<0.50	-	<0.50	<0.5	-	<0.5	<0.50	0.10	0.15	0.30	-	0.12	-	0.12	-	<0.50	-	<0.50	-	<0.5	
Barium	µg/L	-	1,000 [#5]	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	6.3	-	<5	<20	3.89	4.89	9.3	-	5	-	4.47	-	<5.00	-	<5.00	-	<5	
Beryllium	µg/L	-	0.13 [#5]	-	100 [#5]		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	<0.1	-	<0.1	<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.1	
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	<0.1	-	<0.1	-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.1	
Boron	µg/L	1,200 [#5]	-	1,200 [#5]	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	<50	-	<50	<100	<10	13	13	-	<10	-	<10	-	<50	-	<50	-	<50	
Cadmium	µg/L	-	-	-	0.12 [#5]		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	<0.01	-	<0.01	<0.010	<0.0050	<0.0050	0.0133	-	<0.0050	-	0.0077	-	<0.010	-	<0.010	-	<0.01	
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	9,670	-	9,680	8830	9080	11,300	11,300	-	8,830	-	10,200	-	13,300	16,400	7,430	8,610	11,300	
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	<0.010	0.014	0.037	-	0.014	-	0.013	-	-	-	-	-	-	
Chromium	µg/L	-	2.5 [#5,12]	-	1.5 [#5,12]		<1.0	<0.10	0.13	0.18	-	<0.50	-	0.10	-	<0.50	-	<0.50	<0.5	-	<0.5	<1.0	0.11	0.16	0.69	-	<0.50	-	0.14	-	<0.50	-	<0.50	-	<0.5	
Cobalt	µg/L	4 [#5]	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	0.18	-	<0.1	<0.30	<0.10	<0.10	0.27	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	
Copper	µg/L	-	2 [#5]	-	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	1.05	-	0.52	1.6	<0.50	<1.0	**3.37**	-	0.71	-	<0.50	-	<0.40	-	0.91	-	<0.4	
Iron	µg/L	1,000 [#3]	-	-	-		1,070	407	702	821	-	360	-	1,050	-	391	-	493	959	-	772	1,130	384	661	1,660	-	490	-	1,100	-	201	-	501	-	459	
Lead	µg/L	-	2 [#5]	-	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	0.33	-	<0.2	0.56	0.132	0.233	1.06	-	0.202	-	0.216	-	<0.20	-	0.2	-	<0.2	
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	0.58	-	0.29	<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.66	-	0.23	-	0.53	
Magnesium	µg/L	-	-	-	-		1,660	1,620	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	2,020	-	1,920	1810	1860	2390	2480	-	1,970	-	1,930	-	2,890	3,600	1,500	1,420	2,310	
Manganese	µg/L	750 [#4,5]	-	100 [#5]			29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	54	-	14.6	37.6	10.4	25.0	87.3	-	18.4	-	15.3	-	17.7	-	4.94	-	18	
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	<0.04	-	-	<0.01	<0.010	-	-	0.0051	-	-	-	<0.0050	-	<0.04	-	<0.04	-	<0.04	
Molybdenum	µg/L	7,600 [#5]	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	0.18	-	0.16	<1.0	0.184	0.245	0.241	-	0.224	-	0.176	-	0.17	-	0.17	-	0.17	
Nickel	µg/L	-	-	8.3 [#5]			<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	<0.4	-	<0.4	<1.0	<0.50	<0.50	0.52	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-	<0.4	
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	<50	-	50	<50	-	<50	-	<50	<50	74	-	<50	-	<50	-	<50	-	77	-	<50	
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	980	-	800	<2000	977	1010	1470	-	974	-	778	-	1,170	-	890	-	900	
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-	-	-	-	0.69	0.63	1.26	-	0.8	-	0.66	-	-	-	-	-	-	
Selenium	µg/L	2 [#5]	-	2 [#5]	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	<0.5	-	<0.5	<0.10	<0.050	<0.050	0.083	-	<0.050	-	<0.050	-	<0.50	-	<0.50	-	<0.5	
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	5,600	-	6,880	-	5210	8200	7520	-	4,980	-	6,350	-	12,600	-	5,500	-	9,400	
Silver	µg/L	0.05 [#4,5]	-	1.5 [#4,5]	0.5 [#5]		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	<0.05	-	<0.05	<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.05	
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	7,010	-	6,770	6,600	7,350	8,120	8,660	-	7,670	-	7,540	-	8,300	-	6,190	-	7,480	
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	64.2	-	57.5	-	58.7	74.6	73.9	-	65.6	-	66.6	-	75.2	-	48.4	-	71.2	
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<0.5	-	3,600	-	<3,000	<3,000	-	<3,000	-	1130	1720	508,000	-	1,370	-	810	-	3,000	-	<3,000	-	<3000	
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	<0.5	-	<0.5	-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.5	
Thallium	µg/L	-	0.03 [#5]	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	<0.02	-	<0.02	<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-	<0.02	
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.1	-	<0.1	-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	<0.2	-	<0.2	<0.50	<0.10	<0.10	4.3	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2	
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	19.9	-	<5	28	4.39	8.52	28.7	-	9.96	-	8.05	-	<5.00	-	<5.00	-	5.8	
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	<1	-	<1	-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<0.2	
Uranium	µg/L	-	7.5 [#5]	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	0.066	-	0.025	<0.20	0.036	0.043	0.096	-	0.05	-	0.027	-	0.021	-	0.03	-	0.049	
Vanadium	µg/L	-	60 [#5]	-	5 [#5]		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	<5	-	<5	2.1	0.78	1.12	2.03	-	1.02	-	1.16	-	1.1	-	1.5	-	<5	
Zinc	µg/L	-	-	10 [#5]	-		<5.0	<3.0	**72.3**	<3.0	-	<3	-	<3	-	<4	-	<4	<4	-	<4	<5.0	<3.0	3.1	6.3	-	3.7	-	<3.0	-	<4	-	<4	-	<4	
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	<0.1	-	<0.1	-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.16	-	<0.1	
Hydrocarbons																																			
EPH$_{10-19}$	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	
EPH$_{19-32}$	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250	-	
VH$_{6-10}$	µg/L	-	-	-	-		-	<100	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	<100	-	-	-	-	-	<100	-	
Polycyclic Aromatic Hydrocarbons (PAHs)																																			
Acenaphthene	µg/L	6 [#5]	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	<0.2	-	
Acridine	µg/L	3 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Anthracene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	
Benz(a)anthracene	µg/L	0.1 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	
Benzo(a)pyrene	µg/L	0.01 [#5]	-	0.01	-		-	<0.0050	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	-	<0.0050	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01	-	
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Benzo(j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1	-	
Chrysene	µg/L	-	-	0.1	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	-	-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	<0.01	-	
Fluoranthene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	<0.03	-	
Fluorene	µg/L	12 [#5]	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05	-	
1-Methylnaphthalene	µg/L	-	-	1	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	<0.10	-	-	-	<0.1	-	
2-Methylnaphthalene	µg/L	-	-	1	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.1	-	
Naphthalene	µg/L	1 [#5]	-	1	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.20	-	-	-	<0.2	-	
Phenanthrene	µg/L	0.3 [#5]	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.1	-	
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	<0.02	-	
Quinoline	µg/L	-	50 [#5]	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.05	-	

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																						SW-3					
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	11-Oct-2022	12-Dec-2022	28-Feb-2023	UP (28-Feb-202	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	UP (10-Mar-202	26-May-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122(20A5363250420B113924072(20B9565301020		21B2866	21E1432	21G2459	21L0641	22J1342	22L1310	23C0154	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25C1419	25E3516			
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006		21B2866-06	21E1432-06	21G2459-06	21L0641-06	22J1342-03	22L1310-08	23C0154-07	23C0154-09	23E2913-07	23I3541-07	23L2282-07	24B2509-07	24F3072-07	24I2276-07	24L1123-07	25C1419-08	25C1419-10	25E3516-08			
		Approved	Working	Approved	Working																													
Total Metals																																		
Aluminum	µg/L	162 [#5,3]	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	-	62.3	-	-	197	-	161	-	224	-	94.1	-	-	336
Antimony	µg/L	74 [#5]	-	-	270 [#5]		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2	-	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	-	<0.2
Arsenic	µg/L	5 [#5]	-	12.5 [#5]	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	<0.50	-	<0.50	-	<0.5	-	-	<0.50	-	<0.5	-	<0.50	-	<0.50	-	-	<0.5
Barium	µg/L	-	1,000 [#5]	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	-	<5	-	-	<5.0	-	<5	-	5.3	-	<5.0	-	-	5.8
Beryllium	µg/L	-	0.13 [#5]	-	100 [#5]		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	-	<0.10	-	<0.1	-	<0.10	-	<0.10	-	-	<0.1
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	<0.1	-	-	<0.10	-	-	-	<0.10	-	<0.10	-	-	<0.1
Boron	µg/L	1,200 [#5]	-	1,200 [#5]	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	-	<50	-	-	<50.0	-	<50	-	<50.0	-	<50.0	-	-	<50
Cadmium	µg/L	-	-	-	0.12 [#5]		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	-	<0.01	-	-	<0.010	-	<0.01	-	<0.010	-	<0.010	-	-	<0.01
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	12,800	10,500	-	-	12,000	-	9,160	-	11,200	-	9,380	-	-	9,840
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	-	2.5 [#5,12]	-	1.5 [#5,12]		<1.0	<0.10	0.13	0.18	-	<0.50	-	<0.10	-	<0.50	-	<0.50	-	<0.5	-	-	<0.50	-	<0.5	-	<0.50	-	<0.50	-	-	<0.5
Cobalt	µg/L	4 [#5]	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	-	0.1	-	<0.1	-	0.12	-	<0.10	-	-	0.16
Copper	µg/L	-	-	2 [#5]	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	-	0.41	-	-	0.72	-	0.59	-	0.64	-	0.62	-	-	0.98
Iron	µg/L	1,000 [#3]	-	-	-		1,070	407	702	821	-	360	-	1,050	-	391	-	493	-	698	-	-	590	-	668	-	667	-	665	-	-	854
Lead	µg/L	-	-	2 [#5]	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	-	<0.2	-	-	0.2	-	<0.2	-	<0.20	-	<0.20	-	-	0.3
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	-	0.37	-	-	0.57	-	0.32	-	0.54	-	0.32	-	-	0.58
Magnesium	µg/L	-	-	-	-		1,660	1,620	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	2,570	2,090	-	-	2,380	-	1,740	-	2,420	-	1,810	-	-	1970
Manganese	µg/L	750 [#4,5]	-	-	100 [#5]		29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	-	10.6	-	-	29.1	-	16.6	-	34.1	-	14.1	-	-	47
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	<0.04	-	-	-	-	<0.020	-	<0.01	-	<0.010	-	<0.010	-	-	-
Molybdenum	µg/L	7,600 [#5]	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	-	0.17	-	-	0.24	-	0.16	-	0.22	-	0.17	-	-	0.19
Nickel	µg/L	-	-	-	8.3 [#5]		<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-	<0.4	-	-	<0.40	-	<0.4	-	<0.40	-	<0.40	-	-	<0.4
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	50	-	<50	-	<50	-	-	<50	-	-	-	<50	-	<50	-	-	<50
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	-	1,090	-	-	1,240	-	-	-	1,130	-	890	-	-	950
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	2 [#5]	-	2 [#5]	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	-	<0.5	-	-	<0.50	-	<0.5	-	<0.50	-	<0.50	-	-	<0.5
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	-	6,900	-	-	7,000	-	-	-	6,800	-	6,500	-	-	5,600
Silver	µg/L	0.05 [#4,5]	-	1.5 [#4,5]	0.5 [#5]		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	<0.05	-	-	<0.050	-	<0.05	-	<0.050	-	<0.050	-	-	<0.05
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	-	8,250	-	-	8,800	-	7,180	-	8,510	-	7,100	-	-	6,820
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	-	63.3	-	-	73.6	-	58.2	-	73.5	-	56.4	-	-	62
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<0.5	-	3,600	-	<3,000	-	<3000	-	-	<3,000	-	-	-	<3,000	-	<3,000	-	-	<3,000
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	<0.5	-	-	<0.50	-	-	-	<0.50	-	<0.50	-	-	<0.5
Thallium	µg/L	-	0.03 [#5]	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-	<0.02	-	-	<0.020	-	<0.02	-	<0.020	-	<0.020	-	-	<0.02
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.1	-	-	<0.10	-	-	-	<0.10	-	<0.10	-	-	<0.1
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	<0.2	-	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	-	<0.2
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	-	<5	-	-	10	-	7.4	-	10.3	-	<5.0	-	-	16.9
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	<1	-	-	<1.0	-	<1	-	<1.0	-	<1.0	-	-	<1
Uranium	µg/L	-	7.5 [#5]	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	-	0.03	-	-	0.047	-	0.03	-	0.043	-	0.028	-	-	0.057
Vanadium	µg/L	-	60 [#5]	-	5 [#5]		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	-	<5	-	-	<5.0	-	<5	-	<5.0	-	<5.0	-	-	<5
Zinc	µg/L	-	-	10 [#5]	-		<5.0	<3.0	**72.3**	<3.0	-	<3	-	<3	-	<4	-	<4	-	<4	-	-	<4.0	-	<4	-	<4.0	-	<4.0	-	-	<4
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	-	<0.1	-	-	<0.10	-	-	-	<0.10	-	<0.10	-	-	<0.1
Hydrocarbons																																		
EPH_{10-19}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	<250	-
EPH_{19-32}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	<250	-
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	<250	-
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	<250	-	-	-	-	<250	-	-	-	<250	<250	-
VH_{6-10}	µg/L	-	-	-	-		-	<100	-	-	-	-	<100	-	-	-	-	-	-	-	<100	-	-	-	-	<100	-	-	-	<100	<100	-
Polycyclic Aromatic Hydrocarbons (PAHs)																																		
Acenaphthene	µg/L	6 [#5]	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	-	-	<0.200	-	-	-	-	<0.200	-	-	-	<0.2	<0.2	-
Acridine	µg/L	3 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
Anthracene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	<0.01	-
Benz(a)anthracene	µg/L	0.1 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	<0.01	-
Benzo(a)pyrene	µg/L	0.01 [#5]	-	0.01	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	<0.01	-
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	<0.1	-
Chrysene	µg/L	-	-	0.1	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	-	-	<0.01	<0.01	-
Fluoranthene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	-	-	<0.030	-	-	-	-	<0.030	-	-	-	<0.03	<0.03	-
Fluorene	µg/L	12 [#5]	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-
1-Methylnaphthalene	µg/L	-	-	1	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	<0.1	-
2-Methylnaphthalene	µg/L	-	-	1	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	<0.1	-
Naphthalene	µg/L	1 [#5]	-	1	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	-	-	<0.200	-	-	-	-	<0.200	-	-	-	<0.2	<0.2	-
Phenanthrene	µg/L	0.3 [#5]	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	-	-	<0.100	-	-	-	-	<0.100	-	-	-	<0.1	<0.1	-
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	-	-	<0.02	<0.02	-
Quinoline	µg/L	-	50 [#5]	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	-	-	<0.05	<0.05	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1															SW-4									
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	14-Jul-2025	UP (14-Jul-2025	2-Dec-2025	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280120(20A5363250420(20B1139240720(20B9565301020				21B2866	21E1432	21G2459	21L0641	25G2084	25G2084	25L0435	L2254182	L2318207	L2367392	20A0908280120(20A5363250420(20B1139240720(20B9565301020					22C0773
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	25G2084-08	25G2084-10	25L0435-08	L2254182-2	L2318207-9	L2367392-9	VA20A0908-010VA20A5363-010VA20B1139-010VA20B9565-009					22C0773-09
		Approved	Working	Approved	Working																										
Total Metals																															
Aluminum	µg/L	162 #6,9	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	-	-	110	21.8	22.9	158	-	46.3	-	338	-	169	-	54.2	-
Antimony	µg/L	74 #6	-	-	270 #5		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	-	<0.2	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-
Arsenic	µg/L	5 #6	-	12.5 #6	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	<0.50	-	<0.50	-	-	<0.5	<0.10	<0.10	0.2	-	<0.10	-	0.13	-	<0.50	-	<0.50	-
Barium	µg/L	-	1,000 #5	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	-	-	<5	4.20	4.40	6.0	-	4.84	-	6.87	-	6.6	-	<5.00	-
Beryllium	µg/L	-	0.13 #5	-	100 #5		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-	-	<0.1	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	-
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-	-	<0.1	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	-
Boron	µg/L	1,200 #5	-	1,200 #5	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	-	-	<50	38	34	38	-	36	-	29	-	<50	-	<50	-
Cadmium	µg/L	-	-	-	0.12 #5		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	-	-	<0.01	<0.0050	<0.0050	0.0135	-	<0.0050	-	0.0058	-	<0.010	-	<0.010	-
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	-	-	9,380	20,300	19,000	15,900	-	19,300	-	20,400	-	18,600	17,700	16,500	18,300
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	<0.010	<0.010	<0.010	-	<0.010	-	0.017	-	-	-	-	-
Chromium	µg/L	-	2.5 #6,12	-	1.5 #6,12		<1.0	<0.10	0.13	0.18	-	<0.50	-	<0.10	-	<0.50	-	<0.50	-	-	<0.5	<0.10	<0.10	0.23	-	<0.50	-	0.22	-	<0.50	-	<0.50	-
Cobalt	µg/L	4 #6	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	<0.1	<0.10	<0.10	0.16	-	<0.10	-	0.13	-	0.16	-	<0.10	-
Copper	µg/L	-	2 #6	-	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	-	-	0.49	<0.50	<0.50	**2.83**	-	<0.50	-	0.94	-	**2.22**	-	1.14	-
Iron	µg/L	1,000 #3	-	-	-		1,070	407	702	821	-	360	-	1,060	-	391	-	493	-	-	748	100	114	773	-	227	-	325	-	436	-	100	-
Lead	µg/L	-	-	2 #6	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	-	-	<0.2	<0.050	<0.050	0.224	-	0.082	-	0.3	-	0.81	-	<0.20	-
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	-	-	0.32	1.1	1.0	<1.0	-	1	-	1.3	-	1.69	-	1.02	-
Magnesium	µg/L	-	-	-	-		1,660	1,820	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	-	-	1,900	4,470	3,830	3,390	-	4,200	-	4,210	-	4,030	3,690	3,630	3,240
Manganese	µg/L	750 #4,5	-	-	100 #5		29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	-	-	16.3	9.97	10.2	49.1	-	15.4	-	16.5	-	42.8	-	7.4	-
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	<0.04	-	-	<0.01	-	-	<0.0050	-	-	-	<0.0050	-	<0.04	-	-	-
Molybdenum	µg/L	7,600 #5	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	-	-	0.17	0.163	0.157	0.171	-	0.171	-	0.193	-	0.17	-	0.25	-
Nickel	µg/L	-	-	-	8.3 #5		<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-	-	<0.4	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	-
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	<50	-	50	-	-	<50	<50	<50	<50	-	<50	-	<50	-	<50	-	59	-
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	-	-	810	2,110	1,920	3,130	-	2,020	-	2,100	-	1,900	-	2,020	-
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-	-	-	<0.20	<0.20	0.99	-	<0.20	-	0.45	-	-	-	-	-
Selenium	µg/L	2 #6	-	2 #6	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	-	-	<0.5	0.129	0.068	0.07	-	0.068	-	0.058	-	<0.50	-	<0.50	-
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	-	-	6400	11,800	13,100	9560	-	11,800	-	13,500	-	13,800	-	12,200	-
Silver	µg/L	0.05 #4,5	-	1.5 #4,5	0.5 #5		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-	-	<0.05	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	-
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	-	-	6640	10,000	9,230	8,360	-	9,500	-	10,300	-	9,120	-	8,830	-
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	-	-	56.4	118	108	97.5	-	120	-	118	-	98.6	-	98.4	-
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<0.5	-	3,000	-	<3,000	-	-	<3,000	5160	5320	5040	-	5,000	-	5,440	-	3,800	-	3,900	-
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-	-	<0.5	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	-
Thallium	µg/L	-	0.03 #5	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-	-	<0.02	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	-
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	<0.1	<0.10	<0.10	<0.10	-	0.10	-	0.10	-	<0.10	-	<0.10	-
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	-	-	<0.2	<0.10	<0.10	0.10	-	<0.10	-	0.10	-	<0.20	-	<0.20	-
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	-	-	<5	0.96	<0.90	4.64	-	1.9	-	18	-	8.4	-	<5.00	-
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	-	-	<1	<0.10	<0.10	<0.10	-	0.10	-	0.10	-	<1.0	-	<1.0	-
Uranium	µg/L	-	7.5 #6	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	-	-	0.026	0.22	0.147	0.235	-	0.232	-	0.125	-	0.128	-	0.113	-
Vanadium	µg/L	-	60 #5	-	5 #5		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	-	-	<5	0.80	0.76	1.31	-	0.9	-	1.49	-	1.8	-	1.1	-
Zinc	µg/L	-	-	10 #5	-		<5.0	<3.0	***72.3***	<3.0	-	<3	-	<3	-	<4	-	<4	-	-	<4	<3.0	<3.0	<3.0	-	<3.0	-	<3.0	-	5	-	<4	-
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	-	-	<0.1	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.18	-
Hydrocarbons																															
EPH_{10-19}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250
EPH_{19-32}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	-	<250	-	<250	-	-	-	<250
VH_{6-10}	µg/L	-	-	-	-		-	<100	-	-	-	-	<100	-	-	-	-	-	-	-	-	<100	-	-	-	-	<100	-	-	-	-	-	<100
Polycyclic Aromatic Hydrocarbons (PAHs)																															
Acenaphthene	µg/L	6 #5	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	<0.2
Acridine	µg/L	3 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
Anthracene	µg/L	4 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01
Benz(a)anthracene	µg/L	0.1 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	<0.01
Benzo(a)pyrene	µg/L	0.01 #5	-	0.01	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	<0.01
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.0150	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
Benzo(g,h,i)perylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.10	-	-	-	<0.1
Chrysene	µg/L	-	0.1	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	<0.01
Fluoranthene	µg/L	4 #5	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	<0.03
Fluorene	µg/L	12 #5	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	<0.05
1-Methylnaphthalene	µg/L	-	1	-	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	<0.10	-	-	-	<0.1
2-Methylnaphthalene	µg/L	-	1	-	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.1
Naphthalene	µg/L	1 #5	1	-	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.20	-	-	-	<0.2
Phenanthrene	µg/L	0.3 #5	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	-	-	-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	<0.1
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	-	-	-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	<0.02
Quinoline	µg/L	-	50 #5	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	<0.05

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																			SW-4								
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	JP (26-May-202	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908028012	20A5363250420	20B1139240720	20B9565301020	21B2866	21E1432	21G2459	21L0641	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25E3516	25G2084	25L0435
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA20A5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	22G1537-09	22J1342-04	22L1310-09	23C0154-08	23E2913-08	23I3541-08	23L2282-08	24B2509-08	24F3072-08	24I2276-08	24L1123-08	25C1419-09	25E3516-09	25E3516-10	25G2084-09	25L0435-09
Total Metals																																		
Aluminum	µg/L	162 [#5,9]	-	-	-		521	95.3	147	202	-	97.1	-	110	-	106	-	106	44	-	144	-	84.3	-	278	-	40.2	-	36.6	-	218	116	-	59.5
Antimony	µg/L	74 [#5]	-	-	270 [#5]		<0.50	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.20	-	<0.20	<0.2	-	<0.2	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.2
Arsenic	µg/L	5 [#5]	-	12.5 [#5]	-		<0.50	<0.10	0.13	0.12	-	<0.10	-	0.13	-	<0.50	-	<0.50	<0.5	-	<0.5	-	<0.50	-	<0.5	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Barium	µg/L	-	1,000 [#5]	-	-		<20	3.51	4.21	4.94	-	3.87	-	4.25	-	6.2	-	<5.00	<5	-	<5	-	<5.0	-	6.1	-	<5.0	-	<5.0	-	5.6	<5	-	<5
Beryllium	µg/L	-	0.13 [#5]	-	100 [#5]		<1.0	<0.10	<0.10	<0.10	-	<0.020	-	<0.10	-	<0.10	-	<0.10	<0.1	-	<0.1	-	<0.10	-	<0.1	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Bismuth	µg/L	-	-	-	-		-	<0.050	<0.050	<0.050	-	<0.050	-	<0.050	-	<0.10	-	<0.10	<0.1	-	<0.1	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Boron	µg/L	1,200 [#5]	-	1,200 [#5]	-		<100	<10	<10	<10	-	<10	-	<10	-	<50	-	<50	<50	-	<50	-	<50.0	-	<50	-	<50.0	-	<50.0	-	<50	<50	-	<50
Cadmium	µg/L	-	-	-	0.12 [#5]		<0.010	<0.0050	<0.0050	0.0075	-	<0.0050	-	<0.0050	-	<0.010	-	<0.010	<0.01	-	<0.01	-	<0.010	-	<0.01	-	<0.010	-	<0.010	-	0.01	<0.01	-	<0.01
Calcium	µg/L	-	-	-	-		7980	8250	9600	9230	-	8,300	-	9,680	-	17,100	13,700	6,650	16,400	16,800	16,800	-	17,600	-	18,400	-	16,900	-	17,700	-	18,600	17,600	-	16,900
Cesium	µg/L	-	-	-	-		-	<0.010	0.011	0.012	-	<0.010	-	<0.010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	-	2.5 [#5,12]	-	1.5 [#5,12]		<1.0	<0.10	0.13	0.18	-	<0.50	-	<0.10	-	<0.50	-	<0.50	<0.5	-	0.96	-	<0.50	-	<0.5	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Cobalt	µg/L	4 [#5]	-	-	-		<0.30	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.1	-	0.1	-	<0.10	-	0.12	-	<0.10	-	<0.10	-	0.25	0.13	-	<0.1
Copper	µg/L	-	2 [#5]	-	-		1.5	<0.50	<1.0	0.60	-	0.6	-	<0.50	-	0.64	-	0.87	<0.4	-	1.03	-	0.66	-	0.94	-	<0.40	-	<0.40	-	0.97	0.7	-	<0.4
Iron	µg/L	1,000 [#3]	-	-	-		1,070	407	702	821	-	360	-	1,080	-	391	-	493	260	-	309	-	440	-	445	-	376	-	185	-	1170	461	-	588
Lead	µg/L	-	-	2 [#5]	-		<0.50	0.133	0.167	0.220	-	0.148	-	0.181	-	0.25	-	<0.20	<0.2	-	<0.2	-	0.27	-	0.21	-	<0.20	-	<0.20	-	0.27	<0.2	-	<0.2
Lithium	µg/L	-	-	-	-		<5.0	<1.0	<1.0	<1.0	-	<1.0	-	<1.0	-	0.69	-	0.19	1.1	-	1.17	-	1.15	-	1.18	-	1.08	-	1.27	-	1.28	1.2	-	1
Magnesium	µg/L	-	-	-	-		1,660	1,620	2,000	1930	-	1,620	-	1,740	-	3,740	3,050	1,370	3,450	3,420	3,630	-	3,630	-	3,750	-	3,850	-	3,830	-	3,790	3,610	-	3,640
Manganese	µg/L	750 [#4,5]	-	-	100 [#5]		29.7	11.4	24.7	27.7	-	15.6	-	12.7	-	21.7	-	4.67	18.4	-	21.4	-	28.4	-	29.2	-	24.0	-	16.3	-	76.9	42	-	38.2
Mercury	µg/L	-	-	-	-		<0.010	-	-	<0.00050	-	-	-	<0.00050	-	<0.04	-	<0.04	<0.04	-	-	-	<0.010	-	<0.01	-	<0.010	-	<0.010	-	-	-	-	<0.01
Molybdenum	µg/L	7,600 [#5]	-	-	-		<1.0	0.151	0.173	0.169	-	0.165	-	0.149	-	0.37	-	0.19	0.15	-	0.2	-	0.19	-	0.2	-	0.17	-	0.15	-	0.21	0.17	-	0.15
Nickel	µg/L	-	8.3 [#5]	-	-		<1.0	<0.50	<0.50	<0.50	-	<0.50	-	<0.50	-	<0.40	-	<0.40	<0.4	-	0.41	-	<0.40	-	<0.4	-	<0.40	-	<0.40	-	<0.4	<0.4	-	<0.4
Phosphorus	µg/L	-	-	-	-		-	<50	<50	<50	-	<50	-	<50	-	<50	-	50	<50	-	<50	-	<50	-	-	-	<50	-	<50	-	<50	<50	-	<50
Potassium	µg/L	-	-	-	-		<2000	857	780	927	-	808	-	660	-	1,750	-	790	1,510	-	1,850	-	1,640	-	-	-	1,760	-	1,880	-	1,830	1,710	-	1590
Rubidium	µg/L	-	-	-	-		-	0.66	0.54	0.79	-	0.62	-	0.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	2 [#5]	-	2 [#5]	-		<0.10	0.053	<0.050	<0.050	-	<0.050	-	0.052	-	<0.50	-	<0.50	<0.5	-	<0.5	-	<0.50	-	<0.5	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Silicon	µg/L	-	-	-	-		-	4620	6940	6400	-	3,920	-	5,730	-	13,000	-	5,300	12,500	-	12,200	-	12,100	-	-	-	13,400	-	13,400	-	13,200	12,600	-	12700
Silver	µg/L	0.05 [#4,5]	-	1.5 [#4,5]	0.5 [#5]		<0.020	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.050	-	<0.050	<0.05	-	<0.05	-	<0.050	-	<0.05	-	<0.050	-	<0.050	-	<0.05	<0.05	-	<0.05
Sodium	µg/L	-	-	-	-		6200	6820	7220	7200	-	6,460	-	7,110	-	11,500	-	5,860	8,300	-	8,670	-	8,830	-	9,200	-	9,030	-	9,220	-	8,910	8,490	-	8050
Strontium	µg/L	-	-	-	-		-	50.9	61.8	60.5	-	54.8	-	59.2	-	102	-	43.2	87.4	-	93	-	96.9	-	107	-	99.1	-	96.4	-	107	99	-	90.3
Sulphur	µg/L	-	-	-	-		-	1090	1110	1060	-	810	-	<0.5	-	3,600	-	<3,000	<3000	-	3000	-	<3,000	-	-	-	<3,000	-	<3,000	-	<3,000	<3,000	-	<3,000
Tellurium	µg/L	-	-	-	-		-	<0.20	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.50	-	<0.50	<0.5	-	<0.5	-	<0.50	-	-	-	<0.50	-	<0.50	-	<0.5	<0.5	-	<0.5
Thallium	µg/L	-	0.03 [#5]	-	-		<0.20	<0.010	<0.010	<0.010	-	<0.010	-	<0.010	-	<0.020	-	<0.020	<0.02	-	<0.02	-	<0.020	-	<0.02	-	<0.020	-	<0.020	-	<0.02	<0.02	-	<0.02
Thorium	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.1	-	<0.1	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Tin	µg/L	-	-	-	-		<0.50	<0.10	<0.10	0.49	-	<0.10	-	<0.10	-	<0.20	-	<0.20	<0.2	-	<0.2	-	<0.20	-	<0.2	-	<0.20	-	<0.20	-	<0.2	<0.2	-	<0.2
Titanium	µg/L	-	-	-	-		28	4.26	6.56	9.11	-	4.31	-	5.28	-	<5.00	-	<5.00	<5.0	-	<5.0	-	<5.0	-	8.3	-	<5.0	-	<5.0	-	9.7	5.2	-	<5
Tungsten	µg/L	-	-	-	-		-	<0.10	<0.10	<0.10	-	<0.10	-	<0.10	-	<1.0	-	<1.0	<0.2	-	<1	-	<1.0	-	<1	-	<1.0	-	<1.0	-	<1	<1	-	<1
Uranium	µg/L	-	7.5 [#5]	-	-		<0.20	0.022	0.023	0.027	-	0.02	-	0.021	-	0.097	-	<0.020	0.102	-	0.115	-	0.06	-	0.109	-	0.039	-	0.090	-	0.248	0.136	-	0.083
Vanadium	µg/L	-	60 [#5]	-	5 [#5]		2	0.75	0.87	0.92	-	0.78	-	0.88	-	1.8	-	1.6	<5.0	-	<5.0	-	<5.0	-	<5	-	<5.0	-	<5.0	-	<5	<5	-	<5
Zinc	µg/L	-	-	10 [#5]	-		<5.0	<3.0	**72.3**	<3.0	-	<3	-	<3	-	<4	-	<4	<4.0	-	<4.0	-	<4.0	-	**21.6**	-	7.9	-	<4.0	-	7.3	<4	-	<4
Zirconium	µg/L	-	-	-	-		-	<0.060	<0.20	<0.20	-	<0.20	-	<0.20	-	<0.10	-	0.22	<0.1	-	<0.1	-	<0.10	-	-	-	<0.10	-	<0.10	-	<0.1	<0.1	-	<0.1
Hydrocarbons																																		
EPH_{10-19}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-
EPH_{19-32}	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-
LEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-
HEPH	µg/L	-	-	-	-		-	<250	-	-	-	-	<250	-	<250	-	-	-	-	-	-	<250	-	-	-	<250	-	-	-	<250	-	-	-	-
VH_{6-10}	µg/L	-	-	-	-		-	<100	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	<100	-	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)																																		
Acenaphthene	µg/L	6 [#5]	-	6	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.20	-	-	-	-	-	-	<0.200	-	-	-	<0.200	-	-	-	<0.2	-	-	-	-
Acridine	µg/L	3 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
Anthracene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-
Benz(a)anthracene	µg/L	0.1 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-
Benzo(a)pyrene	µg/L	0.01 [#5]	-	0.01	-		-	<0.0050	-	-	-	-	<0.010	-	<0.010	-	-	-	-	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	-	-	-	-		-	-	-	-	-	-	<0.0150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
Benzo(k)fluoranthene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.10	-	-	-	-	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-
Chrysene	µg/L	-	-	0.1	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-		-	<0.0050	-	-	-	-	<0.0050	-	<0.010	-	-	-	-	-	-	<0.010	-	-	-	<0.010	-	-	-	<0.01	-	-	-	-
Fluoranthene	µg/L	4 [#5]	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.030	-	-	-	-	-	-	<0.030	-	-	-	<0.030	-	-	-	<0.03	-	-	-	-
Fluorene	µg/L	12 [#5]	-	12	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-
1-Methylnaphthalene	µg/L	-	-	1	-		-	<0.050	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	1	-		-	<0.020	-	-	-	-	<0.010	-	<0.10	-	-	-	-	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-
Naphthalene	µg/L	1 [#5]	-	1	-		-	<0.020	-	-	-	-	<0.050	-	<0.20	-	-	-	-	-	-	<0.200	-	-	-	<0.200	-	-	-	<0.2	-	-	-	-
Phenanthrene	µg/L	0.3 [#5]	-	-	-		-	<0.020	-	-	-	-	<0.020	-	<0.10	-	-	-	-	-	-	<0.100	-	-	-	<0.100	-	-	-	<0.1	-	-	-	-
Pyrene	µg/L	-	-	-	-		-	<0.010	-	-	-	-	<0.010	-	<0.020	-	-	-	-	-	-	<0.020	-	-	-	<0.020	-	-	-	<0.02	-	-	-	-
Quinoline	µg/L	-	50 [#5]	-	-		-	<0.050	-	-	-	-	<0.050	-	<0.050	-	-	-	-	-	-	<0.050	-	-	-	<0.050	-	-	-	<0.05	-	-	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																			
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908028012	20A5363250422	20B1139240720	20B9565301020	21B2866	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA20A5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	22C0773-06	22G1537-06	22J1342-01	22L1310-06	23C0154-05	23E2913-05	23I3541-05	23L2282-05
		Approved	Working	Approved	Working																					
Resin/Fatty Acids																										
Abietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Arachidic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Dichlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
9,10-Dichlorostearic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-
Isopimaric & Palustric Acids	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	<10	-	-	<10	-	-	-
Isopimaric Acid	µg/L																									
Palustric Acid	µg/L																									
Lauric Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Lignoceric Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-
Linolenic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-
Myristic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Octadecanoic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-
Oleic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	-	<10	-	-	<0.01	-	-	-
Palmitic Acid	µg/L	-	-	-	-		-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Sandaracopimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10	-	-	<0.01	-	-	-
Stearic Acid	µg/L	-	-	-	-		-	<20	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-
Total Fatty Acids	µg/L	-	-	-	-		-	<100	-	-	-	-	<110	-	-	-	-	-	-	<10	-	-	<10	-	-	-
Total Resin Acids	µg/L	-	25 [#3,13]	-	-		-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	<10	-	-	<10	-	-	-
Total Resin and Fatty Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-
BTEXS & MTBE																										
Benzene	µg/L	40 [#5]	-	110 [#5]	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-
Toluene	µg/L	0.5 [#5]	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Xylenes Total	µg/L	30 [#5]	-	-	-		-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2.0	-	-	-
Styrene	µg/L	-	72 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Volatile Organic Compounds (VOCs)																										
Hexadecanoic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Bromoform	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Chloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2.0	-	-	-
Chloroform	µg/L	-	1.8 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Dibromochloromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,2-Dibromoethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-	-	-	<0.3	-	-	-
Dibromomethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,1-Dichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,1-Dichloroethene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,2-Dichloroethene (cis)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,2-Dichloroethene (trans)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,2-Dichloropropane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,3-Dichloropropene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Methylene Chloride	µg/L	-	98.1 [#5]	-	-		-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	<3.0	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-
Tetrachloroethene	µg/L	-	110 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,1,1-Trichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
1,1,2-Trichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Trichloroethene	µg/L	-	21 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Trichlorofluoromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-
Vinyl chloride	µg/L	-	625 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1.0	-	-	-

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#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

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Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		SW-1																														SW-2									
		Approved	Working	Approved	Working																																									
Location						SW-1																																SW-2									
Sample Date						25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	14-Jul-2025	2-Dec-2025	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021
Laboratory Report Number						-	L2254181	L2318207	L2367392	20A0908280122(20A5363250420(20B1139240722(20B9565301020				21B2866	21E1432	21G2459	21L0641	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25G2084	25L0435	-	L2254181	L2318207	L2367392	20A0908280122(20A5363250420(20B1139240722(20B9565301020				21B2866
Laboratory Sample ID						-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA20A5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	24B2509-05	24F3072-05	24I2276-05	24L1123-05	25C1419-06	25E3516-06	25G2084-06	25L0435-06	-	L2254181-2	L2318207-7	L2367392-7	VA20A0908-008	VA20A5363-008	VA20B1139-008	VA20B9565-007	21B2866-07
Resin/Fatty Acids																																													
Abietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Arachidic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-
Behenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Dichlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
9,10-Dichlorostearic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric & Palustric Acids	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0
Isopimaric Acid	ug/L																	<10	-	-	-	<10	-	-	-									
Palustric Acid	ug/L																	<10	-	-	-	<10	-	-	-									
Lauric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-
Levopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Lignoceric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-
Linoleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<5.0	-	-	-	-	9.6	-	-
Linolenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-
Myristic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-
Neoabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Octadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<5.0	-	-	-	-	<5.0	-	<0.0060
Palmitic Acid	µg/L	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Sandaracopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060
Stearic Acid	µg/L	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-	-	<100	-	-	-	-	<110	-	-
Total Resin Acids	µg/L	-	25 [#3,13]	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	<10	-	-	-	<10	-	-	-	-	<10	-	-	-	-	<3.5	-	-
Total Resin and Fatty Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
BTEXS & MTBE																																												
Benzene	µg/L	40 [#5]	-	110 [#5]	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.50
Toluene	µg/L	0.5 [#5]	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Xylenes Total	µg/L	30 [#5]	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	<2.0
Styrene	µg/L	-	72 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Volatile Organic Compounds (VOCs)																																												
Hexadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<6.0
Bromodichloromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Bromoform	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.50
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Chloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2	-	-	-	-	-	-	-	-	-	-	-	<2.0
Chloroform	µg/L	-	1.8 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Dibromochloromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,2-Dibromoethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-	-	-	<0.3	-	-	-	-	-	-	-	-	-	-	-	<0.30
Dibromomethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.50
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,1-Dichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,1-Dichloroethene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,2-Dichloroethene (cis)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,2-Dichloroethene (trans)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,2-Dichloropropane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,3-Dichloropropene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Methylene Chloride	µg/L	-	98.1 [#5]	-	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	<3	-	-	-	-	-	-	-	-	-	-	-	<3.0
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	<0.50
Tetrachloroethene	µg/L	-	110 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,1,1-Trichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0
1,1,2-Trichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Trichloroethene	µg/L	-	21 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Trichlorofluoromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0
Vinyl chloride	µg/L	-	625 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-	<1.0

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		SW-1																SW-2													
		Approved	Working	Approved	Working																														
Location						SW-1																SW-2													
Sample Date						25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	UP (22-Feb-202	24-Jun-2024	UP (24-Jun-202	16-Sep-2024	9-Dec-2024	10-Mar-2025
Laboratory Report Number						-	L2254181	L2318207	L2367392	20A0908280122	(20A5363250422	20B1139240722	(20B9565301022	21B2866	21E1432	21G2459	21L0641	21E1432	21G2459	21L0641	22C0773	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24B2509	24F3072	24F3072	24I2276	24L1123	25C1419
Laboratory Sample ID						-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007	VA5363-007	VA20B1139-007	VA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	21E1432-07	21G2459-07	21L0641-07	2C0773-07	22G1537-07	22J1342-02	22L1310-07	23C0154-06	23E2913-06	23I3541-06	23L2282-06	24B2509-06	24B2509-09	24F3072-06	24F3072-09	24I2276-06	24L1123-06	25C1419-07
Resin/Fatty Acids																																			
Abietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Arachidic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Dichlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
9,10-Dichlorostearic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	-	<10
Isopimaric & Palustric Acids	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	-	-	-	-	-	-
Isopimaric Acid	µg/L																												<10	-	-	-	-	<10
Palustric Acid	ug/L																												<10	-	-	-	-	<10
Lauric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Lignoceric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Linolenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Myristic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Octadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Palmitic Acid	µg/L	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Sandaracopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	-	<0.00001
Stearic Acid	µg/L	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	-	-	-	-	-	<100	-	-	-	-	<110	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	-	<10
Total Resin Acids	µg/L	-	25 [#3,13]	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	-	<10
Total Resin and Fatty Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	-	<10
BTEXS & MTBE																																			
Benzene	µg/L	40 [#5]	-	110 [#5]	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5
Toluene	µg/L	0.5 [#5]	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Xylenes Total	µg/L	30 [#5]	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	<2
Styrene	µg/L	-	72 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-	-	-	<1
Volatile Organic Compounds (VOCs)																																			
Hexadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bromodichloromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Bromoform	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Chloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	<2
Chloroform	µg/L	-	1.8 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Dibromochloromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,2-Dibromoethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-	-	-	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3
Dibromomethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,1-Dichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,1-Dichloroethene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,2-Dichloroethene (cis)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,2-Dichloroethene (trans)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,2-Dichloropropane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,3-Dichloropropene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Methylene Chloride	µg/L	-	98.1 [#5]	-	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	-	<3
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5
Tetrachloroethene	µg/L	-	110 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
1,1,1-Trichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Trichloroethene	µg/L	-	21 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Trichlorofluoromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1
Vinyl chloride	µg/L	-	625 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		SW-1																SW-3													
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	26-May-2025	14-Jul-2025	2-Dec-2025	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022	12-Jul-2022
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280122(20A5363250422(20B1139240722(20B9565301020				21B2866	21E1432	21G2459	21L0641	25E3516	25G2084	25L0435	-	L2254182	L2318207	L2367392	20A0908280122(20A5363250422(20B1139240722(20B9565301020									
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	25E3516-07	25G2084-07	25L0435-07	-	L2254182-1	L2318207-8	L2367392-8	VA20A0908-009VA20A5363-009VA20B1139-009VA20B9565-008									
		Approved	Working	Approved	Working																														
Resin/Fatty Acids																																			
Abietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Arachidic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Behenic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Dichlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
9,10-Dichlorostearic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
Isopimaric & Palustric Acids	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	<10
Isopimaric Acid	ug/L																																		
Palustric Acid	ug/L																																		
Lauric Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Lignoceric Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Linoleic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Linolenic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	<10
Myristic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Octadecanoic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
Oleic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	<0.0060	-	-	-	-	<10
Palmitic Acid	µg/L	-	-	-	-		-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Sandaracopimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	<10
Stearic Acid	µg/L	-	-	-	-		-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	<10
Total Fatty Acids	µg/L	-	-	-	-		-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	<110	-	-	-	-	-	-	<10
Total Resin Acids	µg/L	-	25 [#3,13]	-	-		-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	<10
Total Resin and Fatty Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10
BTEXS & MTBE																																			
Benzene	µg/L	40 [#5]	-	110 [#5]	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Toluene	µg/L	0.5 [#5]	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Xylenes Total	µg/L	30 [#5]	-	-	-		-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Styrene	µg/L	-	72 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Volatile Organic Compounds (VOCs)																																			
Hexadecanoic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-
Bromodichloromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Bromoform	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Chloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-
Chloroform	µg/L	-	1.8 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Dibromochloromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dibromoethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-
Dibromomethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1-Dichloroethene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,2-Dichloropropane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,3-Dichloropropene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Methylene Chloride	µg/L	-	98.1 [#5]	-	-		-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-
Tetrachloroethene	µg/L	-	110 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichloroethene	µg/L	-	21 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Trichlorofluoromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-
Vinyl chloride	µg/L	-	625 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																				SW-3					
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	11-Oct-2022	12-Dec-2022	28-Feb-2023	UP (28-Feb-202	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	UP (10-Mar-202	26-May-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A090828012(20A536325042(20B113924072(20B956530102(		21B2866	21E1432	21G2459	21L0641	22J1342	22L1310	23C0154	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25C1419	25E3516		
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007(VA20A5363-007(VA20B1139-007(VA20B9565-006		21B2866-06	21E1432-06	21G2459-06	21L0641-06	22J1342-03	22L1310-08	23C0154-07	23C0154-09	23E2913-07	23I3541-07	23L2282-07	24B2509-07	24F3072-07	24I2276-07	24L1123-07	25C1419-08	25C1419-10	25E3516-08		
		Approved	Working	Approved	Working																											
Resin/Fatty Acids																																
Abietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Arachidic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Dichlorodehydroabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
9,10-Dichlorostearic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	<10	-
Isopimaric & Palustric Acids	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	µg/L																									<10	-	-	-	<10	<10	-
Palustric Acid	µg/L																									<10	-	-	-	<10	<10	-
Lauric Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Lignoceric Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Linolenic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Myristic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Octadecanoic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	-	-	-	-		-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Palmitic Acid	µg/L	-	-	-	-		-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Sandaracopimaric Acid	µg/L	-	-	-	-		-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	<0.01	-	-	-	-	<0.01	-	-	-	<0.00001	<0.00001	-
Stearic Acid	µg/L	-	-	-	-		-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	-	-	-	-		-	<100	-	-	-	-	<110	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	<10	-
Total Resin Acids	µg/L	-	25 [#3,13]	-	-		-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	<10	-
Total Resin and Fatty Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	<10	-	-	-	<10	<10	-
BTEXS & MTBE																																
Benzene	µg/L	40 [#5]	-	110 [#5]	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	-
Toluene	µg/L	0.5 [#5]	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Xylenes Total	µg/L	30 [#5]	-	-	-		-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	<2	<2	-
Styrene	µg/L	-	72 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Volatile Organic Compounds (VOCs)																																
Hexadecanoic Acid	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Bromodichloromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Bromoform	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	-
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Chloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	<2	<2	-
Chloroform	µg/L	-	1.8 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Dibromochloromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,2-Dibromoethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	<0.3	-
Dibromomethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	-
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,1-Dichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,1-Dichloroethene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,2-Dichloroethene (cis)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,2-Dichloroethene (trans)	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,2-Dichloropropane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,3-Dichloropropene	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Methylene Chloride	µg/L	-	98.1 [#5]	-	-		-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	-	<3	<3	-
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<0.5	<0.5	-
Tetrachloroethene	µg/L	-	110 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
1,1,1-Trichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Trichloroethene	µg/L	-	21 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Trichlorofluoromethane	µg/L	-	-	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-
Vinyl chloride	µg/L	-	625 [#5]	-	-		-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	<1	<1	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

TETRA TECH

Table 3: Surface Water Analytical Results

Location						SW-1																SW-4								
Sample Date						25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	14-Jul-2025	UP (14-Jul-2025	2-Dec-2025	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	2-Mar-2022
Laboratory Report Number						-	L2254181	L2318207	L2367392	20A0908280120A5363250420B1139240720B9565301020				21B2866	21E1432	21G2459	21L0641	25G2084	25G2084	25L0435	L2254182	L2318207	L2367392	20A0908280120A5363250420B1139240720B9565301020							22C0773
Laboratory Sample ID						-	L2254181-1	L2318207-6	L2367392-6	VA20A0908-007VA20A5363-007VA20B1139-007VA20B9565-006				21B2866-06	21E1432-06	21G2459-06	21L0641-06	25G2084-08	25G2084-10	25L0435-08	L2254182-2	L2318207-9	L2367392-9	VA20A0908-010VA20A5363-010VA20B1139-010VA20B9565-009							22C0773-09
Parameter	**Unit**	**BC WQG - Fresh AW**		**BC WQG - Marine AW**																										
		Approved	Working	Approved	Working																									
Resin/Fatty Acids																														
Abietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Arachidic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
Behenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Dichlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
9,10-Dichlorostearic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric & Palustric Acids	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	-
Isopimaric Acid	µg/L																	-	-	-												
Palustric Acid	µg/L																	-	-	-												
Lauric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
Levopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Lignoceric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
Linoleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
Linolenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
Myristic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-
Neoabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Octadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	-
Palmitic Acid	µg/L	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Sandaracopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	-
Stearic Acid	µg/L	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	-	-	-	-	-	<100	-	-	-	-	<110	-	-	-	-	-	-	-	-	<100	-	-	-	-	<110	-	-	-	-	-	-
Total Resin Acids	µg/L	-	25 [#3,13]	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	-
Total Resin and Fatty Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEXS & MTBE																														
Benzene	µg/L	40 [#5]	-	110 [#5]	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-
Toluene	µg/L	0.5 [#5]	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Xylenes Total	µg/L	30 [#5]	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-
Styrene	µg/L	-	72 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Volatile Organic Compounds (VOCs)																														
Hexadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<8.0	-	-	-				-	-	-	-	-	-	-	<8.0	-	-	-	-
Bromodichloromethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Bromoform	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Chloroethane	µg/L	-	-	-	-	-	<2.0	-	-	-	-	<2.0	-	<2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-
Chloroform	µg/L	-	1.8 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Dibromochloromethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,2-Dibromoethane	µg/L	-	-	-	-	-	<0.30	-	-	-	-	<0.30	-	<0.30	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-
Dibromomethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,1-Dichloroethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,1-Dichloroethene	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,2-Dichloropropane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,3-Dichloropropene	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Methylene Chloride	µg/L	-	98.1 [#5]	-	-	-	<3.0	-	-	-	-	<3.0	-	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-	-	<0.50	-	-	-	-	<0.50	-	<0.50	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-
Tetrachloroethene	µg/L	-	110 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,1,1-Trichloroethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
1,1,2-Trichloroethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Trichloroethene	µg/L	-	21 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Trichlorofluoromethane	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-
Vinyl chloride	µg/L	-	625 [#5]	-	-	-	<1.0	-	-	-	-	<1.0	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

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Table 3: Surface Water Analytical Results

Parameter	Unit	BC WQG - Fresh AW		BC WQG - Marine AW		Location	SW-1																				SW-4								
						Sample Date	25-Mar-2014	1-Apr-2019	25-Jul-2019	17-Oct-2019	27-Jan-2020	23-Apr-2020	22-Jul-2020	28-Oct-2020	21-Feb-2021	11-May-2021	19-Jul-2021	1-Dec-2021	12-Jul-2022	11-Oct-2022	12-Dec-2022	28-Feb-2023	23-May-2023	27-Sep-2023	18-Dec-2023	22-Feb-2024	24-Jun-2024	16-Sep-2024	9-Dec-2024	10-Mar-2025	26-May-2025	JP (26-May-202	14-Jul-2025	2-Dec-2025
						Laboratory Report Number	-	L2254181	L2318207	L2367392	20A0908280120	20A5363250420	20B1139240720	20B9565301020	21B2866	21E1432	21G2459	21L0641	22G1537	22J1342	22L1310	23C0154	23E2913	23I3541	23L2282	24B2509	24F3072	24I2276	24L1123	25C1419	25E3516	25E3516	25G2084	25L0435
						Laboratory Sample ID	-	L2254181-1	L2318207-6	L2367392-6	IVA20A0908-007	IVA20A5363-007	IVA20B1139-007	IVA20B9565-006	21B2866-06	21E1432-06	21G2459-06	21L0641-06	22G1537-09	22J1342-04	22L1310-09	23C0154-08	23E2913-08	23I3541-08	23L2282-08	24B2509-08	24F3072-08	24I2276-08	24L1123-08	25C1419-09	25E3516-09	25E3516-10	25G2084-09	25L0435-09
		Approved	Working	Approved	Working																													
Resin/Fatty Acids																																		
Abietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Arachidic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
14-Chlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Dehydroabietic Acid	µg/L	-	8 [#3,13]	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Dichlorodehydroabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
9,10-Dichlorostearic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-	-
Isopimaric & Palustric Acids	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<6.0	-	-	-	<10	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	µg/L																								<10	-	-	-	<10	-	-	-	-
Palustric Acid	µg/L																								<10	-	-	-	<10	-	-	-	-
Lauric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Lignoceric Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Linolenic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Myristic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Octadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	-	-	-	-	-	<5.0	-	-	-	-	<5.0	-	0.017	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Palmitic Acid	µg/L	-	-	-	-	-	<100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Sandaracopimaric Acid	µg/L	-	-	-	-	-	<1.0	-	-	-	-	<1.0	-	<0.0060	-	-	-	<10	-	-	<0.01	-	-	-	<0.01	-	-	-	<0.00001	-	-	-	-
Stearic Acid	µg/L	-	-	-	-	-	<20	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	-	-	-	-	-	<100	-	-	-	-	<110	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-	-
Total Resin Acids	µg/L	-	25 [#3,13]	-	-	-	<10	-	-	-	-	<3.5	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-	-
Total Resin and Fatty Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-	-
BTEXS & MTBE																																		
Benzene	µg/L	40 [#5]	-	110 [#5]	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	-
Toluene	µg/L	0.5 [#5]	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Ethylbenzene	µg/L	200 [#5]	-	250 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Xylenes Total	µg/L	30 [#5]	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2	-	-	-	-
Styrene	µg/L	-	72 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	3,400 [#3]	-	440 [#5]	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Volatile Organic Compounds (VOCs)																																		
Hexadecanoic Acid	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Bromodichloromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Bromoform	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Carbon tetrachloride	µg/L	-	13.3 [#5]	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	-
Chlorobenzene	µg/L	-	1.3 [#5]	-	25 [#5]	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Chloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-	<2	-	-	-	-
Chloroform	µg/L	-	1.8 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Dibromochloromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dibromoethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.30	-	-	-	-	-	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	-
Dibromomethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichlorobenzene	µg/L	-	0.7 [#5]	-	42 [#5]	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	-
1,3-Dichlorobenzene	µg/L	-	150 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,4-Dichlorobenzene	µg/L	-	26 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,1-Dichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloroethane	µg/L	-	100 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,1-Dichloroethene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,2-Dichloropropane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,3-Dichloropropene	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Methylene Chloride	µg/L	-	98.1 [#5]	-	-	-	-	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	<3.0	-	-	-	-	-	-	-	<3	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	<0.5	-	-	-	-
Tetrachloroethene	µg/L	-	110 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
1,1,1-Trichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Trichloroethene	µg/L	-	21 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Trichlorofluoromethane	µg/L	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-
Vinyl chloride	µg/L	-	625 [#5]	-	-	-	-	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	<1.0	-	-	-	-	-	-	-	<1	-	-	-	-

Notes:

#1	Guideline is for short-term daily temperature in streams with unknown fish distribution.
#2	Guideline is the instantaneous minimum for all life stages other than buried embryo/alevin.
#3	Guideline is the short-term acute WQG.
#4	Guideline varies with hardness. Values shown based on average hardness of 32.146 mg/L at background location SW-1.
#5	Guideline is the long-term chronic WQG.
#6	Guideline varies with pH and temperature. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1.
#7	Guideline varies with pH, temperature, and salinity. Values shown based on an average laboratory pH of 7.17 and average field temperature of 10.2°C at background location SW-1. Salinity has not been measured since 2019, so the the guidelines for the lowest salinity is selected.
#8	Guideline varies with chloride. Values shown based on an average chloride concentration of 9.1 mg/L at background location SW-1.
#9	Guideline varies with pH, hardness, and DOC. Values shown is calculated based on an average laboratory pH of 7.17, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#10	Guideline varies with temperature, hardness, and DOC. Values shown is calculated based on an average field temperature of 10.2°C, average hardness of 32.146 mg/L , and DOC of 4.83 mg/L at background location SW-1.
#11	Guideline varies with hardness and DOC. Values shown is calculated based on an average hardness of 32.146 mg/L, and DOC of 4.83 mg/L at background location SW-1.
#12	Guideline is for Chromium VI.
#13	Guideline varies with pH. Values shown is calculated based on an average laboratory pH of 7.17 at background location SW-1.
-	Not analyzed or no applicable BC WQG guideline.
<	Concentration is less than the laboratory detection limit indicated.
BC WQG - Approved	British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated May 2025).
BC WQG - Working	British Columbia Working Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (updated March 2025).
AW	Aquatic Wildlife.
Shaded	Shaded indicates an exceedance of the BC WQG Freshwater AW guidelines.
BOLD	Bold and underlined indicates an exceedance of the BC WQG Marine AW guidelines.
Italic	Detection limit greater than standard.

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Table 4: Groundwater and Surface Water QA/QC Analytical Results

		Location	SW3	Dup	RPD (%)	SW4	Dup	RPD (%)	SW3	Dup	RPD (%)	MW24-05	Dup	RPD (%)
		Sample Date	10-Mar-2025	10-Mar-2025		26-May-2025	26-May-2025		14-Jul-2025	14-Jul-2025		2-Dec-2025	2-Dec-2025	
		Laboratory Report Number	25C1419	25C1419		25E3516	25E3516		25G2084	25G2084		25L0435	25L0435	
		Laboratory Sample ID	25C1419-08	25C1419-10		25E3516-09	25E3516-10		25G2084-08	25G2084-10		25L0435-05	25L0435-10	
Parameter	**Unit**	**RDL**												
Physical Parameters														
pH	pH Units	0.1	7.42	7.41	0	7.29	7.27	0	7.01	7.02	0	6.17	6.13	1
Electrical Conductivity (EC)	µS/cm	2	60.6	85.8	**34**	170	166	2	131	131	0	111	116	4
Total Dissolved Solids (TDS)	µg/L	3,000	-	-	-	75,000	50,000	**40**	-	-	-	112000	105,000	6
Hardness as $CaCO_3$	µg/L	500	-	-	-	62,000	58,800	5	-	-	-	51,000	51,900	2
Alkalinity (total as $CaCO_3$)	µg/L	1,000	26,000	26,700	3	57,900	55,900	4	40,700	40,600	0	61,100	72,400	17
Alkalinity (P)	µg/L	1,000	<1,000	<1,000	-	<1,000	<1,000	-	<1,000	<1,000	-	<1,000	<1,000	-
Bicarbonate	µg/L	1,000	26,000	26,700	3	57,900	55,900	4	40,700	40,600	0	61,100	72,400	17
Carbonate	µg/L	1,000	<1,000	<1,000	-	<1,000	<1,000	-	<1,000	<1,000	-	<1,000	<1,000	-
Hydroxide	µg/L	1,000	<1,000	<1,000	-	<1,000	<1,000	-	<1,000	<1,000	-	<1,000	<1,000	-
Bromide	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-
Chloride	µg/L	500	7,380	7,090	4	11,300	10,700	5	10,900	10,200	7	370	310	-
Fluoride	µg/L	20	<100	<100	-	<100	<100	-	<100	<100	-	<100	<100	-
Sulphate	µg/L	300	1,800	2,300	24	4,500	4,400	2	3,500	3,200	9	2,400	2,100	13
Sulphide (total)	µg/L	10	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	<0.01	-
Turbidity	NTU	0.1	-	-	-	-	-	-	-	-	-	-	-	-
Acidity	µg/L	2,000	-	-	-	-	-	-	-	-	-	-	-	-
Nutrients														
Ammonia as N	µg/L	5	<50	<50	-	<50	<50	-	<50	<50	-	<50	<50	-
Nitrate (as N)	µg/L	5	154	159	3	33	38	14	142	138	3	81	72	12
Nitrite (as N)	µg/L	1	<10	<10	-	<10	<10	-	<10	<10	-	<10	<10	-
Nitrate and nitrate (as N)	µg/L	50	-	-	-	-	-	-	-	-	-	-	-	-
Demand Parameters														
Biochemical Oxygen Demand (BOD)	µg/L	2,000	-	-	-	<4,000	<4,000	-	-	-	-	<4,000	<4,000	-
Chemical Oxygen Demand (COD)	µg/L	20,000	-	-	-	<20,000	<20,000	-	-	-	-	77,000	73,000	-
Carbon														
Dissolved Organic Carbon (DOC)	µg/L	500	-	-	-	2,600	2560	2	-	-	-	20,800	20700	0
Total Organic Carbon (TOC)	µg/L	500	-	-	-	-	-	-	-	-	-	-	-	-
Phenols														
Phenolics	µg/L	2	<2	<2	-	-	-	-	-	-	-	-	-	-
Dissolved Metals														
Aluminum	µg/L	1	-	-	-	<5	<5	-	-	-	-	227	217	5
Antimony	µg/L	0.1	-	-	-	<0.2	<0.2	-	-	-	-	1	1.03	3
Arsenic	µg/L	0.1	-	-	-	<0.5	<0.5	-	-	-	-	0.67	0.67	0
Barium	µg/L	0.1	-	-	-	<5	<5	-	-	-	-	<5	<5	-
Beryllium	µg/L	0.1	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	-
Bismuth	µg/L	0.05	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	-
Boron	µg/L	10	-	-	-	<50	<50	-	-	-	-	<50	<50	-
Cadmium	µg/L	0.005	-	-	-	<0.01	<0.01	-	-	-	-	0.071	0.068	4
Calcium	µg/L	50	-	-	-	17,800	17,700	1	-	-	-	17,300	16,500	5
Cesium	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	<0.5	<0.5	-	-	-	-	1.46	1.46	0
Cobalt	µg/L	0.1	-	-	-	<0.1	<0.1	-	-	-	-	0.1	<0.1	-
Copper	µg/L	0.2	-	-	-	<0.4	<0.4	-	-	-	-	15.2	15.7	3
Iron	µg/L	10	-	-	-	15	12	-	-	-	-	108	102	6
Lead	µg/L	0.05	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	<0.2	-
Lithium	µg/L	1	-	-	-	1.06	1.03	-	-	-	-	0.19	0.18	-
Magnesium	µg/L	5	-	-	-	3,580	3,460	3	-	-	-	2,620	2,500	5
Manganese	µg/L	0.1	-	-	-	2.8	2.22	23	-	-	-	3	3	4
Mercury	µg/L	0.005	-	-	-	<0.04	<0.04	-	-	-	-	0.018	0.019	-
Molybdenum	µg/L	0.05	-	-	-	0.14	0.14	-	-	-	-	0.31	0.3	3
Nickel	µg/L	0.5	-	-	-	<0.4	<0.4	-	-	-	-	1.25	1.18	-
Phosphorus	µg/L	50	-	-	-	<50	<50	-	-	-	-	<50	<50	-
Potassium	µg/L	50	-	-	-	1690	1640	3	-	-	-	2,130	2,070	3
Rubidium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	-
Silicon	µg/L	50	-	-	-	12,000	11,900	1	-	-	-	6,400	6,100	5
Silver	µg/L	0.01	-	-	-	<0.05	<0.05	-	-	-	-	<0.05	<0.05	-
Sodium	µg/L	50	-	-	-	8,410	8,380	0	-	-	-	4,330	3,950	9
Strontium	µg/L	0.2	-	-	-	97.9	95.5	2	-	-	-	69.5	66.9	4
Sulphur	µg/L	500	-	-	-	<3,000	<3,000	-	-	-	-	<3,000	<3,000	-
Tellurium	µg/L	0.2	-	-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	-
Thallium	µg/L	0.01	-	-	-	<0.02	<0.02	-	-	-	-	<0.02	<0.02	-
Thorium	µg/L	0.1	-	-	-	<0.1	<0.1	-	-	-	-	0.11	<0.1	-
Tin	µg/L	0.1	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	<0.2	-
Titanium	µg/L	0.3	-	-	-	<5	<5	-	-	-	-	<5	<5	-
Tungsten	µg/L	0.1	-	-	-	<1	<1	-	-	-	-	<1	<1	-
Uranium	µg/L	0.01	-	-	-	0.075	0.069	8	-	-	-	0.815	0.809	1
Vanadium	µg/L	0.5	-	-	-	<5	<5	-	-	-	-	<5	<5	-
Zinc	µg/L	1	-	-	-	<4	<4	-	-	-	-	<4	<4	-
Zirconium	µg/L	0.06	-	-	-	<0.1	<0.1	-	-	-	-	0.24	0.2	-
Total Metals														
Aluminum	µg/L	3	-	-	-	218	116	**61**	-	-	-	425	458	7
Antimony	µg/L	0.1	-	-	-	<0.2	<0.2	-	-	-	-	0.97	0.99	2
Arsenic	µg/L	0.1	-	-	-	<0.5	<0.5	-	-	-	-	0.69	0.7	1
Barium	µg/L	0.1	-	-	-	5.6	<5	-	-	-	-	<5	<5	-
Beryllium	µg/L	0.1	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	-
Bismuth	µg/L	0.05	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	<0.1	-
Boron	µg/L	10	-	-	-	<50	<50	-	-	-	-	<50	<50	-
Cadmium	µg/L	0.005	-	-	-	0.01	<0.01	-	-	-	-	0.071	0.074	4
Calcium	µg/L	50	-	-	-	18,600	17,600	6	-	-	-	16,200	16500	2
Cesium	µg/L	0.01	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	0.1	-	-	-	<0.5	<0.5	-	-	-	-	1.52	2	3
Cobalt	µg/L	0.1	-	-	-	0.25	0.13	-	-	-	-	0.15	0.14	-
Copper	µg/L	0.5	-	-	-	0.97	0.7	-	-	-	-	15.7	16.2	3
Iron	µg/L	10	-	-	-	1170	461	**87**	-	-	-	257	286	11
Lead	µg/L	0.05	-	-	-	0.27	<0.2	-	-	-	-	<0.2	0	-
Lithium	µg/L	1	-	-	-	1.28	1.2	-	-	-	-	0.21	0.22	-
Magnesium	µg/L	5	-	-	-	3,790	3,610	5	-	-	-	2,570	2570	0
Manganese	µg/L	0.1	-	-	-	76.9	42	**59**	-	-	-	4	5	3
Mercury	µg/L	0.01	-	-	-	-	-	-	-	-	-	0	0	-
Molybdenum	µg/L	0.05	-	-	-	0.21	0.17	-	-	-	-	0.32	0.36	12
Nickel	µg/L	0.5	-	-	-	<0.4	<0.4	-	-	-	-	1.35	1.66	-
Phosphorus	µg/L	50	-	-	-	<50	<50	-	-	-	-	<50	<50	-
Potassium	µg/L	50	-	-	-	1830	1710	7	-	-	-	2,080	2070	0
Rubidium	µg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	0.05	-	-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	-
Silicon	µg/L	100	-	-	-	13,200	12,600	5	-	-	-	6,200	6400	3
Silver	µg/L	0.01	-	-	-	<0.05	<0.05	-	-	-	-	<0.05	<0.05	-
Sodium	µg/L	50	-	-	-	8,910	8,490	5	-	-	-	3,700	3,810	3
Strontium	µg/L	0.2	-	-	-	107	99	8	-	-	-	65.8	66	1
Sulphur	µg/L	500	-	-	-	<3,000	<3,000	-	-	-	-	<3,000	<3,000	-
Tellurium	µg/L	0.2	-	-	-	<0.5	<0.5	-	-	-	-	<0.5	<0.5	-
Thallium	µg/L	0.01	-	-	-	<0.02	<0.02	-	-	-	-	<0.02	<0.02	-
Thorium	µg/L	0.1	-	-	-	<0.1	<0.1	-	-	-	-	0.11	0.11	-
Tin	µg/L	0.1	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	<0.2	-
Titanium	µg/L	0.3	-	-	-	9.7	5.2	**60**	-	-	-	7.5	8.9	17
Tungsten	µg/L	0.1	-	-	-	<1	<1	-	-	-	-	<1	<1	-
Uranium	µg/L	0.01	-	-	-	0.248	0.136	**58**	-	-	-	0.865	0.9	4
Vanadium	µg/L	0.5	-	-	-	<5	<5	-	-	-	-	<5	<5	-
Zinc	µg/L	3	-	-	-	7.3	<4	-	-	-	-	<4	<4	-
Zirconium	µg/L	0.2	-	-	-	<0.1	<0.1	-	-	-	-	0.24	0.26	-

Notes:

-	RPD not calculated.
<	Concentration is less than the laboratory detection limit indicated.
RDL	Reportable Detection Limit.
RPD	RPD is Relative Percentage Difference calculated as RPD(%)=(|V1-V2|/[(V1+V2)/2])*100 where V1,V2 = concentrations of parent and duplicate sample, respectively. RPDs have only been calculated where concentrations are greater than 5
BOLD	High RPDs are in bold (groundwater metals were compared against a 30% screening threshold and groundwater Volitile Organic Compounds (VOCs) and other organics were compared to a 45% screening threshold as recommended by British Columbia (BC) Ministry of Environment Q&A, and BC Environmental Laboratory Manual).

TETRA TECH

Table 4: Groundwater and Surface Water QA/QC Analytical Results

			Location	SW3	Dup		SW4	Dup		SW3	Dup		MW24-05	Dup	
			Sample Date	10-Mar-2025	10-Mar-2025	RPD (%)	26-May-2025	26-May-2025	RPD (%)	14-Jul-2025	14-Jul-2025	RPD (%)	2-Dec-2025	2-Dec-2025	RPD (%)
			Laboratory Report Number	25C1419	25C1419		25E3516	25E3516		25G2084	25G2084		25L0435	25L0435	
			Laboratory Sample ID	25C1419-08	25C1419-10		25E3516-09	25E3516-10		25G2084-08	25G2084-10		25L0435-05	25L0435-10	
Parameter	**Unit**	**RDL**													
Hydrocarbons															
EPH_{10-19}	µg/L	250	<250	<250	-	-	-	-	-	-	-	-	-	-	-
EPH_{19-32}	µg/L	250	<250	<250	-	-	-	-	-	-	-	-	-	-	-
LEPH	µg/L	250	<250	<250	-	-	-	-	-	-	-	-	-	-	-
HEPH	µg/L	250	<250	<250	-	-	-	-	-	-	-	-	-	-	-
VH^{6-10}	µg/L	100	<100	<100	-	-	-	-	-	-	-	-	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)															
Acenaphthene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Acenaphthylene	µg/L	0.01	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-
Acridine	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Anthracene	µg/L	0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-
Benz(a)anthracene	µg/L	0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	0.005	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-
Benzo(b,j,k)fluoranthene	µg/L	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j)fluoranthene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
2-chloronaphthalene	µg/L	0.01	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-
Chrysene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	0.005	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-
Fluoranthene	µg/L	0.01	<0.03	<0.03	-	-	-	-	-	-	-	-	-	-	-
Fluorene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
1-Methylnaphthalene	µg/L	0.05	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	0.02	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	µg/L	0.02	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/L	0.02	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-
Pyrene	µg/L	0.01	<0.02	<0.02	-	-	-	-	-	-	-	-	-	-	-
Quinoline	µg/L	0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-
Resin/Fatty Acids															
Abietic Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Arachidic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-
Behenic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-
12-Chlorodehydroabietic Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
14-Chlorodehydroabietic Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Dehydroabietic Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Dichlorodehydroabietic Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
9,10-Dichlorostearic Acid	µg/L		<10	<10	-	-	-	-	-	-	-	-	-	-	-
Isopimaric & Palustric Acids	µg/L	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopimaric Acid	ug/L	10	<10	<10		-	-		-	-		-	-		
Palustric Acid	ug/L	10	<10	<10		-	-		-	-		-	-		
Lauric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-
Levopimaric Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Lignoceric Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-
Linoleic Acid	µg/L	0.005	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Linolenic Acid	µg/L	0.005	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Myristic Acid	µg/L	0.005	-	-	-	-	-	-	-	-	-	-	-	-	-
Neoabietic Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Octadecanoic Acid	µg/L		<10	<10	-	-	-	-	-	-	-	-	-	-	-
Oleic Acid	µg/L	0.005	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Palmitic Acid	µg/L	100	-	-	-	-	-	-	-	-	-	-	-	-	-
Pimaric Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Sandaracopimaric Acid	µg/L	0.001	<0.00001	<0.00001	-	-	-	-	-	-	-	-	-	-	-
Stearic Acid	µg/L	20	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Fatty Acids	µg/L	0.1	<10	<10	-	-	-	-	-	-	-	-	-	-	-
Total Resin Acids	µg/L	0.01	<10	<10	-	-	-	-	-	-	-	-	-	-	-
Total Resin and Fatty Acid	µg/L	0.01	<10	<10	-	-	-	-	-	-	-	-	-	-	-
BTEXS & MTBE															
Benzene	µg/L	0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Xylenes Total	µg/L	2	<2	<2	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Methyl t-butyl ether (MTBE)	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)															
Hexadecanoic Acid	µg/L	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Bromoform	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	µg/L	2	<2	<2	-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	µg/L	0.3	<0.3	<0.3	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (cis)	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene (trans)	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride	µg/L	3	<3	<3	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/L	1	<1	<1	-	-	-	-	-	-	-	-	-	-	-

Notes:

-	RPD not calculated.
<	Concentration is less than the laboratory detection limit indicated.
RDL	Reportable Detection Limit.
RPD	RPD is Relative Percentage Difference calculated as RPD(%)=(|V1-V2|/[(V1+V2)/2])*100 where V1,V2 = concentrations of parent and duplicate sample, respectively. RPDs have only been calculated where concentrations are greater than 5 times the RDL.
BOLD	High RPDs are in bold (groundwater metals were compared against a 30% screening threshold and groundwater Volitile Organic Compounds (VOCs) and other organics were compared to a 45% screening threshold as recommended by British Columbia (BC) Ministry of Environment Q&A, and BC Environmental Laboratory Manual).

TETRA TECH

FIGURES

Figure 1 Site Location Plan
Figure 2 Site Plan
Figure 3 Interpreted Groundwater Flow March 2025
Figure 4 Interpreted Groundwater Flow May 2025
Figure 5 Interpreted Groundwater Flow July 2025
Figure 6 Interpreted Groundwater Flow December 2025
Figure 7 Monitoring Well Hydrographs
Figure 8 Sulphate Concentrations in Groundwater
Figure 9 Chloride Concentrations in Groundwater
Figure 10 Dissolved Cobalt Concentrations in Groundwater
Figure 11 Dissolved Arsenic Concentrations in Groundwater
Figure 12 Dissolved Iron Concentrations in Groundwater
Figure 13 Dissolved Manganese Concentrations in Groundwater
Figure 14 pH in Surface Water
Figure 15 Sulphate Concentrations in Surface Water
Figure 16 Chloride Concentrations in Surface Water



NOTE:

BASE IMAGE OBTAINED FROM GOOGLE EARTH
IMAGERY DATE: APRIL 2021

0 500m

Scale: 1:10,000 @ 11"x17"

CLIENT

qathet REGIONAL DISTRICT

TETRA TECH

ENVIRONMENTAL MONITORING
MARINE AVENUE SITE, POWELL RIVER, BC

SITE LOCATION PLAN

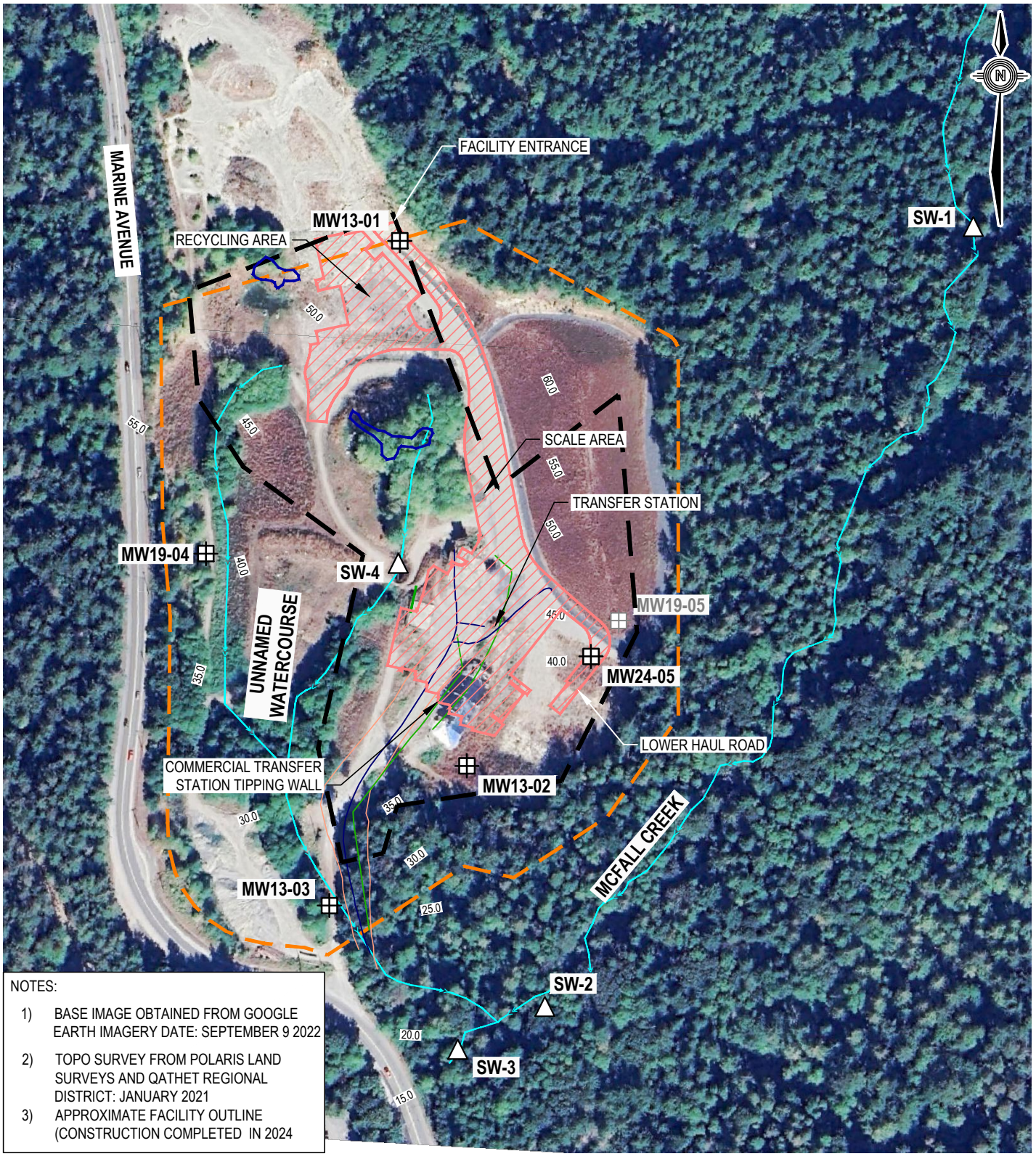
PROJECT NO.	DWN	CKD	REV
SWM.SWOP03663-16	AF	MA	0

OFFICE: VAN

DATE: March 2026

Figure 1

Q:\Edmonton\Drafting\00_MASTER PROJECT BASE PLANS\PRRD Transfer Station\SWM.SWOP03663 Env. Compliance Reporting\FIGURES\CAD\SWM.SWOP03663-14SWM.SWOP03663-14 Figure 1_SS.dwg [FIGURE 1] January 23, 2026 - 1:46:25 pm (BY: FLEMING, ALEXA)



NOTES:

1) BASE IMAGE OBTAINED FROM GOOGLE EARTH IMAGERY DATE: SEPTEMBER 9 2022
2) TOPO SURVEY FROM POLARIS LAND SURVEYS AND QATHET REGIONAL DISTRICT: JANUARY 2021
3) APPROXIMATE FACILITY OUTLINE (CONSTRUCTION COMPLETED IN 2024

0 100 m

Scale: 1: 3 000

LEGEND:

- EXISTING MONITORING WELL LOCATION (APPROXIMATE)
- EXISTING SURFACE WATER MONITORING LOCATION (APPROXIMATE)
- MONITORING WELL DECOMMISSIONED SEPT. 14, 2020
- MARINE AVENUE SITE BOUNDARY (APPROXIMATE)
- CURRENT RRC LEASE BOUNDARY (APPROXIMATE)
- EXISTING PONDS
- STREAMS
- RESOURCE RECOVERY CENTER OUTLINE

CLIENT

qathet REGIONAL DISTRICT

TETRA TECH

ENVIRONMENTAL MONITORING
MARINE AVENUE SITE, POWELL RIVER, BC

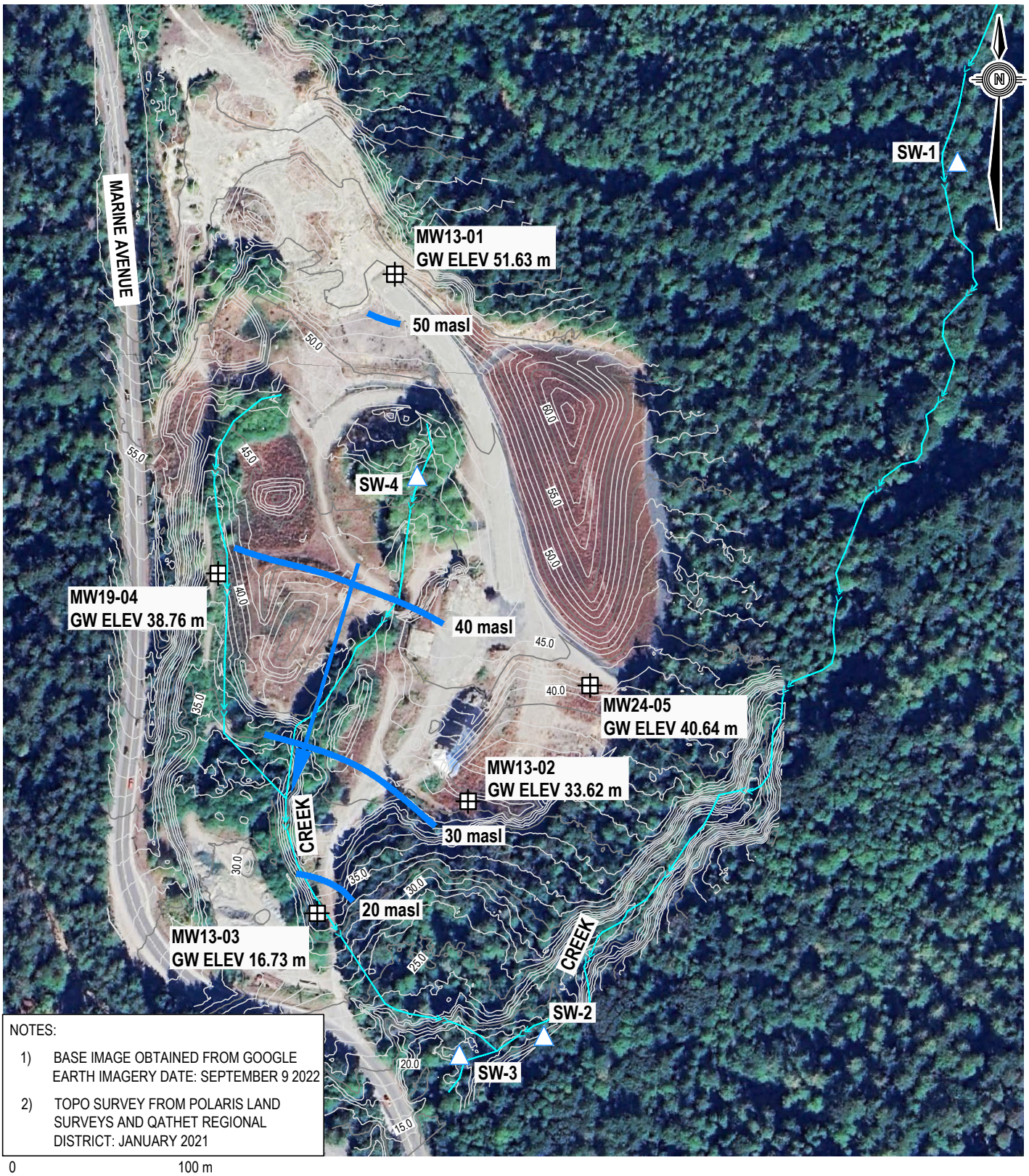
SITE PLAN

PROJECT NO.	DWN	CKD	REV
SWM.SWOP03663-16	AF	MA	0

OFFICE	DATE
VAN	March 2026

Figure 2

Q:\Edmonton\Drafting\00_MASTER PROJECT BASE PLANS\PRRD Transfer Station\SWM.SWOP03663 Env Compliance Reporting\FIGURES\CAD\SWM.SWOP03663-15\SWM.SWOP03663-15 Figure 2_SS.dwg [FIGURE 2] February 04, 2026 - 11:59:49 am (BY: FLEMING, ALEXA)



NOTES:

1) BASE IMAGE OBTAINED FROM GOOGLE EARTH IMAGERY DATE: SEPTEMBER 9 2022

2) TOPO SURVEY FROM POLARIS LAND SURVEYS AND QATHET REGIONAL DISTRICT: JANUARY 2021

0 100 m

Scale: 1: 3 000

LEGEND:

- EXISTING MONITORING WELL LOCATION (APPROXIMATE)
- EXISTING SURFACE WATER MONITORING LOCATION (APPROXIMATE)
- INTERPRETED GROUNDWATER CONTOURS
- INFERRED GROUNDWATER FLOW DIRECTION
- STREAMS
- MAJOR CONTOUR (5m)
- MINOR CONTOUR (1m)

CLIENT

qathet REGIONAL DISTRICT

TETRA TECH

ENVIRONMENTAL MONITORING
MARINE AVENUE SITE, POWELL RIVER, BC

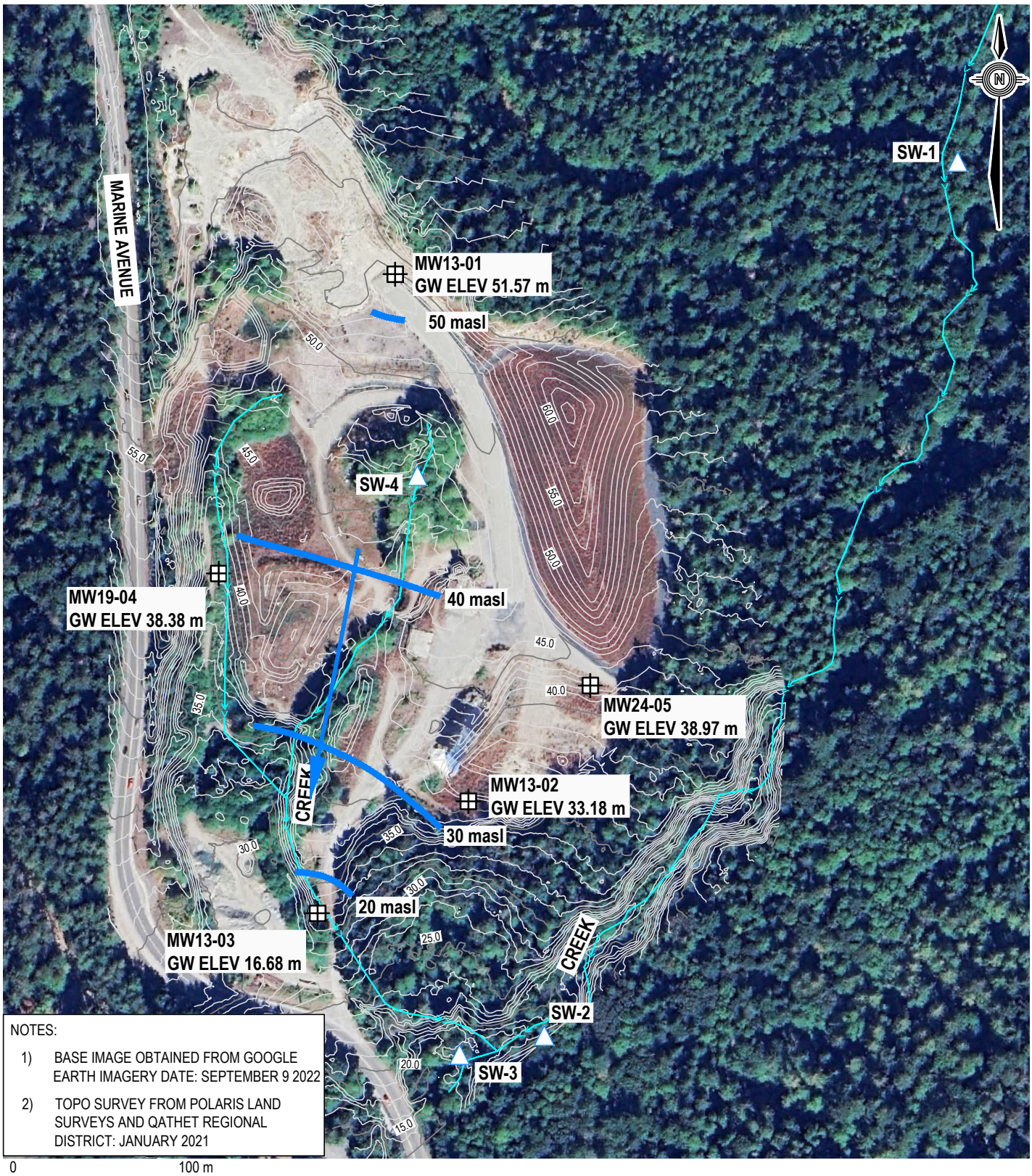
INTERPRETED GROUNDWATER FLOW
MARCH 2025

PROJECT NO.	DWN	CKD	REV
SWM.SWOP03663-16	AF	MA	0

OFFICE	DATE
VAN	March 2026

Figure 3

Q:\Edmonton\Drafting\00_MASTER PROJECT BASE PLANS\PRRD Transfer Station\SWM.SWOP03663 Env Compliance Reporting\FIGURES\CAD\SWM.SWOP03663-15\SWM.SWOP03663-15 Figure 3_SS.dwg [FIGURE 3] February 06, 2026 - 3:27:05 pm (BY: FLEMING, ALEXA)



NOTES:

1) BASE IMAGE OBTAINED FROM GOOGLE EARTH IMAGERY DATE: SEPTEMBER 9 2022

2) TOPO SURVEY FROM POLARIS LAND SURVEYS AND QATHET REGIONAL DISTRICT: JANUARY 2021

0 100 m

Scale: 1: 3 000

LEGEND:

- EXISTING MONITORING WELL LOCATION (APPROXIMATE)
- EXISTING SURFACE WATER MONITORING LOCATION (APPROXIMATE)
- INTERPRETED GROUNDWATER CONTOURS
- INFERRED GROUNDWATER FLOW DIRECTION
- STREAMS
- MAJOR CONTOUR (5m)
- MINOR CONTOUR (1m)

CLIENT

qathet REGIONAL DISTRICT

TETRA TECH

ENVIRONMENTAL MONITORING
MARINE AVENUE SITE, POWELL RIVER, BC

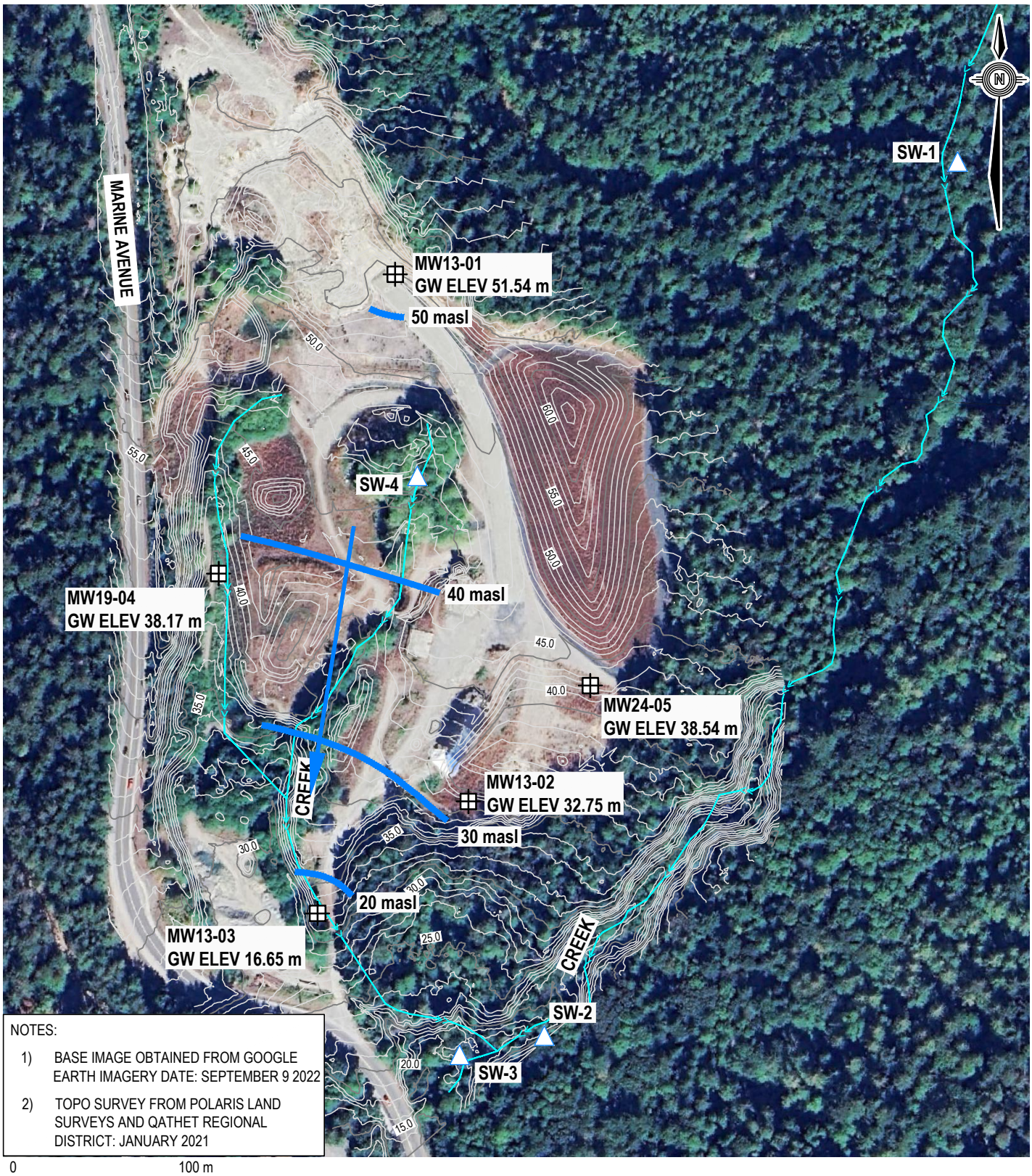
INTERPRETED GROUNDWATER FLOW
MAY 2025

PROJECT NO.	DWN	CKD	REV
SWM.SWOP03663-16	AF	MA	0

OFFICE	DATE
VAN	March 2026

Figure 4

Q:\Edmonton\Drafting\00_MASTER PROJECT BASE PLANS\PRRD Transfer Station\SWM.SWOP03663 Env Compliance Reporting\FIGURES\CAD\SWM.SWOP03663-15\SWM.SWOP03663-15 Figure 4_SS.dwg [FIGURE 4] February 04, 2026 - 4:00:46 pm (BY: FLEMING, ALEXA)



LEGEND:

- EXISTING MONITORING WELL LOCATION (APPROXIMATE)
- EXISTING SURFACE WATER MONITORING LOCATION (APPROXIMATE)
- INTERPRETED GROUNDWATER CONTOURS
- INFERRED GROUNDWATER FLOW DIRECTION
- STREAMS
- MAJOR CONTOUR (5m)
- MINOR CONTOUR (1m)

CLIENT

qathet REGIONAL DISTRICT

TETRA TECH

ENVIRONMENTAL MONITORING
MARINE AVENUE SITE, POWELL RIVER, BC

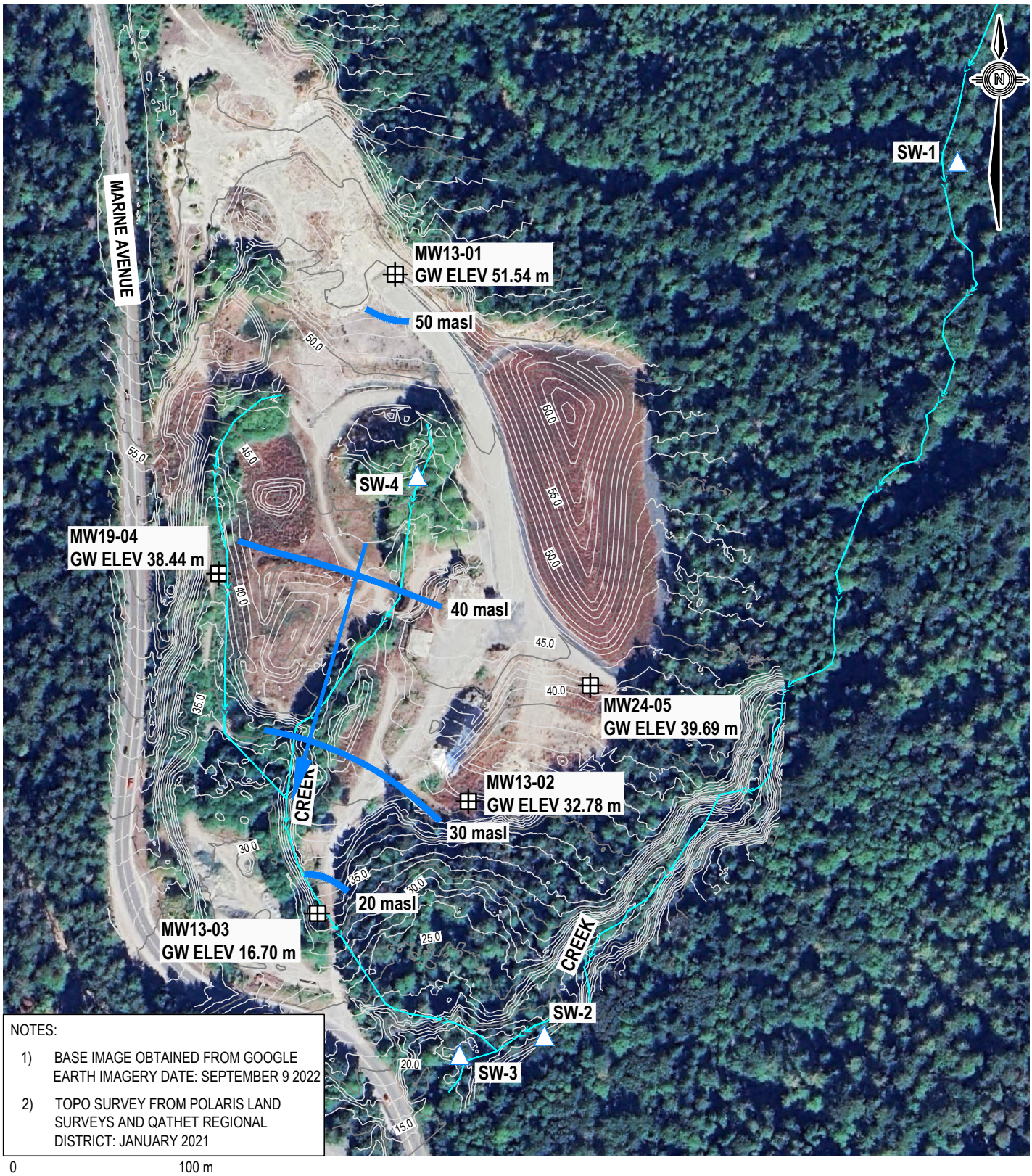
INTERPRETED GROUNDWATER FLOW
JULY 2025

PROJECT NO.	DWN	CKD	REV
SWM.SWOP03663-16	AF	MA	0

OFFICE	DATE
VAN	March 2026

Figure 5

Q:\Edmonton\Drafting\00_MASTER PROJECT BASE PLANS\PRRD Transfer Station\SWM.SWOP03663 Env Compliance Reporting\FIGURES\CAD\SWM.SWOP03663-15\SWM.SWOP03663-15 Figure 5_SS.dwg [FIGURE 5] February 04, 2026 - 4:02:13 pm (BY: FLEMING, ALEXA)



NOTES:

1) BASE IMAGE OBTAINED FROM GOOGLE EARTH IMAGERY DATE: SEPTEMBER 9 2022

2) TOPO SURVEY FROM POLARIS LAND SURVEYS AND QATHET REGIONAL DISTRICT: JANUARY 2021

0 100 m

Scale: 1: 3 000

LEGEND:

- EXISTING MONITORING WELL LOCATION (APPROXIMATE)
- EXISTING SURFACE WATER MONITORING LOCATION (APPROXIMATE)
- INTERPRETED GROUNDWATER CONTOURS
- INFERRED GROUNDWATER FLOW DIRECTION
- STREAMS
- MAJOR CONTOUR (5m)
- MINOR CONTOUR (1m)

CLIENT

qathet REGIONAL DISTRICT

TETRA TECH

ENVIRONMENTAL MONITORING
MARINE AVENUE SITE, POWELL RIVER, BC

INTERPRETED GROUNDWATER FLOW
DECEMBER 2025

PROJECT NO.	DWN	CKD	REV
SWM.SWOP03663-16	AF	MA	0

OFFICE	DATE
VAN	March 2026

Figure 6

Q:\Edmonton\Drafting\00_MASTER PROJECT BASE PLANS\PRRD Transfer Station\SWM.SWOP03663 Env Compliance Reporting\FIGURES\CAD\SWM.SWOP03663-15\SWM.SWOP03663-15 Figure 6_SS.dwg [FIGURE 6] February 04, 2026 - 4:04:44 pm (BY: FLEMING, ALEXA)

Figure 7
Monitoring Well Hydrographs

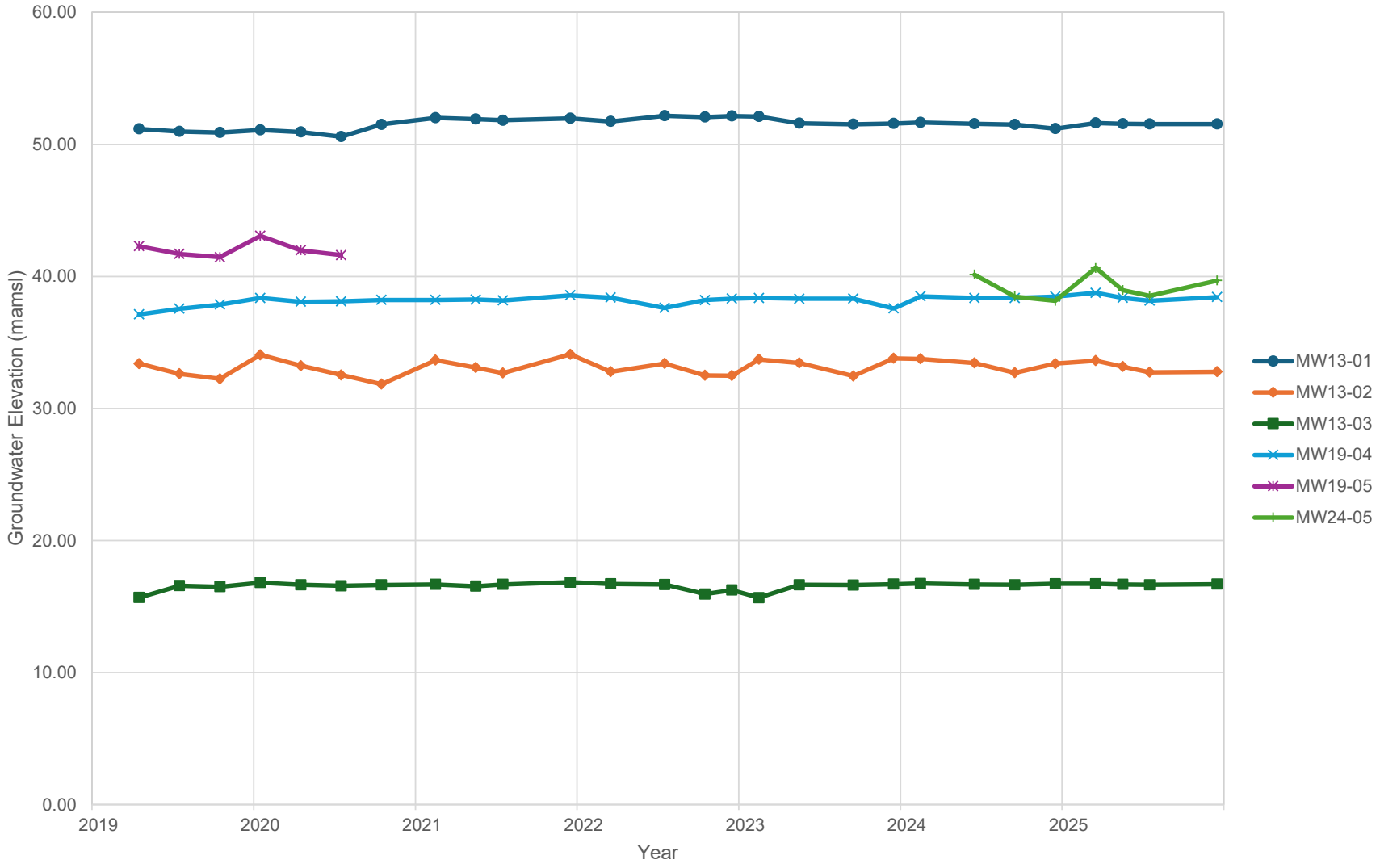


Figure 8
Sulphate Concentrations in Groundwater

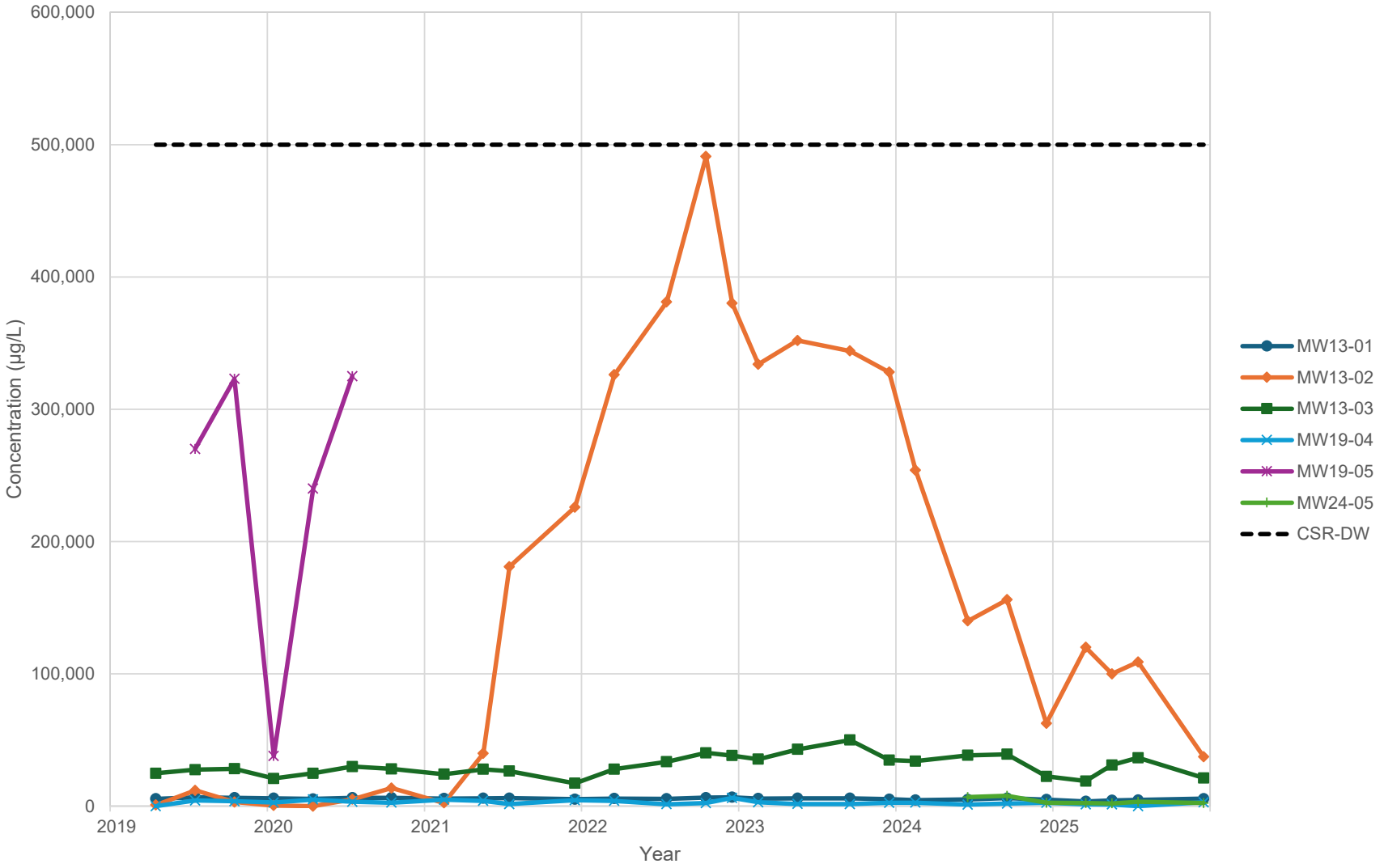


Figure 9
Chloride Concentrations in Groundwater

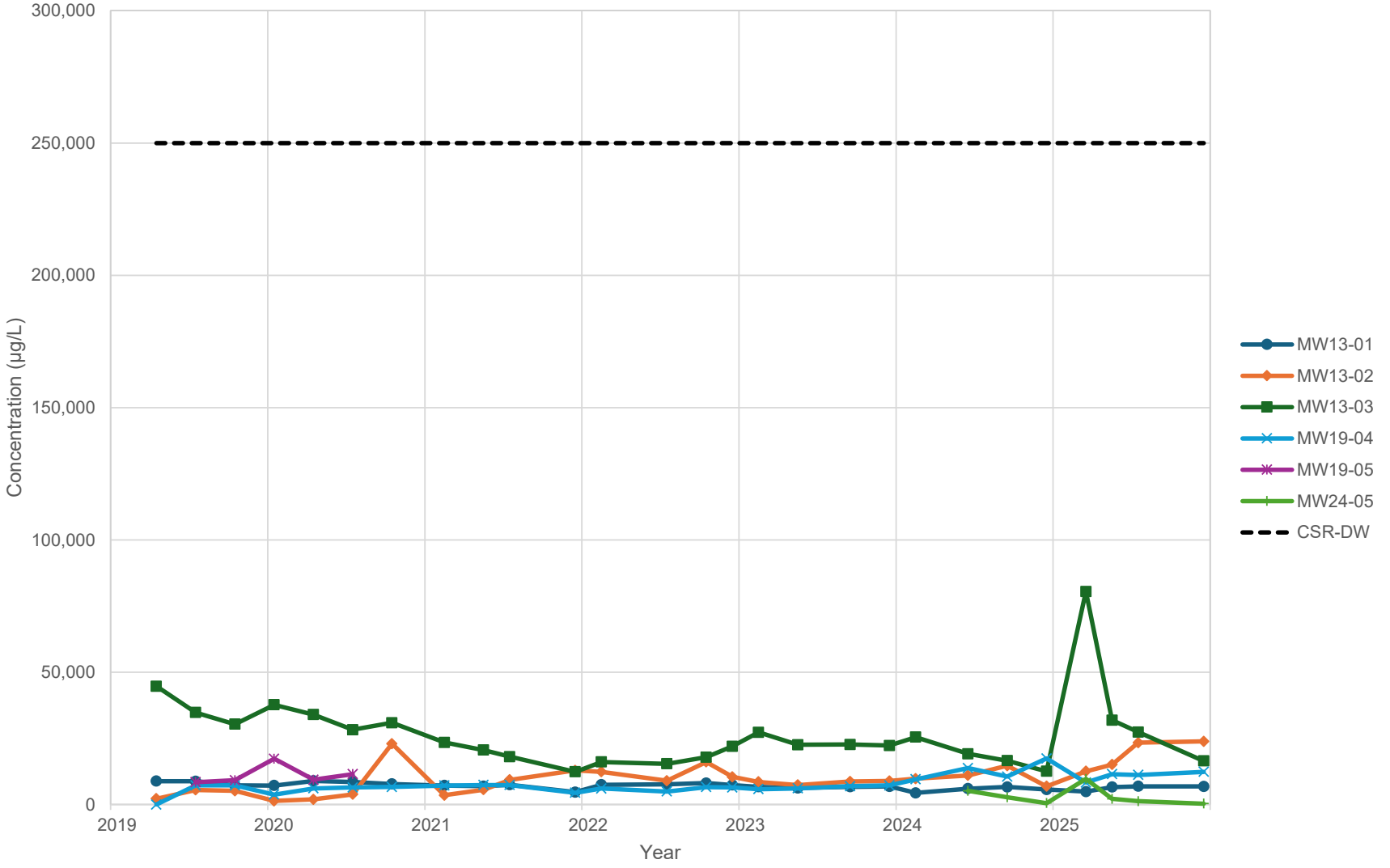


Figure 10
Dissolved Cobalt Concentrations in Groundwater

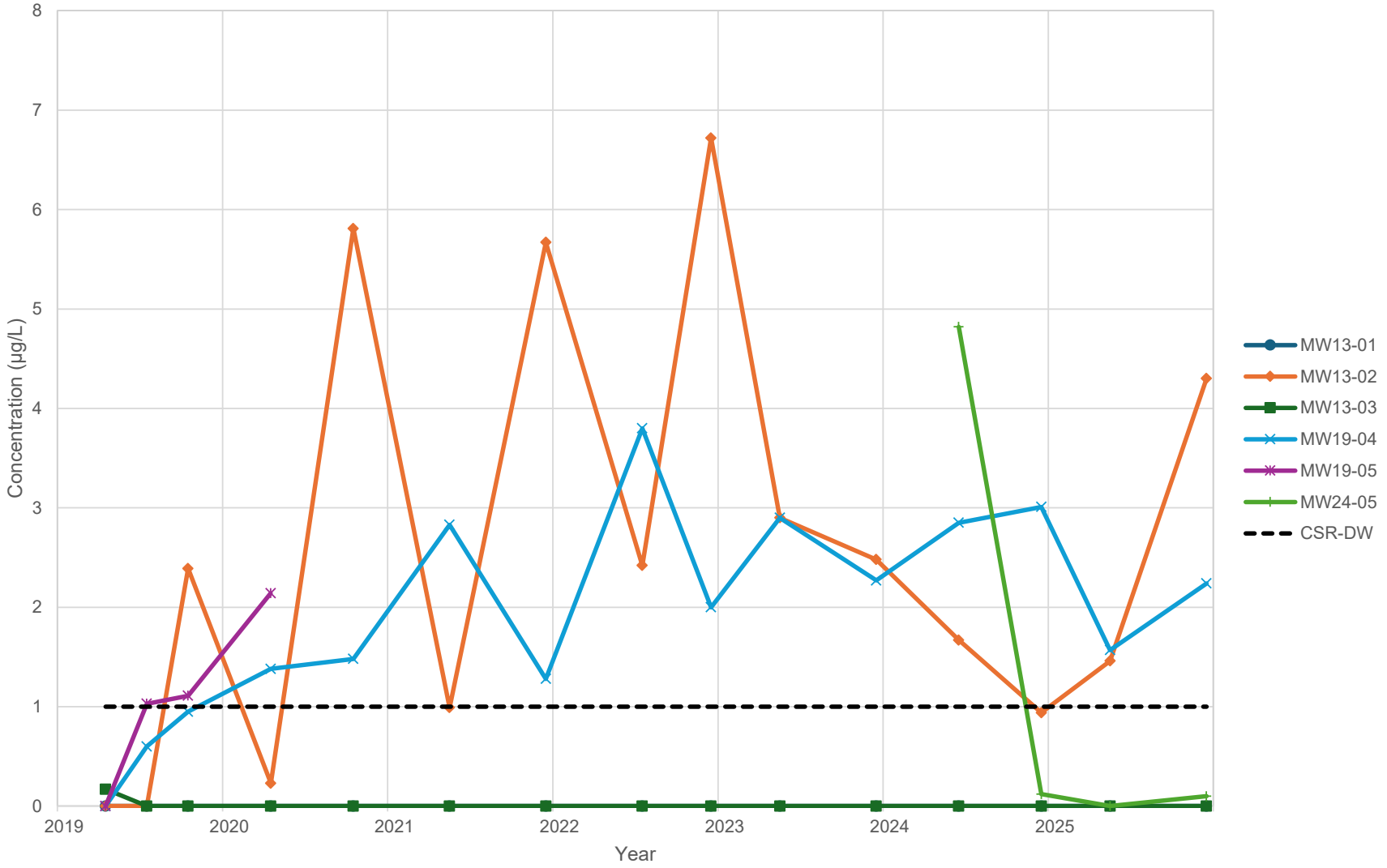


Figure 11
Dissolved Arsenic Concentrations in Groundwater

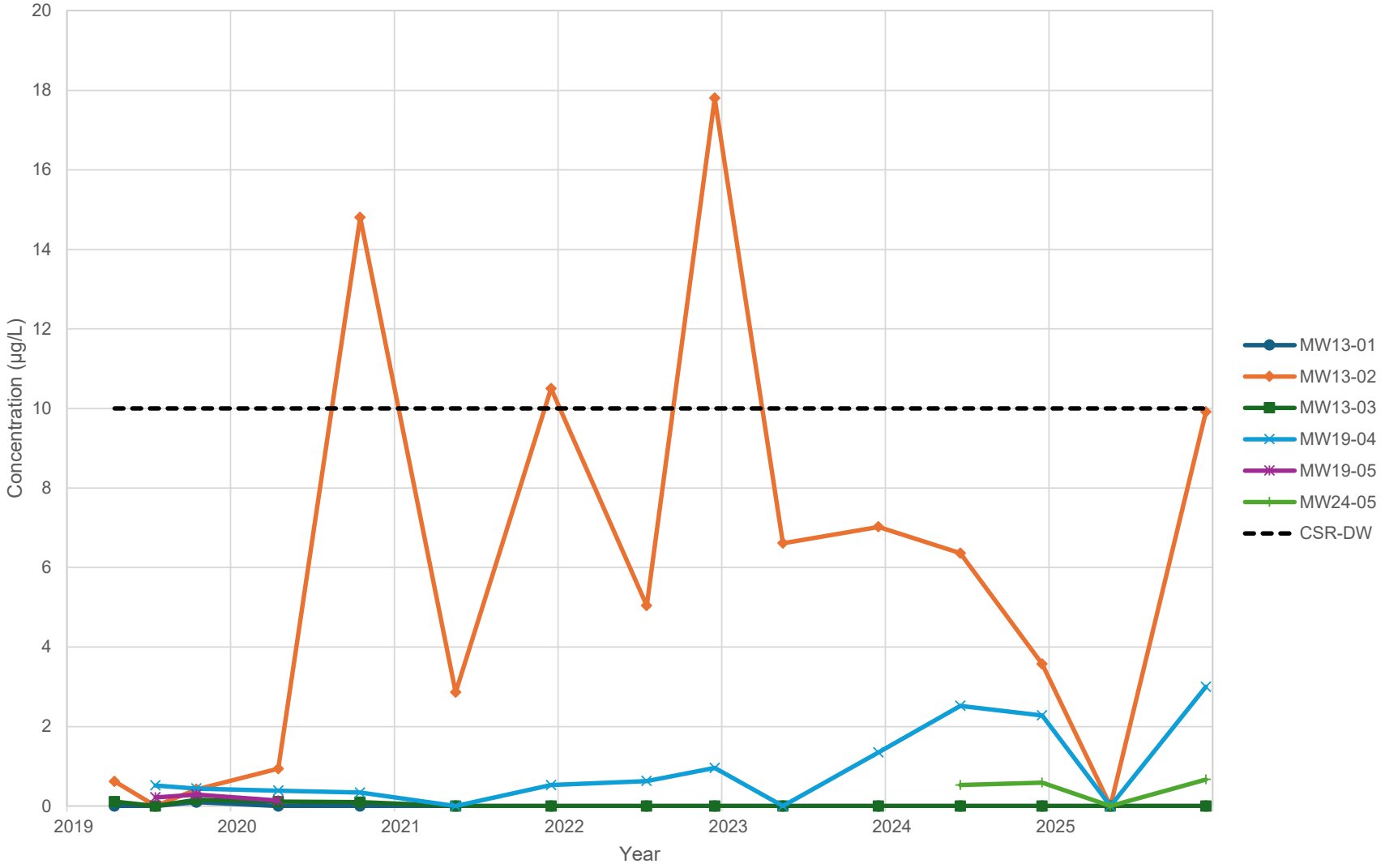


Figure 12
Dissolved Iron Concentrations in Groundwater

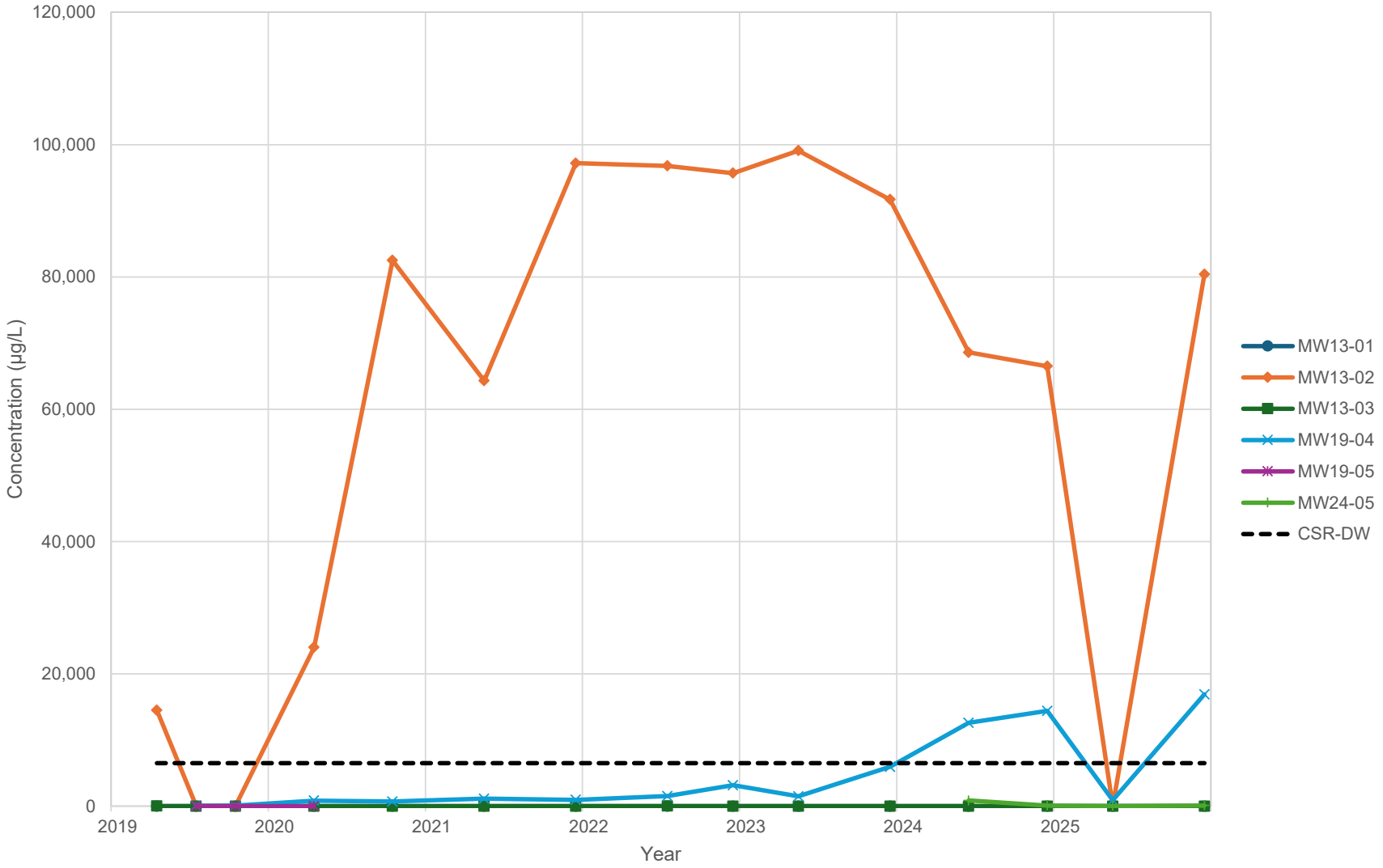


Figure 13
Dissolved Manganese Concentrations in Groundwater

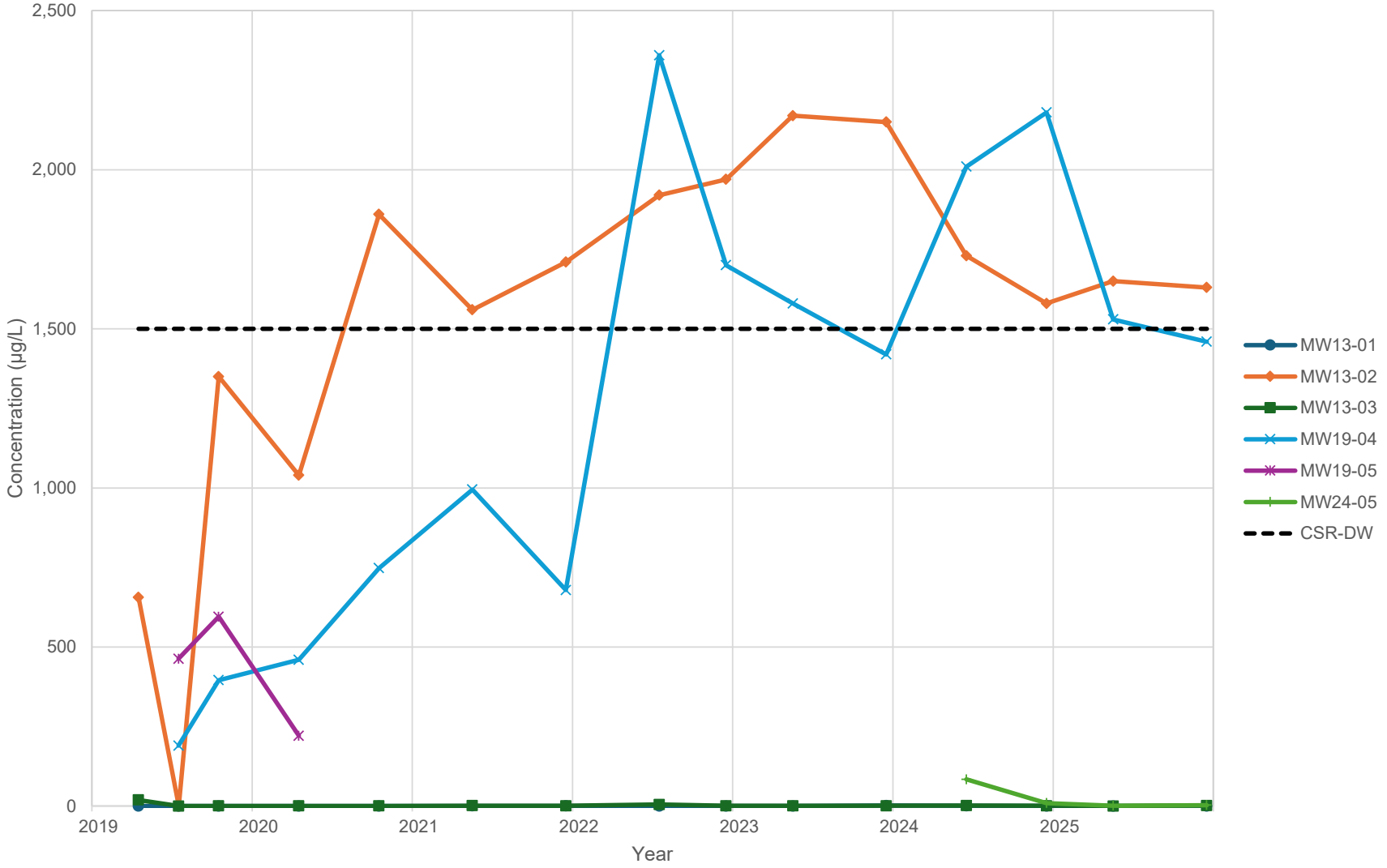


Figure 14
pH in Surface Water

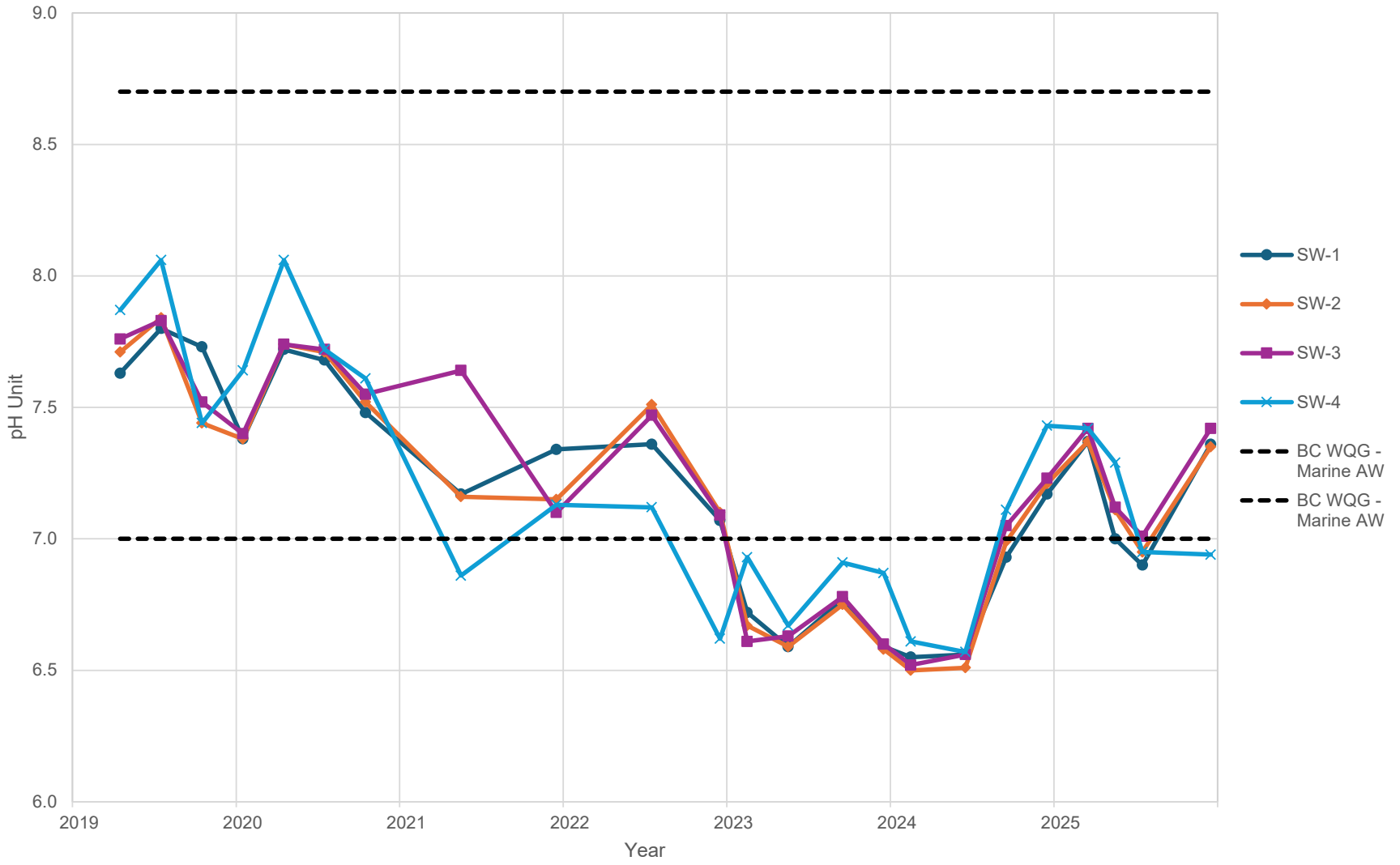


Figure 15
Sulphate Concentrations in Surface Water

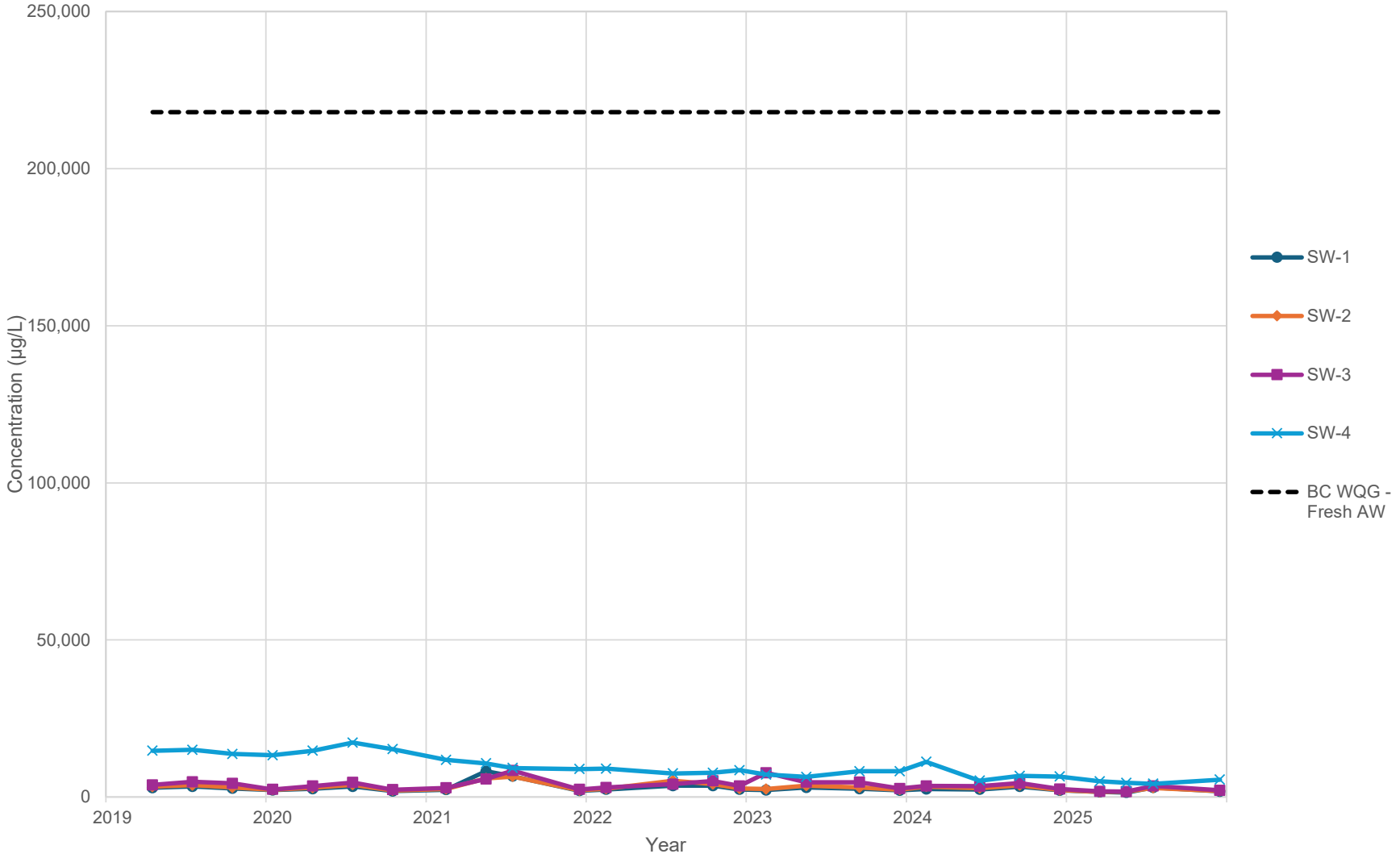
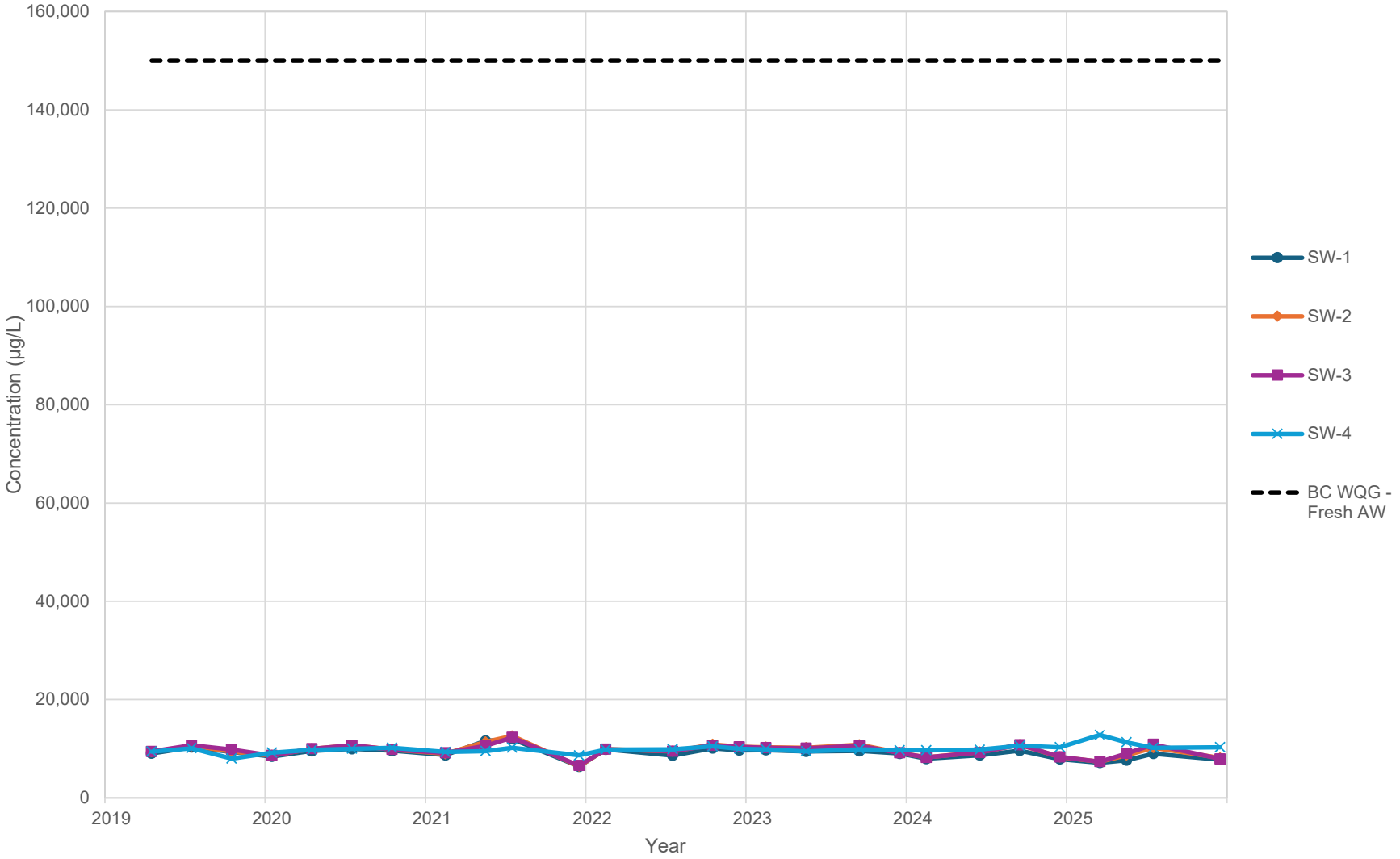


Figure 16
Chloride Concentrations in Surface Water



APPENDIX A

LIMITATIONS ON THE USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOENVIRONMENTAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

Any unauthorized use of the Professional Document is at the sole risk of the user. TETRA TECH accepts no responsibility whatsoever for any loss or damage where such loss or damage is alleged to be or, is in fact, caused by the unauthorized use of the Professional Document.

Where TETRA TECH has expressly authorized the use of the Professional Document by a third party (an "Authorized Party"), consideration for such authorization is the Authorized Party's acceptance of these Limitations on Use of this Document as well as any limitations on liability contained in the Contract with the Client (all of which is collectively termed the "Limitations on Liability"). The Authorized Party should carefully review both these Limitations on Use of this Document and the Contract prior to making any use of the Professional Document. Any use made of the Professional Document by an Authorized Party constitutes the Authorized Party's express acceptance of, and agreement to, the Limitations on Liability.

The Professional Document and any other form or type of data or documents generated by TETRA TECH during the performance of the work are TETRA TECH's professional work product and shall remain the copyright property of TETRA TECH.

The Professional Document is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of TETRA TECH. Additional copies of the Document, if required, may be obtained upon request.

1.2 ALTERNATIVE DOCUMENT FORMAT

Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this report, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 NOTIFICATION OF AUTHORITIES

In certain instances, the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by TETRA TECH in its reasonably exercised discretion.

APPENDIX B

PERMIT PR-509

BRITISH COLUMBIA

July 5, 2024

Tracking Number: 412352
Authorization Number: 509

RECEIVED
JUL 18 2024
qathet REGIONAL DISTRICT

qathet Regional District
202 - 4675 Marine Avenue
Powell River BC V8A 2L2

Dear qathet Regional District,

Re: Abandonment of a Permit under Section 20 of the Environmental Management Act.

Your notice of abandonment of March 15, 2022, advising that you have elected to abandon Permit 509 on the date of your letter pursuant to Section 20(3) of the Environmental Management Act, has been received. It is recognized that you have exercised the right under the subject authorization to discharge waste.

In accordance with Section 20 (5)(b) of the Environmental Management Act, the Director hereby imposes the following requirements:

1. Continue implementation of the previously approved closure plan as detailed in the September 23, 2019, letter "Approval of Powell River Marine Avenue Site Closure Plan" (attached), and the subsequent amendment approved on October 19, 2020 (attached).

2. Carry out the landfill closure plan including any additional requirements and/or amendments specified by the Director, to the satisfaction of the Director.

3. Carry out any additional requirements that the director imposes respecting restoration of the environment, or the control and monitoring of the waste discharged or the waste that continues to be discharged after abandonment.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the Environmental Management Act. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

The property is located at 2021 Marine Avenue, Powell River, (49.85099N, 124.53136W). In accordance with Section 3.2 (1) of the Contaminated Sites Regulation a Site Disclosure Statement must be submitted within 6 months after the owner or operator:

(a) decommissions a site on the land, or
(b) ceases operation on the land,

which was used for an industrial or commercial purpose or activity listed in Schedule 2. If you are about to undertake or have undertaken decommissioning of the site and have not submitted a Site Disclosure Statement, a Site Disclosure Statement must be submitted. The Site Disclosure Statement can be accessed at https://www2.gov.bc.ca/gov/content/environment/air-land-water/site-remediation/guidance-resources/forms or:

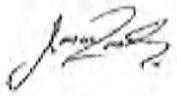
Land Remediation
PO Box 9342
Stn Prov Govt
Victoria BC V8W 9M1
Phone: (250) 387-4441 Fax: (250)387-9935

BRITISH COLUMBIA

Administration of this authorization will be carried out by staff from the Environmental Protection Division's Authorizations and Remediation Branch. Plans, data and reports pertinent to the authorization are to be submitted by email or electronic transfer to the director, or designate officer, at EnvAuthorizationsReporting@gov.bc.ca.

If you have any questions or concerns, please contact the regional office indicated on this letter.

Yours truly,



Jason Lasuik, P.Ag.
for Director, Environmental Management Act
Communities, IPM & Agri Food

CC: Land Remediation Branch, Victoria

ENCL: September 23, 2019 letter "approval of Powell River Marine Avenue Site Closure Plan
October 19, 2020 Amendment to Approval of Powell River Marine Avenue Site Closure Plan

BRITISH COLUMBIA

BRITISH COLUMBIA

September 23, 2019 File Number: PR-509

qathet Regional District
#202 – 4675 Marine Avenue
Powell River, BC V8A 2L2

Dear: Mike Wall,

Re: Approval of Powell River Marine Avenue Site Closure Plan

Site:
This approval pertains to the former municipal solid waste incinerator site located on a parcel of land on portion of Block 36, District Lot 450, Group 1, New Westminster District, Plan 8096 (Marine Avenue Site) for which the Ministry of Environment and Climate Change Strategy (ENV) received a closure plan and amendments.

Permittee:
As stated in the approved solid waste management plan for the qathet Regional District (qRD) entitled "Powell River Regional District, Solid Waste Management and Resource Recovery Plan" dated November 22, 2017 (2017 SWMP), the qRD has assumed full responsibility for the waste export system in the region. Therefore, in accordance with the approved plan, this approval considers the permittee to be the qathet Regional District while agreements between the Corporation of the City of Powell River and the qathet Regional District apportion liability for environmental emissions from past and future site activities.

Closure Plan Documents Reviewed (Marine Site Avenue Closure Plan):
The landfill closure plan, "Powell River Marine Avenue Site Closure Plan Final Report" prepared by Sperling Hansen Associates and dated October 2014 (Closure Plan) is approved by the Director with the following amendments:

- Section 6.2 is replaced with "Updated End-use Plan for the Marine Avenue Site" prepared by Tetra Tech and dated September 19, 2018 (Updated End-Use Plan); and
- Section 12 is replaced with "Updated Environmental Monitoring Plan for the Powell River Marine Avenue Site Closure Plan" prepared by Tetra Tech and dated September 19, 2018 (Updated Monitoring Plan).

Ministry of Environment and Climate Change Strategy
Authorizations - South
Regional Operations Branch
Environmental Protection Division
Mailing Address:
2080-A Labieux Road
Nanaimo BC V9T 6J9
Telephone: 250 751-3100
Facsimile: 250 751-3103
Website: www.gov.bc.ca/en

Requirements to Implement Marine Site Avenue Closure Plan

It is noted that, as per an amendment to PR-509 on February 2, 1994, all discharges at the Marine Avenue Site were to cease on October 15, 1994. It is further noted that on September 12, 2018, the 2017 SWMP received the approval of the Minister of Environment and Climate Change Strategy. The closure of the Marine Avenue Site and transformation of a portion of the site into a Resource Recovery Centre is a prominent segment of the 2017 SWMP. Therefore, in agreement with the approved 2017 SWMP and pursuant to Section 16(4)(j) of the *Environmental Management Act*, the Director requires the qathet Regional District to implement the Marine Avenue Closure Plan, along with the following requirements:

1. An application must be made to transfer PR-509 from the Corporation of the District of Powell River to the qathet Regional District.
2. The landfill closure must be carried out in accordance with the approved plans with the following requirements:
    a. As much recyclable material as practical must be recovered from the solid waste on the Marine Avenue Site prior to landfilling.
    b. The waste eligible for landfilling is limited to that which was present on the Marine Avenue Site detailed at the time of the Closure Plan on October 2014.
    c. Landfilling of waste is limited to the Marine Avenue Site.
    d. A 50 metre buffer zone, as defined in the "Landfill Criteria for Municipal Solid Waste", second edition, June 2016 (Criteria), must be maintained between the landfill footprint and the landfill site boundary unless those wastes are already documented as in place at closer than 50 metres from the site boundary.
3. Only bottom ash which has been determined to not meet the definition of hazardous waste as defined in the "Hazardous Waste Regulation" is eligible for reuse as a construction material substitute such as road base material. The bottom ash must be sampled and characterized by a qualified professional (QP).
4. For one year starting the day construction is complete, the final cover must be inspected by the qRD at least once every three (3) months. Any damage to the final cover must be repaired within 30 days of discovery. Causes of damage include, but are not limited to, settlement, cracks, erosion and sloughing.
5. The groundwater and surface water sampling must be carried out or supervised by a QP in accordance with the Updated Monitoring Plan.
6. An annual report for the preceding calendar year must be submitted by March 31 of each year. The annual report must be certified by a QP and meet the conditions set out in Section 10.6 of the Criteria. The first annual report is due on March 31, 2020.
7. In addition to the requirements set out in Section 10.6 of the Criteria, the first annual report is to include the following (to be updated at each subsequent report until works are completed):
    a. The date landfilling ceased at the Marine Avenue Site.
    b. A section detailing the sampling and characterizing of any bottom ash used as a construction material substitute as outlined in requirement #3 above.

c. A section detailing the constructed modifications to the Marine Avenue Site. This section is to include all inspection and quality assurance/quality control testing results of applicable closure elements including the final cover system, and as-built record drawings showing the lines, grades, and elevations of the landfill.

8. The qRD must carry out any future additional requirements that the Director imposes respecting restoration of the environment or the control and monitoring of the waste discharged.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

If you have any questions or concerns, please contact Luc Lachance at Luc.Lachance@gov.bc.ca.

Yours truly,

Luc Lachance, P.Eng
for Director, *Environmental Management Act*
South Authorizations

October 19, 2020 File: PR-509

VIA EMAIL: MWall@qathet.ca

Attn: Mike Wall
qathet Regional District
#202 – 4675 Marine Avenue
Powell River, BC V8A 2L2

Dear: Mike Wall

Re: **Amendment to Approval of Powell River Marine Avenue Site Closure Plan**

Thank you for submitting the October 2, 2020 letter report prepared by TetraTech and issued to you regarding proposed changes to the Powell River Marine Avenue Site Closure Plan previously approved by myself on September 23, 2019.

Pursuant to Section 16(4)(j) of the *Environmental Management Act,* I hereby amend the September 23, 2019 approval to include recommendations listed in Section 4.0 of the letter report by TetraTech referred to above.

This letter shall not be construed as a waiver of any lawful requirement pertaining to any unauthorized discharge of waste to the environment and is without prejudice to any further legal action that the Ministry may take under the *Environmental Management Act*. All other conditions of the September 23, 2019 approval letter are unchanged and remain in full force.

This letter should be appended to the permit PR-509 as it is now part of the authorization.

Yours truly,

Luc Lachance, P.Eng.
for Director
Environmental Management Act
cc: Lauren Quan, TetraTech (Lauren.Quan@tetratech.com)

March 12, 2024

Tracking Number: 419019
Authorization Number: 509

qathet Regional District
202 - 4675 Marine Avenue
Powell River BC V8A 2L2

Dear qathet Regional District,

Re: Your application for a Permit Transfer under the Environmental Management Act

In response to your application package dated January 24, 2024, and pursuant to Section 17 of the *Environmental Management Act*, the Director hereby consents to the transfer of Permit 509 from THE CORPORATION OF THE DISTRICT OF POWELL RIVER to qathet Regional District. The effective date of this amendment is March 15, 2022.

Furthermore, pursuant to Section 16 of the *Environmental Management Act*, Permit 509 is hereby amended to reflect the name change from THE CORPORATION OF THE DISTRICT OF POWELL RIVER to qathet Regional District. Please note that although a revised permit has not been produced at this time, a copy of this letter is being placed on the permit file, as an addendum to the permit, to reflect the change in the name of the permit holder. The qathet Regional District is now the permittee with all inherent rights and responsibilities. An annual fee for the permit will be determined in accordance with the Permit and Approval Fees and Charges Regulation.

This permit does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the permittee. This permit is issued pursuant to the provisions of the *Environmental Management Act* to ensure compliance with Section 120(3) of that statute, which makes it an offence to discharge waste, from a prescribed industry or activity, without proper authorization. It is also the responsibility of the permittee to ensure that all activities conducted under this authorization are carried out with regard to the rights of third parties and comply with other applicable legislation that may be in force.

When a spill occurs, or there is an imminent risk of one occurring, the responsible person must ensure that it is reported in accordance with the Spill Reporting Regulation. Additional information on spill reporting requirements is available at gov.bc.ca/reportaspill.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Administration of this permit will be carried out by staff from the Environmental Protection Division's Regional Operations Branch. Plans, data and reports pertinent to the permit are to be submitted by email or electronic transfer to the Director. To meet the reporting requirements in a form and manner acceptable to the Director, reports and notifications related to the administration of this approval must be submitted electronically to the following ministry email address:

- EnvAuthorizationsReporting@gov.bc.ca for monitoring and annual reports.
- EnvironmentalCompliance@gov.bc.ca for non-compliance reports and emergency notifications.

For further information about how to submit data and reports, please refer to https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/comply.

Please be reminded that the Director may require the permittee to do one or more of the following at any time:

- repair, alter, remove, improve or add to existing works, or to construct new works, and to submit plans and specifications for works specified in this authorization.
- conduct monitoring, and may specify procedures for monitoring and analysis, and procedures or requirements respecting the handling, treatment, transportation, discharge or storage of waste.
- provide security in the amount and form, and subject to the conditions, specified by the director.
- conduct studies and to report information in accordance with the specifications of the director.
- recycle certain wastes and recover certain reusable resources, including energy potential from wastes, in accordance with the specifications of the director.
- submit copies of reports and notifications to specified Indigenous Groups, within specified timelines, in accordance with the specifications of the director.

For more information about how the Ministry will assess compliance with your permit please refer to gov.bc.ca/environmentalcompliance.

For more information about how to make changes to your permit and to access waste discharge amendment forms and guidance, please refer to gov.bc.ca/wastedischarge-authorizations.

Yours truly,



Jason Lasuik, P.Ag.
for Director, Environmental Management Act
Communities, IPM & Agri Food

CC: Arnold Schwabe, ASchwabe@qathet.ca,
Russell Brewer, rbrewer@powellriver.ca

ENCL: Permit 509

THE GOVERNMENT OF
THE PROVINCE OF BRITISH COLUMBIA

DEPARTMENT OF LANDS, FORESTS, AND WATER RESOURCES
WATER RESOURCES SERVICE

POLLUTION CONTROL BRANCH

PROVISIONAL PERMIT

Under the Provisions of Section 5 (1) of the Pollution Control Act, 1967

The Corporation of the District of Powell River
(Name.)

of 6910 Duncan Street, Powell River, British Columbia
(Address.)

is hereby authorized to discharge ~~effluent~~ refuse from an incinerator
(Plant, factory, municipality, etc.)

located at Powell River, B.C., subject to the conditions set out below and to the conditions set forth in any appendix attached hereto.

(*a*) The approximate point of discharge to a parcel of land on portion of Block 36, District Lot 450, Group 1, New Westminster District, Plan 8096 is located as shown on the attached plan.

(*b*) The quantity of ~~effluent~~ refuse which may be discharged is a maximum of 5 cubic yards per day

(*c*) The characteristics of the ~~effluent~~ refuse shall be ~~equivalent to or better than~~ those of substantially inert incinerator residue

(*d*) The works authorized to be constructed are an incinerator and residue storage facilities approximately located as shown on the attached plan.

(*e*) The land from which the ~~effluent~~ refuse originates and to which this permit is appurtenant is the area of the Powell River Regional District

(x) ~~The appendix attached hereto contains~~ items dealing with

, ~~which are an integral part of this permit.~~

(x)

(f) The incinerator shall be operated in such a manner that the emission of air contaminants does not create a health hazard or a nuisance condition, or contravene any provision of the Pollution Control Act, 1967, or Regulations.

(g) The authority to discharge under this Permit is contingent upon the works authorized having been constructed as per final construction plans approved in accordance with the Pollution Control Act, 1967.

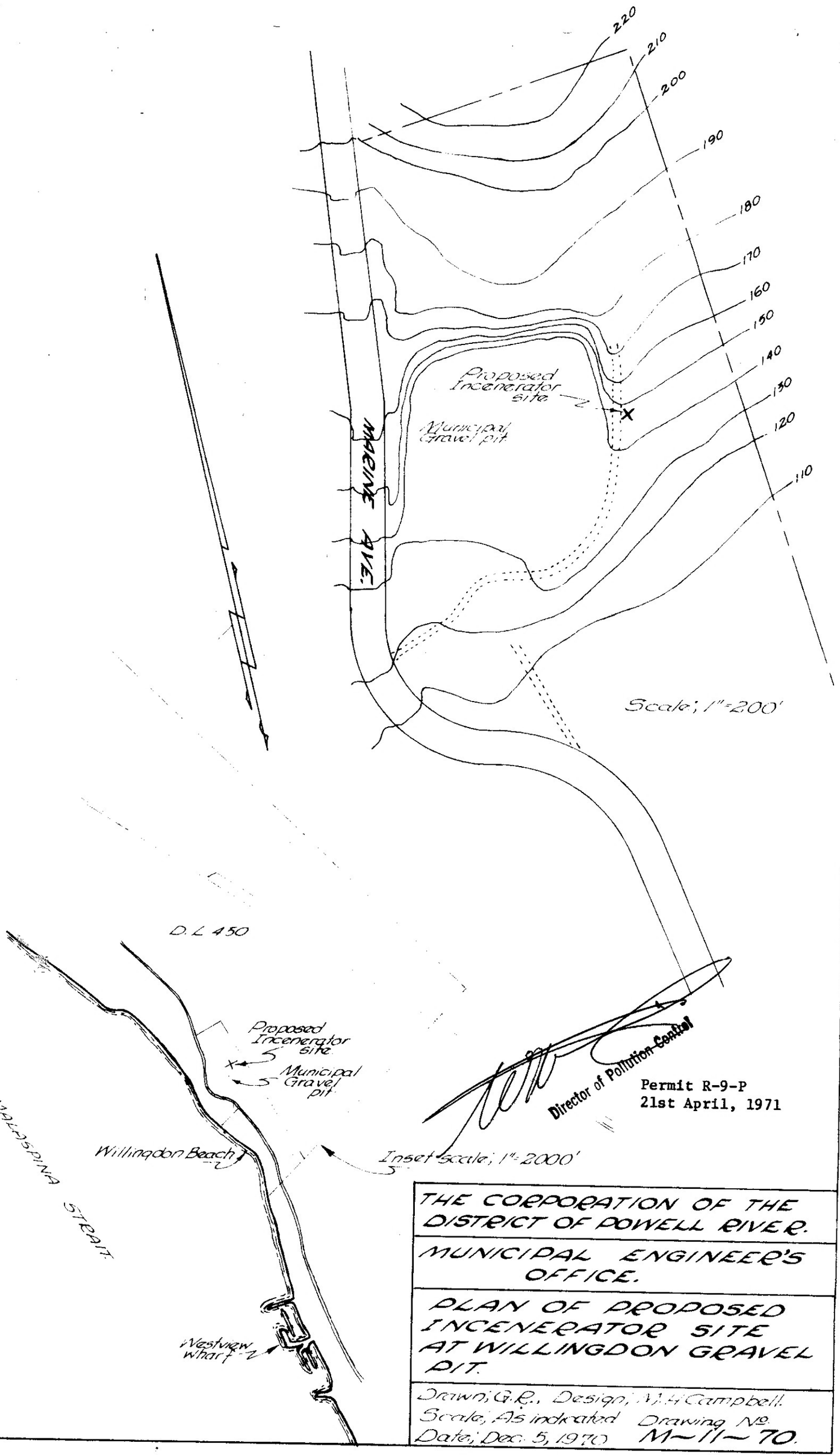
(h) The works are to be constructed on or before June 30, 1972.

This permit, or any of the conditions contained herein, may be amended, varied, or rescinded by order, at any time.

Director of Pollution Control.

Date issued 21st April, 1971

Permit No. R-9-P


220
210
200
190
180
170
160
150
140
130
120
110
Proposed Incinerator site
Municipal Gravel pit
MARINE AVE.
Scale; 1"=200'
D.L 450
Proposed Incinerator site
Municipal Gravel pit
Willingdon Beach
MALASPINA STRAIT
Westview wharf
Inset Scale; 1"=2000'
Director of Pollution Control
Permit R-9-P
21st April, 1971
THE CORPORATION OF THE DISTRICT OF POWELL RIVER.
MUNICIPAL ENGINEER'S OFFICE.
PLAN OF PROPOSED INCENERATOR SITE AT WILLINGDON GRAVEL PIT.
Drawn; G.R., Design; W.H.Campbell.
Scale; As indicated Drawing No.
Date; Dec. 5, 1970 M-11-70.

Province of
British Columbia

MINISTRY OF
ENVIRONMENT,
LANDS AND PARKS

BC Environment
LOWER MAINLAND REGION

Environmental Protection
15326 — 103A Avenue
Surrey, British Columbia
V3R 7A2
Telephone: (604) 582-5200
Facsimile: (604) 584-9751

APR 0 1 1993

File: PR-509

DOUBLE REGISTERED

THE CORPORATION OF THE
DISTRICT OF POWELL RIVER
6910 Duncan Street
Powell River, B. C.
V8A 1V2

Dear Permittee:

AMENDED PERMIT NO. PR-509

Pursuant to Section 11 of the Waste Management Act, Permit PR-509, issued to the Corporation of the District of Powell River on April 21, 1971 and amended December 17, 1992 authorizing the discharge of refuse to land and contaminants to air,is hereby amended as follows:

1. Add the following line to clause (b) of the permit

   Effective February 28, 1994, the quantity of refuse that may be discharged is zero (0) cubic metres per day.

2. Add the following line to clause (f) of the permit

   Effective February 28, 1994, the incinerator shall comply with BACT (Best Available Control Technology) which is as outlined in the document "Emission Criteria for Municipal Solid Waste Incinerators" published by B.C. Environment, June 1991.

All other terms of the Permit shall remain in full force and effect.

Yours very truly,

E. M. Lawson

E.M. Lawson
Assistant Regional Waste Manager

EML/fo

c.c. Environment Canada
Powell River Regional District

Printed on Recycled Paper

British Columbia
Handle with care

Province of
British Columbia

MINISTRY OF
ENVIRONMENT,
LANDS AND PARKS

BC Environment
LOWER MAINLAND REGION

Environmental Protection
15326 — 103A Avenue
Surrey, British Columbia
V3R 7A2
Telephone: (604) 582-5200
Facsimile: (604) 584-9751

DOUBLE REGISTERED

Our File: PR-509

Date: FEB 02 1994

THE CORPORATION OF THE
DISTRICT OF POWELL RIVER
6910 Duncan Street
Powell River, British Columbia
V8A 1V2

Attention: V. H. Petersen
Administrator

Dear Permittee:

AMENDMENT TO PERMIT

Pursuant to Section 11 of the Waste Management Act, Permit PR-509 issued to **THE CORPORATION OF THE DISTRICT OF POWELL RIVER** on April 21, 1971 and last amended April 1, 1993 authorizing the discharge of refuse to land and contaminants to air, is hereby amended as follows:

1. Effective October 15, 1994, all discharge shall cease and the existing refuse burner shall be closed.

2. Progress reports outlining your activities and action in a form suitable for public release shall be submitted on:

   i April 15, 1994;
   ii May 31, 1994;
   iii July 15, 1994;
   iv August 31, 1994;
   v October 14, 1994.

We look forward to your cooperation and strict compliance.

Yours very truly,

E. M. Lawson

E. M. Lawson
Assistant Regional Waste Manager

Enc.

cc: Environment Canada
Powell River Regional District

Printed on Recycled Paper

British Columbia
Handle with care

September 23, 2019 File Number: PR-509

qathet Regional District
#202 – 4675 Marine Avenue
Powell River, BC V8A 2L2

Dear: Mike Wall,

Re: Approval of Powell River Marine Avenue Site Closure Plan

Site:
This approval pertains to the former municipal solid waste incinerator site located on a parcel of land on portion of Block 36, District Lot 450, Group 1, New Westminster District, Plan 8096 (Marine Avenue Site) for which the Ministry of Environment and Climate Change Strategy (ENV) received a closure plan and amendments.

Permittee:
As stated in the approved solid waste management plan for the qathet Regional District (qRD) entitled "Powell River Regional District, Solid Waste Management and Resource Recovery Plan" dated November 22, 2017 (2017 SWMP), the qRD has assumed full responsibility for the waste export system in the region. Therefore, in accordance with the approved plan, this approval considers the permittee to be the qathet Regional District while agreements between the Corporation of the City of Powell River and the qathet Regional District apportion liability for environmental emissions from past and future site activities.

Closure Plan Documents Reviewed (Marine Site Avenue Closure Plan):
The landfill closure plan, "Powell River Marine Avenue Site Closure Plan Final Report" prepared by Sperling Hansen Associates and dated October 2014 (Closure Plan) is approved by the Director with the following amendments:

- Section 6.2 is replaced with "Updated End-use Plan for the Marine Avenue Site" prepared by Tetra Tech and dated September 19, 2018 (Updated End-Use Plan); and
- Section 12 is replaced with "Updated Environmental Monitoring Plan for the Powell River Marine Avenue Site Closure Plan" prepared by Tetra Tech and dated September 19, 2018 (Updated Monitoring Plan).

Ministry of Environment and Climate Change Strategy
Authorizations - South
Regional Operations Branch
Environmental Protection Division
Mailing Address:
2080-A Labieux Road
Nanaimo BC V9T 6J9
Telephone: 250 751-3100
Facsimile: 250 751-3103
Website: www.gov.bc.ca/en

Requirements to Implement Marine Site Avenue Closure Plan

It is noted that, as per an amendment to PR-509 on February 2, 1994, all discharges at the Marine Avenue Site were to cease on October 15, 1994. It is further noted that on September 12, 2018, the 2017 SWMP received the approval of the Minister of Environment and Climate Change Strategy. The closure of the Marine Avenue Site and transformation of a portion of the site into a Resource Recovery Centre is a prominent segment of the 2017 SWMP. Therefore, in agreement with the approved 2017 SWMP and pursuant to Section 16(4)(j) of the *Environmental Management Act*, the Director requires the qathet Regional District to implement the Marine Avenue Closure Plan, along with the following requirements:

1. An application must be made to transfer PR-509 from the Corporation of the District of Powell River to the qathet Regional District.
2. The landfill closure must be carried out in accordance with the approved plans with the following requirements:
    a. As much recyclable material as practical must be recovered from the solid waste on the Marine Avenue Site prior to landfilling.
    b. The waste eligible for landfilling is limited to that which was present on the Marine Avenue Site detailed at the time of the Closure Plan on October 2014.
    c. Landfilling of waste is limited to the Marine Avenue Site.
    d. A 50 metre buffer zone, as defined in the "Landfill Criteria for Municipal Solid Waste", second edition, June 2016 (Criteria), must be maintained between the landfill footprint and the landfill site boundary unless those wastes are already documented as in place at closer than 50 metres from the site boundary.
3. Only bottom ash which has been determined to not meet the definition of hazardous waste as defined in the "Hazardous Waste Regulation" is eligible for reuse as a construction material substitute such as road base material. The bottom ash must be sampled and characterized by a qualified professional (QP).
4. For one year starting the day construction is complete, the final cover must be inspected by the qRD at least once every three (3) months. Any damage to the final cover must be repaired within 30 days of discovery. Causes of damage include, but are not limited to, settlement, cracks, erosion and sloughing.
5. The groundwater and surface water sampling must be carried out or supervised by a QP in accordance with the Updated Monitoring Plan.
6. An annual report for the preceding calendar year must be submitted by March 31 of each year. The annual report must be certified by a QP and meet the conditions set out in Section 10.6 of the Criteria. The first annual report is due on March 31, 2020.
7. In addition to the requirements set out in Section 10.6 of the Criteria, the first annual report is to include the following (to be updated at each subsequent report until works are completed):
    a. The date landfilling ceased at the Marine Avenue Site.
    b. A section detailing the sampling and characterizing of any bottom ash used as a construction material substitute as outlined in requirement #3 above.

c. A section detailing the constructed modifications to the Marine Avenue Site. This section is to include all inspection and quality assurance/quality control testing results of applicable closure elements including the final cover system, and as-built record drawings showing the lines, grades, and elevations of the landfill.

8. The qRD must carry out any future additional requirements that the Director imposes respecting restoration of the environment or the control and monitoring of the waste discharged.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

If you have any questions or concerns, please contact Luc Lachance at Luc.Lachance@gov.bc.ca.

Yours truly,

Luc Lachance, P.Eng
for Director, *Environmental Management Act*
South Authorizations

October 19, 2020 File: PR-509

VIA EMAIL: MWall@qathet.ca

Attn: Mike Wall
qathet Regional District
#202 – 4675 Marine Avenue
Powell River, BC V8A 2L2

Dear: Mike Wall

Re: **Amendment to Approval of Powell River Marine Avenue Site Closure Plan**

Thank you for submitting the October 2, 2020 letter report prepared by TetraTech and issued to you regarding proposed changes to the Powell River Marine Avenue Site Closure Plan previously approved by myself on September 23, 2020.

Pursuant to Section 16(4)(j) of the *Environmental Management Act*, I hereby amend the September 23, 2020 approval to include recommendations listed in Section 4.0 of the letter report by TetraTech referred to above.

This letter shall not be construed as a waiver of any lawful requirement pertaining to any unauthorized discharge of waste to the environment and is without prejudice to any further legal action that the Ministry may take under the *Environmental Management Act*. All other conditions of the September 23, 2020 approval letter are unchanged and remain in full force.

This letter should be appended to the permit PR-509 as it is now part of the authorization.

Yours truly,

Luc Lachance, P.Eng.
for Director
Environmental Management Act
cc: Lauren Quan, TetraTech (Lauren.Quan@tetratech.com)

APPENDIX C

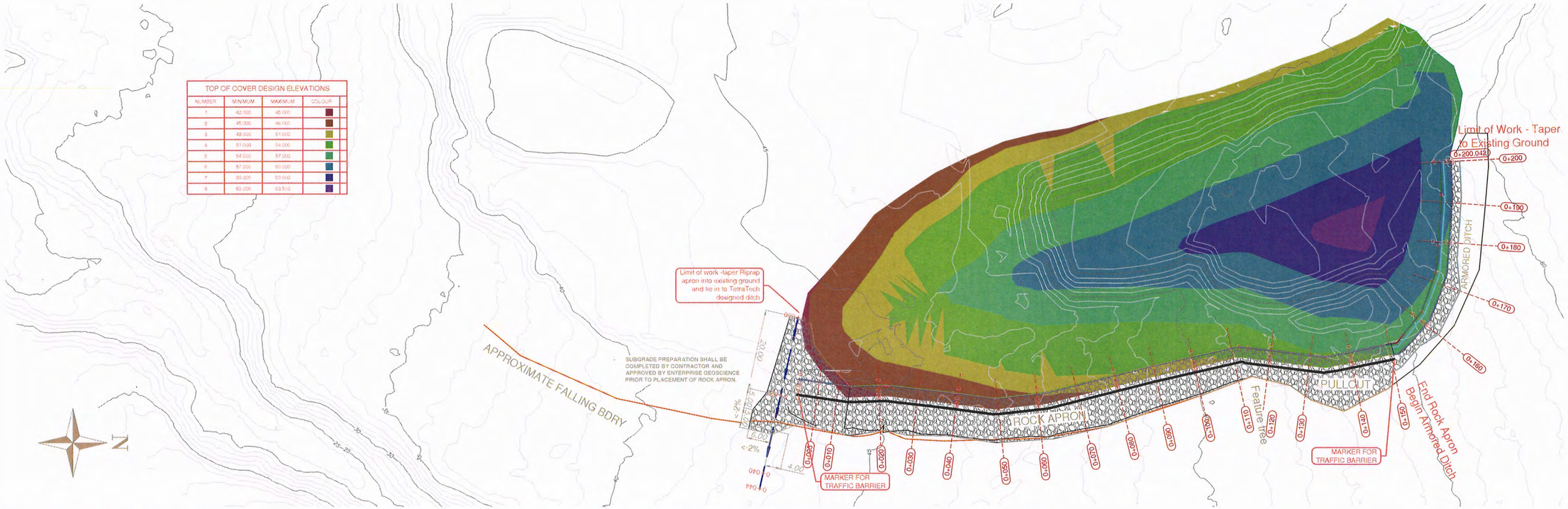
LANDFILL CLOSURE AND RELATED WORKS DRAWINGS

Appendices that have been authenticated through Notarius are encrypted; therefore, the secure files have been included as attachments within the PDF. To access the authenticated appendices, open the document in Adobe and locate the paperclip icon in the tool bar.

APPENDIX D

SURFACE WATER DESIGNS (ENTERPRISE GEOSCIENCE SERVICES)

TOP OF COVER DESIGN ELEVATIONS			
NUMBER	MINIMUM	MAXIMUM	COLOUR
1	42.000	45.000	
2	45.000	48.000	
3	48.000	51.000	
4	51.000	54.000	
5	54.000	57.000	
6	57.000	60.000	
7	60.000	63.000	
8	63.000	63.503	



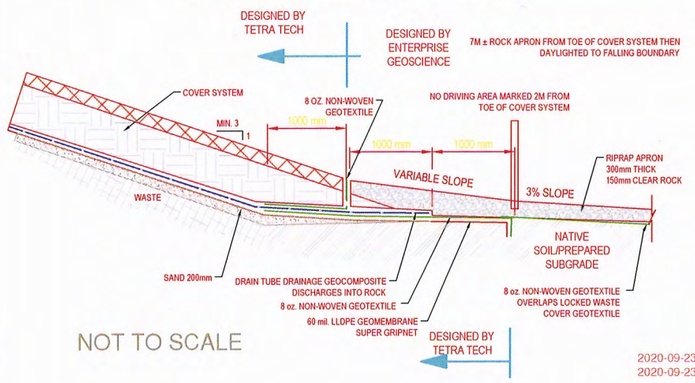
Riprap 150mm Minus Volume Table			
Station	Area	Volume	Cumulative Volume
0+000.000	2.59	0.00	0.00
0+011.000	2.96	30.72	30.72
0+020.000	2.68	28.15	58.76
0+030.000	2.95	29.06	87.82
0+040.000	2.77	28.52	116.35
0+050.000	2.79	27.82	145.08
0+060.000	2.90	28.41	173.10
0+070.000	2.95	29.43	202.53
0+080.000	2.93	29.43	232.96
0+090.000	2.64	27.79	260.66
0+100.000	2.44	25.40	286.06
0+110.000	2.09	22.60	308.66
0+120.000	1.78	19.52	327.89
0+130.000	2.59	21.52	349.50
0+140.000	3.29	28.09	373.59

Riprap 150mm Minus Volume Table			
Station	Area	Volume	Cumulative Volume
0+150.000	1.69	21.41	+93.09
0+160.000	1.85	16.89	+118.98
0+170.000	1.73	17.17	+136.86
0+180.000	1.11	14.34	+151.20
0+190.000	1.11	11.13	+162.33
0+200.000	1.11	11.13	+173.46
0+200.042	1.11	0.05	+173.50

Contractor to provide 10kg sample of 150mm Riprap for approval prior to use.

Add 120 cubic m to Riprap volume to create apron tie in: Total 593 cubic m.

ROCK APRON DETAIL

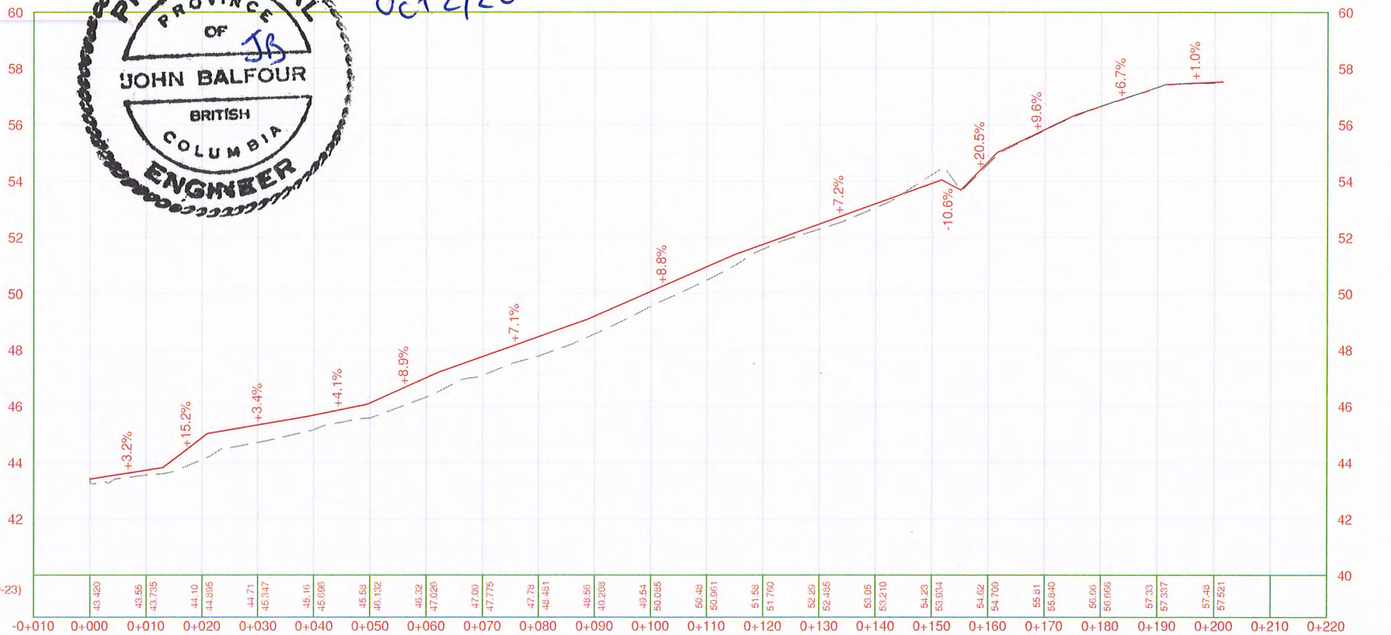


NOT TO SCALE

2020-09-23 (Original Ground 2020-09-23)
2020-09-23 Staked Toe of Waste

PROFESSIONAL ENGINEER
PROVINCE OF JB
JOHN BALFOUR
BRITISH COLUMBIA

Oct 2/20



▶IFC

DESIGN NO. C002701

REV NO	REVISIONS	DATE	DRAWN	APPRD
1	Preliminary East Side Cross Sections	8/27/2020	CDA	
2	Remove Southern Ditch Add typical Section for tie in Add Swale Plan View	9/11/2020	CDA	
3	Remove Swale Plan View/ Add Northern Armored Ditch/Adjust Typical Section Add No Drive Marking System	9/15/2020	CDA	
4	Revised Toe Location and Grading of Subgrade Added Notes IFC	9/30/2020	CDA	JB

STORM DRAINAGE

Resource Recovery Centre

Landfill East Side Apron Plan/ Profile

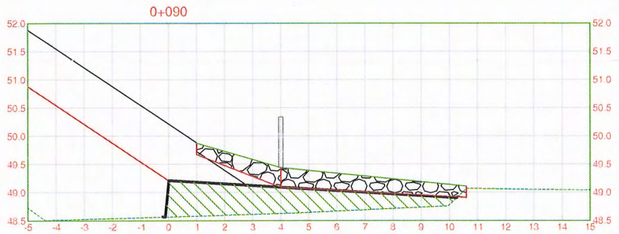
Enterprise Geoscience Services Ltd.

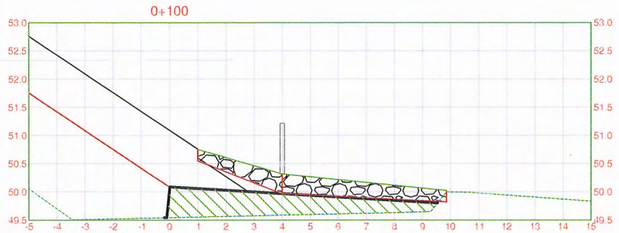
SCALE	1:500H 1:100V	DATE	2020-09-30
DRAWN BY	CDA	DESIGN BY	JB
CHECKED BY	JB	APPROVED BY	JB

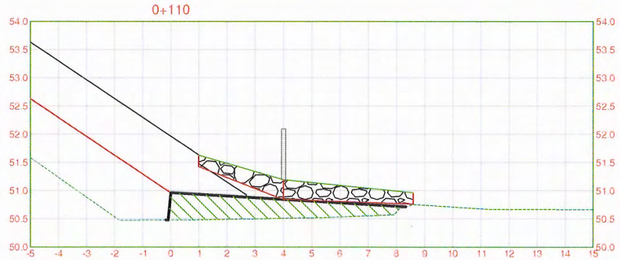
DWG. NO. 1 OF 3

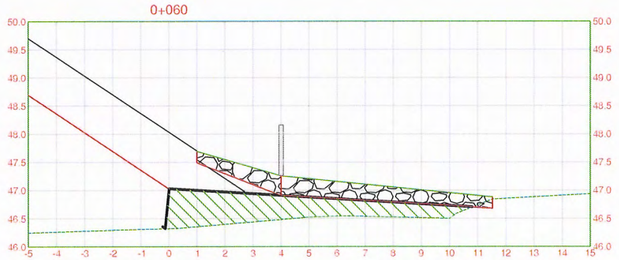
REV. 4

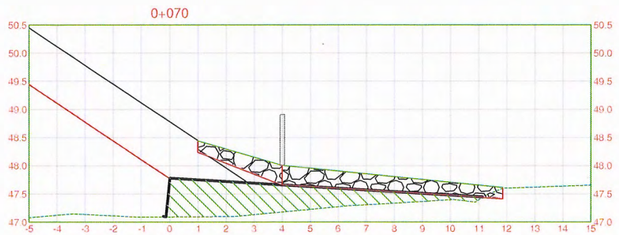
PLOT DATE: October 1, 2020 - D:\...\PROJ\C002701\Enterprise GeoScience\Apron Base 2020-09-25-Rev-4.dwg

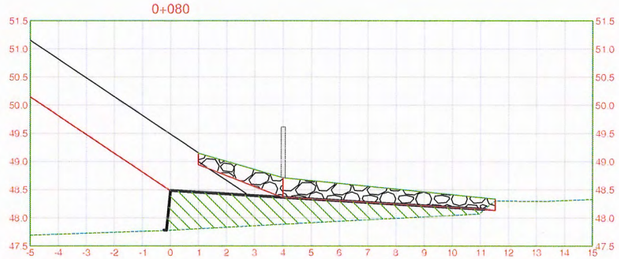


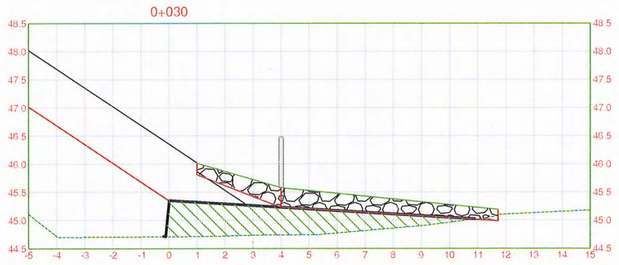


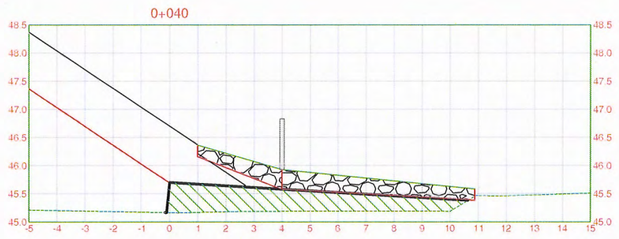


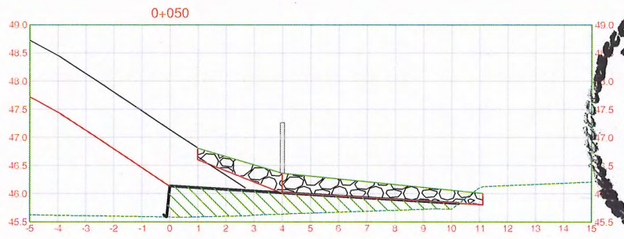


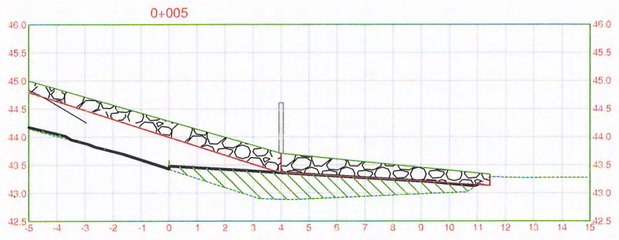


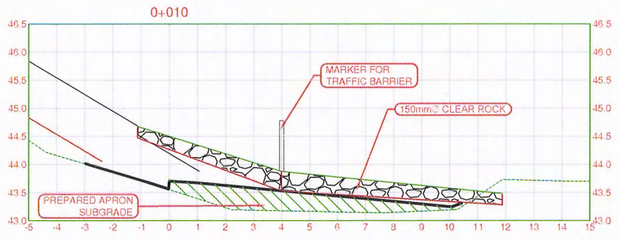


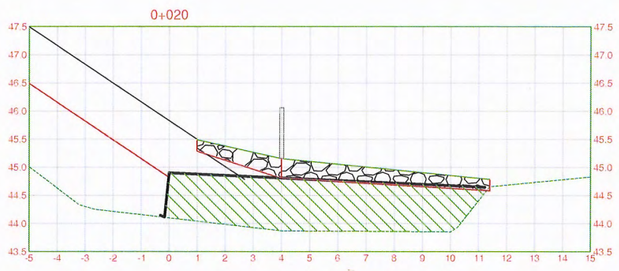












PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
JOHN BALFOUR
JB
Oct 2/20

►IFC

DESIGN NO. C002702

REV NO	REVISIONS	DATE	DRAWN	APPRD
1	Preliminary East Side Cross Sections	8/27/2020	CDA	
2	Remove Southern Ditch Add typical Section for tie in Add Swale Plan View	9/11/2020	CDA	
3	Remove Swale Plan View/ Add Northern Armored Ditch/Adjust Typical Section Add No Drive Marking System	9/15/2020	CDA	
4	Revised Toe Location and Grading of Subgrade Added Notes IFC	9/30/2020	CDA	JB

STORM DRAINAGE

Resource Recovery Centre

Landfill East Side Drainage Apron Sections

Enterprise Geoscience Services Ltd.

SCALE	1:100H 1:50V	DATE	2020-09-30
DRAWN BY	CDA	DESIGN BY	JB
CHECKED BY	JB	APPROVED BY	JB
		REV.	4

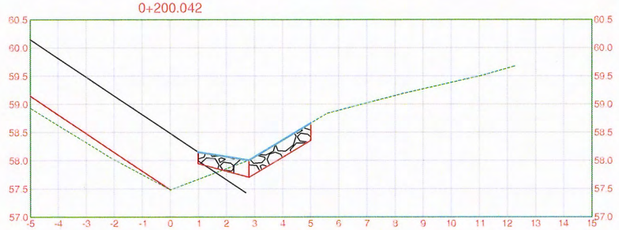
DWG. NO. 2 OF 3

PLOT DATE: October 1, 2020 - D:_qRD\C0027\Enterprise GeoScience\Apron Base 2020-09-25-Rev-4.dwg

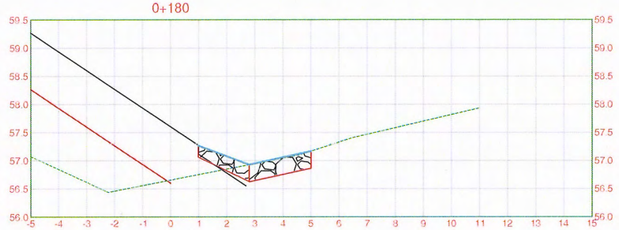


Oct 2/20

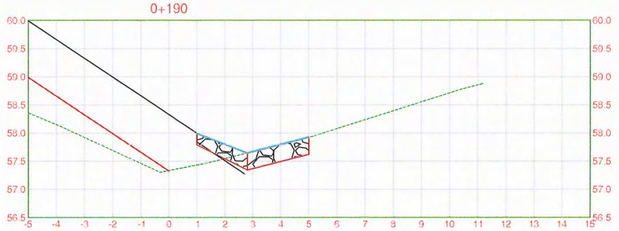
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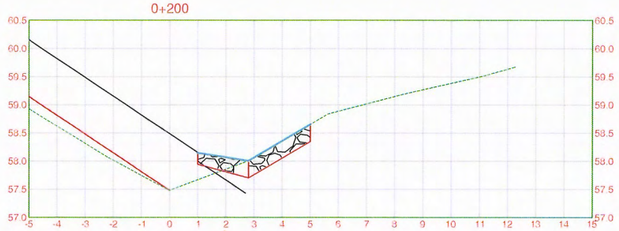
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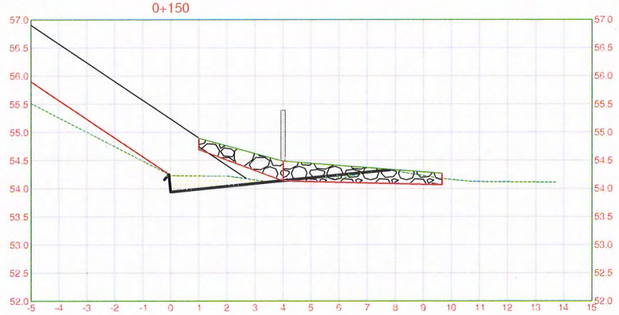
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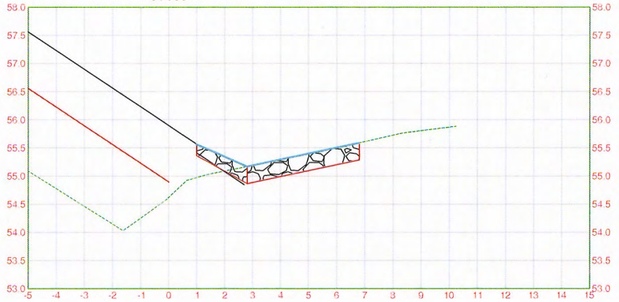
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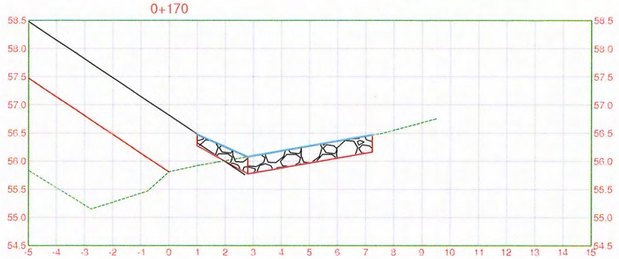
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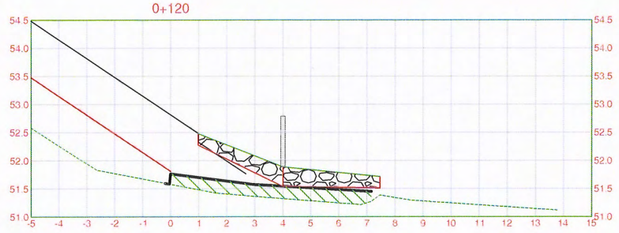
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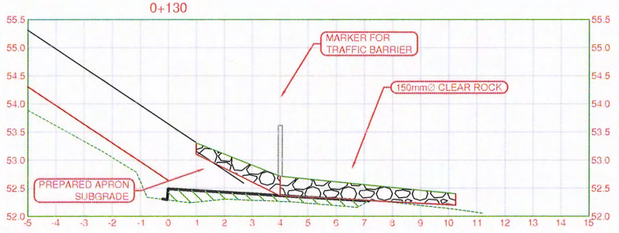
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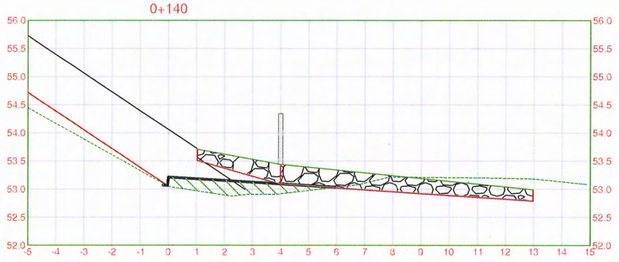
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0+140



►IFC

DESIGN NO. C002703

REV NO	REVISIONS	DATE	DRAWN	APPR'D
1	Preliminary East Side Cross Sections	8/27/2020	CDA	
2	Remove Southern Ditch Add typical Section for tie in Add Swale Plan View	9/11/2020	CDA	
3	Remove Swale Plan View/ Add Northern Armored Ditch/Adjust Typical Section Add No Drive Marking System	9/15/2020	CDA	
4	Revised Toe Location and Grading of Subgrade Added Notes IFC	9/30/2020	CDA	JB

STORM DRAINAGE

Resource Recovery Centre

Landfill East Side Drainage Apron Sections

Enterprise Geoscience Services Ltd.

SCALE	1:100H 1:50V	DATE	2020-09-30
DRAWN BY	CDA	DESIGN BY	JB
CHECKED BY	JB	APPROVED BY	JB
		REV.	4

DWG. NO. 3 OF 3

PLOT DATE: October 1, 2020 - D:_qHO\C0027\Enterprise GeoScience\Apron Base 2020-09-25-Rev-4.dwg

APPENDIX E

BOREHOLE LOG FOR MW24-05

qathet Regional District

Borehole No: **MW24-05**

Project: Marine Avenue Former Landfill Monitoring	Project No: SWM.SWOP03663-12
Location: 4924 Marine Avenue	Ground Elev: 42.9 masl
Powell River, British Columbia	UTM: 390033.4 E; 5523184.5 N; Z 10

Depth (m)	Method	Soil Description	Notes and Comments	MW24-01	Elevation (m)
0					
	Cable tool	SAND (FILL) - road base crush, some gravel, trace silt, grey			
		- concrete			
1					42
		SILT - trace to some organics, trace sand, soft, dark brown			
		SAND - some gravel, trace organics, well graded, dark brown			
2					41
		- no visible organics			
June/24 ▼ 3					June/24 ▼ 40
		SILT - some sand, fine to medium grained sand, stiff, light brown			
		SAND - some silt, trace to some gravel, fine to coarse grained gravel, poorly graded, wet			
4					39
		SILT - sandy, moist, light brown			
		END OF BOREHOLE (4.57 metres) water - 2.80 metres in June 2024 Monitoring well installed to 4.57 metres			
5					38

TETRA TECH

Contractor: Can West Drilling	Completion Depth: 4.57 m
Equipment Type: Cable Tool	Start Date: 2024 May 24
Logged By: MG	Completion Date: 2024 May 24
Reviewed By: LQ	Page 1 of 1

APPENDIX F

LABORATORY ANALYTICAL RESULTS

CERTIFICATE OF ANALYSIS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver) 1000 - 885 Dunsmuir Street Vancouver, BC V6C 1N5		
ATTENTION	Emily Lai	**WORK ORDER**	25C1419
PO NUMBER	704-SWM.SWOP03663-10	**RECEIVED / TEMP**	2025-03-12 10:00 / 5.7°C
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50
PROJECT INFO		**COC NUMBER**	no#

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

If you have any questions or concerns, please contact me at sgulenchyn@caro.ca

Authorized By:

Sara Gulenchyn, B.Sc, P.Chem.
Client Services Manager

1-888-311-8846 | www.caro.ca
#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25C1419-01) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**4.92**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.255**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**3.6**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	**259**	250	µg/L	2025-03-18	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	**259**	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*105*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**42.3**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**42.3**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**93.9**	2.0	µS/cm	2025-03-19	
pH	**7.00**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**24.0**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25C1419-01) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH), Continued					
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	
Surrogate: Acridine-d9	*118*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*119*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*112*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25C1419-01) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*78*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*77*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*85*	*70-130*	%	*2025-03-18*	
MW13-02 (25C1419-02) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**12.6**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	< 0.100	0.010	mg/L	2025-03-13	RA1
Nitrite (as N)	< 0.100	0.010	mg/L	2025-03-13	RA1
Sulfate	**120**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25C1419-02) | Matrix: Water | Sampled: 2025-03-10, Continued					
BCMOE Aggregate Hydrocarbons, Continued					
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*107*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	**0.04**	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**471**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**471**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	**6.80**	0.050	mg/L	2025-03-17	
Conductivity (EC)	**913**	2.0	µS/cm	2025-03-19	
pH	**6.56**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	**0.053**	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.1**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	**0.080**	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25C1419-02) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH), Continued					
Surrogate: Acridine-d9	*116*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*121*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*121*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25C1419-02) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*74*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*72*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*86*	*70-130*	%	*2025-03-18*	
MW13-03 (25C1419-03) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**80.5**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**2.10**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**19.0**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*106*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**99.6**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**99.6**	1.0	mg/L	2025-03-14	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25C1419-03) | Matrix: Water | Sampled: 2025-03-10, Continued					
General Parameters, Continued					
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**439**	2.0	µS/cm	2025-03-19	
pH	**6.64**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**24.2**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	
Surrogate: Acridine-d9	*115*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*123*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*120*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25C1419-03) | Matrix: Water | Sampled: 2025-03-10, Continued					
Resin and Fatty Acids, Continued					
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25C1419-03) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*88*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*76*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*95*	*70-130*	%	*2025-03-18*	
MW19-04 (25C1419-04) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**8.31**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	< 0.010	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**1.4**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*109*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**65.2**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**65.2**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**127**	2.0	µS/cm	2025-03-19	
pH	**6.83**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**22.5**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25C1419-04) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	
Surrogate: Acridine-d9	*119*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*124*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*122*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25C1419-04) | Matrix: Water | Sampled: 2025-03-10, Continued					
Resin and Fatty Acids, Continued					
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*77*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*77*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*94*	*70-130*	%	*2025-03-18*	
MW24-05 (25C1419-05) | Matrix: Water | Sampled: 2025-03-10					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25C1419-05) | Matrix: Water | Sampled: 2025-03-10, Continued					
Anions					
Chloride	**9.68**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.126**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**2.4**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*109*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**50.2**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**50.2**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**152**	2.0	µS/cm	2025-03-19	
pH	**6.57**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.4**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25C1419-05) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH), Continued					
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	
Surrogate: Acridine-d9	*117*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*121*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*124*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25C1419-05) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*82*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*77*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*86*	*70-130*	%	*2025-03-18*	
SW1 (25C1419-06) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**7.17**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.143**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**1.6**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25C1419-06) | Matrix: Water | Sampled: 2025-03-10, Continued					
BCMOE Aggregate Hydrocarbons, Continued					
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*109*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**23.1**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**23.1**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**43.0**	2.0	µS/cm	2025-03-19	
pH	**7.37**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.0**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25C1419-06) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH), Continued					
Surrogate: Acridine-d9	*120*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*125*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*118*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25C1419-06) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*76*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*88*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*100*	*70-130*	%	*2025-03-18*	
SW2 (25C1419-07) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**7.33**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.149**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**1.6**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*101*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**24.1**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**24.1**	1.0	mg/L	2025-03-14	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25C1419-07) | Matrix: Water | Sampled: 2025-03-10, Continued					
General Parameters, Continued					
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**67.4**	2.0	µS/cm	2025-03-19	
pH	**7.37**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.1**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-18	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-18	
Acridine	< 0.050	0.050	µg/L	2025-03-18	
Anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-18	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-18	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-18	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Chrysene	< 0.050	0.050	µg/L	2025-03-18	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-18	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-18	
Fluorene	< 0.050	0.050	µg/L	2025-03-18	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-18	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-18	
Naphthalene	< 0.200	0.200	µg/L	2025-03-18	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-18	
Pyrene	< 0.020	0.020	µg/L	2025-03-18	
Quinoline	< 0.050	0.050	µg/L	2025-03-18	
Surrogate: Acridine-d9	*115*	*50-140*	%	*2025-03-18*	
Surrogate: Naphthalene-d8	*119*	*50-140*	%	*2025-03-18*	
Surrogate: Perylene-d12	*118*	*50-140*	%	*2025-03-18*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25C1419-07) | Matrix: Water | Sampled: 2025-03-10, Continued					
Resin and Fatty Acids, Continued					
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25C1419-07) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*76*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*74*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*86*	*70-130*	%	*2025-03-18*	
SW3 (25C1419-08) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**7.38**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.154**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**1.8**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-18	
EPHw19-32	< 250	250	µg/L	2025-03-18	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*108*	*60-140*	%	*2025-03-18*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**26.0**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**26.0**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**60.6**	2.0	µS/cm	2025-03-19	
pH	**7.42**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.0**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25C1419-08) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-19	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-19	
Acridine	< 0.050	0.050	µg/L	2025-03-19	
Anthracene	< 0.010	0.010	µg/L	2025-03-19	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-19	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-19	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-19	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-19	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-19	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-19	
Chrysene	< 0.050	0.050	µg/L	2025-03-19	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-19	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-19	
Fluorene	< 0.050	0.050	µg/L	2025-03-19	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-19	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-19	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-19	
Naphthalene	< 0.200	0.200	µg/L	2025-03-19	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-19	
Pyrene	< 0.020	0.020	µg/L	2025-03-19	
Quinoline	< 0.050	0.050	µg/L	2025-03-19	
Surrogate: Acridine-d9	*117*	*50-140*	%	*2025-03-19*	
Surrogate: Naphthalene-d8	*121*	*50-140*	%	*2025-03-19*	
Surrogate: Perylene-d12	*119*	*50-140*	%	*2025-03-19*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25C1419-08) | Matrix: Water | Sampled: 2025-03-10, Continued					
Resin and Fatty Acids, Continued					
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*78*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*76*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*87*	*70-130*	%	*2025-03-18*	
SW4 (25C1419-09) | Matrix: Water | Sampled: 2025-03-10					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25C1419-09) | Matrix: Water | Sampled: 2025-03-10, Continued					
Anions					
Chloride	**12.8**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.054**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**5.0**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-19	
EPHw19-32	< 250	250	µg/L	2025-03-19	
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*107*	*60-140*	%	*2025-03-19*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**58.5**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**58.5**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**142**	2.0	µS/cm	2025-03-19	
pH	**7.42**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.4**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-19	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-19	
Acridine	< 0.050	0.050	µg/L	2025-03-19	
Anthracene	< 0.010	0.010	µg/L	2025-03-19	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-19	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-19	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-19	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-19	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-19	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-19	
Chrysene	< 0.050	0.050	µg/L	2025-03-19	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25C1419-09) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH), Continued					
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-19	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-19	
Fluorene	< 0.050	0.050	µg/L	2025-03-19	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-19	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-19	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-19	
Naphthalene	< 0.200	0.200	µg/L	2025-03-19	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-19	
Pyrene	< 0.020	0.020	µg/L	2025-03-19	
Quinoline	< 0.050	0.050	µg/L	2025-03-19	
Surrogate: Acridine-d9	*113*	*50-140*	%	*2025-03-19*	
Surrogate: Naphthalene-d8	*113*	*50-140*	%	*2025-03-19*	
Surrogate: Perylene-d12	*115*	*50-140*	%	*2025-03-19*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25C1419-09) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*81*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*79*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*94*	*70-130*	%	*2025-03-18*	
DUP1 (25C1419-10) | Matrix: Water | Sampled: 2025-03-10					
Anions					
Chloride	**7.09**	0.10	mg/L	2025-03-13	
Fluoride	< 0.10	0.10	mg/L	2025-03-13	
Nitrate (as N)	**0.159**	0.010	mg/L	2025-03-13	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-03-13	
Sulfate	**2.3**	1.0	mg/L	2025-03-13	
BCMOE Aggregate Hydrocarbons					
VHw (6-10)	< 100	100	µg/L	2025-03-18	
VPHw	< 100	100	µg/L	N/A	
EPHw10-19	< 250	250	µg/L	2025-03-19	
EPHw19-32	< 250	250	µg/L	2025-03-19	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25C1419-10) | Matrix: Water | Sampled: 2025-03-10, Continued					
BCMOE Aggregate Hydrocarbons, Continued					
LEPHw	< 250	250	µg/L	N/A	
HEPHw	< 250	250	µg/L	N/A	
Surrogate: 2-Methylnonane (EPH/F2-4)	*109*	*60-140*	%	*2025-03-19*	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-03-19	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**26.7**	1.0	mg/L	2025-03-14	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Bicarbonate (as CaCO3)	**26.7**	1.0	mg/L	2025-03-14	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-03-14	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-03-17	
Conductivity (EC)	**85.8**	2.0	µS/cm	2025-03-19	
pH	**7.41**	0.10	pH units	2025-03-19	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-03-17	
Temperature, at pH	**23.2**		°C	2025-03-19	HT2
Miscellaneous Subcontracted Parameters					
Phenolics, Total	< 0.00200	0.00200	mg/L	2025-03-18	
Polycyclic Aromatic Hydrocarbons (PAH)					
Acenaphthene	< 0.050	0.050	µg/L	2025-03-19	
Acenaphthylene	< 0.200	0.200	µg/L	2025-03-19	
Acridine	< 0.050	0.050	µg/L	2025-03-19	
Anthracene	< 0.010	0.010	µg/L	2025-03-19	
Benz(a)anthracene	< 0.010	0.010	µg/L	2025-03-19	
Benzo(a)pyrene	< 0.010	0.010	µg/L	2025-03-19	
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L	2025-03-19	
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L	2025-03-19	
Benzo(k)fluoranthene	< 0.050	0.050	µg/L	2025-03-19	
2-Chloronaphthalene	< 0.100	0.100	µg/L	2025-03-19	
Chrysene	< 0.050	0.050	µg/L	2025-03-19	
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L	2025-03-19	
Fluoranthene	< 0.030	0.030	µg/L	2025-03-19	
Fluorene	< 0.050	0.050	µg/L	2025-03-19	
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L	2025-03-19	
1-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-19	
2-Methylnaphthalene	< 0.100	0.100	µg/L	2025-03-19	
Naphthalene	< 0.200	0.200	µg/L	2025-03-19	
Phenanthrene	< 0.100	0.100	µg/L	2025-03-19	
Pyrene	< 0.020	0.020	µg/L	2025-03-19	
Quinoline	< 0.050	0.050	µg/L	2025-03-19	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25C1419-10) | Matrix: Water | Sampled: 2025-03-10, Continued					
Polycyclic Aromatic Hydrocarbons (PAH), Continued					
Surrogate: Acridine-d9	*116*	*50-140*	%	*2025-03-19*	
Surrogate: Naphthalene-d8	*117*	*50-140*	%	*2025-03-19*	
Surrogate: Perylene-d12	*116*	*50-140*	%	*2025-03-19*	
Resin and Fatty Acids					
Linoleic Acid	< 10	10	µg/L	2025-03-19	HT1
Linolenic Acid	< 10	10	µg/L	2025-03-19	HT1
Oleic Acid	< 10	10	µg/L	2025-03-19	HT1
9,10-Dichlorostearic Acid	< 10	10	µg/L	2025-03-19	HT1
Stearic Acid	< 10	10	µg/L	2025-03-19	HT1
Fatty Acids, Total	< 10	10	µg/L	2025-03-19	HT1
Pimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Sandaracopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Isopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Palustric Acid	< 10	10	µg/L	2025-03-19	HT1
Levopimaric Acid	< 10	10	µg/L	2025-03-19	HT1
Dehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Abietic Acid	< 10	10	µg/L	2025-03-19	HT1
Neoabietic Acid	< 10	10	µg/L	2025-03-19	HT1
14-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12-Chlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
12,14-Dichlorodehydroabietic Acid	< 10	10	µg/L	2025-03-19	HT1
Resin Acids, total	< 10	10	µg/L	2025-03-19	HT1
Resin and Fatty Acids, total	< 10	10	µg/L	2025-03-19	HT1
Volatile Organic Compounds (VOC)					
Benzene	< 0.5	0.5	µg/L	2025-03-18	
Bromodichloromethane	< 1.0	1.0	µg/L	2025-03-18	
Bromoform	< 1.0	1.0	µg/L	2025-03-18	
Carbon tetrachloride	< 0.5	0.5	µg/L	2025-03-18	
Chlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
Chloroethane	< 2.0	2.0	µg/L	2025-03-18	
Chloroform	< 1.0	1.0	µg/L	2025-03-18	
Dibromochloromethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dibromoethane	< 0.3	0.3	µg/L	2025-03-18	
Dibromomethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L	2025-03-18	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,2-Dichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L	2025-03-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25C1419-10) | Matrix: Water | Sampled: 2025-03-10, Continued					
Volatile Organic Compounds (VOC), Continued					
Dichloromethane	< 3.0	3.0	µg/L	2025-03-18	
1,2-Dichloropropane	< 1.0	1.0	µg/L	2025-03-18	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L	2025-03-18	
Ethylbenzene	< 1.0	1.0	µg/L	2025-03-18	
Methyl tert-butyl ether	< 1.0	1.0	µg/L	2025-03-18	
Styrene	< 1.0	1.0	µg/L	2025-03-18	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L	2025-03-18	
Tetrachloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Toluene	< 1.0	1.0	µg/L	2025-03-18	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L	2025-03-18	
Trichloroethylene	< 1.0	1.0	µg/L	2025-03-18	
Trichlorofluoromethane	< 1.0	1.0	µg/L	2025-03-18	
Vinyl chloride	< 1.0	1.0	µg/L	2025-03-18	
Xylenes (total)	< 2.0	2.0	µg/L	2025-03-18	
Surrogate: Toluene-d8	*83*	*70-130*	%	*2025-03-18*	
Surrogate: 4-Bromofluorobenzene	*88*	*70-130*	%	*2025-03-18*	
Surrogate: 1,4-Dichlorobenzene-d4	*98*	*70-130*	%	*2025-03-18*	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HT1	The sample was prepared and/or analyzed past the recommended holding time.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA1	The Reporting Limit for this sample has been raised due to matrix interference.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Richmond
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Edmonton
EPH in Water	EPA 3511* / BCMOE EPHw	Hexane MicroExtraction (Base/Neutral) / Gas Chromatography (GC-FID)	✓	Richmond
HEPHw in Water	BCMOE LEPH/HEPH	Calculation		N/A
Hydrogen Sulfide, total in Water	SM 4500-S2 H (2021)	Calculation		N/A
LEPHw in Water	BCMOE LEPH/HEPH	Calculation		N/A
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Edmonton
Phenolics in Water	EPA 9066	Auto-Distill-Colorimetric		Sublet
Polycyclic Aromatic Hydrocarbons in Water	EPA 3511* / EPA 8270D	Hexane MicroExtraction (Base/Neutral) / GC-MSD (SIM)	✓	Richmond
Resin and Fatty Acids in Water	MA414Acigr10	N/A		Sublet
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
VH in Water	EPA 5030B / BCMOE VHw	Purge&Trap / Gas Chromatography (GC-FID)	✓	Richmond
Volatile Organic Compounds in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond
VPHw in Water	BCMOE VPH	Calculation: VH - (Benzene + Toluene + Ethylbenzene + Xylenes + Styrene)		N/A

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, ph > 7 = basic
µg/L	Micrograms per litre
µS/cm	Microsiemens per centimetre
BCMOE	British Columbia Environmental Laboratory Manual, British Columbia Ministry of Environment
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Caro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk)**: A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup)**: An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS)**: A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS)**: A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM)**: A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5C2975										
Blank (B5C2975-BLK1)				Prepared: 2025-03-13, Analyzed: 2025-03-13						
Chloride	< 0.10	0.10	mg/L							
Fluoride	< 0.10	0.10	mg/L							
Nitrate (as N)	< 0.010	0.010	mg/L							
Nitrite (as N)	< 0.010	0.010	mg/L							
Sulfate	< 1.0	1.0	mg/L							
LCS (B5C2975-BS1)				Prepared: 2025-03-13, Analyzed: 2025-03-13						
Chloride	2.83	0.10	mg/L	3.00		94	85-115			
Fluoride	2.07	0.10	mg/L	2.00		104	85-115			
Nitrate (as N)	2.90	0.010	mg/L	3.00		97	85-115			
Nitrite (as N)	3.08	0.010	mg/L	3.00		103	85-115			
Sulfate	13.6	1.0	mg/L	15.0		91	85-115			
Duplicate (B5C2975-DUP1)			**Source: 25C1419-01**	Prepared: 2025-03-13, Analyzed: 2025-03-13						
Chloride	4.94	0.10	mg/L		4.92			< 1	20	
Fluoride	< 0.10	0.10	mg/L		< 0.10				20	
Nitrate (as N)	0.256	0.010	mg/L		0.255			< 1	20	
Nitrite (as N)	< 0.010	0.010	mg/L		< 0.010				20	
Sulfate	3.8	1.0	mg/L		3.6				20	
Matrix Spike (B5C2975-MS1)			**Source: 25C1419-01**	Prepared: 2025-03-13, Analyzed: 2025-03-13						
Chloride	7.42	0.10	mg/L	3.00	4.92	83	75-125			
Fluoride	1.71	0.10	mg/L	2.00	< 0.10	85	75-125			
Nitrate (as N)	3.14	0.010	mg/L	3.00	0.255	96	75-125			
Nitrite (as N)	2.97	0.010	mg/L	3.00	< 0.010	99	75-125			
Sulfate	17.0	1.0	mg/L	15.0	3.6	90	75-125			
BCMOE Aggregate Hydrocarbons, Batch B5C3360										
Blank (B5C3360-BLK1)				Prepared: 2025-03-17, Analyzed: 2025-03-18						
EPHw10-19	< 250	250	µg/L							
EPHw19-32	< 250	250	µg/L							
Surrogate: 2-Methylnonane (EPH/F2-4)	*2450*		*µg/L*	2480		*99*	*60-140*			
LCS (B5C3360-BS2)				Prepared: 2025-03-17, Analyzed: 2025-03-18						
EPHw10-19	20600	250	µg/L	17400		119	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
BCMOE Aggregate Hydrocarbons, Batch B5C3360, Continued										
LCS (B5C3360-BS2), Continued				Prepared: 2025-03-17, Analyzed: 2025-03-18						
EPHw19-32	24900	250	µg/L	24800		100	70-130			
Surrogate: 2-Methylnonane (EPH/F2-4)	*1410*		*µg/L*	2480		*57*	*60-140*			*S09*
LCS Dup (B5C3360-BSD2)				Prepared: 2025-03-17, Analyzed: 2025-03-18						
EPHw10-19	21200	250	µg/L	17400		122	70-130	3	20	
EPHw19-32	25600	250	µg/L	24800		103	70-130	3	20	
Surrogate: 2-Methylnonane (EPH/F2-4)	*1430*		*µg/L*	2480		*57*	*60-140*			*S09*
BCMOE Aggregate Hydrocarbons, Batch B5C3409										
Blank (B5C3409-BLK1)				Prepared: 2025-03-18, Analyzed: 2025-03-18						
VHw (6-10)	< 100	100	µg/L							
Blank (B5C3409-BLK2)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
VHw (6-10)	< 100	100	µg/L							
LCS (B5C3409-BS2)				Prepared: 2025-03-18, Analyzed: 2025-03-18						
VHw (6-10)	2380	100	µg/L	2190		109	70-130			
LCS (B5C3409-BS4)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
VHw (6-10)	2030	100	µg/L	2190		93	70-130			
Duplicate (B5C3409-DUP1)			**Source: 25C1419-01**	Prepared: 2025-03-18, Analyzed: 2025-03-18						
VHw (6-10)	< 100	100	µg/L		< 100				30	
Duplicate (B5C3409-DUP2)			**Source: 25C1419-10**	Prepared: 2025-03-19, Analyzed: 2025-03-19						
VHw (6-10)	< 100	100	µg/L		< 100				30	
General Parameters, Batch B5C3148										
Blank (B5C3148-BLK1)				Prepared: 2025-03-14, Analyzed: 2025-03-14						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
Blank (B5C3148-BLK2)				Prepared: 2025-03-14, Analyzed: 2025-03-14						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
Blank (B5C3148-BLK3)				Prepared: 2025-03-14, Analyzed: 2025-03-14						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
LCS (B5C3148-BS1)				Prepared: 2025-03-14, Analyzed: 2025-03-14						
Alkalinity, Total (as CaCO3)	96.0	1.0	mg/L	100		96	80-120			
LCS (B5C3148-BS3)				Prepared: 2025-03-14, Analyzed: 2025-03-14						
Alkalinity, Total (as CaCO3)	95.7	1.0	mg/L	100		96	80-120			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5C3148, Continued										
LCS (B5C3148-BS5)				Prepared: 2025-03-14, Analyzed: 2025-03-14						
Alkalinity, Total (as CaCO3)	96.3	1.0	mg/L	100		96	80-120			
General Parameters, Batch B5C3304										
Blank (B5C3304-BLK1)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Sulfide, Total	< 0.020	0.020	mg/L							
Blank (B5C3304-BLK2)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Sulfide, Total	< 0.020	0.020	mg/L							
LCS (B5C3304-BS1)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Sulfide, Total	0.390	0.020	mg/L	0.450		87	80-120			
LCS (B5C3304-BS2)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Sulfide, Total	0.416	0.020	mg/L	0.450		92	80-120			
General Parameters, Batch B5C3339										
Blank (B5C3339-BLK1)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B5C3339-BLK2)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B5C3339-BLK3)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
LCS (B5C3339-BS1)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	1.04	0.050	mg/L	1.00		104	85-115			
LCS (B5C3339-BS2)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	0.960	0.050	mg/L	1.00		96	85-115			
LCS (B5C3339-BS3)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	0.950	0.050	mg/L	1.00		95	85-115			
Duplicate (B5C3339-DUP1)		**Source: 25C1419-06**		Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	< 0.050	0.050	mg/L		< 0.050				15	
Matrix Spike (B5C3339-MS1)		**Source: 25C1419-06**		Prepared: 2025-03-17, Analyzed: 2025-03-17						
Ammonia, Total (as N)	0.206	0.050	mg/L	0.204	< 0.050	101	75-125			
General Parameters, Batch B5C3545										
Blank (B5C3545-BLK1)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Conductivity (EC)	< 2.0	2.0	µS/cm							
pH	< 0.10	0.10	pH units							
Temperature, at pH	19.6		°C							
Blank (B5C3545-BLK2)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Conductivity (EC)	< 2.0	2.0	µS/cm							
pH	< 0.10	0.10	pH units							
Temperature, at pH	19.6		°C							
LCS (B5C3545-BS1)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Conductivity (EC)	1020	2.0	µS/cm	1000		102	95-105			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5C3545, Continued										
LCS (B5C3545-BS2)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Conductivity (EC)	1020	2.0	µS/cm	1000		102	95-105			
Duplicate (B5C3545-DUP1)		**Source: 25C1419-10**		Prepared: 2025-03-19, Analyzed: 2025-03-19						
Conductivity (EC)	85.8	2.0	µS/cm		85.8			< 1	3	
pH	7.46	0.10	pH units		7.41			< 1	1.5	
Reference (B5C3545-SRM1)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
pH	7.04	0.10	pH units	7.00		101	98-102			
Reference (B5C3545-SRM2)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
pH	7.01	0.10	pH units	7.00		100	98-102			
Polycyclic Aromatic Hydrocarbons (PAH), Batch B5C3360										
Blank (B5C3360-BLK1)				Prepared: 2025-03-17, Analyzed: 2025-03-18						
Acenaphthene	< 0.050	0.050	µg/L							
Acenaphthylene	< 0.200	0.200	µg/L							
Acridine	< 0.050	0.050	µg/L							
Anthracene	< 0.010	0.010	µg/L							
Benz(a)anthracene	< 0.010	0.010	µg/L							
Benzo(a)pyrene	< 0.010	0.010	µg/L							
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L							
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L							
Benzo(k)fluoranthene	< 0.050	0.050	µg/L							
2-Chloronaphthalene	< 0.100	0.100	µg/L							
Chrysene	< 0.050	0.050	µg/L							
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L							
Fluoranthene	< 0.030	0.030	µg/L							
Fluorene	< 0.050	0.050	µg/L							
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L							
1-Methylnaphthalene	< 0.100	0.100	µg/L							
2-Methylnaphthalene	< 0.100	0.100	µg/L							
Naphthalene	< 0.200	0.200	µg/L							
Phenanthrene	< 0.100	0.100	µg/L							
Pyrene	< 0.020	0.020	µg/L							
Quinoline	< 0.050	0.050	µg/L							
Surrogate: Acridine-d9	*30.1*		*µg/L*	25.0		*121*	*50-140*			
Surrogate: Naphthalene-d8	*29.8*		*µg/L*	25.0		*119*	*50-140*			
Surrogate: Perylene-d12	*29.4*		*µg/L*	25.0		*118*	*50-140*			
Blank (B5C3360-BLK2)				Prepared: 2025-03-17, Analyzed: 2025-03-18						
Acenaphthene	< 0.050	0.050	µg/L							
Acenaphthylene	< 0.200	0.200	µg/L							
Acridine	< 0.050	0.050	µg/L							
Anthracene	< 0.010	0.010	µg/L							
Benz(a)anthracene	< 0.010	0.010	µg/L							
Benzo(a)pyrene	< 0.010	0.010	µg/L							
Benzo(b+j)fluoranthene	< 0.050	0.050	µg/L							
Benzo(g,h,i)perylene	< 0.050	0.050	µg/L							
Benzo(k)fluoranthene	< 0.050	0.050	µg/L							
2-Chloronaphthalene	< 0.100	0.100	µg/L							
Chrysene	< 0.050	0.050	µg/L							
Dibenz(a,h)anthracene	< 0.010	0.010	µg/L							
Fluoranthene	< 0.030	0.030	µg/L							
Fluorene	< 0.050	0.050	µg/L							
Indeno(1,2,3-cd)pyrene	< 0.050	0.050	µg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Polycyclic Aromatic Hydrocarbons (PAH), Batch B5C3360, Continued										
Blank (B5C3360-BLK2), Continued				Prepared: 2025-03-17, Analyzed: 2025-03-18						
1-Methylnaphthalene	< 0.100	0.100	µg/L							
2-Methylnaphthalene	< 0.100	0.100	µg/L							
Naphthalene	< 0.200	0.200	µg/L							
Phenanthrene	< 0.100	0.100	µg/L							
Pyrene	< 0.020	0.020	µg/L							
Quinoline	< 0.050	0.050	µg/L							
Surrogate: Acridine-d9	*29.1*		*µg/L*	25.0		*117*	*50-140*			
Surrogate: Naphthalene-d8	*30.0*		*µg/L*	25.0		*120*	*50-140*			
Surrogate: Perylene-d12	*28.9*		*µg/L*	25.0		*116*	*50-140*			
LCS (B5C3360-BS1)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Acenaphthene	6.24	0.050	µg/L	4.98		125	50-140			
Acenaphthylene	5.17	0.200	µg/L	4.92		105	50-140			
Acridine	5.36	0.050	µg/L	4.95		108	50-140			
Anthracene	5.86	0.010	µg/L	4.98		118	50-140			
Benz(a)anthracene	5.56	0.010	µg/L	4.98		112	50-140			
Benzo(a)pyrene	4.57	0.010	µg/L	4.92		93	50-140			
Benzo(b+j)fluoranthene	11.5	0.050	µg/L	9.85		117	50-140			
Benzo(g,h,i)perylene	5.69	0.050	µg/L	4.92		115	50-140			
Benzo(k)fluoranthene	5.88	0.050	µg/L	4.95		119	50-140			
2-Chloronaphthalene	5.50	0.100	µg/L	4.92		112	50-140			
Chrysene	4.66	0.050	µg/L	4.90		95	50-140			
Dibenz(a,h)anthracene	5.64	0.010	µg/L	5.00		113	50-140			
Fluoranthene	5.42	0.030	µg/L	5.00		108	50-140			
Fluorene	5.79	0.050	µg/L	5.08		114	50-140			
Indeno(1,2,3-cd)pyrene	5.67	0.050	µg/L	4.92		115	50-140			
1-Methylnaphthalene	5.96	0.100	µg/L	4.95		120	50-140			
2-Methylnaphthalene	6.13	0.100	µg/L	4.95		124	50-140			
Naphthalene	6.27	0.200	µg/L	4.95		127	50-140			
Phenanthrene	5.91	0.100	µg/L	4.92		120	50-140			
Pyrene	5.34	0.020	µg/L	5.02		106	50-140			
Quinoline	5.56	0.050	µg/L	5.02		111	50-140			
Surrogate: Acridine-d9	*28.1*		*µg/L*	25.0		*113*	*50-140*			
Surrogate: Naphthalene-d8	*27.9*		*µg/L*	25.0		*112*	*50-140*			
Surrogate: Perylene-d12	*27.0*		*µg/L*	25.0		*108*	*50-140*			
LCS Dup (B5C3360-BSD1)				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Acenaphthene	5.82	0.050	µg/L	4.98		117	50-140	7	30	
Acenaphthylene	5.68	0.200	µg/L	4.92		115	50-140	9	30	
Acridine	6.10	0.050	µg/L	4.95		123	50-140	13	30	
Anthracene	5.86	0.010	µg/L	4.98		118	50-140	< 1	30	
Benz(a)anthracene	5.68	0.010	µg/L	4.98		114	50-140	2	30	
Benzo(a)pyrene	5.77	0.010	µg/L	4.92		117	50-140	23	30	
Benzo(b+j)fluoranthene	12.3	0.050	µg/L	9.85		124	50-140	6	30	
Benzo(g,h,i)perylene	5.99	0.050	µg/L	4.92		122	50-140	5	30	
Benzo(k)fluoranthene	5.77	0.050	µg/L	4.95		116	50-140	2	30	
2-Chloronaphthalene	5.37	0.100	µg/L	4.92		109	50-140	2	30	
Chrysene	5.91	0.050	µg/L	4.90		121	50-140	24	30	
Dibenz(a,h)anthracene	5.78	0.010	µg/L	5.00		116	50-140	2	30	
Fluoranthene	5.44	0.030	µg/L	5.00		109	50-140	< 1	30	
Fluorene	5.64	0.050	µg/L	5.08		111	50-140	3	30	
Indeno(1,2,3-cd)pyrene	6.03	0.050	µg/L	4.92		122	50-140	6	30	
1-Methylnaphthalene	5.62	0.100	µg/L	4.95		114	50-140	6	30	
2-Methylnaphthalene	5.79	0.100	µg/L	4.95		117	50-140	6	30	
Naphthalene	5.74	0.200	µg/L	4.95		116	50-140	9	30	
Phenanthrene	5.16	0.100	µg/L	4.92		105	50-140	14	30	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Polycyclic Aromatic Hydrocarbons (PAH), Batch B5C3360, Continued										
LCS Dup (B5C3360-BSD1), Continued				Prepared: 2025-03-17, Analyzed: 2025-03-17						
Pyrene	5.89	0.020	µg/L	5.02		117	50-140	10	30	
Quinoline	5.51	0.050	µg/L	5.02		110	50-140	< 1	30	
Surrogate: Acridine-d9	*27.2*		*µg/L*	25.0		*109*	*50-140*			
Surrogate: Naphthalene-d8	*27.8*		*µg/L*	25.0		*111*	*50-140*			
Surrogate: Perylene-d12	*28.8*		*µg/L*	25.0		*115*	*50-140*			
Volatile Organic Compounds (VOC), Batch B5C3409										
Blank (B5C3409-BLK1)				Prepared: 2025-03-18, Analyzed: 2025-03-18						
Benzene	< 0.5	0.5	µg/L							
Bromodichloromethane	< 1.0	1.0	µg/L							
Bromoform	< 1.0	1.0	µg/L							
Carbon tetrachloride	< 0.5	0.5	µg/L							
Chlorobenzene	< 1.0	1.0	µg/L							
Chloroethane	< 2.0	2.0	µg/L							
Chloroform	< 1.0	1.0	µg/L							
Dibromochloromethane	< 1.0	1.0	µg/L							
1,2-Dibromoethane	< 0.3	0.3	µg/L							
Dibromomethane	< 1.0	1.0	µg/L							
1,2-Dichlorobenzene	< 0.5	0.5	µg/L							
1,3-Dichlorobenzene	< 1.0	1.0	µg/L							
1,4-Dichlorobenzene	< 1.0	1.0	µg/L							
1,1-Dichloroethane	< 1.0	1.0	µg/L							
1,2-Dichloroethane	< 1.0	1.0	µg/L							
1,1-Dichloroethylene	< 1.0	1.0	µg/L							
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L							
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L							
Dichloromethane	< 3.0	3.0	µg/L							
1,2-Dichloropropane	< 1.0	1.0	µg/L							
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L							
Ethylbenzene	< 1.0	1.0	µg/L							
Methyl tert-butyl ether	< 1.0	1.0	µg/L							
Styrene	< 1.0	1.0	µg/L							
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L							
Tetrachloroethylene	< 1.0	1.0	µg/L							
Toluene	< 1.0	1.0	µg/L							
1,1,1-Trichloroethane	< 1.0	1.0	µg/L							
1,1,2-Trichloroethane	< 1.0	1.0	µg/L							
Trichloroethylene	< 1.0	1.0	µg/L							
Trichlorofluoromethane	< 1.0	1.0	µg/L							
Vinyl chloride	< 1.0	1.0	µg/L							
Xylenes (total)	< 2.0	2.0	µg/L							
Surrogate: Toluene-d8	*19.0*		*µg/L*	25.0		*76*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*18.5*		*µg/L*	24.9		*74*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*20.8*		*µg/L*	24.5		*85*	*70-130*			
Blank (B5C3409-BLK2)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Benzene	< 0.5	0.5	µg/L							
Bromodichloromethane	< 1.0	1.0	µg/L							
Bromoform	< 1.0	1.0	µg/L							
Carbon tetrachloride	< 0.5	0.5	µg/L							
Chlorobenzene	< 1.0	1.0	µg/L							
Chloroethane	< 2.0	2.0	µg/L							
Chloroform	< 1.0	1.0	µg/L							
Dibromochloromethane	< 1.0	1.0	µg/L							
1,2-Dibromoethane	< 0.3	0.3	µg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B5C3409, Continued										
Blank (B5C3409-BLK2), Continued				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Dibromomethane	< 1.0	1.0	µg/L							
1,2-Dichlorobenzene	< 0.5	0.5	µg/L							
1,3-Dichlorobenzene	< 1.0	1.0	µg/L							
1,4-Dichlorobenzene	< 1.0	1.0	µg/L							
1,1-Dichloroethane	< 1.0	1.0	µg/L							
1,2-Dichloroethane	< 1.0	1.0	µg/L							
1,1-Dichloroethylene	< 1.0	1.0	µg/L							
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L							
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L							
Dichloromethane	< 3.0	3.0	µg/L							
1,2-Dichloropropane	< 1.0	1.0	µg/L							
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L							
Ethylbenzene	< 1.0	1.0	µg/L							
Methyl tert-butyl ether	< 1.0	1.0	µg/L							
Styrene	< 1.0	1.0	µg/L							
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L							
Tetrachloroethylene	< 1.0	1.0	µg/L							
Toluene	< 1.0	1.0	µg/L							
1,1,1-Trichloroethane	< 1.0	1.0	µg/L							
1,1,2-Trichloroethane	< 1.0	1.0	µg/L							
Trichloroethylene	< 1.0	1.0	µg/L							
Trichlorofluoromethane	< 1.0	1.0	µg/L							
Vinyl chloride	< 1.0	1.0	µg/L							
Xylenes (total)	< 2.0	2.0	µg/L							
Surrogate: Toluene-d8	*19.0*		*µg/L*	25.0		*76*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*18.3*		*µg/L*	24.9		*73*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*20.8*		*µg/L*	24.5		*85*	*70-130*			
LCS (B5C3409-BS1)				Prepared: 2025-03-18, Analyzed: 2025-03-18						
Benzene	17.2	0.5	µg/L	20.1		85	70-130			
Bromodichloromethane	19.4	1.0	µg/L	20.1		96	70-130			
Bromoform	22.5	1.0	µg/L	20.1		112	70-130			
Carbon tetrachloride	19.2	0.5	µg/L	20.1		96	70-130			
Chlorobenzene	20.4	1.0	µg/L	20.1		101	70-130			
Chloroethane	21.9	2.0	µg/L	20.1		109	60-140			
Chloroform	19.5	1.0	µg/L	20.1		97	70-130			
Dibromochloromethane	18.7	1.0	µg/L	20.1		93	70-130			
1,2-Dibromoethane	18.0	0.3	µg/L	20.1		89	70-130			
Dibromomethane	20.0	1.0	µg/L	20.1		100	70-130			
1,2-Dichlorobenzene	21.8	0.5	µg/L	20.1		108	70-130			
1,3-Dichlorobenzene	22.4	1.0	µg/L	20.1		111	70-130			
1,4-Dichlorobenzene	20.5	1.0	µg/L	20.1		102	70-130			
1,1-Dichloroethane	21.1	1.0	µg/L	20.1		105	70-130			
1,2-Dichloroethane	17.0	1.0	µg/L	20.1		85	70-130			
1,1-Dichloroethylene	21.4	1.0	µg/L	20.1		106	70-130			
cis-1,2-Dichloroethylene	18.9	1.0	µg/L	20.1		94	70-130			
trans-1,2-Dichloroethylene	19.3	1.0	µg/L	20.1		96	70-130			
Dichloromethane	20.0	3.0	µg/L	20.1		100	70-130			
1,2-Dichloropropane	18.7	1.0	µg/L	20.1		93	70-130			
1,3-Dichloropropene (cis + trans)	36.0	1.0	µg/L	40.2		90	70-130			
Ethylbenzene	18.3	1.0	µg/L	20.1		91	70-130			
Methyl tert-butyl ether	18.2	1.0	µg/L	20.0		91	70-130			
Styrene	18.8	1.0	µg/L	20.1		94	70-130			
1,1,2,2-Tetrachloroethane	21.5	0.5	µg/L	20.1		107	70-130			
Tetrachloroethylene	19.5	1.0	µg/L	20.1		97	70-130			
Toluene	17.6	1.0	µg/L	20.1		88	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B5C3409, Continued										
LCS (B5C3409-BS1), Continued				Prepared: 2025-03-18, Analyzed: 2025-03-18						
1,1,1-Trichloroethane	18.9	1.0	µg/L	20.1		94	70-130			
1,1,2-Trichloroethane	19.0	1.0	µg/L	20.1		95	70-130			
Trichloroethylene	16.6	1.0	µg/L	20.1		83	70-130			
Trichlorofluoromethane	34.1	1.0	µg/L	20.1		170	60-140			SPK
Vinyl chloride	18.8	1.0	µg/L	20.1		93	60-140			
Xylenes (total)	60.0	2.0	µg/L	60.3		99	70-130			
Surrogate: Toluene-d8	*23.1*		*µg/L*	25.0		*92*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*26.4*		*µg/L*	24.9		*106*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*29.1*		*µg/L*	24.5		*119*	*70-130*			
LCS (B5C3409-BS3)				Prepared: 2025-03-19, Analyzed: 2025-03-19						
Benzene	17.0	0.5	µg/L	20.1		85	70-130			
Bromodichloromethane	18.3	1.0	µg/L	20.1		91	70-130			
Bromoform	23.5	1.0	µg/L	20.1		117	70-130			
Carbon tetrachloride	18.7	0.5	µg/L	20.1		93	70-130			
Chlorobenzene	21.0	1.0	µg/L	20.1		105	70-130			
Chloroethane	18.9	2.0	µg/L	20.1		94	60-140			
Chloroform	20.0	1.0	µg/L	20.1		100	70-130			
Dibromochloromethane	17.5	1.0	µg/L	20.1		87	70-130			
1,2-Dibromoethane	18.6	0.3	µg/L	20.1		92	70-130			
Dibromomethane	18.3	1.0	µg/L	20.1		91	70-130			
1,2-Dichlorobenzene	22.3	0.5	µg/L	20.1		111	70-130			
1,3-Dichlorobenzene	22.9	1.0	µg/L	20.1		114	70-130			
1,4-Dichlorobenzene	21.1	1.0	µg/L	20.1		105	70-130			
1,1-Dichloroethane	21.1	1.0	µg/L	20.1		105	70-130			
1,2-Dichloroethane	17.9	1.0	µg/L	20.1		89	70-130			
1,1-Dichloroethylene	20.4	1.0	µg/L	20.1		102	70-130			
cis-1,2-Dichloroethylene	19.5	1.0	µg/L	20.1		97	70-130			
trans-1,2-Dichloroethylene	19.5	1.0	µg/L	20.1		97	70-130			
Dichloromethane	19.8	3.0	µg/L	20.1		98	70-130			
1,2-Dichloropropane	18.0	1.0	µg/L	20.1		89	70-130			
1,3-Dichloropropene (cis + trans)	35.2	1.0	µg/L	40.2		88	70-130			
Ethylbenzene	18.7	1.0	µg/L	20.1		93	70-130			
Methyl tert-butyl ether	18.7	1.0	µg/L	20.0		93	70-130			
Styrene	19.1	1.0	µg/L	20.1		95	70-130			
1,1,2,2-Tetrachloroethane	23.7	0.5	µg/L	20.1		118	70-130			
Tetrachloroethylene	18.6	1.0	µg/L	20.1		93	70-130			
Toluene	17.8	1.0	µg/L	20.1		88	70-130			
1,1,1-Trichloroethane	18.6	1.0	µg/L	20.1		93	70-130			
1,1,2-Trichloroethane	18.2	1.0	µg/L	20.1		90	70-130			
Trichloroethylene	16.9	1.0	µg/L	20.1		84	70-130			
Trichlorofluoromethane	22.3	1.0	µg/L	20.1		111	60-140			
Vinyl chloride	18.5	1.0	µg/L	20.1		92	60-140			
Xylenes (total)	60.4	2.0	µg/L	60.3		100	70-130			
Surrogate: Toluene-d8	*22.9*		*µg/L*	25.0		*92*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*27.2*		*µg/L*	24.9		*109*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*27.4*		*µg/L*	24.5		*112*	*70-130*			
Duplicate (B5C3409-DUP1)	**Source: 25C1419-01**			Prepared: 2025-03-18, Analyzed: 2025-03-18						
Benzene	< 0.5	0.5	µg/L		< 0.5				30	
Bromodichloromethane	< 1.0	1.0	µg/L		< 1.0				30	
Bromoform	< 1.0	1.0	µg/L		< 1.0				30	
Carbon tetrachloride	< 0.5	0.5	µg/L		< 0.5				30	
Chlorobenzene	< 1.0	1.0	µg/L		< 1.0				30	
Chloroethane	< 2.0	2.0	µg/L		< 2.0				30	
Chloroform	< 1.0	1.0	µg/L		< 1.0				30	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B5C3409, Continued										
Duplicate (B5C3409-DUP1), Continued	**Source: 25C1419-01**			Prepared: 2025-03-18, Analyzed: 2025-03-18						
Dibromochloromethane	< 1.0	1.0	µg/L		< 1.0				30	
1,2-Dibromoethane	< 0.3	0.3	µg/L		< 0.3				30	
Dibromomethane	< 1.0	1.0	µg/L		< 1.0				30	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L		< 0.5				30	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L		< 1.0				30	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L		< 1.0				30	
1,1-Dichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
1,2-Dichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
1,1-Dichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
Dichloromethane	< 3.0	3.0	µg/L		< 3.0				30	
1,2-Dichloropropane	< 1.0	1.0	µg/L		< 1.0				30	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L		< 1.0				30	
Ethylbenzene	< 1.0	1.0	µg/L		< 1.0				30	
Methyl tert-butyl ether	< 1.0	1.0	µg/L		< 1.0				30	
Styrene	< 1.0	1.0	µg/L		< 1.0				30	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L		< 0.5				30	
Tetrachloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
Toluene	< 1.0	1.0	µg/L		< 1.0				30	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
Trichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
Trichlorofluoromethane	< 1.0	1.0	µg/L		< 1.0				30	
Vinyl chloride	< 1.0	1.0	µg/L		< 1.0				30	
Xylenes (total)	< 2.0	2.0	µg/L		< 2.0				30	
Surrogate: Toluene-d8	*19.5*		*µg/L*	25.0		*78*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*19.8*		*µg/L*	24.9		*79*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*21.5*		*µg/L*	24.5		*88*	*70-130*			
Duplicate (B5C3409-DUP2)	**Source: 25C1419-10**			Prepared: 2025-03-19, Analyzed: 2025-03-19						
Benzene	< 0.5	0.5	µg/L		< 0.5				30	
Bromodichloromethane	< 1.0	1.0	µg/L		< 1.0				30	
Bromoform	< 1.0	1.0	µg/L		< 1.0				30	
Carbon tetrachloride	< 0.5	0.5	µg/L		< 0.5				30	
Chlorobenzene	< 1.0	1.0	µg/L		< 1.0				30	
Chloroethane	< 2.0	2.0	µg/L		< 2.0				30	
Chloroform	< 1.0	1.0	µg/L		< 1.0				30	
Dibromochloromethane	< 1.0	1.0	µg/L		< 1.0				30	
1,2-Dibromoethane	< 0.3	0.3	µg/L		< 0.3				30	
Dibromomethane	< 1.0	1.0	µg/L		< 1.0				30	
1,2-Dichlorobenzene	< 0.5	0.5	µg/L		< 0.5				30	
1,3-Dichlorobenzene	< 1.0	1.0	µg/L		< 1.0				30	
1,4-Dichlorobenzene	< 1.0	1.0	µg/L		< 1.0				30	
1,1-Dichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
1,2-Dichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
1,1-Dichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
cis-1,2-Dichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
trans-1,2-Dichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
Dichloromethane	< 3.0	3.0	µg/L		< 3.0				30	
1,2-Dichloropropane	< 1.0	1.0	µg/L		< 1.0				30	
1,3-Dichloropropene (cis + trans)	< 1.0	1.0	µg/L		< 1.0				30	
Ethylbenzene	< 1.0	1.0	µg/L		< 1.0				30	
Methyl tert-butyl ether	< 1.0	1.0	µg/L		< 1.0				30	
Styrene	< 1.0	1.0	µg/L		< 1.0				30	
1,1,2,2-Tetrachloroethane	< 0.5	0.5	µg/L		< 0.5				30	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B5C3409, Continued										
Duplicate (B5C3409-DUP2), Continued	**Source: 25C1419-10**			Prepared: 2025-03-19, Analyzed: 2025-03-19						
Tetrachloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
Toluene	< 1.0	1.0	µg/L		< 1.0				30	
1,1,1-Trichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
1,1,2-Trichloroethane	< 1.0	1.0	µg/L		< 1.0				30	
Trichloroethylene	< 1.0	1.0	µg/L		< 1.0				30	
Trichlorofluoromethane	< 1.0	1.0	µg/L		< 1.0				30	
Vinyl chloride	< 1.0	1.0	µg/L		< 1.0				30	
Xylenes (total)	< 2.0	2.0	µg/L		< 2.0				30	
Surrogate: Toluene-d8	*18.1*		*µg/L*	25.0		*72*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*18.6*		*µg/L*	24.9		*75*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*21.4*		*µg/L*	24.5		*87*	*70-130*			
Matrix Spike (B5C3409-MS1)	**Source: 25C1419-01**			Prepared: 2025-03-18, Analyzed: 2025-03-18						
Benzene	17.4	0.5	µg/L	20.1	< 0.5	87	70-130			
Bromodichloromethane	18.0	1.0	µg/L	20.1	< 1.0	90	70-130			
Bromoform	21.9	1.0	µg/L	20.1	< 1.0	109	70-130			
Carbon tetrachloride	18.1	0.5	µg/L	20.1	< 0.5	90	70-130			
Chlorobenzene	20.0	1.0	µg/L	20.1	< 1.0	100	70-130			
Chloroethane	18.3	2.0	µg/L	20.1	< 2.0	91	60-140			
Chloroform	18.7	1.0	µg/L	20.1	< 1.0	93	70-130			
Dibromochloromethane	17.3	1.0	µg/L	20.1	< 1.0	86	70-130			
1,2-Dibromoethane	17.3	0.3	µg/L	20.1	< 0.3	86	70-130			
Dibromomethane	18.2	1.0	µg/L	20.1	< 1.0	91	70-130			
1,2-Dichlorobenzene	21.3	0.5	µg/L	20.1	< 0.5	106	70-130			
1,3-Dichlorobenzene	21.9	1.0	µg/L	20.1	< 1.0	109	70-130			
1,4-Dichlorobenzene	20.2	1.0	µg/L	20.1	< 1.0	100	70-130			
1,1-Dichloroethane	19.5	1.0	µg/L	20.1	< 1.0	97	70-130			
1,2-Dichloroethane	17.8	1.0	µg/L	20.1	< 1.0	88	70-130			
1,1-Dichloroethylene	19.6	1.0	µg/L	20.1	< 1.0	97	70-130			
cis-1,2-Dichloroethylene	18.2	1.0	µg/L	20.1	< 1.0	91	70-130			
trans-1,2-Dichloroethylene	18.6	1.0	µg/L	20.1	< 1.0	92	70-130			
Dichloromethane	18.1	3.0	µg/L	20.1	< 3.0	90	70-130			
1,2-Dichloropropane	17.8	1.0	µg/L	20.1	< 1.0	89	70-130			
1,3-Dichloropropene (cis + trans)	33.6	1.0	µg/L	40.2	< 1.0	84	70-130			
Ethylbenzene	19.4	1.0	µg/L	20.1	< 1.0	96	70-130			
Methyl tert-butyl ether	16.8	1.0	µg/L	20.0	< 1.0	84	70-130			
Styrene	20.4	1.0	µg/L	20.1	< 1.0	102	70-130			
1,1,2,2-Tetrachloroethane	21.5	0.5	µg/L	20.1	< 0.5	107	70-130			
Tetrachloroethylene	18.2	1.0	µg/L	20.1	< 1.0	90	70-130			
Toluene	17.4	1.0	µg/L	20.1	< 1.0	86	70-130			
1,1,1-Trichloroethane	18.6	1.0	µg/L	20.1	< 1.0	92	70-130			
1,1,2-Trichloroethane	17.6	1.0	µg/L	20.1	< 1.0	87	70-130			
Trichloroethylene	17.2	1.0	µg/L	20.1	< 1.0	85	70-130			
Trichlorofluoromethane	21.4	1.0	µg/L	20.1	< 1.0	106	60-140			
Vinyl chloride	18.7	1.0	µg/L	20.1	< 1.0	93	60-140			
Xylenes (total)	63.0	2.0	µg/L	60.3	< 2.0	105	70-130			
Surrogate: Toluene-d8	*21.5*		*µg/L*	25.0		*86*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*25.2*		*µg/L*	24.9		*101*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*27.0*		*µg/L*	24.5		*110*	*70-130*			
Matrix Spike (B5C3409-MS2)	**Source: 25C1419-10**			Prepared: 2025-03-19, Analyzed: 2025-03-19						
Benzene	17.1	0.5	µg/L	20.1	< 0.5	85	70-130			
Bromodichloromethane	17.5	1.0	µg/L	20.1	< 1.0	87	70-130			
Bromoform	21.0	1.0	µg/L	20.1	< 1.0	105	70-130			
Carbon tetrachloride	17.4	0.5	µg/L	20.1	< 0.5	86	70-130			
Chlorobenzene	19.6	1.0	µg/L	20.1	< 1.0	98	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25C1419
PROJECT	Marine Avenue Site	**REPORTED**	2025-03-20 16:50

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B5C3409, Continued										
Matrix Spike (B5C3409-MS2), Continued	**Source: 25C1419-10**			Prepared: 2025-03-19, Analyzed: 2025-03-19						
Chloroethane	16.1	2.0	µg/L	20.1	< 2.0	80	60-140			
Chloroform	18.2	1.0	µg/L	20.1	< 1.0	91	70-130			
Dibromochloromethane	17.0	1.0	µg/L	20.1	< 1.0	84	70-130			
1,2-Dibromoethane	16.7	0.3	µg/L	20.1	< 0.3	83	70-130			
Dibromomethane	18.4	1.0	µg/L	20.1	< 1.0	92	70-130			
1,2-Dichlorobenzene	20.1	0.5	µg/L	20.1	< 0.5	100	70-130			
1,3-Dichlorobenzene	20.7	1.0	µg/L	20.1	< 1.0	103	70-130			
1,4-Dichlorobenzene	18.5	1.0	µg/L	20.1	< 1.0	92	70-130			
1,1-Dichloroethane	18.9	1.0	µg/L	20.1	< 1.0	94	70-130			
1,2-Dichloroethane	18.5	1.0	µg/L	20.1	< 1.0	92	70-130			
1,1-Dichloroethylene	18.8	1.0	µg/L	20.1	< 1.0	93	70-130			
cis-1,2-Dichloroethylene	17.9	1.0	µg/L	20.1	< 1.0	89	70-130			
trans-1,2-Dichloroethylene	17.8	1.0	µg/L	20.1	< 1.0	88	70-130			
Dichloromethane	17.5	3.0	µg/L	20.1	< 3.0	87	70-130			
1,2-Dichloropropane	18.0	1.0	µg/L	20.1	< 1.0	90	70-130			
1,3-Dichloropropene (cis + trans)	31.3	1.0	µg/L	40.2	< 1.0	78	70-130			
Ethylbenzene	18.2	1.0	µg/L	20.1	< 1.0	91	70-130			
Methyl tert-butyl ether	16.4	1.0	µg/L	20.0	< 1.0	82	70-130			
Styrene	18.5	1.0	µg/L	20.1	< 1.0	92	70-130			
1,1,2,2-Tetrachloroethane	20.6	0.5	µg/L	20.1	< 0.5	103	70-130			
Tetrachloroethylene	18.2	1.0	µg/L	20.1	< 1.0	91	70-130			
Toluene	16.8	1.0	µg/L	20.1	< 1.0	83	70-130			
1,1,1-Trichloroethane	17.5	1.0	µg/L	20.1	< 1.0	87	70-130			
1,1,2-Trichloroethane	17.3	1.0	µg/L	20.1	< 1.0	86	70-130			
Trichloroethylene	16.5	1.0	µg/L	20.1	< 1.0	82	70-130			
Trichlorofluoromethane	19.6	1.0	µg/L	20.1	< 1.0	97	60-140			
Vinyl chloride	17.8	1.0	µg/L	20.1	< 1.0	89	60-140			
Xylenes (total)	57.4	2.0	µg/L	60.3	< 2.0	95	70-130			
Surrogate: Toluene-d8	*20.7*		*µg/L*	25.0		*83*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.7*		*µg/L*	24.9		*99*	*70-130*			
Surrogate: 1,4-Dichlorobenzene-d4	*26.4*		*µg/L*	24.5		*108*	*70-130*			

QC Qualifiers:

S09	The surrogate recovery for this sample is outside of established control limits .
SPK	The recovery of this analyte was outside of established control limits.

CARO ANALYTICAL SERVICES
Caring About Results, Obviously.

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#102-3677
17225 109 /
#108-4475 W

25C1419

CHAIN OF CUSTODY RECORD

CARO BC COC, Rev 2019-01

By engaging our services, you are agreeing to CARO's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

COC#: _____ PAGE OF

RELINQUISHED BY:	DATE: Mar 10/25	RECEIVED BY:	DATE: 12/3
RC	TIME: 3:00	BIA Texada	TIME: 10:00

TURNAROUND TIME REQUESTED:
Routine: (5-7 Days) ☑
Rush: 1 Day* ☐ 2 Day* ☐ 3 Day* ☐
Other* _____
*Contact Lab To Confirm. Surcharge May Apply

REGULATORY APPLICATION: Show on Report ☐
Canadian Drinking Water Quality ☐ BC WQG ☐ BC HWR ☐
BC CSR Soil: WL ☐ AL ☐ PL ☐ RL-LD ☐ RL-HD ☐ CL ☐ IL ☐
BC CSR Water: AW ☑ IW ☐ LW ☐ DW ☑
CCME: _____ Other: _____

REPORT TO:
COMPANY: Tetra Tech Canada Inc.
ADDRESS: Suite 1000-885 Dunsmuir Street
Vancouver, BC V8G 0A7
CONTACT: Emily Lai
TEL/FAX: 236-984-3851
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
DATA FORMAT: EXCEL ☑ WATERTRAX ☐ ESdat ☑
EQuIS ☐ BC EMS ☐ OTHER* ☐
EMAIL 1: emily.lai@tetratech.com
EMAIL 2: mike.gallo@tetratech.com
EMAIL 3: lauren.quan@tetratech.com

INVOICE TO: SAME AS REPORT TO ☐
COMPANY: Tetra Tech Canada Inc.
ADDRESS: 14940 123 Ave NW
Edmonton AB T5V 1B4
CONTACT:
TEL/FAX:
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
EMAIL 1: Accounts.Payable@tetratech.com
EMAIL 2: emily.lai@tetratech.com
EMAIL 3:
PO #: 704-SWM.SWOP03663-14

PROJECT NUMBER / INFO: Marine Avenue Site

A: Biohazard B: Cyanide C: PCBs D: Asbestos E: Heavy Metals F: Flammable G: Strong Odour H: High Contamination I: Other (please specify*)

** If you would like to sign up for ClientConnect and/or EnviroChain, CARO's online service offerings, please check here: ☐

SAMPLED BY: Regan Keil

CLIENT SAMPLE ID:	MATRIX: DRINKING WATER	OTHER WATER	SOIL	OTHER	CONTAINER QTY	SAMPLING: DATE YYYY-MM-DD	TIME HH:MM	COMMENTS: CHLORINATED	FILTERED	PRESERVED	(e.g. flow/volume media ID/notes)
MW13-01		X									
MW13-02		X									
MW13-03		X									
MW19-04		X									
MW24-05		X									
SW1		X									
SW2		X									
SW3		X									
SW4		X									
SW5		X									
DUP1		X									

ANALYSES REQUESTED:

CLIENT SAMPLE ID:	BTEX ☐ VPH ☐ PHC F1 ☐	VOC ☐ VPH ☐	EPH ☑ PHC F2-F4 ☐	PAH ☑ L/HEPH ☐	PHENOLS Chlorinated ☐ Non-Chlor. ☐	PCB ☐ GLYCOLS ☐ HAA ☐ THM ☐	PESTICIDES ☐ ACID HERBICIDES ☐	METALS - WATER TOTAL Hg ☐	METALS - WATER DISSOLVED Hg ☐	METALS - SOIL (SALM) ☐ inc. pH ☐	pH ☑ EC ☑ ALK ☑ ANIONS ☐	TSS ☐ VSS ☐ TDS ☐ ☐	BOD ☐ COD ☐ TOG ☐ MOG ☐	TN ☐ NH3 ☐ TKN ☐	FECAL COLIFORMS ☐ HPC ☐	TOTAL COLIFORMS ☐ E. coli ☐	ASBESTOS	Essential Drinking Water Package	NH3,Cl,SO4,F,NO3,NO2 ✓	low level sulphides ✓	Resins and Fatty Acids ✓	Total Phenols ✓	Volatile Hydrocarbons ✓	HOLD	POSSIBLE SAMPLE HAZARD CODE(S)
MW13-01			✓	✓							✓								✓	✓	✓	✓	✓		
MW13-02			✓	✓							✓								✓	✓	✓	✓	✓		
MW13-03			✓	✓							✓								✓	✓	✓	✓	✓		
MW19-04			✓	✓							✓								✓	✓	✓	✓	✓		
MW24-05			✓	✓							✓								✓	✓	✓	✓	✓		
SW1			✓	✓							✓								✓	✓	✓	✓	✓		
SW2			✓	✓							✓								✓	✓	✓	✓	✓		
SW3			✓	✓							✓								✓	✓	✓	✓	✓		
SW4			✓	✓							✓								✓	✓	✓	✓	✓		
SW5			✓	✓							✓								✓	✓	✓	✓	✓		
DUP1			✓	✓							✓								✓	✓	✓	✓	✓		

SHIPPING INSTRUCTIONS: Return Cooler(s) ☐
Supplies Needed:

SAMPLE RETENTION:
30 Days (default) ☐
60 Days ☐ 90 Days ☐
Other (surcharges will apply): _____

*** OTHER INSTRUCTIONS:**

If you would like to talk to a real live Scientist about your project requirements, please check here: ☐

SAMPLE RECEIPT CONDITION:
COOLER 1 (°C): 6.9 ICE: Y ☐ N ☐
COOLER 2 (°C): 5.7 ICE: Y ☐ N ☐
COOLER 3 (°C): ICE: Y ☐ N ☐
CUSTODY SEALS INTACT: NA ☐ Y ☐ N ☐

CERTIFICATE OF ANALYSIS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver) 1000 - 885 Dunsmuir Street Vancouver, BC V6C 1N5		
ATTENTION	Emily Lai	**WORK ORDER**	25E3516
PO NUMBER	704-SWM.SWOP03663-14	**RECEIVED / TEMP**	2025-05-27 10:16 / 10.4°C
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46
PROJECT INFO		**COC NUMBER**	No #

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

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If you have any questions or concerns, please contact me at sgulenchyn@caro.ca

Authorized By:

Sara Gulenchyn, B.Sc, P.Chem.
Client Services Manager

1-888-311-8846 | www.caro.ca
#110 4011 Viking Way Richmond, BC V6V 2K9 | #102 3677 Highway 97N Kelowna, BC V1X 5C3 | 17225 109 Avenue Edmonton, AB T5S 1H7 | #108 4475 Wayburne Drive Burnaby, BC V5G 4X4

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25E3516-01) | Matrix: Water | Sampled: 2025-05-26 13:50					
Anions					
Chloride	**6.60**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**0.231**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**4.4**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**41.9**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**12.7**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	< 0.010	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00074**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**2.49**	0.010	mg/L	2025-06-01	
Manganese, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00013**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**1.25**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**13.1**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**6.90**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0659**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25E3516-01) | Matrix: Water | Sampled: 2025-05-26 13:50, Continued					
Dissolved Metals, Continued					F1
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000059**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**43.7**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**43.7**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**1.01**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**125**	2.0	µS/cm	2025-05-30	
pH	**6.97**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**83**	10	mg/L	2025-05-29	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.0**		°C	2025-06-03	HT2
MW13-02 (25E3516-02) | Matrix: Water | Sampled: 2025-05-26 12:55					
Anions					
Chloride	**15.1**	0.10	mg/L	2025-05-28	
Fluoride	< 1.00	0.10	mg/L	2025-05-28	RA1
Nitrate (as N)	< 0.100	0.010	mg/L	2025-05-28	RA1
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**100**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	**0.04**	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**524**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	**0.0504**	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	**0.374**	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25E3516-02) | Matrix: Water | Sampled: 2025-05-26 12:55, Continued					
Dissolved Metals, Continued					F1
Calcium, dissolved	**181**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	**0.00146**	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.012**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00080**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**17.2**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**1.65**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00073**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**27.1**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**10.3**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**25.3**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**1.03**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	**39.8**	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000347**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	**0.0087**	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**482**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**482**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	**8.01**	0.050	mg/L	2025-05-30	
BOD, 5-day	**4.2**	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**15.5**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	**73**	20	mg/L	2025-06-03	
Conductivity (EC)	**1160**	2.0	µS/cm	2025-05-30	
pH	**7.03**	0.10	pH units	2025-05-30	HT2

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25E3516-02) | Matrix: Water | Sampled: 2025-05-26 12:55, Continued					
General Parameters, Continued					
Solids, Total Dissolved	**665**	10	mg/L	2025-05-29	
Sulfide, Total	**0.081**	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.0**		°C	2025-06-03	HT2
MW13-03 (25E3516-03) | Matrix: Water | Sampled: 2025-05-26 13:10					
Anions					
Chloride	**31.9**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**1.07**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**31.1**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**157**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	**0.0148**	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	**0.0761**	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	**0.000011**	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**49.9**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	**0.00185**	0.00040	mg/L	2025-06-01	
Iron, dissolved	< 0.010	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00189**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**7.92**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**0.00025**	0.00020	mg/L	2025-06-02	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00017**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**4.53**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**12.3**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25E3516-03) | Matrix: Water | Sampled: 2025-05-26 13:10, Continued					
Dissolved Metals, Continued					F1
Sodium, dissolved	**25.0**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.352**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	**11.8**	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.00206**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**128**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**128**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**4.27**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**457**	2.0	µS/cm	2025-05-30	
pH	**6.91**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**290**	10	mg/L	2025-05-30	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.2**		°C	2025-06-03	HT2
MW19-04 (25E3516-04) | Matrix: Water | Sampled: 2025-05-26 11:40					
Anions					
Chloride	**11.5**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	< 0.010	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**1.3**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**126**	0.500	mg/L	N/A	
Dissolved Metals					F1

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25E3516-04) | Matrix: Water | Sampled: 2025-05-26 11:40, Continued					
Dissolved Metals, Continued					F1
Aluminum, dissolved	**0.0054**	0.0050	mg/L	2025-06-01	
Antimony, dissolved	**0.00021**	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	**0.0185**	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	**0.000024**	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**40.5**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	**0.00157**	0.00010	mg/L	2025-06-01	
Copper, dissolved	**0.00557**	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.913**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00169**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**5.91**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**1.53**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00037**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	**0.00078**	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**7.86**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**15.8**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**12.7**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.221**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000330**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**138**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**138**	1.0	mg/L	2025-05-30	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25E3516-04) | Matrix: Water | Sampled: 2025-05-26 11:40, Continued					
General Parameters, Continued					
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	**0.194**	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**8.83**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	**32**	20	mg/L	2025-06-03	
Conductivity (EC)	**328**	2.0	µS/cm	2025-05-30	
pH	**7.29**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**195**	10	mg/L	2025-05-29	
Sulfide, Total	**0.020**	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.6**		°C	2025-06-03	HT2
MW24-05 (25E3516-05) | Matrix: Water | Sampled: 2025-05-26 10:45					
Anions					
Chloride	**2.17**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**0.351**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**2.1**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**67.6**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	**0.0527**	0.0050	mg/L	2025-06-01	
Antimony, dissolved	**0.00058**	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	**0.000044**	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**21.3**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	**0.00486**	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.019**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00016**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**3.46**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**0.00138**	0.00020	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25E3516-05) | Matrix: Water | Sampled: 2025-05-26 10:45, Continued					
Dissolved Metals, Continued					F1
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00038**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	**0.00048**	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**2.42**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**7.0**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**6.35**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0915**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000302**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**72.4**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**72.4**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**7.53**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**167**	2.0	µS/cm	2025-05-30	
pH	**6.89**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**102**	10	mg/L	2025-05-29	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.9**		°C	2025-06-03	HT2
SW1 (25E3516-06) | Matrix: Water | Sampled: 2025-05-26 08:10					
Anions					
Chloride	**7.67**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25E3516-06) | Matrix: Water | Sampled: 2025-05-26 08:10, Continued					
Anions, Continued					
Nitrate (as N)	**0.067**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**1.4**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**24.9**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	**0.0156**	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**7.64**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.249**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00026**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**1.41**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**0.00079**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00017**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**0.72**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**4.0**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**5.96**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0475**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25E3516-06) | Matrix: Water | Sampled: 2025-05-26 08:10, Continued					
Dissolved Metals, Continued					F1
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**26.8**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**26.8**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**4.67**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**87.0**	2.0	µS/cm	2025-05-30	
pH	**7.00**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**60**	10	mg/L	2025-05-29	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.6**		°C	2025-06-03	HT2
Total Metals					F3
Aluminum, total	**0.264**	0.0050	mg/L	2025-06-05	
Antimony, total	< 0.00020	0.00020	mg/L	2025-06-05	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-06-05	
Barium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-06-05	
Boron, total	< 0.0500	0.0500	mg/L	2025-06-05	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-06-05	
Calcium, total	**8.05**	0.20	mg/L	2025-06-05	
Chromium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Cobalt, total	**0.00013**	0.00010	mg/L	2025-06-05	
Copper, total	**0.00077**	0.00040	mg/L	2025-06-05	
Iron, total	**0.781**	0.010	mg/L	2025-06-05	
Lead, total	**0.00030**	0.00020	mg/L	2025-06-05	
Lithium, total	**0.00042**	0.00010	mg/L	2025-06-05	
Magnesium, total	**1.67**	0.010	mg/L	2025-06-05	
Manganese, total	**0.0373**	0.00020	mg/L	2025-06-05	
Molybdenum, total	**0.00018**	0.00010	mg/L	2025-06-05	
Nickel, total	< 0.00040	0.00040	mg/L	2025-06-05	
Phosphorus, total	< 0.050	0.050	mg/L	2025-06-05	
Potassium, total	**0.83**	0.10	mg/L	2025-06-05	
Selenium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Silicon, total	**4.6**	1.0	mg/L	2025-06-05	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25E3516-06) | Matrix: Water | Sampled: 2025-05-26 08:10, Continued					
Total Metals, Continued					F3
Silver, total	< 0.000050	0.000050	mg/L	2025-06-05	
Sodium, total	**6.30**	0.10	mg/L	2025-06-05	
Strontium, total	**0.0518**	0.0010	mg/L	2025-06-05	
Sulfur, total	< 3.0	3.0	mg/L	2025-06-05	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Thallium, total	< 0.000020	0.000020	mg/L	2025-06-05	
Thorium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Tin, total	< 0.00020	0.00020	mg/L	2025-06-05	
Titanium, total	**0.0133**	0.0050	mg/L	2025-06-05	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-06-05	
Uranium, total	**0.000031**	0.000020	mg/L	2025-06-05	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Zinc, total	< 0.0040	0.0040	mg/L	2025-06-05	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-06-05	
SW2 (25E3516-07) | Matrix: Water | Sampled: 2025-05-26 08:45					
Anions					
Chloride	**8.68**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**0.091**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**1.7**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**30.6**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	**0.0156**	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**9.34**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.200**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25E3516-07) | Matrix: Water | Sampled: 2025-05-26 08:45, Continued					
Dissolved Metals, Continued					F1
Lithium, dissolved	**0.00032**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**1.75**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**0.00074**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00017**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**0.87**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**4.9**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**6.74**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0589**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000022**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**31.5**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**31.5**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**4.68**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**102**	2.0	µS/cm	2025-05-30	
pH	**7.11**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**60**	10	mg/L	2025-05-30	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.7**		°C	2025-06-03	HT2
Total Metals					F3
Aluminum, total	**0.372**	0.0050	mg/L	2025-06-05	
Antimony, total	< 0.00020	0.00020	mg/L	2025-06-05	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25E3516-07) | Matrix: Water | Sampled: 2025-05-26 08:45, Continued					
Total Metals, Continued					F3
Arsenic, total	< 0.00050	0.00050	mg/L	2025-06-05	
Barium, total	**0.0063**	0.0050	mg/L	2025-06-05	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-06-05	
Boron, total	< 0.0500	0.0500	mg/L	2025-06-05	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-06-05	
Calcium, total	**9.67**	0.20	mg/L	2025-06-05	
Chromium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Cobalt, total	**0.00018**	0.00010	mg/L	2025-06-05	
Copper, total	**0.00105**	0.00040	mg/L	2025-06-05	
Iron, total	**0.959**	0.010	mg/L	2025-06-05	
Lead, total	**0.00033**	0.00020	mg/L	2025-06-05	
Lithium, total	**0.00058**	0.00010	mg/L	2025-06-05	
Magnesium, total	**2.02**	0.010	mg/L	2025-06-05	
Manganese, total	**0.0540**	0.00020	mg/L	2025-06-05	
Molybdenum, total	**0.00018**	0.00010	mg/L	2025-06-05	
Nickel, total	< 0.00040	0.00040	mg/L	2025-06-05	
Phosphorus, total	< 0.050	0.050	mg/L	2025-06-05	
Potassium, total	**0.98**	0.10	mg/L	2025-06-05	
Selenium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Silicon, total	**5.6**	1.0	mg/L	2025-06-05	
Silver, total	< 0.000050	0.000050	mg/L	2025-06-05	
Sodium, total	**7.01**	0.10	mg/L	2025-06-05	
Strontium, total	**0.0642**	0.0010	mg/L	2025-06-05	
Sulfur, total	< 3.0	3.0	mg/L	2025-06-05	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Thallium, total	< 0.000020	0.000020	mg/L	2025-06-05	
Thorium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Tin, total	< 0.00020	0.00020	mg/L	2025-06-05	
Titanium, total	**0.0199**	0.0050	mg/L	2025-06-05	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-06-05	
Uranium, total	**0.000066**	0.000020	mg/L	2025-06-05	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Zinc, total	< 0.0040	0.0040	mg/L	2025-06-05	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-06-05	
SW3 (25E3516-08) | Matrix: Water | Sampled: 2025-05-26 09:00					
Anions					
Chloride	**9.04**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**0.093**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25E3516-08) | Matrix: Water | Sampled: 2025-05-26 09:00, Continued					
Anions, Continued					
Sulfate	**1.7**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**30.1**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	**0.0160**	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**9.24**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.195**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00031**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**1.70**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**0.00075**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00016**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**0.85**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**4.8**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**6.51**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0570**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25E3516-08) | Matrix: Water | Sampled: 2025-05-26 09:00, Continued					
Dissolved Metals, Continued					F1
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**31.3**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**31.3**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**4.41**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**100**	2.0	µS/cm	2025-05-30	
pH	**7.12**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**65**	10	mg/L	2025-05-29	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.7**		°C	2025-06-03	HT2
Total Metals					F3
Aluminum, total	**0.336**	0.0050	mg/L	2025-06-05	
Antimony, total	< 0.00020	0.00020	mg/L	2025-06-05	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-06-05	
Barium, total	**0.0058**	0.0050	mg/L	2025-06-05	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-06-05	
Boron, total	< 0.0500	0.0500	mg/L	2025-06-05	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-06-05	
Calcium, total	**9.84**	0.20	mg/L	2025-06-05	
Chromium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Cobalt, total	**0.00016**	0.00010	mg/L	2025-06-05	
Copper, total	**0.00098**	0.00040	mg/L	2025-06-05	
Iron, total	**0.854**	0.010	mg/L	2025-06-05	
Lead, total	**0.00030**	0.00020	mg/L	2025-06-05	
Lithium, total	**0.00058**	0.00010	mg/L	2025-06-05	
Magnesium, total	**1.97**	0.010	mg/L	2025-06-05	
Manganese, total	**0.0470**	0.00020	mg/L	2025-06-05	
Molybdenum, total	**0.00019**	0.00010	mg/L	2025-06-05	
Nickel, total	< 0.00040	0.00040	mg/L	2025-06-05	
Phosphorus, total	< 0.050	0.050	mg/L	2025-06-05	
Potassium, total	**0.95**	0.10	mg/L	2025-06-05	
Selenium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Silicon, total	**5.6**	1.0	mg/L	2025-06-05	
Silver, total	< 0.000050	0.000050	mg/L	2025-06-05	
Sodium, total	**6.82**	0.10	mg/L	2025-06-05	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25E3516-08) | Matrix: Water | Sampled: 2025-05-26 09:00, Continued					
Total Metals, Continued					F3
Strontium, total	**0.0624**	0.0010	mg/L	2025-06-05	
Sulfur, total	< 3.0	3.0	mg/L	2025-06-05	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Thallium, total	< 0.000020	0.000020	mg/L	2025-06-05	
Thorium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Tin, total	< 0.00020	0.00020	mg/L	2025-06-05	
Titanium, total	**0.0169**	0.0050	mg/L	2025-06-05	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-06-05	
Uranium, total	**0.000057**	0.000020	mg/L	2025-06-05	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Zinc, total	< 0.0040	0.0040	mg/L	2025-06-05	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-06-05	
SW4 (25E3516-09) | Matrix: Water | Sampled: 2025-05-26 10:00					
Anions					
Chloride	**11.3**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**0.033**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**4.5**	1.0	mg/L	2025-05-28	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**59.3**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**17.8**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.015**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00106**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**3.58**	0.010	mg/L	2025-06-01	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25E3516-09) | Matrix: Water | Sampled: 2025-05-26 10:00, Continued					
Dissolved Metals, Continued					F1
Manganese, dissolved	**0.00280**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00014**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**1.69**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**12.0**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**8.41**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0979**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000075**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					
Alkalinity, Total (as CaCO3)	**57.9**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**57.9**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**2.60**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**170**	2.0	µS/cm	2025-05-30	
pH	**7.29**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**75**	10	mg/L	2025-05-29	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.4**		°C	2025-06-03	HT2
Total Metals					F3
Aluminum, total	**0.218**	0.0050	mg/L	2025-06-05	
Antimony, total	< 0.00020	0.00020	mg/L	2025-06-05	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-06-05	
Barium, total	**0.0056**	0.0050	mg/L	2025-06-05	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25E3516-09) | Matrix: Water | Sampled: 2025-05-26 10:00, Continued					
Total Metals, Continued					F3
Beryllium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-06-05	
Boron, total	< 0.0500	0.0500	mg/L	2025-06-05	
Cadmium, total	**0.000010**	0.000010	mg/L	2025-06-05	
Calcium, total	**18.6**	0.20	mg/L	2025-06-05	
Chromium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Cobalt, total	**0.00025**	0.00010	mg/L	2025-06-05	
Copper, total	**0.00097**	0.00040	mg/L	2025-06-05	
Iron, total	**1.17**	0.010	mg/L	2025-06-05	
Lead, total	**0.00027**	0.00020	mg/L	2025-06-05	
Lithium, total	**0.00128**	0.00010	mg/L	2025-06-05	
Magnesium, total	**3.79**	0.010	mg/L	2025-06-05	
Manganese, total	**0.0769**	0.00020	mg/L	2025-06-05	
Molybdenum, total	**0.00021**	0.00010	mg/L	2025-06-05	
Nickel, total	< 0.00040	0.00040	mg/L	2025-06-05	
Phosphorus, total	< 0.050	0.050	mg/L	2025-06-05	
Potassium, total	**1.83**	0.10	mg/L	2025-06-05	
Selenium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Silicon, total	**13.2**	1.0	mg/L	2025-06-05	
Silver, total	< 0.000050	0.000050	mg/L	2025-06-05	
Sodium, total	**8.91**	0.10	mg/L	2025-06-05	
Strontium, total	**0.107**	0.0010	mg/L	2025-06-05	
Sulfur, total	< 3.0	3.0	mg/L	2025-06-05	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Thallium, total	< 0.000020	0.000020	mg/L	2025-06-05	
Thorium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Tin, total	< 0.00020	0.00020	mg/L	2025-06-05	
Titanium, total	**0.0097**	0.0050	mg/L	2025-06-05	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-06-05	
Uranium, total	**0.000248**	0.000020	mg/L	2025-06-05	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Zinc, total	**0.0073**	0.0040	mg/L	2025-06-05	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-06-05	
DUP1 (25E3516-10) | Matrix: Water | Sampled: 2025-05-26 10:45					
Anions					
Chloride	**10.7**	0.10	mg/L	2025-05-28	
Fluoride	< 0.10	0.10	mg/L	2025-05-28	
Nitrate (as N)	**0.038**	0.010	mg/L	2025-05-28	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-05-28	
Sulfate	**4.4**	1.0	mg/L	2025-05-28	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25E3516-10) | Matrix: Water | Sampled: 2025-05-26 10:45, Continued					
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-06-04	CT6
Hardness, Dissolved (as CaCO3)	**58.6**	0.500	mg/L	N/A	
Dissolved Metals					F1
Aluminum, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-06-01	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-06-01	
Calcium, dissolved	**17.7**	0.20	mg/L	2025-06-01	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Iron, dissolved	**0.012**	0.010	mg/L	2025-06-01	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Lithium, dissolved	**0.00103**	0.00010	mg/L	2025-06-01	
Magnesium, dissolved	**3.46**	0.010	mg/L	2025-06-01	
Manganese, dissolved	**0.00222**	0.00020	mg/L	2025-06-01	
Mercury, dissolved	< 0.000040	0.000040	mg/L	2025-06-01	HG1
Molybdenum, dissolved	**0.00014**	0.00010	mg/L	2025-06-01	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-06-01	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-06-01	
Potassium, dissolved	**1.64**	0.10	mg/L	2025-06-01	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Silicon, dissolved	**11.9**	1.0	mg/L	2025-06-01	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-06-01	
Sodium, dissolved	**8.38**	0.10	mg/L	2025-06-01	
Strontium, dissolved	**0.0955**	0.0010	mg/L	2025-06-01	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-06-01	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-06-01	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-06-01	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-06-01	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-06-01	
Uranium, dissolved	**0.000069**	0.000020	mg/L	2025-06-01	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-06-01	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-06-01	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-06-01	
General Parameters					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25E3516-10) | Matrix: Water | Sampled: 2025-05-26 10:45, Continued					
General Parameters, Continued					
Alkalinity, Total (as CaCO3)	**55.9**	1.0	mg/L	2025-05-30	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Bicarbonate (as CaCO3)	**55.9**	1.0	mg/L	2025-05-30	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-05-30	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-05-30	
BOD, 5-day	< 4.0	8.0	mg/L	2025-06-02	
Carbon, Dissolved Organic	**2.56**	0.50	mg/L	2025-05-31	
Chemical Oxygen Demand	< 20	20	mg/L	2025-06-03	
Conductivity (EC)	**166**	2.0	µS/cm	2025-05-30	
pH	**7.27**	0.10	pH units	2025-05-30	HT2
Solids, Total Dissolved	**50**	10	mg/L	2025-05-29	
Sulfide, Total	< 0.020	0.020	mg/L	2025-06-02	
Temperature, at pH	**22.2**		°C	2025-06-03	HT2
Total Metals					F3
Aluminum, total	**0.116**	0.0050	mg/L	2025-06-05	
Antimony, total	< 0.00020	0.00020	mg/L	2025-06-05	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-06-05	
Barium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-06-05	
Boron, total	< 0.0500	0.0500	mg/L	2025-06-05	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-06-05	
Calcium, total	**17.6**	0.20	mg/L	2025-06-05	
Chromium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Cobalt, total	**0.00013**	0.00010	mg/L	2025-06-05	
Copper, total	**0.00070**	0.00040	mg/L	2025-06-05	
Iron, total	**0.461**	0.010	mg/L	2025-06-05	
Lead, total	< 0.00020	0.00020	mg/L	2025-06-05	
Lithium, total	**0.00120**	0.00010	mg/L	2025-06-05	
Magnesium, total	**3.61**	0.010	mg/L	2025-06-05	
Manganese, total	**0.0420**	0.00020	mg/L	2025-06-05	
Molybdenum, total	**0.00017**	0.00010	mg/L	2025-06-05	
Nickel, total	< 0.00040	0.00040	mg/L	2025-06-05	
Phosphorus, total	< 0.050	0.050	mg/L	2025-06-05	
Potassium, total	**1.71**	0.10	mg/L	2025-06-05	
Selenium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Silicon, total	**12.6**	1.0	mg/L	2025-06-05	
Silver, total	< 0.000050	0.000050	mg/L	2025-06-05	
Sodium, total	**8.49**	0.10	mg/L	2025-06-05	
Strontium, total	**0.0990**	0.0010	mg/L	2025-06-05	
Sulfur, total	< 3.0	3.0	mg/L	2025-06-05	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25E3516-10) | Matrix: Water | Sampled: 2025-05-26 10:45, Continued					
Total Metals, Continued					F3
Tellurium, total	< 0.00050	0.00050	mg/L	2025-06-05	
Thallium, total	< 0.000020	0.000020	mg/L	2025-06-05	
Thorium, total	< 0.00010	0.00010	mg/L	2025-06-05	
Tin, total	< 0.00020	0.00020	mg/L	2025-06-05	
Titanium, total	**0.0052**	0.0050	mg/L	2025-06-05	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-06-05	
Uranium, total	**0.000136**	0.000020	mg/L	2025-06-05	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-06-05	
Zinc, total	< 0.0040	0.0040	mg/L	2025-06-05	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-06-05	

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
F1	The sample was not field-filtered and was therefore filtered through a 0.45 µm membrane in the laboratory prior to analysis.
F3	Results may be biased low due to sub-sampling from general container.
HG1	Sample bottle and preservation submitted is not suitable for Mercury analysis and analyte stability may be affected.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA1	The Reporting Limit for this sample has been raised due to matrix interference.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Richmond
Biochemical Oxygen Demand in Water	SM 5210 B (2019)	Dissolved Oxygen Meter	✓	Richmond
Carbon, Dissolved Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Hydrogen Sulfide, total in Water	SM 4500-S2 H (2021)	Calculation		N/A
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Water	SM 2540 C* (2020)	Gravimetry (Dried at 103-105C)		Richmond
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, ph > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

General Comments:

The results in this report apply to the received samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Caro will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

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APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk)**: A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup)**: An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS)**: A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS)**: A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM)**: A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5E4658										
Blank (B5E4658-BLK1)				Prepared: 2025-05-28, Analyzed: 2025-05-28						
Chloride	< 0.10	0.10	mg/L							
Fluoride	< 0.10	0.10	mg/L							
Nitrate (as N)	< 0.010	0.010	mg/L							
Nitrite (as N)	< 0.010	0.010	mg/L							
Sulfate	< 1.0	1.0	mg/L							
Blank (B5E4658-BLK2)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Chloride	< 0.10	0.10	mg/L							
Fluoride	< 0.10	0.10	mg/L							
Nitrate (as N)	< 0.010	0.010	mg/L							
Nitrite (as N)	< 0.010	0.010	mg/L							
Sulfate	< 1.0	1.0	mg/L							
LCS (B5E4658-BS1)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Chloride	3.38	0.10	mg/L	3.00		113	85-115			
Fluoride	2.19	0.10	mg/L	2.00		110	85-115			
Nitrate (as N)	3.19	0.010	mg/L	3.00		106	85-115			
Nitrite (as N)	3.21	0.010	mg/L	3.00		107	85-115			
Sulfate	15.3	1.0	mg/L	15.0		102	85-115			
LCS (B5E4658-BS2)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Chloride	2.96	0.10	mg/L	3.00		99	85-115			
Fluoride	2.15	0.10	mg/L	2.00		108	85-115			
Nitrate (as N)	3.02	0.010	mg/L	3.00		101	85-115			
Nitrite (as N)	3.04	0.010	mg/L	3.00		101	85-115			
Sulfate	15.0	1.0	mg/L	15.0		100	85-115			
Duplicate (B5E4658-DUP2)		**Source: 25E3516-10**		Prepared: 2025-05-29, Analyzed: 2025-05-29						
Chloride	10.5	0.10	mg/L		10.7			3	20	
Fluoride	< 0.10	0.10	mg/L		< 0.10				20	
Nitrate (as N)	0.034	0.010	mg/L		0.038				20	
Nitrite (as N)	< 0.010	0.010	mg/L		< 0.010				20	
Sulfate	4.4	1.0	mg/L		4.4				20	
Matrix Spike (B5E4658-MS2)		**Source: 25E3516-10**		Prepared: 2025-05-29, Analyzed: 2025-05-29						
Chloride	14.1	0.10	mg/L	3.00	10.7	113	75-125			
Fluoride	1.80	0.10	mg/L	2.00	< 0.10	90	75-125			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5E4658, Continued										
Matrix Spike (B5E4658-MS2), Continued	**Source: 25E3516-10**			Prepared: 2025-05-29, Analyzed: 2025-05-29						
Nitrate (as N)	2.98	0.010	mg/L	3.00	0.038	98	75-125			
Nitrite (as N)	2.98	0.010	mg/L	3.00	< 0.010	99	75-125			
Sulfate	18.2	1.0	mg/L	15.0	4.4	92	75-125			
Dissolved Metals, Batch B5F1777										
Blank (B5F1777-BLK1)				Prepared: 2025-06-01, Analyzed: 2025-06-01						
Aluminum, dissolved	< 0.0050	0.0050	mg/L							
Antimony, dissolved	< 0.00020	0.00020	mg/L							
Arsenic, dissolved	< 0.00050	0.00050	mg/L							
Barium, dissolved	< 0.0050	0.0050	mg/L							
Beryllium, dissolved	< 0.00010	0.00010	mg/L							
Bismuth, dissolved	< 0.00010	0.00010	mg/L							
Boron, dissolved	< 0.0500	0.0500	mg/L							
Cadmium, dissolved	< 0.000010	0.000010	mg/L							
Calcium, dissolved	< 0.20	0.20	mg/L							
Chromium, dissolved	< 0.00050	0.00050	mg/L							
Cobalt, dissolved	< 0.00010	0.00010	mg/L							
Copper, dissolved	< 0.00040	0.00040	mg/L							
Iron, dissolved	< 0.010	0.010	mg/L							
Lead, dissolved	< 0.00020	0.00020	mg/L							
Lithium, dissolved	< 0.00010	0.00010	mg/L							
Magnesium, dissolved	< 0.010	0.010	mg/L							
Manganese, dissolved	< 0.00020	0.00020	mg/L							
Mercury, dissolved	0.000067	0.000040	mg/L							BLK
Molybdenum, dissolved	< 0.00010	0.00010	mg/L							
Nickel, dissolved	< 0.00040	0.00040	mg/L							
Phosphorus, dissolved	< 0.050	0.050	mg/L							
Potassium, dissolved	< 0.10	0.10	mg/L							
Selenium, dissolved	< 0.00050	0.00050	mg/L							
Silicon, dissolved	< 1.0	1.0	mg/L							
Silver, dissolved	< 0.000050	0.000050	mg/L							
Sodium, dissolved	< 0.10	0.10	mg/L							
Strontium, dissolved	< 0.0010	0.0010	mg/L							
Sulfur, dissolved	< 3.0	3.0	mg/L							
Tellurium, dissolved	< 0.00050	0.00050	mg/L							
Thallium, dissolved	< 0.000020	0.000020	mg/L							
Thorium, dissolved	< 0.00010	0.00010	mg/L							
Tin, dissolved	< 0.00020	0.00020	mg/L							
Titanium, dissolved	< 0.0050	0.0050	mg/L							
Tungsten, dissolved	< 0.0010	0.0010	mg/L							
Uranium, dissolved	< 0.000020	0.000020	mg/L							
Vanadium, dissolved	< 0.0050	0.0050	mg/L							
Zinc, dissolved	< 0.0040	0.0040	mg/L							
Zirconium, dissolved	< 0.00010	0.00010	mg/L							
LCS (B5F1777-BS1)				Prepared: 2025-06-01, Analyzed: 2025-06-01						
Aluminum, dissolved	4.07	0.0050	mg/L	4.00		102	80-120			
Antimony, dissolved	0.0403	0.00020	mg/L	0.0400		101	80-120			
Arsenic, dissolved	0.404	0.00050	mg/L	0.400		101	80-120			
Barium, dissolved	0.0419	0.0050	mg/L	0.0400		105	80-120			
Beryllium, dissolved	0.0395	0.00010	mg/L	0.0400		99	80-120			
Bismuth, dissolved	0.0409	0.00010	mg/L	0.0400		102	80-120			
Boron, dissolved	0.410	0.0500	mg/L	0.400		103	80-120			
Cadmium, dissolved	0.0406	0.000010	mg/L	0.0400		102	80-120			
Calcium, dissolved	4.07	0.20	mg/L	4.00		102	80-120			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5F1777, Continued										
LCS (B5F1777-BS1), Continued				Prepared: 2025-06-01, Analyzed: 2025-06-01						
Chromium, dissolved	0.0412	0.00050	mg/L	0.0400		103	80-120			
Cobalt, dissolved	0.0400	0.00010	mg/L	0.0400		100	80-120			
Copper, dissolved	0.0400	0.00040	mg/L	0.0400		100	80-120			
Iron, dissolved	4.02	0.010	mg/L	4.00		101	80-120			
Lead, dissolved	0.0418	0.00020	mg/L	0.0400		105	80-120			
Lithium, dissolved	0.0403	0.00010	mg/L	0.0400		101	80-120			
Magnesium, dissolved	3.95	0.010	mg/L	4.00		99	80-120			
Manganese, dissolved	0.0404	0.00020	mg/L	0.0400		101	80-120			
Mercury, dissolved	0.00391	0.000040	mg/L	0.00400		98	80-120			
Molybdenum, dissolved	0.0407	0.00010	mg/L	0.0400		102	80-120			
Nickel, dissolved	0.0394	0.00040	mg/L	0.0400		99	80-120			
Phosphorus, dissolved	4.06	0.050	mg/L	4.00		101	80-120			
Potassium, dissolved	4.11	0.10	mg/L	4.00		103	80-120			
Selenium, dissolved	0.394	0.00050	mg/L	0.400		99	80-120			
Silicon, dissolved	4.1	1.0	mg/L	4.00		102	80-120			
Silver, dissolved	0.0401	0.000050	mg/L	0.0400		100	80-120			
Sodium, dissolved	4.08	0.10	mg/L	4.00		102	80-120			
Strontium, dissolved	0.0402	0.0010	mg/L	0.0400		100	80-120			
Sulfur, dissolved	40.3	3.0	mg/L	40.0		101	80-120			
Tellurium, dissolved	0.0412	0.00050	mg/L	0.0400		103	80-120			
Thallium, dissolved	0.0429	0.000020	mg/L	0.0400		107	80-120			
Thorium, dissolved	0.0415	0.00010	mg/L	0.0400		104	80-120			
Tin, dissolved	0.0406	0.00020	mg/L	0.0400		102	80-120			
Titanium, dissolved	0.0402	0.0050	mg/L	0.0400		100	80-120			
Tungsten, dissolved	0.0416	0.0010	mg/L	0.0400		104	80-120			
Uranium, dissolved	0.0425	0.000020	mg/L	0.0400		106	80-120			
Vanadium, dissolved	0.0400	0.0050	mg/L	0.0400		100	80-120			
Zinc, dissolved	0.403	0.0040	mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0398	0.00010	mg/L	0.0400		100	80-120			
General Parameters, Batch B5E4654										
Blank (B5E4654-BLK1)				Prepared: 2025-05-28, Analyzed: 2025-06-02						
BOD, 5-day	< 2.0	2.0	mg/L							
LCS (B5E4654-BS1)				Prepared: 2025-05-28, Analyzed: 2025-06-02						
BOD, 5-day	186	80.0	mg/L	198		94	85-115			
Reference (B5E4654-SRM1)				Prepared: 2025-05-28, Analyzed: 2025-06-02						
BOD, 5-day	480	133	mg/L	500		96	85-115			
General Parameters, Batch B5E4833										
Blank (B5E4833-BLK1)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	< 10	10	mg/L							
Blank (B5E4833-BLK2)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	< 10	10	mg/L							
LCS (B5E4833-BS1)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	52	10	mg/L	50.2		105	85-115			
LCS (B5E4833-BS2)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	40	10	mg/L	50.2		80	85-115			SPK1

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5E4833, Continued										
LCS (B5E4833-BS3)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	188	10	mg/L	200		94	85-115			
LCS (B5E4833-BS4)				Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	200	10	mg/L	200		100	85-115			
Duplicate (B5E4833-DUP1)		**Source: 25E3516-01**		Prepared: 2025-05-29, Analyzed: 2025-05-29						
Solids, Total Dissolved	92	10	mg/L		83			11	20	
General Parameters, Batch B5E4834										
Blank (B5E4834-BLK1)				Prepared: 2025-06-03, Analyzed: 2025-06-03						
Chemical Oxygen Demand	< 20	20	mg/L							
LCS (B5E4834-BS1)				Prepared: 2025-06-03, Analyzed: 2025-06-03						
Chemical Oxygen Demand	537	20	mg/L	500		107	89-115			
Duplicate (B5E4834-DUP1)		**Source: 25E3516-05**		Prepared: 2025-06-03, Analyzed: 2025-06-03						
Chemical Oxygen Demand	< 20	20	mg/L		< 20				14	
Matrix Spike (B5E4834-MS1)		**Source: 25E3516-05**		Prepared: 2025-06-03, Analyzed: 2025-06-03						
Chemical Oxygen Demand	142	20	mg/L	125	< 20	106	75-125			
General Parameters, Batch B5E4859										
Blank (B5E4859-BLK1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B5E4859-BLK2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B5E4859-BLK3)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B5E4859-BLK4)				Prepared: 2025-05-30, Analyzed: 2025-05-31						
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
LCS (B5E4859-BS1)				Prepared: 2025-05-30, Analyzed: 2025-05-31						
Carbon, Dissolved Organic	9.37	0.50	mg/L	10.0		94	78-116			
LCS (B5E4859-BS2)				Prepared: 2025-05-30, Analyzed: 2025-05-31						
Carbon, Dissolved Organic	9.44	0.50	mg/L	10.0		94	78-116			
LCS (B5E4859-BS3)				Prepared: 2025-05-30, Analyzed: 2025-05-31						
Carbon, Dissolved Organic	9.33	0.50	mg/L	10.0		93	78-116			
LCS (B5E4859-BS4)				Prepared: 2025-05-30, Analyzed: 2025-05-31						
Carbon, Dissolved Organic	9.30	0.50	mg/L	10.0		93	78-116			
General Parameters, Batch B5E4885										
Blank (B5E4885-BLK1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5E4885, Continued										
Blank (B5E4885-BLK1), Continued				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Conductivity (EC)	< 2.0	2.0	µS/cm							
Temperature, at pH	22.1		°C							
Blank (B5E4885-BLK2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
Conductivity (EC)	< 2.0	2.0	µS/cm							
Temperature, at pH	22.9		°C							
LCS (B5E4885-BS1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Alkalinity, Total (as CaCO3)	96.5	1.0	mg/L	100		96	80-120			
LCS (B5E4885-BS2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Conductivity (EC)	1420	2.0	µS/cm	1410		101	95-105			
LCS (B5E4885-BS3)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Alkalinity, Total (as CaCO3)	96.6	1.0	mg/L	100		97	80-120			
LCS (B5E4885-BS4)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Conductivity (EC)	1430	2.0	µS/cm	1410		101	95-105			
Reference (B5E4885-SRM1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
pH	7.00	0.10	pH units	7.01		100	98-102			
Reference (B5E4885-SRM2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
pH	7.00	0.10	pH units	7.01		100	98-102			
General Parameters, Batch B5E4934										
Blank (B5E4934-BLK1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Solids, Total Dissolved	< 10	10	mg/L							
LCS (B5E4934-BS1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Solids, Total Dissolved	172	10	mg/L	200		86	85-115			
LCS (B5E4934-BS2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Solids, Total Dissolved	50	10	mg/L	50.2		100	85-115			
Duplicate (B5E4934-DUP1)		**Source: 25E3516-03**		Prepared: 2025-05-30, Analyzed: 2025-05-30						
Solids, Total Dissolved	298	10	mg/L		290			3	20	
General Parameters, Batch B5E4943										
Blank (B5E4943-BLK1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B5E4943-BLK2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
Blank (B5E4943-BLK3)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
LCS (B5E4943-BS1)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Ammonia, Total (as N)	0.907	0.050	mg/L	1.00		91	85-115			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5E4943, Continued										
LCS (B5E4943-BS2)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Ammonia, Total (as N)	0.895	0.050	mg/L	1.00		90	85-115			
LCS (B5E4943-BS3)				Prepared: 2025-05-30, Analyzed: 2025-05-30						
Ammonia, Total (as N)	0.894	0.050	mg/L	1.00		89	85-115			
General Parameters, Batch B5F1837										
Blank (B5F1837-BLK1)				Prepared: 2025-06-02, Analyzed: 2025-06-02						
Sulfide, Total	< 0.020	0.020	mg/L							
LCS (B5F1837-BS1)				Prepared: 2025-06-02, Analyzed: 2025-06-02						
Sulfide, Total	0.440	0.020	mg/L	0.460		96	80-120			
Duplicate (B5F1837-DUP1)		**Source: 25E3516-03**		Prepared: 2025-06-02, Analyzed: 2025-06-02						
Sulfide, Total	< 0.020	0.020	mg/L		< 0.020				15	
Total Metals, Batch B5F2028										
Blank (B5F2028-BLK1)				Prepared: 2025-06-04, Analyzed: 2025-06-05						
Aluminum, total	< 0.0050	0.0050	mg/L							
Antimony, total	< 0.00020	0.00020	mg/L							
Arsenic, total	< 0.00050	0.00050	mg/L							
Barium, total	< 0.0050	0.0050	mg/L							
Beryllium, total	< 0.00010	0.00010	mg/L							
Bismuth, total	< 0.00010	0.00010	mg/L							
Boron, total	< 0.0500	0.0500	mg/L							
Cadmium, total	< 0.000010	0.000010	mg/L							
Calcium, total	< 0.20	0.20	mg/L							
Chromium, total	< 0.00050	0.00050	mg/L							
Cobalt, total	< 0.00010	0.00010	mg/L							
Copper, total	< 0.00040	0.00040	mg/L							
Iron, total	< 0.010	0.010	mg/L							
Lead, total	< 0.00020	0.00020	mg/L							
Lithium, total	< 0.00010	0.00010	mg/L							
Magnesium, total	< 0.010	0.010	mg/L							
Manganese, total	< 0.00020	0.00020	mg/L							
Molybdenum, total	< 0.00010	0.00010	mg/L							
Nickel, total	< 0.00040	0.00040	mg/L							
Phosphorus, total	< 0.050	0.050	mg/L							
Potassium, total	< 0.10	0.10	mg/L							
Selenium, total	< 0.00050	0.00050	mg/L							
Silicon, total	< 1.0	1.0	mg/L							
Silver, total	< 0.000050	0.000050	mg/L							
Sodium, total	< 0.10	0.10	mg/L							
Strontium, total	< 0.0010	0.0010	mg/L							
Sulfur, total	< 3.0	3.0	mg/L							
Tellurium, total	< 0.00050	0.00050	mg/L							
Thallium, total	< 0.000020	0.000020	mg/L							
Thorium, total	< 0.00010	0.00010	mg/L							
Tin, total	< 0.00020	0.00020	mg/L							
Titanium, total	< 0.0050	0.0050	mg/L							
Tungsten, total	< 0.0010	0.0010	mg/L							
Uranium, total	< 0.000020	0.000020	mg/L							
Vanadium, total	< 0.0050	0.0050	mg/L							
Zinc, total	< 0.0040	0.0040	mg/L							
Zirconium, total	< 0.00010	0.00010	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5F2028, Continued										
LCS (B5F2028-BS1)				Prepared: 2025-06-04, Analyzed: 2025-06-05						
Aluminum, total	4.01	0.0050	mg/L	4.00		100	80-120			
Antimony, total	0.0397	0.00020	mg/L	0.0400		99	80-120			
Arsenic, total	0.398	0.00050	mg/L	0.400		99	80-120			
Barium, total	0.0411	0.0050	mg/L	0.0400		103	80-120			
Beryllium, total	0.0413	0.00010	mg/L	0.0400		103	80-120			
Bismuth, total	0.0400	0.00010	mg/L	0.0400		100	80-120			
Boron, total	0.427	0.0500	mg/L	0.400		107	80-120			
Cadmium, total	0.0398	0.000010	mg/L	0.0400		100	80-120			
Calcium, total	3.96	0.20	mg/L	4.00		99	80-120			
Chromium, total	0.0404	0.00050	mg/L	0.0400		101	80-120			
Cobalt, total	0.0414	0.00010	mg/L	0.0400		103	80-120			
Copper, total	0.0411	0.00040	mg/L	0.0400		103	80-120			
Iron, total	4.01	0.010	mg/L	4.00		100	80-120			
Lead, total	0.0405	0.00020	mg/L	0.0400		101	80-120			
Lithium, total	0.0419	0.00010	mg/L	0.0400		105	80-120			
Magnesium, total	4.00	0.010	mg/L	4.00		100	80-120			
Manganese, total	0.0406	0.00020	mg/L	0.0400		102	80-120			
Molybdenum, total	0.0398	0.00010	mg/L	0.0400		100	80-120			
Nickel, total	0.0402	0.00040	mg/L	0.0400		100	80-120			
Phosphorus, total	4.10	0.050	mg/L	4.00		102	80-120			
Potassium, total	3.95	0.10	mg/L	4.00		99	80-120			
Selenium, total	0.384	0.00050	mg/L	0.400		96	80-120			
Silicon, total	4.2	1.0	mg/L	4.00		106	80-120			
Silver, total	0.0401	0.000050	mg/L	0.0400		100	80-120			
Sodium, total	4.01	0.10	mg/L	4.00		100	80-120			
Strontium, total	0.0403	0.0010	mg/L	0.0400		101	80-120			
Sulfur, total	38.6	3.0	mg/L	40.0		96	80-120			
Tellurium, total	0.0383	0.00050	mg/L	0.0400		96	80-120			
Thallium, total	0.0397	0.000020	mg/L	0.0400		99	80-120			
Thorium, total	0.0397	0.00010	mg/L	0.0400		99	80-120			
Tin, total	0.0396	0.00020	mg/L	0.0400		99	80-120			
Titanium, total	0.0394	0.0050	mg/L	0.0400		98	80-120			
Tungsten, total	0.0404	0.0010	mg/L	0.0400		101	80-120			
Uranium, total	0.0404	0.000020	mg/L	0.0400		101	80-120			
Vanadium, total	0.0398	0.0050	mg/L	0.0400		100	80-120			
Zinc, total	0.388	0.0040	mg/L	0.400		97	80-120			
Zirconium, total	0.0400	0.00010	mg/L	0.0400		100	80-120			
Duplicate (B5F2028-DUP1)		**Source: 25E3516-06**		Prepared: 2025-06-04, Analyzed: 2025-06-05						
Aluminum, total	0.259	0.0050	mg/L		0.264			2	20	
Antimony, total	< 0.00020	0.00020	mg/L		< 0.00020				20	
Arsenic, total	< 0.00050	0.00050	mg/L		< 0.00050				20	
Barium, total	< 0.0050	0.0050	mg/L		< 0.0050				20	
Beryllium, total	< 0.00010	0.00010	mg/L		< 0.00010				20	
Bismuth, total	< 0.00010	0.00010	mg/L		< 0.00010				20	
Boron, total	< 0.0500	0.0500	mg/L		< 0.0500				20	
Cadmium, total	< 0.000010	0.000010	mg/L		< 0.000010				20	
Calcium, total	7.96	0.20	mg/L		8.05			1	20	
Chromium, total	< 0.00050	0.00050	mg/L		< 0.00050				20	
Cobalt, total	0.00012	0.00010	mg/L		0.00013				20	
Copper, total	0.00077	0.00040	mg/L		0.00077				20	
Iron, total	0.778	0.010	mg/L		0.781			< 1	20	
Lead, total	0.00032	0.00020	mg/L		0.00030				20	
Lithium, total	0.00043	0.00010	mg/L		0.00042				20	
Magnesium, total	1.65	0.010	mg/L		1.67			1	20	
Manganese, total	0.0401	0.00020	mg/L		0.0373			7	20	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5F2028, Continued										
Duplicate (B5F2028-DUP1), Continued		**Source: 25E3516-06**		Prepared: 2025-06-04, Analyzed: 2025-06-05						
Molybdenum, total	0.00019	0.00010	mg/L		0.00018				20	
Nickel, total	< 0.00040	0.00040	mg/L		< 0.00040				20	
Phosphorus, total	< 0.050	0.050	mg/L		< 0.050				20	
Potassium, total	0.81	0.10	mg/L		0.83			2	20	
Selenium, total	< 0.00050	0.00050	mg/L		< 0.00050				20	
Silicon, total	4.6	1.0	mg/L		4.6				20	
Silver, total	< 0.000050	0.000050	mg/L		< 0.000050				20	
Sodium, total	6.24	0.10	mg/L		6.30			1	20	
Strontium, total	0.0509	0.0010	mg/L		0.0518			2	20	
Sulfur, total	< 3.0	3.0	mg/L		< 3.0				20	
Tellurium, total	< 0.00050	0.00050	mg/L		< 0.00050				20	
Thallium, total	< 0.000020	0.000020	mg/L		< 0.000020				20	
Thorium, total	< 0.00010	0.00010	mg/L		< 0.00010				20	
Tin, total	< 0.00020	0.00020	mg/L		< 0.00020				20	
Titanium, total	0.0134	0.0050	mg/L		0.0133				20	
Tungsten, total	< 0.0010	0.0010	mg/L		< 0.0010				20	
Uranium, total	0.000029	0.000020	mg/L		0.000031				20	
Vanadium, total	< 0.0050	0.0050	mg/L		< 0.0050				20	
Zinc, total	< 0.0040	0.0040	mg/L		< 0.0040				20	
Zirconium, total	< 0.00010	0.00010	mg/L		< 0.00010				20	
Matrix Spike (B5F2028-MS1)		**Source: 25E3516-07**		Prepared: 2025-06-04, Analyzed: 2025-06-05						
Aluminum, total	4.36	0.0050	mg/L	4.00	0.372	100	70-130			
Antimony, total	0.0407	0.00020	mg/L	0.0400	< 0.00020	102	70-130			
Arsenic, total	0.398	0.00050	mg/L	0.400	< 0.00050	99	70-130			
Barium, total	0.0468	0.0050	mg/L	0.0400	0.0063	101	70-130			
Beryllium, total	0.0406	0.00010	mg/L	0.0400	< 0.00010	102	70-130			
Bismuth, total	0.0398	0.00010	mg/L	0.0400	< 0.00010	99	70-130			
Boron, total	0.411	0.0500	mg/L	0.400	< 0.0500	101	70-130			
Cadmium, total	0.0403	0.000010	mg/L	0.0400	< 0.000010	101	70-130			
Calcium, total	13.3	0.20	mg/L	4.00	9.67	91	70-130			
Chromium, total	0.0402	0.00050	mg/L	0.0400	< 0.00050	100	70-130			
Cobalt, total	0.0397	0.00010	mg/L	0.0400	0.00018	99	70-130			
Copper, total	0.0399	0.00040	mg/L	0.0400	0.00105	97	70-130			
Iron, total	4.92	0.010	mg/L	4.00	0.959	99	70-130			
Lead, total	0.0407	0.00020	mg/L	0.0400	0.00033	101	70-130			
Lithium, total	0.0416	0.00010	mg/L	0.0400	0.00058	102	70-130			
Magnesium, total	6.07	0.010	mg/L	4.00	2.02	101	70-130			
Manganese, total	0.0968	0.00020	mg/L	0.0400	0.0540	107	70-130			
Molybdenum, total	0.0412	0.00010	mg/L	0.0400	0.00018	103	70-130			
Nickel, total	0.0397	0.00040	mg/L	0.0400	< 0.00040	99	70-130			
Phosphorus, total	4.21	0.050	mg/L	4.00	< 0.050	104	70-130			
Potassium, total	4.91	0.10	mg/L	4.00	0.98	98	70-130			
Selenium, total	0.387	0.00050	mg/L	0.400	< 0.00050	97	70-130			
Silicon, total	9.6	1.0	mg/L	4.00	5.6	101	70-130			
Silver, total	0.0371	0.000050	mg/L	0.0400	< 0.000050	93	70-130			
Sodium, total	10.6	0.10	mg/L	4.00	7.01	89	70-130			
Strontium, total	0.103	0.0010	mg/L	0.0400	0.0642	97	70-130			
Sulfur, total	39.7	3.0	mg/L	40.0	< 3.0	97	70-130			
Tellurium, total	0.0406	0.00050	mg/L	0.0400	< 0.00050	102	70-130			
Thallium, total	0.0402	0.000020	mg/L	0.0400	< 0.000020	100	70-130			
Thorium, total	0.0404	0.00010	mg/L	0.0400	< 0.00010	101	70-130			
Tin, total	0.0408	0.00020	mg/L	0.0400	< 0.00020	102	70-130			
Titanium, total	0.0606	0.0050	mg/L	0.0400	0.0199	102	70-130			
Tungsten, total	0.0405	0.0010	mg/L	0.0400	< 0.0010	101	70-130			
Uranium, total	0.0410	0.000020	mg/L	0.0400	0.000066	102	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25E3516
PROJECT	Marine Avenue Site	**REPORTED**	2025-06-05 12:46

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5F2028, Continued										
Matrix Spike (B5F2028-MS1), Continued		**Source: 25E3516-07**		Prepared: 2025-06-04, Analyzed: 2025-06-05						
Vanadium, total	0.0413	0.0050	mg/L	0.0400	< 0.0050	99	70-130			
Zinc, total	0.404	0.0040	mg/L	0.400	< 0.0040	100	70-130			
Zirconium, total	0.0407	0.00010	mg/L	0.0400	< 0.00010	102	70-130			

QC Qualifiers:

BLK	Analyte concentration in the Method Blank is above the Reporting Limit (RL).
SPK1	The recovery of this analyte was outside of established control limits. The data was accepted based on performance of other batch QC.

CARO
ANALYTICAL SERVICES
Caring About Results, Obviously.

CARO
#110-4
#102-3
17225
#108-44
2K9
5C3
4X4

25E3516

CHAIN OF CUSTODY RECORD

CARO BC COC, Rev 2019-01

By engaging our services, you are agreeing to CARO's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

COC# _____ PAGE OF

RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
Regan	May 26, 25	Texada LKN	05/26/25
	TIME: 3:30		TIME: 10:16

TURNAROUND TIME REQUESTED:
Routine: (5-7 Days) ☑
Rush: 1 Day* ☐ 2 Day* ☐ 3 Day* ☐
Other* _____
*Contact Lab To Confirm. Surcharge May Apply

REGULATORY APPLICATION:
Show on Report ☐
Canadian Drinking Water Quality ☐ BC WQG ☐ BC HWR ☐
BC CSR Soil: WL ☐ AL ☐ PL ☐ RL-LD ☐ RL-HD ☐ CL ☐ IL ☐
BC CSR Water: AW ☑ IW ☐ LW ☐ DW ☑
CCME: _____ Other: _____

PROJECT NUMBER / INFO: Marine Avenue Site

A: Biohazard B: Cyanide C: PCBs D: Asbestos E: Heavy Metals F: Flammable G: Strong Odour H: High Contamination I: Other (please specify*)

REPORT TO:
COMPANY: Tetra Tech Canada Inc.
ADDRESS: Suite 1000-885 Dunsmuir Street
Vancouver, BC V8G 0A7
CONTACT: Emily Lai
TEL/FAX: 236-984-3851
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
DATA FORMAT: EXCEL ☑ WATERTRAX ☐ ESdat ☑ EQuIS ☐ BC EMS ☐ OTHER* ☐
EMAIL 1: emily.lai@tetratech.com
EMAIL 2: mike.gallo@tetratech.com
EMAIL 3: lauren.quan@tetratech.com

INVOICE TO: SAME AS REPORT TO ☐
COMPANY: Tetra Tech Canada Inc.
ADDRESS: 14940 123 Ave NW
Edmonton AB T5V 1B4
CONTACT:
TEL/FAX:
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
EMAIL 1: Accounts.Payable@tetratech.com
EMAIL 2: emily.lai@tetratech.com
EMAIL 3:
PO #: 704-SWM.SWOP03663-14

** If you would like to sign up for ClientConnect and/or EnviroChain, CARO's online service offerings, please check here: ☐

SAMPLED BY: Regan Keil

	CLIENT SAMPLE ID:	MATRIX: DRINKING WATER	OTHER WATER	SOIL	OTHER	CONTAINER QTY	SAMPLING: DATE YYYY-MM-DD	TIME HH:MM	COMMENTS: CHLORINATED	FILTERED	PRESERVED	(e.g. flow/volume media ID/notes)
1	MW13-01		X									
2	MW13-02		X									
3	MW13-03		X									
4	MW19-04		X									
5	MW24-05		X									
6	SW1		X									
7	SW2		X									
8	SW3		X									
9	SW4		X									
10	DUP1		X									

ANALYSES REQUESTED:

	BTEX	VOC	EPH	PAH	PHENOLS Chlorinated	PCB	PESTICIDES	METALS - WATER TOTAL	METALS - WATER DISSOLVED	METALS - SOIL (SALM)	pH	TSS	BOD	TN	FECAL COLIFORMS	TOTAL COLIFORMS	ASBESTOS	Essential Drinking Water Package	NH3,Cl,SO4,F,NO3,NO2	Sulphide (as H2S)	Dissolved Organic Carbon			HOLD	POSSIBLE SAMPLE HAZARD CODE(S)
	PHC F1	PHC F2-F4	L/HEPH	Non-Chlor.	GLYCOLS	HAA	ACID HERBICIDES	Hg	Hg	inc. pH	ALK	VSS	MOG	NH3	HPC	*E. coli*									
	VPH	VPH				THM					ANIONS	TDS	TOG	TKN											
											EC		COD												
1	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
2	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
3	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
4	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
5	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
6	☐	☐	☐	☐	☐	☐	☐	☑	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
7	☐	☐	☐	☐	☐	☐	☐	☑	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
8	☐	☐	☐	☐	☐	☐	☐	☑	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
9	☐	☐	☐	☐	☐	☐	☐	☑	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
10	☐	☐	☐	☐	☐	☐	☐	☑	☑	☐	☑	☑	☑	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

SHIPPING INSTRUCTIONS: Return Cooler(s) ☐
Supplies Needed:

SAMPLE RETENTION:
30 Days (default) ☐
60 Days ☐ 90 Days ☐
Other (surcharges will apply):

*** OTHER INSTRUCTIONS:**
6-10
1-5

If you would like to talk to a real live Scientist about your project requirements, please check here: ☐

SAMPLE RECEIPT CONDITION:
COOLER 1 (°C): 10.4 ICE: Y ☑ N ☐
COOLER 2 (°C): 8.7 ICE: Y ☑ N ☐
COOLER 3 (°C): ICE: Y ☐ N ☐
CUSTODY SEALS INTACT: NA ☐ Y ☐ N ☐

CERTIFICATE OF ANALYSIS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver) 1000 - 885 Dunsmuir Street Vancouver, BC V6C 1N5		
ATTENTION	Emily Lai	**WORK ORDER**	25G2084
PO NUMBER	704-SWM.SWOP03663-10	**RECEIVED / TEMP**	2025-07-15 10:17 / 14.2°C
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40
PROJECT INFO		**COC NUMBER**	none

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

If you have any questions or concerns, please contact me at efex@caro.ca

Authorized By:

Echo Fex
Junior Account Manager

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25G2084-01) | Matrix: Water | Sampled: 2025-07-14 11:40					
Anions					
Chloride	**6.90**	0.10	mg/L	2025-07-15	
Fluoride	< 0.10	0.10	mg/L	2025-07-15	
Nitrate (as N)	**0.189**	0.010	mg/L	2025-07-15	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-15	
Sulfate	**4.7**	1.0	mg/L	2025-07-15	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**42.7**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**42.7**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**127**	2.0	µS/cm	2025-07-18	
pH	**6.68**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**21.9**		°C	2025-07-18	HT2
MW13-02 (25G2084-02) | Matrix: Water | Sampled: 2025-07-14 10:13					
Anions					
Chloride	**23.4**	0.10	mg/L	2025-07-16	
Fluoride	**0.36**	0.10	mg/L	2025-07-16	
Nitrate (as N)	< 0.100	0.010	mg/L	2025-07-16	RA1
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**109**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	**0.03**	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**415**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**415**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	**8.11**	0.050	mg/L	2025-07-22	
Conductivity (EC)	**1130**	2.0	µS/cm	2025-07-18	
pH	**6.96**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	**0.055**	0.020	mg/L	2025-07-16	
Temperature, at pH	**21.8**		°C	2025-07-18	HT2

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25G2084-03) | Matrix: Water | Sampled: 2025-07-14 10:55					
Anions					
Chloride	**27.4**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	**0.803**	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**36.6**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	**0.01**	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**139**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**139**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**471**	2.0	µS/cm	2025-07-18	
pH	**6.91**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	**0.022**	0.020	mg/L	2025-07-16	
Temperature, at pH	**22.0**		°C	2025-07-18	HT2
MW19-04 (25G2084-04) | Matrix: Water | Sampled: 2025-07-14 09:07					
Anions					
Chloride	**11.2**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	< 0.010	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	< 1.0	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**121**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**121**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	**0.375**	0.050	mg/L	2025-07-22	
Conductivity (EC)	**296**	2.0	µS/cm	2025-07-18	
pH	**6.96**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25G2084-04) | Matrix: Water | Sampled: 2025-07-14 09:07, Continued					
General Parameters, Continued					
Temperature, at pH	**22.1**		°C	2025-07-18	HT2
MW24-05 (25G2084-05) | Matrix: Water | Sampled: 2025-07-14 10:40					
Anions					
Chloride	**1.26**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	**0.300**	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**3.3**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**63.6**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**63.6**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**154**	2.0	µS/cm	2025-07-18	
pH	**6.77**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**22.4**		°C	2025-07-18	HT2
SW1 (25G2084-06) | Matrix: Water | Sampled: 2025-07-14 13:10					
Anions					
Chloride	**9.01**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	**0.097**	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**3.0**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**33.9**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**33.9**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25G2084-06) | Matrix: Water | Sampled: 2025-07-14 13:10, Continued					
General Parameters, Continued					
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**110**	2.0	µS/cm	2025-07-18	
pH	**6.90**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**22.2**		°C	2025-07-18	HT2
SW2 (25G2084-07) | Matrix: Water | Sampled: 2025-07-14 13:40					
Anions					
Chloride	**10.2**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	**0.130**	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**2.9**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**38.2**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**38.2**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**124**	2.0	µS/cm	2025-07-18	
pH	**6.95**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**22.1**		°C	2025-07-18	HT2
SW3 (25G2084-08) | Matrix: Water | Sampled: 2025-07-14 13:50					
Anions					
Chloride	**10.9**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	**0.142**	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**3.5**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**40.7**	1.0	mg/L	2025-07-18	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25G2084-08) | Matrix: Water | Sampled: 2025-07-14 13:50, Continued					
General Parameters, Continued					
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**40.7**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**131**	2.0	µS/cm	2025-07-18	
pH	**7.01**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**22.1**		°C	2025-07-18	HT2
SW4 (25G2084-09) | Matrix: Water | Sampled: 2025-07-14 12:10					
Anions					
Chloride	**10.2**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	< 0.010	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**4.2**	1.0	mg/L	2025-07-16	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**54.5**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**54.5**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**162**	2.0	µS/cm	2025-07-18	
pH	**6.95**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**21.8**		°C	2025-07-18	HT2
DUP1 (25G2084-10) | Matrix: Water | Sampled: 2025-07-14 14:05					
Anions					
Chloride	**10.2**	0.10	mg/L	2025-07-16	
Fluoride	< 0.10	0.10	mg/L	2025-07-16	
Nitrate (as N)	**0.138**	0.010	mg/L	2025-07-16	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-07-16	
Sulfate	**3.2**	1.0	mg/L	2025-07-16	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25G2084-10) | Matrix: Water | Sampled: 2025-07-14 14:05, Continued					
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-07-21	CT6
General Parameters					
Alkalinity, Total (as CaCO3)	**40.6**	1.0	mg/L	2025-07-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Bicarbonate (as CaCO3)	**40.6**	1.0	mg/L	2025-07-18	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-07-18	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-07-22	
Conductivity (EC)	**131**	2.0	µS/cm	2025-07-18	
pH	**7.02**	0.10	pH units	2025-07-18	HT2
Sulfide, Total	< 0.020	0.020	mg/L	2025-07-16	
Temperature, at pH	**22.0**		°C	2025-07-18	HT2

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA1	The Reporting Limit for this sample has been raised due to matrix interference.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Kelowna
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Richmond
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Hydrogen Sulfide, total in Water	SM 4500-S2 H (2021)	Calculation		N/A
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, ph > 7 = basic
µS/cm	Microsiemens per centimetre
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any liability is limited to the cost of analysis. CARO will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Results in **red** indicate values above the regulatory limits where these have been included. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: {@Email}

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in “batches” and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk)**: A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup)**: An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS)**: A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS)**: A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM)**: A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5G3379										
Blank (B5G3379-BLK1)				Prepared: 2025-07-15, Analyzed: 2025-07-15						
Chloride	< 0.10	0.10	mg/L							
Fluoride	< 0.10	0.10	mg/L							
Nitrate (as N)	< 0.010	0.010	mg/L							
Nitrite (as N)	< 0.010	0.010	mg/L							
Sulfate	< 1.0	1.0	mg/L							
LCS (B5G3379-BS1)				Prepared: 2025-07-16, Analyzed: 2025-07-16						
Chloride	3.02	0.10	mg/L	3.00		101	85-115			
Fluoride	2.12	0.10	mg/L	2.00		106	85-115			
Nitrate (as N)	3.18	0.010	mg/L	3.00		106	85-115			
Nitrite (as N)	3.12	0.010	mg/L	3.00		104	85-115			
Sulfate	15.9	1.0	mg/L	15.0		106	85-115			
General Parameters, Batch B5G3442										
Blank (B5G3442-BLK1)				Prepared: 2025-07-16, Analyzed: 2025-07-16						
Sulfide, Total	< 0.020	0.020	mg/L							
LCS (B5G3442-BS1)				Prepared: 2025-07-16, Analyzed: 2025-07-16						
Sulfide, Total	0.444	0.020	mg/L	0.500		89	80-120			
General Parameters, Batch B5G3792										
Blank (B5G3792-BLK1)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
Conductivity (EC)	< 2.0	2.0	µS/cm							
Temperature, at pH	23.0		°C							
Blank (B5G3792-BLK2)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5G3792, Continued										
Blank (B5G3792-BLK2), Continued				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
Conductivity (EC)	< 2.0	2.0	µS/cm							
Temperature, at pH	22.4		°C							
Blank (B5G3792-BLK3)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Bicarbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
Conductivity (EC)	< 2.0	2.0	µS/cm							
Temperature, at pH	22.9		°C							
LCS (B5G3792-BS1)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	86.2	1.0	mg/L	100		86	80-120			
LCS (B5G3792-BS2)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Conductivity (EC)	1420	2.0	µS/cm	1410		101	95-105			
LCS (B5G3792-BS3)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	86.3	1.0	mg/L	100		86	80-120			
LCS (B5G3792-BS4)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Conductivity (EC)	1420	2.0	µS/cm	1410		101	95-105			
LCS (B5G3792-BS5)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	87.5	1.0	mg/L	100		88	80-120			
LCS (B5G3792-BS6)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
Conductivity (EC)	1430	2.0	µS/cm	1410		101	95-105			
Duplicate (B5G3792-DUP1)	**Source: 25G2084-01**			Prepared: 2025-07-18, Analyzed: 2025-07-18						
Alkalinity, Total (as CaCO3)	43.3	1.0	mg/L		42.7			1	10	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L		< 1.0				10	
Alkalinity, Bicarbonate (as CaCO3)	43.3	1.0	mg/L		42.7			1	10	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L		< 1.0				10	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L		< 1.0				10	
Conductivity (EC)	129	2.0	µS/cm		127			1	5	
pH	6.74	0.10	pH units		6.68			< 1	4	HT2
Reference (B5G3792-SRM1)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
pH	7.00	0.10	pH units	7.01		100	98-102			
Reference (B5G3792-SRM2)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
pH	6.99	0.10	pH units	7.01		100	98-102			
Reference (B5G3792-SRM3)				Prepared: 2025-07-18, Analyzed: 2025-07-18						
pH	7.00	0.10	pH units	7.01		100	98-102			
General Parameters, Batch B5G4095										
Blank (B5G4095-BLK1)				Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25G2084
PROJECT	Marine Avenue Site	**REPORTED**	2025-07-22 15:40

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5G4095, Continued										
LCS (B5G4095-BS1)				Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	0.937	0.050	mg/L	1.00		94	85-115			
Duplicate (B5G4095-DUP1)			**Source: 25G2084-05**	Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	< 0.050	0.050	mg/L		< 0.050				15	
Matrix Spike (B5G4095-MS1)			**Source: 25G2084-05**	Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	0.214	0.050	mg/L	0.204	< 0.050	94	75-125			
General Parameters, Batch B5G4099										
Blank (B5G4099-BLK1)				Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
LCS (B5G4099-BS1)				Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	0.920	0.050	mg/L	1.00		92	85-115			
Duplicate (B5G4099-DUP1)			**Source: 25G2084-01**	Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	0.060	0.050	mg/L		< 0.050				15	
Matrix Spike (B5G4099-MS1)			**Source: 25G2084-01**	Prepared: 2025-07-22, Analyzed: 2025-07-22						
Ammonia, Total (as N)	0.237	0.050	mg/L	0.204	< 0.050	103	75-125			

QC Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.

2 5 G 2 0 8 4

CARO.ca 1-888-311-8846
#110-4011 Viking Way, Richmond, BC V6V 2K9
#102-3677 Highway 97N, Kelowna, BC V1X 5C3
17225 109 Avenue NW, Edmonton, AB T5S 1H7
#108-4475 Wayburne Drive, Burnaby, BC V5G 4X4

CHAIN OF CUSTODY RECORD

CARO BC COC, Rev 2019-01

By engaging our services, you are agreeing to CARO's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

COC#: PAGE OF

RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
Alex	July 14, 2025	LKN Texadd	07/15/25
	TIME: 3:00 pm		TIME: 10:17

TURNAROUND TIME REQUESTED:
Routine: (5-7 Days) ☑
Rush: 1 Day* ☐ 2 Day* ☐ 3 Day* ☐
Other*
*Contact Lab To Confirm. Surcharge May Apply

REGULATORY APPLICATION: Show on Report ☐
Canadian Drinking Water Quality ☐ BC WQG ☐ BC HWR ☐
BC CSR Soil: WL ☐ AL ☐ PL ☐ RL-LD ☐ RL-HD ☐ CL ☐ IL ☐
BC CSR Water: AW ☑ IW ☐ LW ☐ DW ☑
CCME: Other:

REPORT TO:
COMPANY: Tetra Tech Canada Inc.
ADDRESS: Suite 1000-885 Dunsmuir Street
Vancouver, BC V8G 0A7
CONTACT: Emily Lai
TEL/FAX: 236-984-3851
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
DATA FORMAT: EXCEL ☑ WATERTRAX ☐ ESdat ☑ EQuIS ☐ BC EMS ☐ OTHER* ☐
EMAIL 1: emily.lai@tetratech.com
EMAIL 2: mike.gallo@tetratech.com
EMAIL 3: lauren.quan@tetratech.com

INVOICE TO: SAME AS REPORT TO ☐
COMPANY: Tetra Tech Canada Inc.
ADDRESS: 14940 123 Ave NW
Edmonton AB T5V 1B4
CONTACT:
TEL/FAX:
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
EMAIL 1: Accounts.Payable@tetratech.com
EMAIL 2: emily.lai@tetratech.com
EMAIL 3:
PO #: 704-SWM.SWOP03663-14

PROJECT NUMBER / INFO: Marine Avenue Site

A: Biohazard B: Cyanide C: PCBs D: Asbestos E: Heavy Metals F: Flammable G: Strong Odour H: High Contamination I: Other (please specify*)

** If you would like to sign up for ClientConnect and/or EnviroChain, CARO's online service offerings, please check here: ☐

SAMPLED BY: Regan Keil

ANALYSES REQUESTED:

	CLIENT SAMPLE ID:	MATRIX: DRINKING WATER	OTHER WATER	SOIL	OTHER	CONTAINER QTY	SAMPLING: DATE YYYY-MM-DD	TIME HH:MM	COMMENTS: CHLORINATED	FILTERED	PRESERVED	(e.g. flow/volume media ID/notes)
1	MW13-01		X									
2	MW13-02		X									
3	MW13-03		X									
4	MW19-04		X									
5	MW24-05		X									
6	SW1		X									
7	SW2		X									
8	SW3		X									
9	SW4		X									
	~~SW5~~		~~X~~									
10	DUP1		X									

BTEX ☐ VPH ☐ PHC F1 ☐ | VOC ☐ VPH ☐ | EPH ☐ PHC F2-F4 ☐ | PAH ☐ L/HEPH ☐ | PHENOLS Chlorinated ☐ Non-Chlor. ☐ | PCB ☐ GLYCOLS ☐ HAA ☐ THM ☐ | PESTICIDES ☐ ACID HERBICIDES ☐ | METALS - WATER TOTAL Hg ☐ | METALS - WATER DISSOLVED Hg ☐ | METALS - SOIL (SALM) ☐ inc. pH ☐ | pH ☑ EC ☑ ALK ☑ ANIONS ☐ | TSS ☐ VSS ☐ TDS ☐ | BOD ☑ COD ☐ TOG ☐ MOG ☐ | TN ☐ NH3 ☐ TKN ☐ | FECAL COLIFORMS ☐ HPC ☐ | TOTAL COLIFORMS ☐ E. coli ☐ | ASBESTOS | Essential Drinking Water Package | NH3, Cl, SO4, F, NO3, NO2 | low level sulphides | HOLD | POSSIBLE SAMPLE HAZARD CODE(S)

SHIPPING INSTRUCTIONS: Return Cooler(s) ☐
Supplies Needed:

SAMPLE RETENTION:
30 Days (default) ☐
60 Days ☐ 90 Days ☐
Other (surcharges will apply):

*** OTHER INSTRUCTIONS:**

If you would like to talk to a real live Scientist about your project requirements, please check here: ☐

SAMPLE RECEIPT CONDITION:
COOLER 1 (°C): 14.2 ICE: Y ☑ N ☐
COOLER 2 (°C): ICE: Y ☐ N ☐
COOLER 3 (°C): ICE: Y ☐ N ☐
CUSTODY SEALS INTACT: NA ☐ Y ☐ N ☐



Hi Team,

Client has clarified that she would like the hydrogen sulfide package instead of sulfide for this work order, please add this (already in the project) and I can adjust the price accordingly!

Thanks,
Echo

CERTIFICATE OF ANALYSIS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver) 1000 - 885 Dunsmuir Street Vancouver, BC V6C 1N5		
ATTENTION	Emily Lai	**WORK ORDER**	25L0435
PO NUMBER	704-SWM.SWOP03663-14	**RECEIVED / TEMP**	2025-12-03 10:56 / 4.4°C
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49
PROJECT INFO		**COC NUMBER**	No #

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

Big Picture Sidekicks

You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry

It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve

Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

By engaging our services, you are agreeing to CARO Analytical Service's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

If you have any questions or concerns, please contact me at efex@caro.ca

Authorized By:

Echo Fex
Junior Account Manager

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25L0435-01) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**6.83**	0.10	mg/L	2025-12-04	
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.166**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**5.7**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**43.7**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**13.0**	0.20	mg/L	2025-12-04	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.00086**	0.00040	mg/L	2025-12-04	
Iron, dissolved	< 0.010	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00084**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**2.74**	0.010	mg/L	2025-12-04	
Manganese, dissolved	< 0.00020	0.00020	mg/L	2025-12-05	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00013**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**1.37**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**14.1**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**7.34**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0670**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25L0435-01) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, dissolved	**0.000064**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**53.6**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**53.6**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	< 0.50	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	< 20	20	mg/L	2025-12-09	
Conductivity (EC)	**127**	2.0	µS/cm	2025-12-04	
pH	**6.50**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**78**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**19.2**		°C	2025-12-04	HT2
Total Metals					
Aluminum, total	**0.0564**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, total	**12.7**	0.20	mg/L	2025-12-04	
Chromium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, total	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, total	< 0.00040	0.00040	mg/L	2025-12-04	
Iron, total	**0.088**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00079**	0.00010	mg/L	2025-12-04	
Magnesium, total	**2.81**	0.010	mg/L	2025-12-04	
Manganese, total	**0.00187**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00014**	0.00010	mg/L	2025-12-04	
Nickel, total	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO Tetra Tech EBA Inc. (Vancouver)
PROJECT Marine Avenue Site
WORK ORDER 25L0435
REPORTED 2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-01 (25L0435-01) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Potassium, total	**1.24**	0.10	mg/L	2025-12-04	
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**14.0**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**6.80**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0651**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000066**	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-12-04	
MW13-02 (25L0435-02) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**23.9**	0.10	mg/L	2025-12-04	
Fluoride	< 1.00	0.10	mg/L	2025-12-04	RA1
Nitrate (as N)	< 0.100	0.010	mg/L	2025-12-04	RA1
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**37.4**	1.0	mg/L	2025-12-04	RE2
Calculated Parameters					
Hydrogen Sulfide, total	**0.05**	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**509**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0109**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	**0.00991**	0.00050	mg/L	2025-12-04	
Barium, dissolved	**0.123**	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	**0.223**	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**176**	0.20	mg/L	2025-12-04	
Chromium, dissolved	**0.00166**	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	**0.00430**	0.00010	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25L0435-02) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Iron, dissolved	**80.4**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00117**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**16.8**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**1.63**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00113**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	**0.00097**	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	**0.101**	0.050	mg/L	2025-12-04	
Potassium, dissolved	**24.4**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**15.2**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**20.6**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.946**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	**14.5**	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, dissolved	**0.000387**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	**0.0052**	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	**0.00052**	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**657**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**657**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	**6.32**	0.050	mg/L	2025-12-08	
BOD, 5-day	**11.3**	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**16.4**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**47**	20	mg/L	2025-12-09	
Conductivity (EC)	**1210**	2.0	µS/cm	2025-12-04	
pH	**6.33**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**725**	10	mg/L	2025-12-04	
Sulfide, Total	**0.059**	0.020	mg/L	2025-12-05	
Temperature, at pH	**22.2**		°C	2025-12-04	HT2

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-02 (25L0435-02) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals					
Aluminum, total	**0.0502**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	**0.00850**	0.00050	mg/L	2025-12-04	
Barium, total	**0.121**	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	**0.228**	0.0500	mg/L	2025-12-04	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, total	**181**	0.20	mg/L	2025-12-04	
Chromium, total	**0.00171**	0.00050	mg/L	2025-12-04	
Cobalt, total	**0.00438**	0.00010	mg/L	2025-12-04	
Copper, total	< 0.00040	0.00040	mg/L	2025-12-04	
Iron, total	**85.2**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00106**	0.00010	mg/L	2025-12-04	
Magnesium, total	**16.9**	0.010	mg/L	2025-12-04	
Manganese, total	**1.73**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00119**	0.00010	mg/L	2025-12-04	
Nickel, total	**0.00079**	0.00040	mg/L	2025-12-04	
Phosphorus, total	**0.098**	0.050	mg/L	2025-12-04	
Potassium, total	**23.5**	0.10	mg/L	2025-12-04	
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**15.5**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**19.8**	0.10	mg/L	2025-12-04	
Strontium, total	**0.972**	0.0010	mg/L	2025-12-04	
Sulfur, total	**14.9**	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000366**	0.000020	mg/L	2025-12-04	
Vanadium, total	**0.0054**	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	**0.00050**	0.00010	mg/L	2025-12-04	
MW13-03 (25L0435-03) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**16.5**	0.10	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25L0435-03) | Matrix: Water | Sampled: 2025-12-02, Continued					
Anions, Continued					
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.676**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**21.3**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	**0.02**	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**113**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0116**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, dissolved	**0.0113**	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	**0.0609**	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	**0.000048**	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**35.5**	0.20	mg/L	2025-12-04	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.00218**	0.00040	mg/L	2025-12-04	
Iron, dissolved	< 0.010	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00189**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**5.95**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.00159**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00013**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**3.82**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**13.1**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**23.9**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.230**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	**7.9**	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25L0435-03) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Uranium, dissolved	**0.000912**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	**0.0178**	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**126**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**126**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**2.80**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**40**	20	mg/L	2025-12-08	
Conductivity (EC)	**329**	2.0	µS/cm	2025-12-04	
pH	**6.10**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**212**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**20.1**		°C	2025-12-04	HT2
Total Metals					
Aluminum, total	**6.68**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	**0.00063**	0.00050	mg/L	2025-12-04	
Barium, total	**0.0538**	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	**0.0609**	0.0500	mg/L	2025-12-04	
Cadmium, total	**0.000029**	0.000010	mg/L	2025-12-04	
Calcium, total	**36.2**	0.20	mg/L	2025-12-04	
Chromium, total	**0.00354**	0.00050	mg/L	2025-12-04	
Cobalt, total	**0.00314**	0.00010	mg/L	2025-12-04	
Copper, total	**0.0126**	0.00040	mg/L	2025-12-04	
Iron, total	**5.79**	0.010	mg/L	2025-12-04	
Lead, total	**0.00120**	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00437**	0.00010	mg/L	2025-12-04	
Magnesium, total	**7.95**	0.010	mg/L	2025-12-04	
Manganese, total	**0.123**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00032**	0.00010	mg/L	2025-12-04	
Nickel, total	**0.00281**	0.00040	mg/L	2025-12-04	
Phosphorus, total	**0.257**	0.050	mg/L	2025-12-04	
Potassium, total	**4.69**	0.10	mg/L	2025-12-05	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW13-03 (25L0435-03) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**22.3**	1.0	mg/L	2025-12-04	
Silver, total	**0.000081**	0.000050	mg/L	2025-12-04	
Sodium, total	**22.6**	0.10	mg/L	2025-12-04	
Strontium, total	**0.277**	0.0010	mg/L	2025-12-04	
Sulfur, total	**7.8**	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	**0.000034**	0.000020	mg/L	2025-12-04	
Thorium, total	**0.00064**	0.00010	mg/L	2025-12-04	
Tin, total	**0.00031**	0.00020	mg/L	2025-12-04	
Titanium, total	**0.371**	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.00143**	0.000020	mg/L	2025-12-04	
Vanadium, total	**0.0120**	0.0050	mg/L	2025-12-04	
Zinc, total	**0.0237**	0.0040	mg/L	2025-12-04	
Zirconium, total	**0.00055**	0.00010	mg/L	2025-12-04	
MW19-04 (25L0435-04) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**12.4**	0.10	mg/L	2025-12-04	
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	< 0.010	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**3.0**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**150**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0076**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	**0.00025**	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	**0.00300**	0.00050	mg/L	2025-12-04	
Barium, dissolved	**0.0282**	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	**0.000018**	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**48.2**	0.20	mg/L	2025-12-04	
Chromium, dissolved	**0.00054**	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	**0.00224**	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.00055**	0.00040	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25L0435-04) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Iron, dissolved	**16.9**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00180**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**7.17**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**1.46**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00037**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	**0.00040**	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	**0.205**	0.050	mg/L	2025-12-04	
Potassium, dissolved	**6.13**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**15.3**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**9.86**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.248**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, dissolved	**0.000272**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	**0.00012**	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**194**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**194**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	**0.162**	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**9.83**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**80**	20	mg/L	2025-12-08	
Conductivity (EC)	**348**	2.0	µS/cm	2025-12-04	
pH	**6.55**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**205**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**22.1**		°C	2025-12-04	HT2
Total Metals					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW19-04 (25L0435-04) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Aluminum, total	**0.153**	0.0050	mg/L	2025-12-04	
Antimony, total	**0.00029**	0.00020	mg/L	2025-12-04	
Arsenic, total	**0.00355**	0.00050	mg/L	2025-12-04	
Barium, total	**0.0306**	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	**0.000024**	0.000010	mg/L	2025-12-04	
Calcium, total	**48.3**	0.20	mg/L	2025-12-04	
Chromium, total	**0.00066**	0.00050	mg/L	2025-12-04	
Cobalt, total	**0.00246**	0.00010	mg/L	2025-12-04	
Copper, total	**0.00183**	0.00040	mg/L	2025-12-04	
Iron, total	**20.1**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00166**	0.00010	mg/L	2025-12-04	
Magnesium, total	**7.21**	0.010	mg/L	2025-12-04	
Manganese, total	**1.57**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00045**	0.00010	mg/L	2025-12-04	
Nickel, total	**0.00064**	0.00040	mg/L	2025-12-04	
Phosphorus, total	**0.276**	0.050	mg/L	2025-12-04	
Potassium, total	**6.01**	0.10	mg/L	2025-12-04	
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**16.1**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**9.23**	0.10	mg/L	2025-12-04	
Strontium, total	**0.267**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	**0.0078**	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000315**	0.000020	mg/L	2025-12-04	
Vanadium, total	**0.0058**	0.0050	mg/L	2025-12-04	
Zinc, total	**0.0524**	0.0040	mg/L	2025-12-04	
Zirconium, total	**0.00016**	0.00010	mg/L	2025-12-04	
MW24-05 (25L0435-05) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**0.37**	0.10	mg/L	2025-12-04	RE2

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25L0435-05) | Matrix: Water | Sampled: 2025-12-02, Continued					
Anions, Continued					
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.081**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**2.4**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**54.0**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.227**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	**0.00100**	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	**0.00067**	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	**0.000071**	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**17.3**	0.20	mg/L	2025-12-04	
Chromium, dissolved	**0.00146**	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	**0.00010**	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.0152**	0.00040	mg/L	2025-12-04	
Iron, dissolved	**0.108**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00019**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**2.62**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.00280**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	**0.000018**	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00031**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	**0.00125**	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**2.13**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**6.4**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**4.33**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0695**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	**0.00011**	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25L0435-05) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Uranium, dissolved	**0.000815**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	**0.00024**	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**61.1**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**61.1**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**20.8**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**77**	20	mg/L	2025-12-08	
Conductivity (EC)	**111**	2.0	µS/cm	2025-12-04	
pH	**6.17**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**112**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**21.4**		°C	2025-12-04	HT2
Total Metals					
Aluminum, total	**0.425**	0.0050	mg/L	2025-12-04	
Antimony, total	**0.00097**	0.00020	mg/L	2025-12-04	
Arsenic, total	**0.00069**	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	**0.000071**	0.000010	mg/L	2025-12-04	
Calcium, total	**16.2**	0.20	mg/L	2025-12-04	
Chromium, total	**0.00152**	0.00050	mg/L	2025-12-04	
Cobalt, total	**0.00015**	0.00010	mg/L	2025-12-04	
Copper, total	**0.0157**	0.00040	mg/L	2025-12-04	
Iron, total	**0.257**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00021**	0.00010	mg/L	2025-12-04	
Magnesium, total	**2.57**	0.010	mg/L	2025-12-04	
Manganese, total	**0.00445**	0.00020	mg/L	2025-12-04	
Mercury, total	**0.000016**	0.000010	mg/L	2025-12-09	
Molybdenum, total	**0.00032**	0.00010	mg/L	2025-12-04	
Nickel, total	**0.00135**	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	
Potassium, total	**2.08**	0.10	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
MW24-05 (25L0435-05) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**6.2**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**3.70**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0658**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	**0.00011**	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	**0.0075**	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000865**	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	**0.00024**	0.00010	mg/L	2025-12-04	
SW1 (25L0435-06) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**7.79**	0.10	mg/L	2025-12-04	
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.064**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**1.8**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**28.1**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0194**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**8.54**	0.20	mg/L	2025-12-04	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25L0435-06) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Iron, dissolved	**0.506**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00024**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**1.65**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.00670**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00013**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**0.79**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**5.9**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**6.58**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0534**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**36.4**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**36.4**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**4.62**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**30**	20	mg/L	2025-12-08	
Conductivity (EC)	**92.9**	2.0	µS/cm	2025-12-04	
pH	**7.36**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**75**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**19.9**		°C	2025-12-04	HT2
Total Metals					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW1 (25L0435-06) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Aluminum, total	**0.0722**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, total	**8.83**	0.20	mg/L	2025-12-04	
Chromium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, total	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, total	< 0.00040	0.00040	mg/L	2025-12-04	
Iron, total	**0.807**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00025**	0.00010	mg/L	2025-12-04	
Magnesium, total	**1.80**	0.010	mg/L	2025-12-04	
Manganese, total	**0.0140**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00015**	0.00010	mg/L	2025-12-04	
Nickel, total	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	
Potassium, total	**0.73**	0.10	mg/L	2025-12-04	
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**6.1**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**6.41**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0526**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-12-04	
SW2 (25L0435-07) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**8.13**	0.10	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25L0435-07) | Matrix: Water | Sampled: 2025-12-02, Continued					
Anions, Continued					
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.089**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**1.9**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**30.6**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0189**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**9.29**	0.20	mg/L	2025-12-04	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.00118**	0.00040	mg/L	2025-12-04	
Iron, dissolved	**0.437**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00029**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**1.79**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.00453**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00014**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**0.85**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**6.5**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**6.89**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0578**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25L0435-07) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Uranium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**37.9**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**37.9**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**4.30**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**30**	20	mg/L	2025-12-08	
Conductivity (EC)	**100**	2.0	µS/cm	2025-12-04	
pH	**7.35**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**55**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**20.0**		°C	2025-12-04	HT2
Total Metals					
Aluminum, total	**0.0957**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, total	**9.68**	0.20	mg/L	2025-12-04	
Chromium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, total	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, total	**0.00052**	0.00040	mg/L	2025-12-04	
Iron, total	**0.772**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00029**	0.00010	mg/L	2025-12-04	
Magnesium, total	**1.92**	0.010	mg/L	2025-12-04	
Manganese, total	**0.0146**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00016**	0.00010	mg/L	2025-12-04	
Nickel, total	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	
Potassium, total	**0.80**	0.10	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW2 (25L0435-07) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**6.8**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**6.77**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0575**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000025**	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-12-04	
SW3 (25L0435-08) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**7.92**	0.10	mg/L	2025-12-04	
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.100**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**2.1**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**32.1**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0189**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**9.69**	0.20	mg/L	2025-12-04	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.00091**	0.00040	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25L0435-08) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Iron, dissolved	**0.444**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00029**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**1.91**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.00474**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00017**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**0.92**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**6.6**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**7.44**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0587**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**42.0**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**42.0**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**4.44**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**38**	20	mg/L	2025-12-08	
Conductivity (EC)	**106**	2.0	µS/cm	2025-12-04	
pH	**7.42**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**55**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**21.1**		°C	2025-12-04	HT2
Total Metals					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW3 (25L0435-08) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Aluminum, total	**0.110**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, total	**9.38**	0.20	mg/L	2025-12-04	
Chromium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, total	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, total	**0.00049**	0.00040	mg/L	2025-12-04	
Iron, total	**0.748**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00032**	0.00010	mg/L	2025-12-04	
Magnesium, total	**1.90**	0.010	mg/L	2025-12-04	
Manganese, total	**0.0163**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00017**	0.00010	mg/L	2025-12-04	
Nickel, total	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	
Potassium, total	**0.81**	0.10	mg/L	2025-12-04	
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**6.4**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**6.64**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0564**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000026**	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-12-04	
SW4 (25L0435-09) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**10.3**	0.10	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25L0435-09) | Matrix: Water | Sampled: 2025-12-02, Continued					
Anions, Continued					
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.027**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**5.5**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**61.1**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.0055**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**18.2**	0.20	mg/L	2025-12-04	
Chromium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.00069**	0.00040	mg/L	2025-12-04	
Iron, dissolved	**0.140**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00115**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**3.81**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.0377**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00015**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**1.86**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**13.4**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**9.17**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0993**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25L0435-09) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Uranium, dissolved	**0.000069**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**74.0**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**74.0**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**1.57**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	< 20	20	mg/L	2025-12-08	
Conductivity (EC)	**162**	2.0	µS/cm	2025-12-04	
pH	**6.94**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**98**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**20.5**		°C	2025-12-04	HT2
Total Metals					
Aluminum, total	**0.0595**	0.0050	mg/L	2025-12-04	
Antimony, total	< 0.00020	0.00020	mg/L	2025-12-04	
Arsenic, total	< 0.00050	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	< 0.000010	0.000010	mg/L	2025-12-04	
Calcium, total	**16.9**	0.20	mg/L	2025-12-04	
Chromium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Cobalt, total	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, total	< 0.00040	0.00040	mg/L	2025-12-04	
Iron, total	**0.588**	0.010	mg/L	2025-12-04	
Lead, total	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00100**	0.00010	mg/L	2025-12-04	
Magnesium, total	**3.64**	0.010	mg/L	2025-12-04	
Manganese, total	**0.0382**	0.00020	mg/L	2025-12-04	
Mercury, total	< 0.000010	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00015**	0.00010	mg/L	2025-12-04	
Nickel, total	< 0.00040	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	
Potassium, total	**1.59**	0.10	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
SW4 (25L0435-09) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**12.7**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**8.05**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0903**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000083**	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	< 0.00010	0.00010	mg/L	2025-12-04	
DUP1 (25L0435-10) | Matrix: Water | Sampled: 2025-12-02					
Anions					
Chloride	**0.31**	0.10	mg/L	2025-12-04	RE2
Fluoride	< 0.10	0.10	mg/L	2025-12-04	
Nitrate (as N)	**0.072**	0.010	mg/L	2025-12-04	
Nitrite (as N)	< 0.010	0.010	mg/L	2025-12-04	
Sulfate	**2.1**	1.0	mg/L	2025-12-04	
Calculated Parameters					
Hydrogen Sulfide, total	< 0.01	0.01	mg/L	2025-12-08	CT6
Hardness, Dissolved (as CaCO3)	**51.6**	0.500	mg/L	N/A	
Dissolved Metals					
Aluminum, dissolved	**0.217**	0.0050	mg/L	2025-12-04	
Antimony, dissolved	**0.00103**	0.00020	mg/L	2025-12-04	
Arsenic, dissolved	**0.00067**	0.00050	mg/L	2025-12-04	
Barium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, dissolved	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, dissolved	**0.000068**	0.000010	mg/L	2025-12-04	
Calcium, dissolved	**16.5**	0.20	mg/L	2025-12-04	
Chromium, dissolved	**0.00146**	0.00050	mg/L	2025-12-04	
Cobalt, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Copper, dissolved	**0.0157**	0.00040	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25L0435-10) | Matrix: Water | Sampled: 2025-12-02, Continued					
Dissolved Metals, Continued					
Iron, dissolved	**0.102**	0.010	mg/L	2025-12-04	
Lead, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Lithium, dissolved	**0.00018**	0.00010	mg/L	2025-12-04	
Magnesium, dissolved	**2.50**	0.010	mg/L	2025-12-04	
Manganese, dissolved	**0.00270**	0.00020	mg/L	2025-12-04	
Mercury, dissolved	**0.000019**	0.000010	mg/L	2025-12-05	
Molybdenum, dissolved	**0.00030**	0.00010	mg/L	2025-12-04	
Nickel, dissolved	**0.00118**	0.00040	mg/L	2025-12-04	
Phosphorus, dissolved	< 0.050	0.050	mg/L	2025-12-04	
Potassium, dissolved	**2.07**	0.10	mg/L	2025-12-04	
Selenium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, dissolved	**6.1**	1.0	mg/L	2025-12-04	
Silver, dissolved	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, dissolved	**3.95**	0.10	mg/L	2025-12-04	
Strontium, dissolved	**0.0669**	0.0010	mg/L	2025-12-04	
Sulfur, dissolved	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, dissolved	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, dissolved	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, dissolved	< 0.00010	0.00010	mg/L	2025-12-04	
Tin, dissolved	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Tungsten, dissolved	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, dissolved	**0.000809**	0.000020	mg/L	2025-12-04	
Vanadium, dissolved	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, dissolved	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, dissolved	**0.00020**	0.00010	mg/L	2025-12-04	
General Parameters					
Alkalinity, Total (as CaCO3)	**72.4**	1.0	mg/L	2025-12-05	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Bicarbonate (as CaCO3)	**72.4**	1.0	mg/L	2025-12-05	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L	2025-12-05	
Ammonia, Total (as N)	< 0.050	0.050	mg/L	2025-12-08	
BOD, 5-day	< 4.0	8.0	mg/L	2025-12-09	
Carbon, Dissolved Organic	**20.7**	0.50	mg/L	2025-12-05	
Chemical Oxygen Demand	**73**	20	mg/L	2025-12-08	
Conductivity (EC)	**116**	2.0	µS/cm	2025-12-04	
pH	**6.13**	0.10	pH units	2025-12-04	HT2
Solids, Total Dissolved	**105**	10	mg/L	2025-12-04	
Sulfide, Total	< 0.020	0.020	mg/L	2025-12-05	
Temperature, at pH	**19.3**		°C	2025-12-04	HT2
Total Metals					

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Analyzed	Qualifier
DUP1 (25L0435-10) | Matrix: Water | Sampled: 2025-12-02, Continued					
Total Metals, Continued					
Aluminum, total	**0.458**	0.0050	mg/L	2025-12-04	
Antimony, total	**0.00099**	0.00020	mg/L	2025-12-04	
Arsenic, total	**0.00070**	0.00050	mg/L	2025-12-04	
Barium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Beryllium, total	< 0.00010	0.00010	mg/L	2025-12-04	
Bismuth, total	< 0.00010	0.00010	mg/L	2025-12-04	
Boron, total	< 0.0500	0.0500	mg/L	2025-12-04	
Cadmium, total	**0.000074**	0.000010	mg/L	2025-12-04	
Calcium, total	**16.5**	0.20	mg/L	2025-12-04	
Chromium, total	**0.00157**	0.00050	mg/L	2025-12-04	
Cobalt, total	**0.00014**	0.00010	mg/L	2025-12-04	
Copper, total	**0.0162**	0.00040	mg/L	2025-12-04	
Iron, total	**0.286**	0.010	mg/L	2025-12-04	
Lead, total	**0.00021**	0.00020	mg/L	2025-12-04	
Lithium, total	**0.00022**	0.00010	mg/L	2025-12-04	
Magnesium, total	**2.57**	0.010	mg/L	2025-12-04	
Manganese, total	**0.00458**	0.00020	mg/L	2025-12-04	
Mercury, total	**0.000019**	0.000010	mg/L	2025-12-05	
Molybdenum, total	**0.00036**	0.00010	mg/L	2025-12-04	
Nickel, total	**0.00166**	0.00040	mg/L	2025-12-04	
Phosphorus, total	< 0.050	0.050	mg/L	2025-12-04	
Potassium, total	**2.07**	0.10	mg/L	2025-12-04	
Selenium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Silicon, total	**6.4**	1.0	mg/L	2025-12-04	
Silver, total	< 0.000050	0.000050	mg/L	2025-12-04	
Sodium, total	**3.81**	0.10	mg/L	2025-12-04	
Strontium, total	**0.0663**	0.0010	mg/L	2025-12-04	
Sulfur, total	< 3.0	3.0	mg/L	2025-12-04	
Tellurium, total	< 0.00050	0.00050	mg/L	2025-12-04	
Thallium, total	< 0.000020	0.000020	mg/L	2025-12-04	
Thorium, total	**0.00011**	0.00010	mg/L	2025-12-04	
Tin, total	< 0.00020	0.00020	mg/L	2025-12-04	
Titanium, total	**0.0089**	0.0050	mg/L	2025-12-04	
Tungsten, total	< 0.0010	0.0010	mg/L	2025-12-04	
Uranium, total	**0.000900**	0.000020	mg/L	2025-12-04	
Vanadium, total	< 0.0050	0.0050	mg/L	2025-12-04	
Zinc, total	< 0.0040	0.0040	mg/L	2025-12-04	
Zirconium, total	**0.00026**	0.00010	mg/L	2025-12-04	

TEST RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Sample Qualifiers:

CT6	Results were based on lab temperature & lab pH.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
RA1	The Reporting Limit for this sample has been raised due to matrix interference.
RE2	Result was confirmed by re-analysis prior to reporting.

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Richmond
Ammonia, Total in Water	SM 4500-NH3 G* (2021)	Automated Colorimetry (Phenate)	✓	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Richmond
Biochemical Oxygen Demand in Water	SM 5210 B (2019)	Dissolved Oxygen Meter	✓	Richmond
Carbon, Dissolved Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chemical Oxygen Demand in Water	SM 5220 D* (2022)	Closed Reflux, Colorimetry	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Edmonton
Dissolved Metals in Water	EPA 200.8 / EPA 6020B	0.45 µm Filtration / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	✓	N/A
Hydrogen Sulfide, total in Water	SM 4500-S2 H (2021)	Calculation		N/A
Mercury, dissolved in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Edmonton
Solids, Total Dissolved in Water	SM 2540 C* (2020)	Gravimetry (Dried at 103-105C)		Richmond
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Glossary of Terms:

RL	Reporting Limit (default)
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
°C	Degrees Celcius
mg/L	Milligrams per litre
pH units	pH < 7 = acidic, ph > 7 = basic
µS/cm	Microsiemens per centimetre
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

General Comments:

The results in this report apply to samples received by CARO and analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety and must not be modified. CARO is not responsible for losses or damages resulting directly or indirectly from errors or omissions in the conduct of the testing. Any liability is limited to the cost of analysis. CARO will dispose of all samples within 30 days of sample receipt, unless otherwise agreed.

Results in **Bold** indicate values that are above CARO's method reporting limits. Results in **red** indicate values above the regulatory limits where these have been included. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: {@Email}

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk)**: A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup)**: An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS)**: A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS)**: A second aliquot of sample is fortified with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM)**: A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5L2011										
Blank (B5L2011-BLK1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Chloride	< 0.10	0.10	mg/L							
Fluoride	< 0.10	0.10	mg/L							
Nitrate (as N)	< 0.010	0.010	mg/L							
Nitrite (as N)	< 0.010	0.010	mg/L							
Sulfate	< 1.0	1.0	mg/L							
Blank (B5L2011-BLK2)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Chloride	< 0.10	0.10	mg/L							
Fluoride	< 0.10	0.10	mg/L							
Nitrate (as N)	< 0.010	0.010	mg/L							
Nitrite (as N)	< 0.010	0.010	mg/L							
Sulfate	< 1.0	1.0	mg/L							
LCS (B5L2011-BS1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Chloride	2.68	0.10	mg/L	3.00		89	85-115			
Fluoride	1.70	0.10	mg/L	2.00		85	85-115			
Nitrate (as N)	2.72	0.010	mg/L	3.00		91	85-115			
Nitrite (as N)	2.82	0.010	mg/L	3.00		94	85-115			
Sulfate	15.1	1.0	mg/L	15.0		101	85-115			
LCS (B5L2011-BS2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Chloride	2.78	0.10	mg/L	3.00		93	85-115			
Fluoride	1.70	0.10	mg/L	2.00		85	85-115			
Nitrate (as N)	2.81	0.010	mg/L	3.00		94	85-115			
Nitrite (as N)	2.86	0.010	mg/L	3.00		95	85-115			
Sulfate	15.1	1.0	mg/L	15.0		101	85-115			
Duplicate (B5L2011-DUP2)		**Source: 25L0435-01**		Prepared: 2025-12-04, Analyzed: 2025-12-04						
Chloride	6.22	0.10	mg/L		6.83			9	20	
Nitrate (as N)	0.168	0.010	mg/L		0.166			1	20	
Nitrite (as N)	< 0.010	0.010	mg/L		< 0.010				20	
Sulfate	5.3	1.0	mg/L		5.7			8	20	
Matrix Spike (B5L2011-MS2)		**Source: 25L0435-01**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Chloride	9.24	0.10	mg/L	3.00	6.83	80	75-125			
Nitrate (as N)	2.87	0.010	mg/L	3.00	0.166	90	75-125			
Nitrite (as N)	2.74	0.010	mg/L	3.00	< 0.010	91	75-125			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Anions, Batch B5L2011, Continued										
Matrix Spike (B5L2011-MS2), Continued	**Source: 25L0435-01**			Prepared: 2025-12-05, Analyzed: 2025-12-05						
Sulfate	20.3	1.0	mg/L	15.0	5.7	97	75-125			
Dissolved Metals, Batch B5L2079										
Blank (B5L2079-BLK1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Aluminum, dissolved	< 0.0050	0.0050	mg/L							
Antimony, dissolved	< 0.00020	0.00020	mg/L							
Arsenic, dissolved	< 0.00050	0.00050	mg/L							
Barium, dissolved	< 0.0050	0.0050	mg/L							
Beryllium, dissolved	< 0.00010	0.00010	mg/L							
Bismuth, dissolved	< 0.00010	0.00010	mg/L							
Boron, dissolved	< 0.0500	0.0500	mg/L							
Cadmium, dissolved	< 0.000010	0.000010	mg/L							
Calcium, dissolved	< 0.20	0.20	mg/L							
Chromium, dissolved	< 0.00050	0.00050	mg/L							
Cobalt, dissolved	< 0.00010	0.00010	mg/L							
Copper, dissolved	< 0.00040	0.00040	mg/L							
Iron, dissolved	< 0.010	0.010	mg/L							
Lead, dissolved	< 0.00020	0.00020	mg/L							
Lithium, dissolved	< 0.00010	0.00010	mg/L							
Magnesium, dissolved	< 0.010	0.010	mg/L							
Manganese, dissolved	< 0.00020	0.00020	mg/L							
Molybdenum, dissolved	< 0.00010	0.00010	mg/L							
Nickel, dissolved	< 0.00040	0.00040	mg/L							
Phosphorus, dissolved	< 0.050	0.050	mg/L							
Potassium, dissolved	< 0.10	0.10	mg/L							
Selenium, dissolved	< 0.00050	0.00050	mg/L							
Silicon, dissolved	< 1.0	1.0	mg/L							
Silver, dissolved	< 0.000050	0.000050	mg/L							
Sodium, dissolved	< 0.10	0.10	mg/L							
Strontium, dissolved	< 0.0010	0.0010	mg/L							
Sulfur, dissolved	< 3.0	3.0	mg/L							
Tellurium, dissolved	< 0.00050	0.00050	mg/L							
Thallium, dissolved	< 0.000020	0.000020	mg/L							
Thorium, dissolved	< 0.00010	0.00010	mg/L							
Tin, dissolved	< 0.00020	0.00020	mg/L							
Titanium, dissolved	< 0.0050	0.0050	mg/L							
Tungsten, dissolved	< 0.0010	0.0010	mg/L							
Uranium, dissolved	< 0.000020	0.000020	mg/L							
Vanadium, dissolved	< 0.0050	0.0050	mg/L							
Zinc, dissolved	< 0.0040	0.0040	mg/L							
Zirconium, dissolved	< 0.00010	0.00010	mg/L							
LCS (B5L2079-BS1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Aluminum, dissolved	3.84	0.0050	mg/L	4.00		96	80-120			
Antimony, dissolved	0.0397	0.00020	mg/L	0.0400		99	80-120			
Arsenic, dissolved	0.402	0.00050	mg/L	0.400		100	80-120			
Barium, dissolved	0.0407	0.0050	mg/L	0.0400		102	80-120			
Beryllium, dissolved	0.0391	0.00010	mg/L	0.0400		98	80-120			
Bismuth, dissolved	0.0399	0.00010	mg/L	0.0400		100	80-120			
Boron, dissolved	0.394	0.0500	mg/L	0.400		99	80-120			
Cadmium, dissolved	0.0403	0.000010	mg/L	0.0400		101	80-120			
Calcium, dissolved	4.19	0.20	mg/L	4.00		105	80-120			
Chromium, dissolved	0.0404	0.00050	mg/L	0.0400		101	80-120			
Cobalt, dissolved	0.0404	0.00010	mg/L	0.0400		101	80-120			
Copper, dissolved	0.0410	0.00040	mg/L	0.0400		102	80-120			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO Tetra Tech EBA Inc. (Vancouver) **WORK ORDER** 25L0435
PROJECT Marine Avenue Site **REPORTED** 2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5L2079, Continued										
LCS (B5L2079-BS1), Continued				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Iron, dissolved	3.92	0.010	mg/L	4.00		98	80-120			
Lead, dissolved	0.0408	0.00020	mg/L	0.0400		102	80-120			
Lithium, dissolved	0.0394	0.00010	mg/L	0.0400		98	80-120			
Magnesium, dissolved	3.80	0.010	mg/L	4.00		95	80-120			
Manganese, dissolved	0.0406	0.00020	mg/L	0.0400		102	80-120			
Molybdenum, dissolved	0.0400	0.00010	mg/L	0.0400		100	80-120			
Nickel, dissolved	0.0415	0.00040	mg/L	0.0400		104	80-120			
Phosphorus, dissolved	4.00	0.050	mg/L	4.00		100	80-120			
Potassium, dissolved	3.98	0.10	mg/L	4.00		100	80-120			
Selenium, dissolved	0.411	0.00050	mg/L	0.400		103	80-120			
Silicon, dissolved	4.0	1.0	mg/L	4.00		100	80-120			
Silver, dissolved	0.0405	0.000050	mg/L	0.0400		101	80-120			
Sodium, dissolved	3.85	0.10	mg/L	4.00		96	80-120			
Strontium, dissolved	0.0403	0.0010	mg/L	0.0400		101	80-120			
Sulfur, dissolved	41.1	3.0	mg/L	40.0		103	80-120			
Tellurium, dissolved	0.0391	0.00050	mg/L	0.0400		98	80-120			
Thallium, dissolved	0.0411	0.000020	mg/L	0.0400		103	80-120			
Thorium, dissolved	0.0400	0.00010	mg/L	0.0400		100	80-120			
Tin, dissolved	0.0401	0.00020	mg/L	0.0400		100	80-120			
Titanium, dissolved	0.0398	0.0050	mg/L	0.0400		99	80-120			
Tungsten, dissolved	0.0408	0.0010	mg/L	0.0400		102	80-120			
Uranium, dissolved	0.0407	0.000020	mg/L	0.0400		102	80-120			
Vanadium, dissolved	0.0404	0.0050	mg/L	0.0400		101	80-120			
Zinc, dissolved	0.403	0.0040	mg/L	0.400		101	80-120			
Zirconium, dissolved	0.0406	0.00010	mg/L	0.0400		102	80-120			
Matrix Spike (B5L2079-MS1)		**Source: 25L0435-03**		Prepared: 2025-12-04, Analyzed: 2025-12-04						
Aluminum, dissolved	4.03	0.0050	mg/L	4.00	0.0116	100	70-130			
Antimony, dissolved	0.0421	0.00020	mg/L	0.0400	< 0.00020	105	70-130			
Arsenic, dissolved	0.409	0.00050	mg/L	0.400	< 0.00050	102	70-130			
Barium, dissolved	0.0532	0.0050	mg/L	0.0400	0.0113	105	70-130			
Beryllium, dissolved	0.0411	0.00010	mg/L	0.0400	< 0.00010	103	70-130			
Bismuth, dissolved	0.0314	0.00010	mg/L	0.0400	< 0.00010	79	70-130			
Boron, dissolved	0.439	0.0500	mg/L	0.400	0.0609	95	70-130			
Cadmium, dissolved	0.0412	0.000010	mg/L	0.0400	0.000048	103	70-130			
Calcium, dissolved	37.2	0.20	mg/L	4.00	35.5	42	70-130			MS2
Chromium, dissolved	0.0406	0.00050	mg/L	0.0400	< 0.00050	101	70-130			
Cobalt, dissolved	0.0390	0.00010	mg/L	0.0400	< 0.00010	97	70-130			
Copper, dissolved	0.0403	0.00040	mg/L	0.0400	0.00218	95	70-130			
Iron, dissolved	3.93	0.010	mg/L	4.00	< 0.010	98	70-130			
Lead, dissolved	0.0417	0.00020	mg/L	0.0400	< 0.00020	104	70-130			
Lithium, dissolved	0.0433	0.00010	mg/L	0.0400	0.00189	104	70-130			
Magnesium, dissolved	9.69	0.010	mg/L	4.00	5.95	94	70-130			
Manganese, dissolved	0.0414	0.00020	mg/L	0.0400	0.00159	100	70-130			
Molybdenum, dissolved	0.0407	0.00010	mg/L	0.0400	0.00013	102	70-130			
Nickel, dissolved	0.0392	0.00040	mg/L	0.0400	< 0.00040	97	70-130			
Phosphorus, dissolved	4.17	0.050	mg/L	4.00	< 0.050	104	70-130			
Potassium, dissolved	7.70	0.10	mg/L	4.00	3.82	97	70-130			
Selenium, dissolved	0.420	0.00050	mg/L	0.400	< 0.00050	105	70-130			
Silicon, dissolved	16.5	1.0	mg/L	4.00	13.1	83	70-130			
Silver, dissolved	0.0347	0.000050	mg/L	0.0400	< 0.000050	87	70-130			
Sodium, dissolved	26.0	0.10	mg/L	4.00	23.9	53	70-130			MS2
Strontium, dissolved	0.261	0.0010	mg/L	0.0400	0.230	78	70-130			
Sulfur, dissolved	47.7	3.0	mg/L	40.0	7.9	99	70-130			
Tellurium, dissolved	0.0424	0.00050	mg/L	0.0400	< 0.00050	106	70-130			
Thallium, dissolved	0.0427	0.000020	mg/L	0.0400	< 0.000020	107	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5L2079, Continued										
Matrix Spike (B5L2079-MS1), Continued		**Source: 25L0435-03**		Prepared: 2025-12-04, Analyzed: 2025-12-04						
Thorium, dissolved	0.0424	0.00010	mg/L	0.0400	< 0.00010	106	70-130			
Tin, dissolved	0.0423	0.00020	mg/L	0.0400	< 0.00020	106	70-130			
Titanium, dissolved	0.0402	0.0050	mg/L	0.0400	< 0.0050	100	70-130			
Tungsten, dissolved	0.0415	0.0010	mg/L	0.0400	< 0.0010	104	70-130			
Uranium, dissolved	0.0432	0.000020	mg/L	0.0400	0.000912	106	70-130			
Vanadium, dissolved	0.0408	0.0050	mg/L	0.0400	< 0.0050	101	70-130			
Zinc, dissolved	0.416	0.0040	mg/L	0.400	0.0178	100	70-130			
Zirconium, dissolved	0.0428	0.00010	mg/L	0.0400	< 0.00010	107	70-130			
Dissolved Metals, Batch B5L2201										
Blank (B5L2201-BLK1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2201-BLK2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2201-BLK3)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2201-BLK4)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
LCS (B5L2201-BS1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	0.00267	0.000010	mg/L	0.00250		107	80-120			
LCS (B5L2201-BS2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	0.00263	0.000010	mg/L	0.00250		105	80-120			
LCS (B5L2201-BS3)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	0.00257	0.000010	mg/L	0.00250		103	80-120			
LCS (B5L2201-BS4)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	0.00258	0.000010	mg/L	0.00250		103	80-120			
Duplicate (B5L2201-DUP2)		**Source: 25L0435-06**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	< 0.000010	0.000010	mg/L		< 0.000010				20	
Duplicate (B5L2201-DUP3)		**Source: 25L0435-07**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	< 0.000010	0.000010	mg/L		< 0.000010				20	
Matrix Spike (B5L2201-MS1)		**Source: 25L0435-09**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	0.00264	0.000010	mg/L	0.00250	< 0.000010	106	70-130			
Matrix Spike (B5L2201-MS2)		**Source: 25L0435-08**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, dissolved	0.00278	0.000010	mg/L	0.00250	< 0.000010	111	70-130			
Dissolved Metals, Batch B5L2514										
Blank (B5L2514-BLK1)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK2)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK3)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	< 0.000010	0.000010	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Dissolved Metals, Batch B5L2514, Continued										
Blank (B5L2514-BLK4)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK5)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK6)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	< 0.000010	0.000010	mg/L							
LCS (B5L2514-BS1)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	0.00251	0.000010	mg/L	0.00250		100	80-120			
LCS (B5L2514-BS2)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	0.00253	0.000010	mg/L	0.00250		101	80-120			
LCS (B5L2514-BS3)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	0.00248	0.000010	mg/L	0.00250		99	80-120			
LCS (B5L2514-BS4)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	0.00259	0.000010	mg/L	0.00250		103	80-120			
LCS (B5L2514-BS5)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	0.00256	0.000010	mg/L	0.00250		103	80-120			
LCS (B5L2514-BS6)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, dissolved	0.00252	0.000010	mg/L	0.00250		101	80-120			
General Parameters, Batch B5L2013										
Blank (B5L2013-BLK1)				Prepared: 2025-12-04, Analyzed: 2025-12-09						
BOD, 5-day	< 2.0	2.0	mg/L							
LCS (B5L2013-BS1)				Prepared: 2025-12-04, Analyzed: 2025-12-09						
BOD, 5-day	182	80.0	mg/L	198		92	85-115			
Reference (B5L2013-SRM1)				Prepared: 2025-12-04, Analyzed: 2025-12-09						
BOD, 5-day	546	133	mg/L	500		109	85-115			
General Parameters, Batch B5L2027										
LCS (B5L2027-BS1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Conductivity (EC)	1010	2.0	µS/cm	1000		101	95-105			
Duplicate (B5L2027-DUP1)			**Source: 25L0435-09**	Prepared: 2025-12-04, Analyzed: 2025-12-04						
Conductivity (EC)	167	2.0	µS/cm		162			3	5	
pH	6.95	0.10	pH units		6.94			< 1	1.5	
Reference (B5L2027-SRM1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
pH	7.07	0.10	pH units	7.00		101	98-102			
General Parameters, Batch B5L2036										
Blank (B5L2036-BLK1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Solids, Total Dissolved	< 10	10	mg/L							
LCS (B5L2036-BS1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Solids, Total Dissolved	212	10	mg/L	202		105	85-115			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5L2036, Continued										
LCS (B5L2036-BS2)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Solids, Total Dissolved	52	10	mg/L	51.0		103	85-115			
Duplicate (B5L2036-DUP1)			**Source: 25L0435-01**	Prepared: 2025-12-04, Analyzed: 2025-12-04						
Solids, Total Dissolved	88	10	mg/L		78			12	20	
General Parameters, Batch B5L2080										
Blank (B5L2080-BLK1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
Blank (B5L2080-BLK2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Carbon, Dissolved Organic	< 0.50	0.50	mg/L							
LCS (B5L2080-BS1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Carbon, Dissolved Organic	10.0	0.50	mg/L	10.0		100	78-116			
LCS (B5L2080-BS2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Carbon, Dissolved Organic	10.1	0.50	mg/L	10.0		101	78-116			
Duplicate (B5L2080-DUP2)			**Source: 25L0435-01**	Prepared: 2025-12-04, Analyzed: 2025-12-05						
Carbon, Dissolved Organic	0.51	0.50	mg/L		< 0.50				15	
Matrix Spike (B5L2080-MS2)			**Source: 25L0435-01**	Prepared: 2025-12-04, Analyzed: 2025-12-05						
Carbon, Dissolved Organic	9.92	0.50	mg/L	10.0	< 0.50	95	70-130			
General Parameters, Batch B5L2159										
Blank (B5L2159-BLK1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Sulfide, Total	< 0.020	0.020	mg/L							
LCS (B5L2159-BS1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Sulfide, Total	0.449	0.020	mg/L	0.475		94	80-120			
General Parameters, Batch B5L2191										
Blank (B5L2191-BLK1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Alkalinity, Total (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L							
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L							
LCS (B5L2191-BS1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Alkalinity, Total (as CaCO3)	120	1.0	mg/L	100		120	80-120			
Duplicate (B5L2191-DUP1)			**Source: 25L0435-06**	Prepared: 2025-12-05, Analyzed: 2025-12-05						
Alkalinity, Total (as CaCO3)	34.8	1.0	mg/L		36.4			4	20	
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	1.0	mg/L		< 1.0				20	
Alkalinity, Bicarbonate (as CaCO3)	34.8	1.0	mg/L		36.4			4	20	
Alkalinity, Carbonate (as CaCO3)	< 1.0	1.0	mg/L		< 1.0				20	
Alkalinity, Hydroxide (as CaCO3)	< 1.0	1.0	mg/L		< 1.0				20	
General Parameters, Batch B5L2387										
Blank (B5L2387-BLK1)				Prepared: 2025-12-08, Analyzed: 2025-12-08						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B5L2387, Continued										
Blank (B5L2387-BLK2)				Prepared: 2025-12-08, Analyzed: 2025-12-08						
Ammonia, Total (as N)	< 0.050	0.050	mg/L							
LCS (B5L2387-BS1)				Prepared: 2025-12-08, Analyzed: 2025-12-08						
Ammonia, Total (as N)	0.902	0.050	mg/L	1.00		90	85-115			
LCS (B5L2387-BS2)				Prepared: 2025-12-08, Analyzed: 2025-12-08						
Ammonia, Total (as N)	0.914	0.050	mg/L	1.00		91	85-115			
General Parameters, Batch B5L2390										
Blank (B5L2390-BLK1)				Prepared: 2025-12-08, Analyzed: 2025-12-08						
Chemical Oxygen Demand	< 20	20	mg/L							
LCS (B5L2390-BS1)				Prepared: 2025-12-08, Analyzed: 2025-12-08						
Chemical Oxygen Demand	522	20	mg/L	500		104	89-115			
Duplicate (B5L2390-DUP1)		**Source: 25L0435-03**		Prepared: 2025-12-08, Analyzed: 2025-12-08						
Chemical Oxygen Demand	43	20	mg/L		40				14	
Matrix Spike (B5L2390-MS1)		**Source: 25L0435-03**		Prepared: 2025-12-08, Analyzed: 2025-12-08						
Chemical Oxygen Demand	126	20	mg/L	100	40	86	75-125			
General Parameters, Batch B5L2472										
Blank (B5L2472-BLK1)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Chemical Oxygen Demand	< 20	20	mg/L							
LCS (B5L2472-BS1)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Chemical Oxygen Demand	492	20	mg/L	500		98	89-115			
Total Metals, Batch B5L2003										
Blank (B5L2003-BLK1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Aluminum, total	< 0.0050	0.0050	mg/L							
Antimony, total	< 0.00020	0.00020	mg/L							
Arsenic, total	< 0.00050	0.00050	mg/L							
Barium, total	< 0.0050	0.0050	mg/L							
Beryllium, total	< 0.00010	0.00010	mg/L							
Bismuth, total	< 0.00010	0.00010	mg/L							
Boron, total	< 0.0500	0.0500	mg/L							
Cadmium, total	< 0.000010	0.000010	mg/L							
Calcium, total	< 0.20	0.20	mg/L							
Chromium, total	< 0.00050	0.00050	mg/L							
Cobalt, total	< 0.00010	0.00010	mg/L							
Copper, total	< 0.00040	0.00040	mg/L							
Iron, total	< 0.010	0.010	mg/L							
Lead, total	< 0.00020	0.00020	mg/L							
Lithium, total	< 0.00010	0.00010	mg/L							
Magnesium, total	< 0.010	0.010	mg/L							
Manganese, total	< 0.00020	0.00020	mg/L							
Molybdenum, total	< 0.00010	0.00010	mg/L							
Nickel, total	< 0.00040	0.00040	mg/L							
Phosphorus, total	< 0.050	0.050	mg/L							
Potassium, total	< 0.10	0.10	mg/L							
Selenium, total	< 0.00050	0.00050	mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5L2003, Continued										
Blank (B5L2003-BLK1), Continued				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Silicon, total	< 1.0	1.0	mg/L							
Silver, total	< 0.000050	0.000050	mg/L							
Sodium, total	< 0.10	0.10	mg/L							
Strontium, total	< 0.0010	0.0010	mg/L							
Sulfur, total	< 3.0	3.0	mg/L							
Tellurium, total	< 0.00050	0.00050	mg/L							
Thallium, total	< 0.000020	0.000020	mg/L							
Thorium, total	< 0.00010	0.00010	mg/L							
Tin, total	< 0.00020	0.00020	mg/L							
Titanium, total	< 0.0050	0.0050	mg/L							
Tungsten, total	< 0.0010	0.0010	mg/L							
Uranium, total	< 0.000020	0.000020	mg/L							
Vanadium, total	< 0.0050	0.0050	mg/L							
Zinc, total	< 0.0040	0.0040	mg/L							
Zirconium, total	< 0.00010	0.00010	mg/L							
LCS (B5L2003-BS1)				Prepared: 2025-12-04, Analyzed: 2025-12-04						
Aluminum, total	4.22	0.0050	mg/L	4.00		106	80-120			
Antimony, total	0.0403	0.00020	mg/L	0.0400		101	80-120			
Arsenic, total	0.402	0.00050	mg/L	0.400		100	80-120			
Barium, total	0.0411	0.0050	mg/L	0.0400		103	80-120			
Beryllium, total	0.0389	0.00010	mg/L	0.0400		97	80-120			
Bismuth, total	0.0398	0.00010	mg/L	0.0400		99	80-120			
Boron, total	0.407	0.0500	mg/L	0.400		102	80-120			
Cadmium, total	0.0397	0.000010	mg/L	0.0400		99	80-120			
Calcium, total	4.05	0.20	mg/L	4.00		101	80-120			
Chromium, total	0.0407	0.00050	mg/L	0.0400		102	80-120			
Cobalt, total	0.0406	0.00010	mg/L	0.0400		101	80-120			
Copper, total	0.0400	0.00040	mg/L	0.0400		100	80-120			
Iron, total	4.10	0.010	mg/L	4.00		103	80-120			
Lead, total	0.0404	0.00020	mg/L	0.0400		101	80-120			
Lithium, total	0.0391	0.00010	mg/L	0.0400		98	80-120			
Magnesium, total	4.21	0.010	mg/L	4.00		105	80-120			
Manganese, total	0.0406	0.00020	mg/L	0.0400		102	80-120			
Molybdenum, total	0.0402	0.00010	mg/L	0.0400		101	80-120			
Nickel, total	0.0399	0.00040	mg/L	0.0400		100	80-120			
Phosphorus, total	3.99	0.050	mg/L	4.00		100	80-120			
Potassium, total	3.97	0.10	mg/L	4.00		99	80-120			
Selenium, total	0.392	0.00050	mg/L	0.400		98	80-120			
Silicon, total	4.1	1.0	mg/L	4.00		102	80-120			
Silver, total	0.0395	0.000050	mg/L	0.0400		99	80-120			
Sodium, total	4.00	0.10	mg/L	4.00		100	80-120			
Strontium, total	0.0402	0.0010	mg/L	0.0400		100	80-120			
Sulfur, total	40.5	3.0	mg/L	40.0		101	80-120			
Tellurium, total	0.0381	0.00050	mg/L	0.0400		95	80-120			
Thallium, total	0.0421	0.000020	mg/L	0.0400		105	80-120			
Thorium, total	0.0418	0.00010	mg/L	0.0400		105	80-120			
Tin, total	0.0407	0.00020	mg/L	0.0400		102	80-120			
Titanium, total	0.0411	0.0050	mg/L	0.0400		103	80-120			
Tungsten, total	0.0403	0.0010	mg/L	0.0400		101	80-120			
Uranium, total	0.0420	0.000020	mg/L	0.0400		105	80-120			
Vanadium, total	0.0397	0.0050	mg/L	0.0400		99	80-120			
Zinc, total	0.396	0.0040	mg/L	0.400		99	80-120			
Zirconium, total	0.0399	0.00010	mg/L	0.0400		100	80-120			
Total Metals, Batch B5L2201										

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5L2201, Continued										
Blank (B5L2201-BLK1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2201-BLK2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2201-BLK3)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2201-BLK4)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	< 0.000010	0.000010	mg/L							
LCS (B5L2201-BS1)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	0.00267	0.000010	mg/L	0.00250		107	80-120			
LCS (B5L2201-BS2)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	0.00263	0.000010	mg/L	0.00250		105	80-120			
LCS (B5L2201-BS3)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	0.00257	0.000010	mg/L	0.00250		103	80-120			
LCS (B5L2201-BS4)				Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	0.00258	0.000010	mg/L	0.00250		103	80-120			
Duplicate (B5L2201-DUP4)		**Source: 25L0435-02**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	< 0.000010	0.000010	mg/L		< 0.000010				20	
Matrix Spike (B5L2201-MS4)		**Source: 25L0435-06**		Prepared: 2025-12-05, Analyzed: 2025-12-05						
Mercury, total	0.00271	0.000010	mg/L	0.00250	< 0.000010	108	70-130			
Total Metals, Batch B5L2514										
Blank (B5L2514-BLK1)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK2)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK3)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK4)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK5)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	< 0.000010	0.000010	mg/L							
Blank (B5L2514-BLK6)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	< 0.000010	0.000010	mg/L							
LCS (B5L2514-BS1)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.00251	0.000010	mg/L	0.00250		100	80-120			
LCS (B5L2514-BS2)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.00253	0.000010	mg/L	0.00250		101	80-120			
LCS (B5L2514-BS3)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.00248	0.000010	mg/L	0.00250		99	80-120			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO	Tetra Tech EBA Inc. (Vancouver)	**WORK ORDER**	25L0435
PROJECT	Marine Avenue Site	**REPORTED**	2025-12-10 10:49

Analyte	Result	RL	Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B5L2514, Continued										
LCS (B5L2514-BS4)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.00259	0.000010	mg/L	0.00250		103	80-120			
LCS (B5L2514-BS5)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.00256	0.000010	mg/L	0.00250		103	80-120			
LCS (B5L2514-BS6)				Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.00252	0.000010	mg/L	0.00250		101	80-120			
Duplicate (B5L2514-DUP1)		**Source: 25L0435-05**		Prepared: 2025-12-09, Analyzed: 2025-12-09						
Mercury, total	0.000017	0.000010	mg/L		0.000016				20	

QC Qualifiers:

MS2 The native sample concentration is greater than the spike concentration hence the matrix spike limits do not apply.

TEXADA TRANSFER

CARO ANALYTICAL SERVICES
Caring About Results, Obviously.

CARO.
#110-401
#102-367
17225 10
#108-447

25L0435

CHAIN OF CUSTODY RECORD

CARO BC COC, Rev 2019-01

By engaging our services, you are agreeing to CARO's Standard Terms and Conditions outlined here: https://www.caro.ca/terms-conditions

COC# _____ PAGE OF

RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:
	TIME:	MK	TIME: 10:56

TURNAROUND TIME REQUESTED: Routine: (5-7 Days) ☑ Rush: 1 Day* ☐ 2 Day* ☐ 3 Day* ☐ Other* _____
*Contact Lab To Confirm. Surcharge May Apply

REGULATORY APPLICATION: Show on Report ☐
Canadian Drinking Water Quality ☐ BC WQG ☐ BC HWR ☐
BC CSR Soil: WL ☐ AL ☐ PL ☐ RL-LD ☐ RL-HD ☐ CL ☐ IL ☐
BC CSR Water: AW ☑ IW ☐ LW ☐ DW ☑
CCME: _____ Other: _____

REPORT TO:
COMPANY: Tetra Tech Canada Inc.
ADDRESS: Suite 1000-885 Dunsmuir Street
Vancouver, BC V8G 0A7
CONTACT: Emily Lai
TEL/FAX: 236-984-3851
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
DATA FORMAT: EXCEL ☑ WATERTRAX ☐ ESdat ☑ EQuIS ☐ BC EMS ☐ OTHER* ☐
EMAIL 1: emily.lai@tetratech.com
EMAIL 2: mike.gallo@tetratech.com
EMAIL 3: lauren.quan@tetratech.com

INVOICE TO: SAME AS REPORT TO ☐
COMPANY: Tetra Tech Canada Inc.
ADDRESS: 14940 123 Ave NW
Edmonton AB T5V 1B4
CONTACT:
TEL/FAX:
DELIVERY METHOD: EMAIL ☑ ONLINE ☐ OTHER* ☐
EMAIL 1: Accounts.Payable@tetratech.com
EMAIL 2: emily.lai@tetratech.com
EMAIL 3:
PO #: 704-SWM.SWOP03663-14

PROJECT NUMBER / INFO: Marine Avenue Site

A: Biohazard B: Cyanide C: PCBs D: Asbestos E: Heavy Metals F: Flammable G: Strong Odour H: High Contamination I: Other (please specify*)

** If you would like to sign up for ClientConnect and/or EnviroChain, CARO's online service offerings, please check here: ☐

SAMPLED BY: Garrett Huber

CLIENT SAMPLE ID:	MATRIX: DRINKING WATER	OTHER WATER	SOIL	OTHER	CONTAINER QTY	SAMPLING: DATE YYYY-MM-DD	TIME HH:MM	COMMENTS: CHLORINATED	FILTERED	PRESERVED	(e.g. flow/volume media ID/notes)
MW13-01		X				Dec 2	13:12				
MW13-02		X				"	11:20				
MW13-03		X				"	11:52				
MW19-04		X				"	9:07				
MW24-05		X				"	10:40				
SW1		X									
SW2		X									
SW3		X									
SW4		X									
DUP1		X									

ANALYSES REQUESTED:

BTEX	VPH	PHC F1	VOC	VPH	PHC F2-F4	EPH	L/HEPH	PAH	PHENOLS Chlorinated	Non-Chlor.	PCB	GLYCOLS	HAA	THM	PESTICIDES	ACID HERBICIDES	METALS - WATER TOTAL	Hg	METALS - WATER DISSOLVED	Hg	METALS - SOIL (SALM)	inc. pH	pH	EC	ALK	ANIONS	TSS	VSS	TDS	BOD	COD	TOG	MOG	TN	NH3	TKN	FECAL COLIFORMS	HPC	TOTAL COLIFORMS	E. coli	ASBESTOS	Essential Drinking Water Package	NH3,Cl,SO4,F,NO3,NO2	Sulphide (as H2S)	Dissolved Organic Carbon			HOLD	POSSIBLE SAMPLE HAZARD CODE(S)
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☑	☐	☐	☐	☑	☐	☑	☐	☑	☐	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☑	☑	☐	☐	☐	☐

SHIPPING INSTRUCTIONS: Return Cooler(s) ☐
Supplies Needed:

SAMPLE RETENTION:
30 Days (default) ☐
60 Days ☐ 90 Days ☐
Other (surcharges will apply): _____

*** OTHER INSTRUCTIONS:**

If you would like to talk to a real live Scientist about your project requirements, please check here: ☐

SAMPLE RECEIPT CONDITION:
COOLER 1 (°C): 4.4 ICE: Y ☐ N ☐
COOLER 2 (°C): _____ ICE: Y ☐ N ☐
COOLER 3 (°C): _____ ICE: Y ☐ N ☐
CUSTODY SEALS INTACT: NA ☐ Y ☐ N ☐