

## TECHNICAL MEMORANDUM

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**To:** Ian McAllister, Ashleigh Crompton, Mike Champion,  
Mark Zan and Ryan Schucroft (Woodfibre LNG) **Date:** 30 Jan 2026

**From:** Holly Pelletier, Cheng Kuang and Patrick Mueller (Lorax) **Project #:** A633-9

**Subject:** PE-111578 Weekly Discharge and Compliance Report #98 for January 18 - 24

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Waste Discharge Authorization (WDA) Effluent Permit PE-111578 was issued by the British Columbia Energy Regulator (BCER) to Woodfibre LNG on February 9, 2024. The associated WDA discharge and compliance monitoring program is conducted by on-site Environmental Monitors (Roe Environmental) that are sub-contracted to the civil works contractor (LB LNG). Analytical samples are submitted by Roe Environmental to ALS Environmental in Burnaby, BC, for testing. Lorax Environmental Services Ltd. (Lorax) provides water quality database management and WDA compliance reporting services to Woodfibre LNG.

This technical memorandum (Report #98) was prepared by Lorax and summarizes WDA monitoring conducted for the period of January 18 - 24. Monitoring data and pending results from prior monitoring periods available at the time of reporting are tabulated and included as appendices to this memorandum. Report #98 has been prepared to meet the requirements specified in Condition 4.2 of PE-111578:

“The Permittee shall summarize the results of the discharge and compliance monitoring program in a report that shall be submitted to the BCER weekly over the term of this permit. Reports must include suitable tabulated data. The table must include any applicable regulatory limits/guidelines e.g. permit limits, BC Water Quality Guidelines etc. Any exceedances of respective regulatory limits/guidelines must be clearly highlighted. Any missed sampling events/missing data must be identified with an explanation provided. Reporting frequency may be reduced upon a history of compliance and by written confirmation from the BCER. These reports shall be submitted to Waste.Management@bc-er.ca. A copy of the reports shall be provided to each First Nation consulted with regarding this subject permit, and also made publicly available on the Woodfibre LNG Environmental Reporting webpage.”

Site layout and water management figures and site images are included in Appendix A. Monitoring results are tabulated in Appendix B through Appendix G for contact water, treated water and receiving environment samples.

## 1. Current Conditions

### 1.1 Water Management Infrastructure

The Construction Phase of the Woodfibre LNG Export Facility commenced in October 2023. Shoring works along the foreshore areas were initiated in December 2023, and construction of water management infrastructure commenced in early 2024. Land-based construction occurs within two water management areas east and west of Mill Creek, referred to as the east and west catchments, respectively. Non-contact water is intercepted and diverted around the construction areas to Howe Sound and Mill Creek. Stormwater runoff collected within the east and west catchment areas (7.12 and 5.92 ha, respectively) is managed as site contact water and is conveyed to the East Wastewater Treatment Plant (WWTP) for treatment, or to the East and West Sedimentation Ponds for settling of suspended particulate prior to discharge. Intermittent discharge to Howe Sound from the East and West Sedimentation Ponds commenced April and October 2024, respectively.

Non-contact water from the slopes above and outside the Woodfibre LNG construction area is intercepted by diversion ditches and conveyed to Howe Sound or Mill Creek. Diversion ditches for the west catchment convey water to Mill Creek at station OUT-06, or to Howe Sound at station OUT-02 (Appendix A, Figure 1). During heavy precipitation, non-contact water is also conveyed to Howe Sound via station OUT-01. East of Mill Creek, non-contact water is intercepted and diverted around the east catchment along pre-existing road ditches that flow to East Creek or Mill Creek and through Outfall 13 (OUT-13). The diversion ditch connected to Outfall 11 (OUT-11) is not yet constructed; therefore, Outfall 11 is not in use. The lower reach of East Creek discharges to Howe Sound through Outfall 12 (OUT-12).

The contact water conveyance ditches described in PE- 111578 were designed to transport non-contaminated contact water (*i.e.*, stormwater) to the East and West Sedimentation Ponds and will be constructed following completion of site preparation activities (*e.g.*, site grading, bedrock excavation) along the ditch lines. Until the ditches are operational, contact waters within the catchments are managed to remain on site using a system of berms, sumps, temporary ditches and baker tanks for intermediate storage and are then directed to the East WWTP for treatment, or the East and West Sedimentation Ponds prior to re-use or discharge.

The East and West WWTPs were commissioned to treat contaminated contact water in April and August 2024, respectively. The installed treatment capacities are 1,080 m<sup>3</sup>/day (East WWTP) and 120 m<sup>3</sup>/day (West WWTP). Lower than expected volumes of contaminated contact water have been encountered during construction; therefore, operation of the West WWTP has been suspended since September 25, 2024, and all contaminated contact waters are directed to the East WWTP for treatment. Treated effluent is generally directed to the East Sedimentation Pond. Occasionally the East WWTP effluent is discharged to Howe Sound at authorized discharge location SP-E-OUT.

Discharge from the East and West Sedimentation Ponds is controlled using pumps. Sedimentation pond effluent is pumped to the 2700GPM TSS settling system to remove TSS prior to discharge. Each sedimentation pond has an associated authorized discharge location (stations SP-E-OUT and SP-W-OUT) with an initial dilution zone (IDZ) where discharged water mixes with Howe Sound surface waters. The IDZ is defined in PE-111578 and extends in a 150 m radius from each point of discharge into Howe Sound. Since June 2025, surplus contact water in the East Sedimentation Pond is directed to the West Sedimentation Pond for storage or discharge, and discharge of clarified non-contaminated contact water to Howe Sound generally only occurs from the West Sedimentation Pond.

The flocculant-based 2700GPM TSS settling system has an installed capacity to clarify 14,700 m<sup>3</sup>/day of contact water and consists of six parallel treatment trains (Trains 1 to 6), each with an installed capacity of 2450 m<sup>3</sup>/day. A staged commissioning of the 2700GPM system began June 2025 and was completed November 2025. Only one train is operated when contact water flows are low. Additional trains are activated as needed to match the influent volumes. Some of the TSS-clarified water may be recirculated back to the ponds or re-used for construction purposes (e.g., dust suppression).

The construction phase water management layout and monitoring stations are shown in Appendix A, Figure 1. Contact water collection and dewatering locations and photographs of the sedimentation ponds are shown in Appendix A, Figure 2 through Figure 5.

## 1.2 Weather and Water Management

Dry weather conditions were observed during the January 18 - 24 monitoring period. The daily weather conditions are summarized in Table 1.

**Table 1:**  
**Summary of Certified Project Area (CPA) Daily Weather Conditions.**

Date	Precipitation (mm)	Max. Temp (°C)	Min. Temp (°C)	Weather Description
2026-01-18	0	13.1	3.7	Sunny
2026-01-19	0	11.0	2.3	Sunny
2026-01-20	0	15.4	2.3	Mix of sun and cloud
2026-01-21	0	10.5	1.6	Mix of sun and cloud
2026-01-22	0	6.7	0.3	Mix of sun and cloud
2026-01-23	0	11.1	0.4	Mix of sun and cloud
2026-01-24	0	7.4	-0.8	Sunny

**Note:** Data retrieved from the Woodfibre on-site weather station operated by Stantec.

From January 18 - 24, the East Sedimentation Pond received water from the Area 1100 Sump, the M09 Sump and recirculated effluent from the East WWTP (Appendix A, Figure 2). No water from the East Sedimentation Pond was transferred to the West Sedimentation Pond from January 18 - 24 (Appendix B, Table B-6).

Routine operation of the East WWTP continued during the monitoring period (January 18 - 24). Concrete contact water and water from the Wash Bay and Hydrovac Pit was periodically directed

to the East WWTP for treatment, as well as water stored in the East Sedimentation Pond (Appendix A, Figure 2 and Figure 3). East WWTP treated effluent was discharged to the East Sedimentation Pond each day during the monitoring period (January 18 - 24) except on January 18 and 19 when the East WWTP was not operated. Daily water volumes processed by the East WWTP and discharged to Howe Sound are provided in Appendix B (Table B-6).

From January 18 - 24, the West Sedimentation Pond received water from the Area 4100 and Area 4200 Sumps as well as recirculated effluent from the 2700GPM TSS settling system (Appendix A, Figure 3). West Sedimentation Pond effluent was clarified through the 2700GPM system on January 18 and 24 and either recirculated back to the pond or intermittently discharged to Howe Sound. A total of 209 m<sup>3</sup> of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT during the monitoring period (January 18 - 24). Clarified effluent was not reclaimed for construction use. Daily clarified effluent volumes from the 2700GPM TSS settling system recirculated to the West Sedimentation Pond or discharged to Howe Sound are provided in Appendix C (Table C-6).

## 2. Monitoring Summary

The locations of PE-111578 monitoring stations are shown on Figure 1. Monitoring is conducted by the on-site Environmental Monitors (Roe Environmental). Analytical samples are submitted by Roe Environmental to ALS Environmental in Burnaby, BC for testing.

The following PE-111578 and supplementary monitoring stations are currently being monitored:

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02 and OUT-06).
- Creek water monitoring stations for Woodfibre, Mill and East Creek (SW-01, SW-02, SW-03, SW-04, SW-07).
- Contact water monitoring locations (SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, 2700GPM-IN, and 2700GPM-OUT).
- Supplementary contact water stations at the outlet of each sampling train. These samples are identified as W2700T#-OUT (with # equal to the train number).
- Effluent compliance stations (SP-E-OUT and SP-W-OUT). As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. From late September to early December 2025, SP-W-OUT was sampled from the discharge manhole. From December 1 to 8, a pipe manifold was installed that combines effluent from the individual trains into a single discharge line and is configured with a sampling port. Since December 8, samples have been collected at the sampling port or at the manhole.
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

The diversion ditch outlet at Outfall 11(OUT-11) does not receive water and will not be monitored until it is operational.

The influent culverts for East and West Sedimentation Ponds are not operational and the associated influent stations defined in PE-111578 (SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP-W-IN-2) have been replaced with temporary influent monitoring stations SP-E-IN and SP-W-IN (East and West Sedimentation Pond, respectively) located in-pond, at the influent end of each pond.

A flocculant-based TSS settling system (2700GPM) is used at the West Sedimentation Pond as described in Section 1.1. Influent and effluent are monitored at stations 2700GPM-IN and 2700GPM-OUT, respectively. The 2700GPM-OUT station represents the combined discharge line from all six individual treatment trains when clarified effluent is directed to the West Sedimentation Pond and is equivalent to the SP-W-OUT station. At times when only one 2700GPM treatment train is operated, the 2700GPM-OUT sample may be collected at the outlet of that train. Monitoring of the individual 2700GPM settling system treatment trains is supplemental to the PE-111578 monitoring requirements and is conducted at the discretion of field staff.

Water quality was monitored at stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T5-OUT, and W2700T6-OUT during the monitoring period (January 18 - 24). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (January 18 - 24) were met. The initial high frequency monitoring requirements outlined in effluent permit PE-111578 for the sedimentation ponds, WWTP and IDZ stations have been met. On June 25, 2025, BCER approved the implementation of low-frequency (*i.e.*, bi-monthly and monthly) monitoring requirements specified in PE-111578 for all parameters, except for metals, hexavalent chromium, and methylmercury, which continue to be monitored weekly at sedimentation pond and WWTP stations.

Daily field parameters and a weekly analytical sample were not collected at the east catchment effluent compliance station (SP-E-OUT) as there was no discharge to Howe Sound from the East Sedimentation Pond during the monitoring period (January 18 - 24). Daily field parameters were not collected at the west catchment compliance station (SP-W-OUT) January 19 – 24 as there was no discharge to Howe Sound from the West Sedimentation Pond on those days. Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT, respectively) January 18, 19 and 24 as the East WWTP was not operational at the time of monitoring. Daily field parameters and a weekly analytical sample were not collected at the influent and effluent stations of the West WWTP (WWTP-W-IN and WWTP-W-OUT, respectively) as it was not operational during the monitoring period (January 18 - 24).

Table 2:  
Summary of PE-111578 Monitoring Samples Collected January 18 - 24.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
January 18, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M <sub>2</sub> , W
	SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a SP-W-OUT sampling port	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M <sub>2</sub> , W
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	W2700T5-OUT	2700GPM TSS settling system at the outlet of Train 5	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	W2700T6-OUT	2700GPM TSS settling system at the outlet of Train 6		
January 19, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
January 20, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M <sub>2</sub> , W
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M <sub>2</sub> , W
	WWTP-E-OUT	East WWTP at the effluent meter box		
	COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
January 21, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
January 22, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters and Hexavalent Chromium.	D, P
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box	Field Parameters and Hexavalent Chromium.	D, P
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
January 23, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-IN	East WWTP at the influent meter box	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box		
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
January 24, 2026	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D

**Notes:**  
Monitoring frequency requirements under PE-111578 are indicated as follows:  
D – daily monitoring of field parameters at WWTP and sedimentation pond influent and effluent stations.  
M – monthly monitoring for all parameters at WWTP, sedimentation pond and receiving environment stations. Monthly monitoring for General parameters, except ammonia, nitrate and nitrite (*i.e.*, nitrogen species) are monitored weekly during blasting season.  
M<sub>2</sub> – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.  
W – weekly monitoring for metals, chromium speciation and methylmercury at WWTP and sedimentation pond influent and effluent stations, effective June 25, 2025.  
P – periodic monitoring for targeted parameters that is supplementary to PE-111578 requirements.

### **3. Water Quality Results**

#### **3.1 Summary of Reported Results**

Analytical results and associated field measurements included in this weekly report (Report #98) are listed below in Table 3, with additional field measurements presented in Table B-5 (Appendix B) and Table C-5 (Appendix C). Testing for methylmercury, dioxins, furans and toxicity may require four weeks or longer to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2 collected November 25 at 0.5 m below surface (chronic toxicity);
- SP-E-OUT collected December 16 (dioxins and furans);
- SP-E-OUT collected December 17 (dioxins and furans);
- SP-W-OUT and 2700GPM-IN collected December 26 (dioxins and furans);
- SP-W-OUT and 2700GPM-IN collected December 28 (dioxins and furans);
- SP-W-IN, SP-W-OUT and 2700GPM-IN collected January 4 (dioxins and furans);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected January 5 (dioxins and furans);
- SW-01, SW-02, SW-03, SW-04 and SW-07 collected January 5 (dioxins and furans);
- SP-W-OUT and 2700GPM-IN collected January 11 (dioxins and furans);
- IDZ-W1, IDZ-W2 and WQR2 collected January 11 (total mercury, methylmercury, dioxins and furans);
- SP-E-OUT collected January 12 (dioxins and furans);
- IDZ-E1, IDZ-E2 and WQR1 collected January 14 (total mercury, methylmercury, dioxins and furans);
- SP-E-IN and WWTP-E-OUT collected January 22 (hexavalent chromium).

**Table 3:**  
**Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #98.**

Sample	Description	Sampling Date	Parameters Reported
SP-E-OUT	East WWTP treated effluent, collected at the sampling port	December 15, 2025	Dioxins and Furans.
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a new SP-W-OUT sampling port		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR2-0.5	Reference site 2; 0.5 m below surface		
OUT-01	Non-contact water diversion ditch outlet	January 4, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, and Methylmercury.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	January 5, 2026	Methylmercury.
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)		
SW-03	Mill Creek Estuary		
SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		
SW-07	Upstream Mill Creek (at the diversion inlet)		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	January 18, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, and Methylmercury.
SP-W-OUT	West Sedimentation Pond clarified effluent discharge to Howe Sound, collected at the manifold that combines effluent from the individual 2700GPM trains into a single discharge line configured with a new SP-W-OUT sampling port		
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T5-OUT	2700GPM TSS settling system at the outlet of Train 5		
W2700T6-OUT	2700GPM TSS settling system at the outlet of Train 6		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	January 20, 2026	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, and Methylmercury.
WWTP-E-IN	East WWTP at the influent meter box		
COMB-WWTP-E-IN	Combined East WWTP influent from the concrete contact water treatment stream and the East Sedimentation Pond, collected from the heated frac tank		
WWTP-E-OUT	East WWTP at the effluent meter box		



### 3.2 Screening and Reporting Overview

Water quality and flow monitoring results are screened against operational minimum discharge objectives (MDOs) for the East WWTP, and PE-111578 discharge limits for sedimentation pond and 2700GPM TSS settling system stations. The East WWTP MDOs were set equal to Canadian Council of Ministers of the Environment (CCME) water quality guidelines (WQGs) and the PE-111578 discharge limits. Contact and non-contact water monitoring results are also screened against Canadian (Canadian Council of Ministers of the Environment, CCME), Federal (Environment and Climate Change Canada, ECCC) and BC water quality guidelines (WQGs). All water quality data are recorded in the Woodfibre LNG environmental monitoring database. However, for brevity, a sub-set of the results are presented in the weekly report appendices. Results are reported for parameters with a freshwater, estuarine or marine water quality guideline for the protection of aquatic life, parameters with a discharge limit, parameters of potential concern (*i.e.*, dioxins and furans) as well as other parameters that are relevant for water quality interpretation.

It is expected that samples of contact water and samples collected within the IDZ (*i.e.*, mixing zone) defined in PE-111578 for the authorized discharge locations may have parameter concentrations above baseline or background (*i.e.*, reference station) concentrations due to project influence. As well, for receiving environment samples, parameter concentrations above a WQG value but within the range of values observed in the baseline monitoring program are considered to represent the background conditions of the water.

The values used for screening are listed in the water quality tables provided in the appendices. Results above a screening value are highlighted in the tables. Samples collected from sedimentation pond effluent that is discharged to Howe Sound (monitored at stations SP-E-OUT and SP-W-OUT) are evaluated for non-compliance to PE-111578 discharge limits. Exceedances in contact water that remains on-site and is not discharged (e.g., WWTP influent and effluent, sedimentation pond influent, TSS settling system influent, and TSS settling system effluent that is recirculated) are screened for comparison purposes only, and exceedances in these samples do not represent non-compliance to the PE-111578 conditions.

Canadian, Federal and BC WQGs are not specified for dioxins and furans. The general term “dioxins and furans” refers to a total of 210 polychlorinated dibenzo-*p*-dioxin (PCDD) and polychlorinated dibenzofuran (PCDF) compounds. A sub-set of 17 of the most toxic PCDDs and PCDFs are typically evaluated for toxicity by converting the individual parameter concentrations to toxic equivalent (TEQ) values that are summed and evaluated as a single PCDD/F TEQ parameter. To address uncertainties for results reported as not detected, two PCDD/F TEQ values are reported. A “lower-bound PCDD/F TEQ” is calculated assuming a concentration of zero for results reported as not detected, therefore, if all 17 of the individual compounds in the sub-set are

not detected the lower-bound PCDD/F TEQ will equal zero. An “upper-bound PCDD/F TEQ” is calculated assuming a concentration equal to the detection limit for results reported as not detected. These two parameters span the range of possible TEQs if one or more of the PCDDs and PCDFs are reported as not detected.

The BC WQG for total mercury is a sample-specific calculated value that is based on the concentration of methylmercury in a sample. Although an approved BC WQG for the protection of aquatic life for methylmercury has not been explicitly established, the BC Ambient Water Quality Guidelines for Mercury Overview Report indicates the total mercury WQG is derived from a methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) that is set at a concentration that protects fish from mercury bioaccumulation to levels that could harm wildlife that consumes fish. Therefore, if methylmercury results are reported, the 0.0001 µg/L value is presented as a WQG to support the interpretation of methylmercury results.

A summary of reported and pending results is provided in Section 3.1. Results for effluents from East WWTP, 2700GPM TSS settling system, and East and West Sedimentation Ponds are discussed in Section 3.2 and Section 0. The water quality monitored at non-contact water diversion ditch outlets and in the receiving environment is described in Section 3.5 to Section 3.7. Sediment samples are collected annually at stations IDZ-E-SED and IDZ-W-SED and are discussed in Section 3.7 when they are reported. Sediment samples were last collected July 2025 and the analytical results were presented in Report #82.

### **3.3 East Catchment**

The east catchment water quality and flow monitoring results for stations at the East WWTP, the East Sedimentation Pond, and the authorized discharge location (SP-E-OUT) are discussed in this section and are tabulated in Appendix B.

Results are presented for field measurements of influent quality for the East Sedimentation Pond and East WWTP influent and effluent quality collected January 18 - 24 as well as analytical results for samples collected January 20 (stations SP-E-IN, WWTP-E-IN, COMB-WWTP-E-IN and WWTP-E-OUT). Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected January 18 - 24 and the analytical samples collected January 20 met MDOs except for hexavalent chromium (0.00154 mg/L; Appendix B, Table B-1, Table B-3 and Table B-5). Follow-up actions for hexavalent chromium are tracked in Table 4.

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from January 18 - 24 (Section 1.2; Table B-6 of Appendix B). Therefore, water quality samples and field measurements were not collected at the SP-E-OUT sedimentation pond effluent station.

### **3.4 West Catchment**

The west catchment water quality monitoring results for stations at the West Sedimentation Pond, the 2700GPM TSS settling system, and the authorized discharge location (SP-W-OUT) are discussed in this section and are tabulated in Appendix C. Operation of the West WWTP is suspended (refer to Section 1.1) and monitoring results are therefore not available for the stations at this facility.

As discussed in Section 1.2, a total of 209 m<sup>3</sup> of clarified sedimentation pond effluent from the 2700GPM TSS Settling System was intermittently discharged to Howe Sound from SP-W-OUT on January 18.

Field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected January 18 - 24 and analytical samples collected January 18 (stations SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T5-OUT and W2700T6-OUT) were available at the time of reporting (Appendix C, Table C-1 through Table C-3 and Table C-5). Field measurements and the analytical sample collected at SP-W-OUT on January 18 met PE-111578 discharge limits and WQGs.

### **3.5 Non-Contact Water Diversion Ditch Outlets**

Analytical results were available at the time of reporting for the non-contact water diversion ditch outlet samples collected at stations OUT-01, OUT-02 and OUT-06 on January 4 (as discussed in Report #96). The analytical results, field parameters, and WQGs are summarized in Appendix D.

Parameter concentrations met WQGs except total aluminum and dissolved copper in all samples. Total aluminum and dissolved copper were above the long-term WQGs in all the samples, ranging from 0.223 to 0.415 mg/L and 0.00059 to 0.00088 mg/L, respectively. The total aluminum and dissolved copper concentrations above WQGs are within the range of values observed during the pre-construction baseline monitoring of diversion ditch water quality (0.0833 to 0.433 mg/L for total aluminum and 0.0002 to 0.00095 mg/L for dissolved copper).

The methylmercury concentrations for the non-contact water diversion ditch outlet samples collected at stations OUT-01, OUT-02 and OUT-06 on January 4 (as discussed in Report #96) ranged from 0.000021 to 0.000040 µg/L and were below the WQG. The corresponding total mercury results were also below the WQGs. Results are tabulated in Appendix D, Table D-2.

### **3.6 Freshwater and Estuarine Water Receiving Environment**

Methylmercury results for the freshwater and estuarine water samples collected at the Mill Creek estuary, mid-stream and background stations (SW-03, SW-02 and SW-07, respectively) as well as near the mouth of Woodfibre Creek and East Creek (stations SW-01 and SW-04, respectively) on

January 5 (as discussed in Report #96) were available at the time of reporting. Methylmercury concentrations were  $<0.000020$   $\mu\text{g/L}$  in all samples and were below the WQG. The corresponding total mercury results were also below the WQGs. Results are tabulated in Appendix E, Table E-1 (freshwater) and Appendix F, Table F-1 (estuarine water).

### **3.7 Marine Water Receiving Environment**

Analytical results and field measurements were available at the time of reporting for marine water samples collected at 0.5 and 2 m below the water surface and 2 m above the seafloor on January 11 (stations IDZ-W1, IDZ-W2 and WQR2) and on January 14 (stations IDZ-E1, IDZ-E2 and WQR1), as discussed in Report #97. The analytical results, field parameters, and WQGs are summarized in Appendix G.

Parameter concentrations met WQGs except dissolved oxygen, total boron and total copper in some samples (Appendix G; Tables G-1 through Table G-3). In all samples collected at 2 m below the surface and at 2 m above the seafloor on January 11 (IDZ-W1, IDZ-W2 and WQR2) and in all samples collected at 2 m above the seafloor on January 14 (IDZ-E1, IDZ-E2 and WQR1), dissolved oxygen ranged from 6.17 to 7.86 mg/L and was below the lower limit of the WQG (8 mg/L). Total boron was above the WQG (1.2 mg/L) in all samples collected January 11, in all samples collected at 2 m above the seafloor on January 14 and at 2 m below the surface at marine reference station WQR1 on January 14, ranging from 1.29 to 3.87 mg/L. Total copper was above the WQG (0.002 mg/L) in the sample collected from the marine reference station WQR2 at 2 m above the seafloor (0.00227 mg/L) on January 11.

Low concentrations of dissolved oxygen and elevated concentrations of total boron are indicative of influence from the deeper saline waters in the northern basin of Howe Sound and are a natural condition of marine water at the WDA monitoring stations. The dissolved oxygen and total boron concentrations observed at the IDZ monitoring stations were within concentrations that have been observed in the pre-construction baseline monitoring program (2.44 to 9.42 mg/L for dissolved oxygen and 0.0893 to 8.38 mg/L for total boron) and within background ranges observed at marine reference stations (3.94 to 13.80 mg/L for dissolved oxygen and 0.30 to 5.06 mg/L for total boron).

Periodic exceedances of total copper WQGs at 2 m above the seafloor were observed during the baseline program. The total copper concentration observed 2 m above the seafloor at station WQR2 was within the range of baseline concentrations ( $<0.0002$  to 0.0070 mg/L).

Dioxins and furans results were available at the time of reporting for marine water samples collected at 0.5 m below the water surface on December 15 (stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2), as discussed in Report #95. The lower and upper bound PCDD/F TEQ concentrations measured in these samples ranged from 0.0839 to 0.601 pg/L and from 1.35 to 2.30 pg/L, respectively. The lower and upper bound PCDD/F TEQ concentrations were within

the concentration ranges observed in the pre-construction baseline monitoring program (0 to 2.64 pg/L and 0 to 7.06 pg/L, respectively) and within ranges observed at marine reference stations (0 to 0.941 pg/L and 0.499 to 5.65 pg/L, respectively). Results are tabulated in Appendix G, Table G-4.

### **3.8 Quality Control**

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 4). The evaluation includes a review of field and lab QC, completeness of the weekly report (*e.g.*, pending data), completeness of the monitoring program, confirmation of recordkeeping, evaluation of compliance and review of water management activities. Items flagged for follow-up in Section 3 are also tracked in Table 4. Any items flagged for follow-up are carried forward to future reports until they are closed.

Table 4:  
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (January 18 - 24, Report #98)		
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works for water management have been constructed, except for some of the conveyance ditches, which require completion of site grading prior to installation. Sumps, pumps and hoses are used for temporary conveyance until the ditches are completed. The lower reach of East Creek was temporarily diverted through Outfall 11 from September 17, 2024 to November 18, 2025. As November 19, 2025, East Creek flows have been returned to the lower Channel that discharges to Howe Sound through the Outfall 12 culverts (OUT-12). The culvert at OUT-01 is being replaced and diversion water flows to OUT-01 have been redirected to OUT-02. Outfall 11 (OUT-11) has been constructed but is not in use. All monitoring stations have been established except at SP-E-IN-1, SP-E-IN-2, SP-W-IN-1 and SP- W- IN- 2 where substitute stations are established in lieu of those listed in PE-111578 (refer to Section 2). This item remains open.
Report #98: Pending Data	Analytical results not reported.	Hexavalent chromium results for contact and treated water samples collected January 22 are pending and will be included in future weekly reports when available. This item remains open.
Report #98: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	The hexavalent chromium concentration was 0.00154 mg/L in the sample collected at WWTP-E-OUT on January 20 and was above the MDO (0.0015 mg/L). The WWTP treatment performance for hexavalent chromium will continue to be evaluated through the end of February 2026 to determine if this is an isolated event or a recurring issue that requires additional investigation. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #92: Pending Data	Analytical results not reported.	Chronic toxicity results for receiving environment samples collected November 25 are pending and will be included in future weekly reports when available. This item remains open.
Report #95: WWTP Performance Evaluation	Total vanadium above the MDO.	The total vanadium concentration was 0.0106 mg/L in the sample collected at WWTP-E-OUT on December 15 and was above the MDO (0.0081 mg/L). Results from samples collected December 23 and 28, January 5, 12 and 20 met the MDO for total vanadium and indicate the December 15 result was an isolated incident. This item is closed.
Report #95: Pending Data	Analytical results not reported.	Previously pending dioxins and furans results for receiving environment and for contact and treated water samples collected December 15 are included in Report #98. Dioxins and furans results for contact and treated water samples collected December 16, 17, 26 and 28 are pending and will be included in future weekly reports when available. This item remains open.
Report #96: Pending Data	Analytical results not reported.	Previously pending field and analytical results for non-contact water diversion ditch outlet samples collected January 4 as well as total mercury and methylmercury results for receiving environment samples collected January 5 are included in Report #98. Dioxins and furans results for contact and treated water samples collected January 4 and 5 and for receiving environment samples collected January 5 are pending and will be included in future weekly reports when available. This item remains open.
Report #97: Pending Data	Analytical results not reported.	Previously pending field and analytical results for receiving environment samples collected January 11 and 14 are included in Report #98. Total mercury, methylmercury and dioxins and furans results for receiving environment samples collected January 11 and 14 as well as dioxins and furans results for contact and treated water samples collected January 11 and 12 are pending and will be included in future weekly reports when available. This item remains open.

**Notes:**  
Result QA/QC screening includes the evaluation of field and lab QC results, comparison of total and dissolved metal results and review for modified detection limits.  
Pending data are outstanding results from monitoring samples reported in the current or previous weekly reports.  
Authorized works and monitoring program evaluation is an assessment of the completeness of the authorized works and monitoring program compared to PE-111578 specified or implied requirements.  
WWTP performance evaluation is an assessment of WWTP effluent quality compared to operational MDOs.  
Data QC indicates an evaluation of data trends or inter-parameter relationships that suggest a test result may not be representative of water quality at the time of monitoring.  
Non-compliant discharge indicates exceedance of a discharge limit or a discharge that bypasses the sedimentation pond discharge location.  
Potential project influence is an assessment that water quality at creek and Howe Sound baseline stations are above the baseline concentration range and may indicate project influence at these stations.

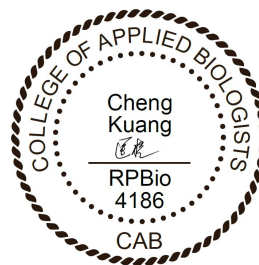
#### 4. Closure

This weekly report is a desktop review by Lorax of the PE-111578 discharge and compliance monitoring program records, reports and results provided by Woodfibre LNG and prime contractor McDermott International and their sub-contractors. The records reviewed and analyzed by Lorax include ALS Environmental laboratory test reports and site reports (from Roe Environmental, LB LNG, McDermott and Woodfibre LNG). Verbal or electronic communications between Lorax, and Roe Environmental, LB LNG, McDermott, and Woodfibre LNG staff are conducted as needed to confirm the information presented in this report.

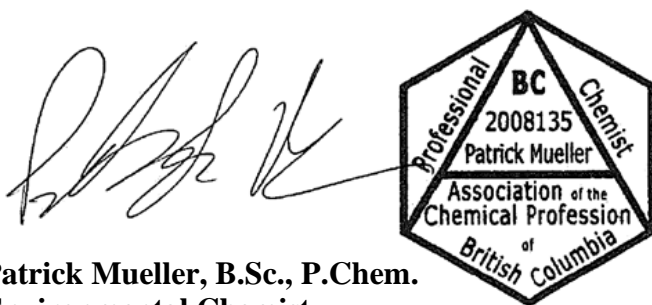
Regards,

**LORAX ENVIRONMENTAL SERVICES LTD.**

**Holly Pelletier, B.Sc., GIT.  
Environmental Geoscientist**



**Cheng Kuang, M.Sc., RPBio.  
Environmental Scientist**



**Patrick Mueller, B.Sc., P.Chem.  
Environmental Chemist**

## ***Appendix A: Figures and Site Images***





World Imagery: District of Squamish. Additional imagery provided by McDermott International captured December 1st, 2025.

## LEGEND

- Freshwater Monitoring Station
- Marine Water Monitoring Station
- Clean Water Diversion Discharge Station
- Sedimentation Pond Monitoring Stations (Water Quality)
- Wastewater Treatment Plant (WWTP)
- Certified Project Area
- Watercourse
- Non-Contact Ditch
- Culvert / Outfall / Pipeline
- Non-Contact Water Transfer Hose
- Bathymetry Contour (Major: 50m)
- Bathymetry Contour (Minor: 10m)

**DATE SAVED:** Jan 30, 2026  
**DRAWN BY:** DM  
**REVIEWED:** PM  
**VERSION:** 1

**Coordinate System:** NAD 1983 UTM Zone 10N  
**Projection:** Transverse Mercator  
**Datum:** North American 1983  
**Units:** Metre  
**1:6,000**  
0 100 200 Metres

CLIENT:



PROJECT:

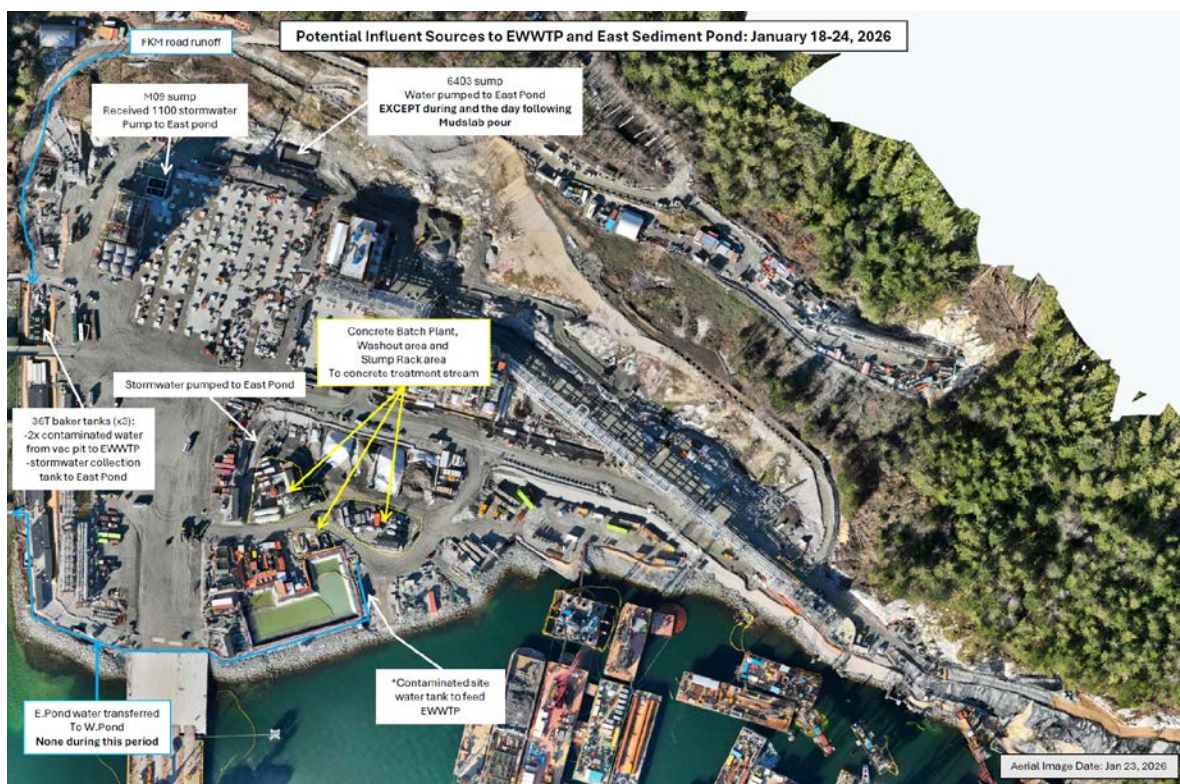
## Woodfibre LNG Project Construction Phase

**TITLE:** Site Layout and Water Quality Monitoring Stations for PE-111578 (January 24, 2026)

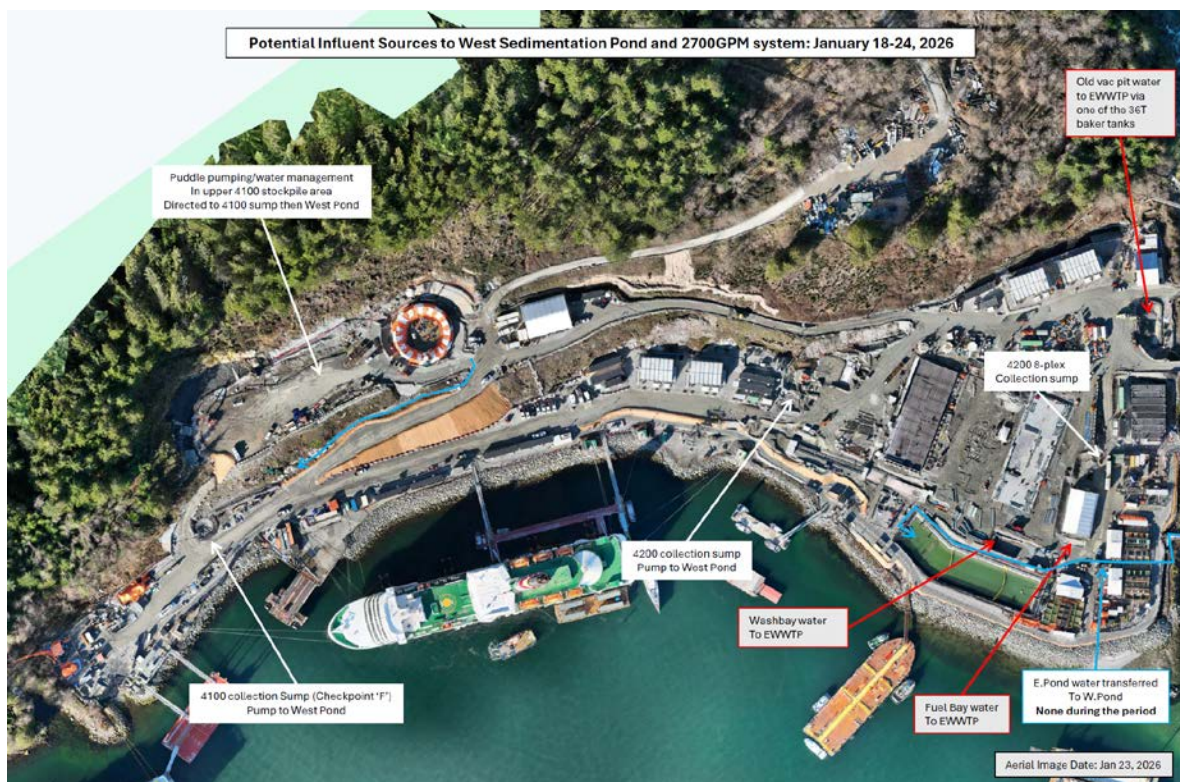
**PROJECT #:** A633-9

**FIGURE:** 1





**Figure 2: East Catchment contact water management facilities (January 18 - 24).**



**Figure 3: West Catchment contact water management facilities (January 18 - 24).**





**Figure 4:** Aerial view of the East Sedimentation Pond (January 23, 2026). The East WWTP is located on the left side of the pond.



**Figure 5:** Aerial view of the West Sedimentation Pond (January 23, 2026).

***Appendix B:***  
***East Catchment Monitoring Results***

Table B-1:  
East WWTP Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station	Station	Station
					WWTP-E-IN	COMB-WWTP-E-IN	WWTP-E-OUT
					Influent	Influent	Effluent
		WWTP-E-IN	COMB-WWTP-E-IN		WWTP-E-OUT		
VA26A1300-002	VA26A1300-003	VA26A1300-004					
Long Term		Short Term	2026-01-20 13:42	2026-01-20 14:16	2026-01-20 16:43		
General Parameters							
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	8.5	2.8	6.9
Specific Conductivity - Field	µS/cm	-	-	-	340	2226	855
Temperature - Field	°C	-	-	-	7.3	7.3	8.1
Salinity - Field	ppt	-	-	-	0.16	1.14	0.42
Turbidity - Field	NTU	-	-	-	3116.38	40.18	2.35
TSS	mg/L	-	-	25 or 75 <sup>6</sup>	14100	56.9	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	8.63	10.32	12.53
Total Hardness	mg/L	-	-	-	1800	253	43.9
Dissolved Hardness	mg/L	-	-	-	80.3	205	46.4
Anions and Nutrients							
Sulphate	mg/L	-	-	-	74.4	763	297
Chloride	mg/L	-	-	-	2.55	<5.00	<2.50
Fluoride	mg/L	-	1.5	-	0.168	<0.200	<0.100
Ammonia (N-NH <sub>3</sub> )	mg/L	1.2-29 <sup>3</sup>	7.9-191 <sup>3</sup>	-	0.463	0.0681	0.049
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0188	<0.0100	0.0404
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.104	0.169	0.173
Total Organic Carbon (TOC)	mg/L	-	-	-	207	4.86	1.57
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	6.03	4.41	1.02
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	473	8.86	0.0441
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	<0.00500	0.00104	0.00071
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.0822	0.00373	0.00042
Barium, total (T-Ba)	mg/L	-	-	-	2.95	0.241	0.0049
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.00825	0.000274	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.500	0.029	0.013
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0049	0.000358	<0.0000300
Chromium, total (T-Cr)	mg/L	-	-	-	0.204	0.037	0.00157
Cobalt, total (T-Co)	mg/L	-	-	-	0.165	0.00295	<0.00010
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.843	0.0168	0.00135
Iron, total (T-Fe)	mg/L	-	-	-	414	5.25	0.013
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.381	0.0118	0.000083
Manganese, total (T-Mn)	mg/L	-	-	-	15.9	0.485	0.00451
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0547	0.167	0.0888
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.134	0.00485	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	<0.00250	0.00132	0.000505
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.00155	0.000015	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.00188	0.000029	0.000011
Uranium, total (T-U)	mg/L	-	-	-	0.0598	0.00779	0.00443
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.646	0.00984	0.00104
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	2.47	0.0922	0.0056
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.0013	0.00078	0.00154
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000050	0.000187	<0.0000250
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0004	0.0102	0.001
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	2.21	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.00619	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0182	0.252	0.00459
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	0.00291	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0992	0.865	0.129
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00408	0.00492	0.00094
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	0.0467	0.0045
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	-	-	-
Acridine	mg/L	-	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.11	-	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-

**Notes:**  
East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.  
Non-detect results are screened using the detection limit value.  
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.  
**Shaded** results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.  
Results in **orange text** exceed the PE-111578 East Sedimentation Pond Discharge Limit.  
The East Catchment did not discharge during the monitoring period (January 18 - 24).  
<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.  
<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.  
<sup>3</sup> The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.  
<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.  
<sup>5</sup> When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.  
<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.



Table B-2:  
East Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station SP-E-IN
					Influent
					SP-E-IN
		Long Term	Short Term		VA26A1300-001 2026-01-20 13:20
General Parameters					
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	6.3
Specific Conductivity - Field	µS/cm	-	-	-	274
Temperature - Field	°C	-	-	-	6.9
Salinity - Field	ppt	-	-	-	0.13
Turbidity - Field	NTU	-	-	-	40.64
TSS	mg/L	-	-	25 or 75 <sup>6</sup>	11.1
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.07
Total Hardness	mg/L	-	-	-	59.6
Dissolved Hardness	mg/L	-	-	-	57
Anions and Nutrients					
Sulphate	mg/L	-	-	-	55
Chloride	mg/L	-	-	-	1.3
Fluoride	mg/L	-	1.5	-	0.061
Ammonia (N-NH <sub>3</sub> )	mg/L	29 <sup>3</sup>	191 <sup>3</sup>	-	0.0106
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0073
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.226
Total Organic Carbon (TOC)	mg/L	-	-	-	3.36
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.01
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	2.78
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00063
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00141
Barium, total (T-Ba)	mg/L	-	-	-	0.0369
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000044
Boron, total (T-B)	mg/L	1.2	-	-	0.021
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000350
Chromium, total (T-Cr)	mg/L	-	-	-	0.0067
Cobalt, total (T-Co)	mg/L	-	-	-	0.00064
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.00364
Iron, total (T-Fe)	mg/L	-	-	-	1.64
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.00136
Manganese, total (T-Mn)	mg/L	-	-	-	0.0719
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.041
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00058
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000323
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000012
Uranium, total (T-U)	mg/L	-	-	-	0.00474
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.00475
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	0.0173
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00612
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000150
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00163
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.031
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0132
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.137
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00166
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0037
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.006	-	-	-
Acridine	mg/L	-	-	-	-
Anthracene	mg/L	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-
Chrysene	mg/L	0.0001	-	-	-
Fluoranthene	mg/L	-	-	-	-
Fluorene	mg/L	0.012	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-
Naphthalene	mg/L	0.001	-	-	-
Phenanthrene	mg/L	-	-	-	-
Pyrene	mg/L	-	-	-	-
Quinoline	mg/L	-	-	-	-
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.11	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-
Styrene	mg/L	-	-	-	-
Toluene	mg/L	0.215	-	-	-
Total Xylenes	mg/L	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-

**Notes:**  
East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.  
Non-detect results are screened using the detection limit value.  
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.  
Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.  
Results in **orange text** exceeded the PE-111578 East Sedimentation Pond Discharge Limit.  
The East Catchment did not discharge during the monitoring period (January 18 - 24).  
<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.  
<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.  
<sup>3</sup> The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.  
<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.  
<sup>5</sup> When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.  
<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table B-3:  
East Catchment Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.0060-0.016 <sup>3,4</sup>
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-E-IN	Influent	SP-E-IN	VA26A1300-001	2026-01-20	0.000092	0.00721
WWTP-E-IN	Influent	WWTP-E-IN	VA26A1300-002	2026-01-20	<u><b>0.0206</b></u>	<u><b>1.23</b></u>
COMB-WWTP-E-IN	Influent	COMB-WWTP-E-IN	VA26A1300-003	2026-01-20	<u><b>0.000680</b></u>	<u><b>0.542</b></u>
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA26A1300-004	2026-01-20	0.000025	0.00195

Notes:

East catchment influents and East WWTP effluent were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.

<sup>3</sup> CCME guideline for total mercury = 0.016 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Table B-4:  
East Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Effluent						
SP-E-OUT	Effluent	SP-E-OUT	VA25D3470-001	2025-12-15	0.938	2.09
SP-E-OUT	Effluent	SP-E-OUT-DUP	VA25D3470-002	2025-12-15	0.317	2.14

Notes:

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).

Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table B-5:  
East Catchment Field Measurements Collected During the Monitoring Period (January 18 - 24).

Parameter			Temp.	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS <sup>3</sup>	pH	Specific Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 <sup>6</sup>	5.5 - 9.0	-	-
Lowest Applicable Guideline <sup>1</sup>			-	≥8	-	-	- <sup>2</sup>	- <sup>2</sup>	-	-
Station ID	Water Type	Date								
Influent <sup>4</sup>										
SP-E-IN	Influent	2026-01-18 14:14	6.4	12.32	0.06	57.17	45.6	8.3	118	No
SP-E-IN	Influent	2026-01-19 10:09	4.2	12.21	0.06	55.18	44.2	6.7	119	No
SP-E-IN	Influent	2026-01-20 13:20	6.9	11.07	0.13	40.64	33.3	6.3	274	No
SP-E-IN	Influent	2026-01-21 11:30	5.9	12.10	0.41	9.99	10.5	7.7	840	No
SP-E-IN	Influent	2026-01-22 9:37	4.6	13.29	0.38	14.64	13.9	6.6	779	No
SP-E-IN	Influent	2026-01-23 10:35	5.4	13.15	1.06	4.45	6.3	7.4	2073	No
SP-E-IN	Influent	2026-01-24 12:11	6.7	12.42	0.27	36.17	30.0	7.3	556	No
WWTP-E-IN	Influent	2026-01-20 13:42	7.3	8.63	0.16	3116.38	2327.2	8.5	340	No
WWTP-E-IN	Influent	2026-01-21 11:36	5.2	12.97	0.19	39.47	32.4	6.4	395	No
WWTP-E-IN	Influent	2026-01-22 9:26	4.8	12.64	0.35	22.53	19.8	6.5	711	No
WWTP-E-IN	Influent	2026-01-23 10:45	5.7	12.95	0.71	8.66	9.5	6.5	1416	No
Effluent <sup>5</sup>										
WWTP-E-OUT	Effluent	2026-01-20 16:43	8.1	12.53	0.42	2.35	4.8	6.9	855	No
WWTP-E-OUT	Effluent	2026-01-21 11:39	6.3	12.37	0.54	1.40	4.0	6.4	1086	No
WWTP-E-OUT	Effluent	2026-01-22 9:20	5.7	13.21	0.34	2.71	5.0	6.4	687	No
WWTP-E-OUT	Effluent	2026-01-23 10:42	5.8	13.96	1.10	2.38	4.8	6.5	2151	No

Notes:

The east catchment did not discharge to Howe Sound during the monitoring period (January 18 - 24). Results above screening values are highlighted for comparative purposes.

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

Results in **orange text** exceed the PE-111578 East Sedimentation Pond Discharge Limit.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

<sup>3</sup> TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 \* [turbidity as NTU] + 3.

<sup>4</sup> Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond. Daily field measurements for station WWTP-E-IN were not collected January 18, 19 and 24 as the East WWTP was not operational at the time of monitoring.

<sup>5</sup> There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (January 18 - 24), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field measurements for station WWTP-E-OUT were not collected January 18, 19 and 24 as the East WWTP was not operational at the time of monitoring.

<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table B-6:**  
**East Catchment Daily Discharge Volumes for the Monitoring Period (January 18 - 24).**

	East Sedimentation Pond Effluent	Transfer to West Sedimentation Pond	East WWTP Treated Effluent (Station WWTP-E-OUT) <sup>2</sup>	Discharge to Howe Sound (Station SP-E-OUT)
Units	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
<b>PE-111578 Discharge Limit</b>	-	-	1100	- <sup>1</sup>
<b>Date</b>				
2026-01-18	0	0	0	0
2026-01-19	0	0	0	0
2026-01-20	0	0	130	0
2026-01-21	0	0	334	0
2026-01-22	0	0	704	0
2026-01-23	0	0	510	0
2026-01-24	0	0	109	0

**Notes:**

Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.

<sup>1</sup> As noted in PE-111578 Condition 2.1.4, the annual average authorized discharge rate from the East Sedimentation Pond to Howe Sound was set to 650 m<sup>3</sup>/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.

<sup>2</sup> East WWTP treated effluent was recirculated to the East Sedimentation Pond.



***Appendix C:***  
***West Catchment Monitoring Results***

Table C-1:  
West 2700GPM TSS Settling System Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station 2700GPM-IN	Station W2700T5-OUT	Station W2700T6-OUT
					Influent	Effluent	Effluent
					2700GPM-IN	W2700T5-OUT	W2700T6-OUT
		VA26A1149-002	VA26A1149-003		VA26A1149-004		
		Long Term	Short Term		2026-01-18 10:35	2026-01-18 10:12	2026-01-18 10:26
General Parameters							
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	8.2	8.1	8.2
Specific Conductivity - Field	µS/cm	-	-	-	224	223	222
Temperature - Field	°C	-	-	-	6.0	5.9	6.6
Salinity - Field	ppt	-	-	-	0.11	0.11	0.11
Turbidity - Field	NTU	-	-	-	43.17	1.24	1.86
TSS	mg/L	-	-	25 or 75 <sup>6</sup>	30.2	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	13.41	14.06	15.80
Total Hardness	mg/L	-	-	-	62.4	57.8	58.3
Dissolved Hardness	mg/L	-	-	-	58.2	58.7	58.6
Anions and Nutrients							
Sulphate	mg/L	-	-	-	22.5	22.8	22.7
Chloride	mg/L	-	-	-	5.03	5.19	5.00
Fluoride	mg/L	-	1.5	-	0.095	0.099	0.092
Ammonia (N-NH <sub>3</sub> )	mg/L	1.8-2.9 <sup>3</sup>	12-19 <sup>3</sup>	-	0.0162	0.0121	0.0109
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0052	0.0040	0.0038
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.222	0.228	0.209
Total Organic Carbon (TOC)	mg/L	-	-	-	3.53	3.07	2.56
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.36	3.18	2.64
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	2.38	0.0270	0.0272
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00058	0.00057	0.00055
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00214	0.00167	0.00167
Barium, total (T-Ba)	mg/L	-	-	-	0.0243	0.00344	0.00280
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000038	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000324	<0.0000050	<0.0000050
Chromium, total (T-Cr)	mg/L	-	-	-	0.00066	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00065	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.00281	0.00051	0.00075
Iron, total (T-Fe)	mg/L	-	-	-	1.69	<0.010	<0.010
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.00178	<0.000050	0.000087
Manganese, total (T-Mn)	mg/L	-	-	-	0.0779	0.0163	0.0191
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0105	0.00988	0.00917
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00060	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000078	0.000061	<0.000050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.00001	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000023	0.000017	0.000022
Uranium, total (T-U)	mg/L	-	-	-	0.00778	0.00664	0.00693
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.00372	0.00083	0.00072
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	0.0086	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	0.0000058	0.0000056	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00073	0.00061	0.00063
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.018	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.000062	0.000057
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0151	0.0165	0.0190
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0715	0.0716	0.0708
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00096	0.00069	0.00059
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	-	-	-
Acridine	mg/L	-	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-	-
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.11	-	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	-
Styrene	mg/L	-	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	-

Notes:

West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

Results in **orange text** exceed the PE-111578 West Sedimentation Pond Discharge Limit.

The West Catchment intermittently discharged during the monitoring period (January 18 - 24) on January 18.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

<sup>3</sup> The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.

<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

<sup>5</sup> When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table C-2:  
West Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		PE-111578 Discharge Limit	Station SP-W-IN	Station SP-W-OUT
					Influent	Effluent
					SP-W-IN	SP-W-OUT
		VA26A1149-001 2026-01-18 10:23	VA26A1149-005 2026-01-18 9:39			
General Parameters						
pH - Field	pH units	- <sup>2</sup>	-	5.5 - 9.0	8.3	7.9
Specific Conductivity - Field	µS/cm	-	-	-	226	222
Temperature - Field	°C	-	-	-	6.8	6.4
Salinity - Field	ppt	-	-	-	0.11	0.11
Turbidity - Field	NTU	-	-	-	12.18	1.99
TSS	mg/L	-	-	25 or 75 <sup>6</sup>	18	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	13.62	13.91
Total Hardness	mg/L	-	-	-	56.2	57.7
Dissolved Hardness	mg/L	-	-	-	55.2	59.4
Anions and Nutrients						
Sulphate	mg/L	-	-	-	21.9	22.8
Chloride	mg/L	-	-	-	5.13	5.09
Fluoride	mg/L	-	1.5	-	0.14	0.095
Ammonia (N-NH <sub>3</sub> )	mg/L	1.8-4.7 <sup>3</sup>	12-31 <sup>3</sup>	-	0.0239	0.0145
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	-	0.0034	0.0038
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	-	0.186	0.219
Total Organic Carbon (TOC)	mg/L	-	-	-	4.19	2.62
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	4.15	2.63
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.624	0.0262
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	-	0.00058	0.00054
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00203	0.00164
Barium, total (T-Ba)	mg/L	-	-	-	0.00861	0.0031
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010	<0.010
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000126	<0.0000050
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00019	<0.00010
Copper, total (T-Cu)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0043	0.00105	0.00135
Iron, total (T-Fe)	mg/L	-	-	-	0.459	<0.010
Lead, total (T-Pb)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0035	0.000457	0.000185
Manganese, total (T-Mn)	mg/L	-	-	-	0.0328	0.0182
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0103	0.00922
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000069	0.000063
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000022	0.00002
Uranium, total (T-U)	mg/L	-	-	-	0.00687	0.0068
Vanadium, total (T-V)	mg/L	- <sup>2</sup>	-	0.0081	0.00161	0.00077
Zinc, total (T-Zn)	mg/L	- <sup>2</sup>	- <sup>2</sup>	0.0133	0.003	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000050	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00047	0.00052
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0217	0.0181
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0696	0.0683
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00083	0.00064
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	-	-	-
Acridine	mg/L	-	-	-	-	-
Anthracene	mg/L	-	-	-	-	-
Benz(a)anthracene	mg/L	-	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	0.0001	-	-	-	-
Fluoranthene	mg/L	-	-	-	-	-
Fluorene	mg/L	0.012	-	-	-	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-
Naphthalene	mg/L	0.001	-	-	-	-
Phenanthrene	mg/L	-	-	-	-	-
Pyrene	mg/L	-	-	-	-	-
Quinoline	mg/L	-	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	-	-	-
Ethylbenzene	mg/L	0.25	-	-	-	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-
Styrene	mg/L	-	-	-	-	-
Toluene	mg/L	0.215	-	-	-	-
Total Xylenes	mg/L	-	-	-	-	-
Chlorobenzene	mg/L	0.025	-	-	-	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-

Notes:

West catchment influents were not discharged to Howe Sound. Influent results above screening values are only highlighted for comparative purposes.

Non-detect results are screened using the detection limit value.

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

Results in **orange text** exceed the PE-111578 West Sedimentation Pond Discharge Limit.

The West Catchment intermittently discharged during the monitoring period (January 18 - 24) on January 18.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

<sup>3</sup> The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.

<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

<sup>5</sup> When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.

<sup>6</sup> The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

Table C-3:  
West Catchment Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.0025-0.015 <sup>3,4</sup>
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
SP-W-IN	Influent	SP-W-IN	VA26A1149-001	2026-01-18	0.000037	0.00126
2700GPM-IN	Influent	2700GPM-IN	VA26A1149-002	2026-01-18	0.000033	0.00488
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA26A1149-005	2026-01-18	<0.000020	<0.00050
W2700T5-OUT	Effluent	W2700T5-OUT	VA26A1149-003	2026-01-18	<0.000020	<0.00050
W2700T6-OUT	Effluent	W2700T6-OUT	VA26A1149-004	2026-01-18	<0.000020	<0.00050

Notes:

West catchment influents were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.  
Non-detect results are screened using the detection limit value.

Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.

<sup>3</sup> CCME guideline for total mercury = 0.016 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Table C-4:  
West Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Water Type	Sample ID	Lab ID	Sampling Date		
Influent						
2700GPM-IN	Influent	2700GPM-IN	VA25D3428-001	2025-12-15	3.05	4.53
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25D3428-002	2025-12-15	0.6010	2.05

Notes:

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).

Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table C-5:  
West Catchment Field Measurements Collected During the Monitoring Period (January 18 - 24).

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS <sup>3</sup>	pH	Specific Conductivity	Visibility of Sheen
Unit			°C	mg/L	ppt	NTU	mg/L	s.u.	µS/cm	
PE-111578 Discharge Limit			-	-	-	-	25 or 75 <sup>6</sup>	5.5 - 9.0	-	-
Lowest Applicable Guideline <sup>1</sup>			-	≥8	-	-	- <sup>2</sup>	- <sup>2</sup>	-	-
Station ID	Water Type	Date								
Influent <sup>4</sup>										
SP-W-IN	Influent	2026-01-18 10:23	6.8	13.62	0.11	12.18	12.1	8.3	226	No
SP-W-IN	Influent	2026-01-19 10:30	5.6	11.95	0.10	5.01	6.7	8.0	215	No
SP-W-IN	Influent	2026-01-20 14:15	6.9	11.18	0.10	1.53	4.1	7.2	204	No
SP-W-IN	Influent	2026-01-21 11:16	6.1	11.50	0.10	2.00	4.5	7.3	207	No
SP-W-IN	Influent	2026-01-22 10:00	3.4	11.99	0.10	2.52	4.9	7.1	219	No
SP-W-IN	Influent	2026-01-23 10:18	4.6	11.42	0.10	2.00	4.5	7.8	210	No
SP-W-IN	Influent	2026-01-24 13:02	6.5	11.56	0.10	2.31	4.7	8.1	209	No
2700GPM-IN	Influent	2026-01-18 10:35	6.0	13.41	0.11	43.17	35.2	8.2	224	No
Effluent <sup>5</sup>										
SP-W-OUT	Effluent	2026-01-18 9:39	6.4	13.91	0.11	1.99	4.5	7.9	222	No
SP-W-OUT	Effluent	2026-01-18 9:43	6.4	14.08	0.11	2.36	4.8	8.0	223	No

Notes:

West catchment influents for January 18 - 24 were not discharged to Howe Sound. Results above screening values are only highlighted for comparative purposes.

Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

Results in **orange text** exceed the PE-111578 West Sedimentation Pond Discharge Limit.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> The WQG was not evaluated for parameters with discharge limits.

<sup>3</sup> TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 \* [turbidity as NTU] + 3.

<sup>4</sup> Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.

<sup>5</sup> As described in Section 1.1, when there is surplus water, West Sedimentation Pond clarified effluent from the individual 2700GPM trains is directed to SP-W-OUT for discharge. 2700GPM clarified effluent from trains 5 and 6 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) during the monitoring period (January 18 - 24) on January 18. There was no discharge at SP-W-OUT on January 19 – 24, therefore daily field parameters for SP-W-OUT were not collected on those days.

<sup>6</sup>The PE-111578 discharge limit for TSS is 25 mg/L under dry conditions and 75 mg/L for each day of Wet Conditions and for one day following the end of Wet Conditions.

**Table C-6:  
West Catchment Daily Discharge Volumes for the Monitoring Period (January 18 - 24).**

	West Sedimentation Pond Effluent	West TSS Settling System (2700GPM) Clarified Effluent (Station 2700GPM-OUT) <sup>3</sup>	Water Reclaimed for Construction Purposes (Station 2700GPM-OUT)	West WWTP Treated Effluent <sup>1</sup> (Station WWTP-W-OUT)	Discharge to Howe Sound (Station SP-W-OUT)
Unit	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
<b>PE-111578 Discharge Limit</b>	-	-	-	120	- <sup>2</sup>
<b>Date</b>					
2026-01-18	0	1,111	0	0	209
2026-01-19	0	0	0	0	0
2026-01-20	0	0	0	0	0
2026-01-21	0	0	0	0	0
2026-01-22	0	0	0	0	0
2026-01-23	0	0	0	0	0
2026-01-24	0	93	0	0	0

**Notes:**

Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.

<sup>1</sup> The West WWTP is not being operated therefore discharges are not expected from this facility.

<sup>2</sup> As noted in PE-111578 Condition 2.2.4, the annual average authorized discharge rate from the West Sedimentation Pond to Howe Sound was set to 310 m<sup>3</sup>/day for the purpose of calculating discharge fees as required by the Permit and Approval Fees and Charges Regulation. Therefore, the annual average authorized discharge rate is not evaluated as a discharge limit.

<sup>3</sup> Clarified effluent from the 2700GPM TSS settling system is recirculated to the West Sedimentation Pond, discharged to Howe Sound or reclaimed for construction purposes based on operational considerations. Daily discharge volumes from station 2700GPM-OUT are a sum of all active treatment trains.

***Appendix D:  
Non-Contact Water Diversion Ditch Outlets  
Monitoring Results***

Table D-1:  
Summary of Non-Contact Water Diversion Ditch Outlet Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1, 2</sup>		Station OUT-01	Station OUT-02	Station OUT-06
				Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet
				OUT-01	OUT-02	OUT-06
		VA26A0080-001	VA26A0080-002	VA26A0080-003		
		2026-01-04 11:36	2026-01-04 11:25	2026-01-04 12:24		
General Parameters						
pH - Field	pH units	6.5 - 9.0	-	6.6	6.7	6.6
Specific Conductivity - Field	µS/cm	-	-	12	15	27
Temperature - Field	°C	-	-	6.1	7.1	7.2
Salinity - Field	ppt	-	-	0	0.01	0.01
Turbidity - Field	NTU	-	-	0.82	2.05	0.92
TSS	mg/L	-	-	<3.0	5.5	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	12.26	12.12	11.94
Total Hardness	mg/L	-	-	3.88	5.98	11.4
Dissolved Hardness	mg/L	-	-	3.91	5.21	11.5
Anions and Nutrients						
Sulphate <sup>2</sup>	mg/L	128	-	1.23	1.58	1.58
Chloride	mg/L	120	600	<0.50	<0.50	<0.50
Fluoride <sup>2</sup>	mg/L	-	0.400-0.461	<0.020	<0.020	<0.020
Ammonia (N-NH <sub>3</sub> ) <sup>2</sup>	mg/L	1.90-15.3	24.6-25.8	<0.0050	<0.0050	<0.0050
Nitrite (N-NO <sub>2</sub> ) <sup>2</sup>	mg/L	0.200	0.6	<0.0010	<0.0010	<0.0010
Nitrate (N-NO <sub>3</sub> )	mg/L	3	32.8	0.0646	0.0457	0.104
Total Organic Carbon (TOC)	mg/L	-	-	3.95	5.05	5.26
Total Inorganic Carbon (DOC)	mg/L	-	-	3.94	4.56	5.09
Total Metals						
Aluminum, total (T-Al) <sup>2</sup>	mg/L	0.0510-0.192	-	<u>0.228</u>	<u>0.415</u>	<u>0.223</u>
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	0.00013	0.00015
Barium, total (T-Ba)	mg/L	1	-	0.00289	0.00325	0.00364
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	<0.010
Cadmium, total (T-Cd) <sup>2</sup>	mg/L	0.0000364	0.000106-0.000231	<0.0000050	<0.0000050	<0.0000050
Chromium, total (T-Cr) <sup>3</sup>	mg/L	0.001	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) <sup>2</sup>	mg/L	0.000389-0.000778	-	<0.00010	0.00011	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.0006	0.001	0.00085
Iron, total (T-Fe)	mg/L	0.3	1	0.055	0.118	0.033
Lead, total (T-Pb)	mg/L	-	-	0.000082	0.000206	0.0001
Manganese, total (T-Mn) <sup>2</sup>	mg/L	0.768	0.816	0.00272	0.00417	0.00153
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000257	0.00107	0.00062
Nickel, total (T-Ni) <sup>2</sup>	mg/L	0.0250	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	0.000063
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000041	0.000277	0.000052
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	0.00054	0.00055
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	-	-	-
Dissolved Metals						
Cadmium, dissolved (D-Cd) <sup>2</sup>	mg/L	0.000019-0.000043	0.000038-0.000063	<0.0000050	<0.0000050	<0.0000050
Copper, dissolved (D-Cu) <sup>2</sup>	mg/L	0.000200-0.000276	0.00119-0.00185	<u>0.00059</u>	<u>0.00071</u>	<u>0.00088</u>
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.018	0.018	0.014
Lead, dissolved (D-Pb) <sup>2</sup>	mg/L	0.00218-0.00589	-	0.000084	0.000077	0.000059
Manganese, dissolved (D-Mn) <sup>2</sup>	mg/L	0.330-0.350	1.97	0.00061	0.00085	0.00071
Nickel, dissolved (D-Ni) <sup>2</sup>	mg/L	0.000800-0.000900	0.0127-0.0148	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00589	0.00715	0.0192
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) <sup>2</sup>	mg/L	0.00785-0.0178	0.0105-0.0223	0.0014	0.0016	0.0011
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.0058	-	-	-	-
Acridine	mg/L	0.003	-	-	-	-
Anthracene	mg/L	0.000012	-	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	-	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-	-
Fluorene	mg/L	0.003	-	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-	-
Phenanthrene	mg/L	0.0003	-	-	-	-
Pyrene	mg/L	0.00002	-	-	-	-
Quinoline	mg/L	0.0034	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.04	-	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-	-
Styrene	mg/L	0.072	-	-	-	-
Toluene	mg/L	0.0005	-	-	-	-
Total Xylenes	mg/L	0.03	-	-	-	-
Chlorobenzene	mg/L	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-	-

Notes:

Non-detect results are screened using the detection limit value.

Results underlined in bold italics exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> BC WQG or CWQG indicated to be variable are calculated from sample-specific measurements for temperature, field pH, total hardness and dissolved organic carbon (DOC) content.

<sup>3</sup> The approved BC WQG for hexavalent chromium [Cr(VI)] is 0.001 mg/L and 0.0089 mg/L for trivalent chromium [Cr(III)]. The more conservative criteria for Cr(VI) is applied to total chromium results.

The lowest applicable guidelines are shown in the table; however, water quality data was screened to all applicable guidelines.

**Table D-2:**  
**Non-contact Water Diversion Ditch Outlet Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.**

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.011-0.020 <sup>3,4</sup>
Station	Description	Sample ID	Lab ID	Sampling Date		
OUT-01	Non-Contact Water Diversion Ditch Outlet	OUT-01	VA26A0080-001	2026-01-04	0.000031	0.00336
OUT-02	Non-Contact Water Diversion Ditch Outlet	OUT-02	VA26A0080-002	2026-01-04	0.000040	0.00525
OUT-06	Non-Contact Water Diversion Ditch Outlet	OUT-06	VA26A0080-003	2026-01-04	0.000021	0.00533

**Notes:**

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.

<sup>3</sup> CCME guideline for total mercury = 0.026 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Non-detect results are screened using the detection limit value.



***Appendix E:***  
***Freshwater Receiving Environment Results***

**Table E-1:  
Freshwater Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.**

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.0060-0.0095 <sup>3,4</sup>
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-01	Woodfibre Creek Lower Reach	SW-01	VA26A0129-001	2026-01-05	<0.000020	0.00190
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA26A0129-002	2026-01-05	<0.000020	0.00121
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA26A0129-005	2026-01-05	<0.000020	0.00119
SW-04	East Creek Lower Reach	SW-04	VA26A0129-004	2026-01-05	<0.000020	0.00165

**Notes:**

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.

<sup>3</sup> CCME guideline for total mercury = 0.026 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Non-detect results are screened using the detection limit value.

***Appendix F:***  
***Estuarine Water Receiving Environment Results***

**Table F-1:**  
**Estuarine Water Methylmercury and Corresponding Total Mercury Results Received at the Time of Reporting.**

Parameter					Total Methylmercury	Total Mercury
Unit					µg/L	µg/L
Lowest Applicable Guideline <sup>1</sup>					0.0001 <sup>2</sup>	0.0055 <sup>3,4</sup>
Station	Description	Sample ID	Lab ID	Sampling Date		
SW-03	Mill Creek Estuary	SW-03	VA26A0129-003	2026-01-05	<0.000020	0.00109

**Notes:**

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> From BC Ambient Water Quality Guidelines for Mercury Overview Report. The methylmercury concentration threshold of 0.0001 µg/L (0.1 ng/L) is indicated as a WQG for the protection of wildlife and is set at a concentration that protects fish from mercury bioaccumulation to a level that may harm wildlife that consume fish.

<sup>3</sup> CCME guideline for total mercury = 0.026 µg/L.

<sup>4</sup> When MeHg ≤ 0.5% of total Hg, BC WQG = 0.02 µg/L. When MeHg > 0.5% of total Hg, BC WQG = 0.0001/(MeHg/Total Hg). Detection limit values are used to calculate the WQG for result reported as not detected.

Non-detect results are screened using the detection limit value.

***Appendix G:***  
***Marine Water Receiving Environment Results***

Table G-1:  
Summary of Marine Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		Station IDZ-W1	Station IDZ-W1	Station IDZ-W1	Station IDZ-W1	Station IDZ-W2	Station IDZ-W2	Station IDZ-W2
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-W1-0.5	IDZ-W1-2m	IDZ-W1-SF	IDZ-W1-SF-DUP	IDZ-W2-0.5	IDZ-W2-2m	IDZ-W2-SF
		Long Term	Short Term	VA26A0598-001	VA26A0598-002	VA26A0598-003	VA26A0598-004	VA26A0598-007	VA26A0598-008	VA26A0598-009
				2026-01-11 13:00	2026-01-11 12:45	2026-01-11 12:10	2026-01-11 12:10	2026-01-11 15:25	2026-01-11 15:15	2026-01-11 15:00
General Parameters										
pH - Field	pH units	7.0 - 8.7	-	7.62	7.59	7.51	-	7.67	7.62	7.58
Specific Conductivity - Field	µS/cm	-	-	28356	42427	46245	-	21656	39961	46276
Temperature - Field	°C	-	-	6.5	8.4	9.5	-	6.1	8.4	9.5
Salinity - Field	ppt	Narrative <sup>2</sup>	-	17.3	27.03	29.8	-	12.89	25.31	29.82
Turbidity - Field	NTU	Narrative <sup>2</sup>	Narrative <sup>2</sup>	1.19	1.00	1.12	-	1.24	0.98	0.96
TSS	mg/L	Narrative <sup>2</sup>	Narrative <sup>2</sup>	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Oxygen - Field	mg/L	≥8	-	8.25	<u>7.15</u>	<u>6.76</u>	-	8.72	<u>7.23</u>	<u>7.07</u>
Total Hardness	mg/L	-	-	1740	3630	5840	5500	2260	4360	5470
Dissolved Hardness	mg/L	-	-	1970	4250	5230	5130	2210	3760	5250
Anions and Nutrients										
Sulphate	mg/L	-	-	771	1580	2290	2280	962	1900	2300
Chloride	mg/L	-	-	5750	11600	16600	16700	6970	13700	16500
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH <sub>3</sub> )	mg/L	7.2-12 <sup>3</sup>	48-78 <sup>3</sup>	0.0068	0.0064	<0.0050	<0.0050	0.0057	0.0069	<0.0050
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	<0.50	<0.50	<0.50	0.53	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	1.56	1.23	0.76	0.62	1.41	1.05	0.64
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.32	0.96	1.12	0.91	1.14	1.2	0.85
Total Metals										
Aluminum, total (T-Al)	mg/L	-	-	0.0676	0.0356	0.0118	0.009	0.0604	0.0245	0.014
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00065	0.00112	0.00164	0.00152	0.00067	0.0012	0.0015
Barium, total (T-Ba)	mg/L	-	-	0.0077	0.01	0.0101	0.0102	0.0082	0.0093	0.0096
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	<u>1.52</u>	<u>2.64</u>	<u>3.87</u>	<u>3.64</u>	<u>1.77</u>	<u>3.12</u>	<u>3.65</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000035	0.000067	0.000099	0.000083	0.000045	0.000065	0.00008
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000098	0.000114	0.000121	0.000118	0.000106	0.000112	0.000109
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00094	0.00086	<0.00050	<0.00050	0.00087	0.0009	0.00073
Iron, total (T-Fe)	mg/L	-	-	0.074	0.059	0.017	0.027	0.066	0.033	0.017
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.00648	0.00678	0.00311	0.00297	0.00612	0.00485	0.00277
Molybdenum, total (T-Mo)	mg/L	-	-	0.00333	0.00635	0.0095	0.0093	0.00403	0.00741	0.00871
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.00101	0.00173	0.00254	0.00242	0.00116	0.00195	0.00242
Vanadium, total (T-V)	mg/L	0.005	-	0.00072	0.0012	0.00153	0.00154	0.00079	0.00128	0.00151
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals										
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000038	0.000071	0.000074	0.000081	0.000042	0.000061	0.000079
Copper, dissolved (D-Cu)	mg/L	-	-	0.00054	0.00083	0.00053	<0.00050	0.00068	0.00082	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.021	<0.010	<0.010	<0.010	0.016	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00656	0.00471	0.00198	0.00205	0.00566	0.00475	0.00167
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	0.00058	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	2.62	5.64	6.48	6.56	2.8	4.99	7.19
Vanadium, dissolved (D-V)	mg/L	-	-	0.00075	0.00132	0.0014	0.00147	0.00076	0.00114	0.00168
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0018	0.0028	0.0015	0.0015	0.0016	0.002	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)										
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	0.00001	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	0.000019	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)										
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

**Notes:**  
Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.  
**Shaded** results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.  
<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.  
<sup>2</sup> Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was discharging intermittently for <30 days, therefore the turbidity and TSS short-term WQGs were evaluated. Background conditions at each depth (0.5 and 2 m below surface and 2 m above the seafloor) were established using reference station WQR2 collected January 11 (Table G-3).  
<sup>3</sup> The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.  
<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-2:  
Summary of Marine Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		Station IDZ-E1	Station IDZ-E1	Station IDZ-E1	Station IDZ-E2	Station IDZ-E2	Station IDZ-E2
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-E1-0.5	IDZ-E1-2m	IDZ-E1-SF	IDZ-E2-0.5	IDZ-E2-2m	IDZ-E2-SF
		VA26A0856-001	VA26A0856-002	VA26A0856-003	VA26A0856-004	VA26A0856-005	VA26A0856-006		
		Long Term	Short Term	2026-01-14 13:50	2026-01-14 13:40	2026-01-14 13:25	2026-01-14 12:57	2026-01-14 12:45	2026-01-14 12:30
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.63	7.32	7.55	7.60	7.28	7.52
Specific Conductivity - Field	µS/cm	-	-	7958	15228	42331	9362	18598	42478
Temperature - Field	°C	-	-	4.8	5.4	8.4	5.1	5.4	8.5
Salinity - Field	ppt	Narrative <sup>2</sup>	-	4.38	8.79	26.96	5.21	10.91	27.07
Turbidity - Field	NTU	Narrative <sup>2</sup>	Narrative <sup>2</sup>	6.48	5.94	1.45	5.62	5.9	1.60
TSS	mg/L	Narrative <sup>2</sup>	Narrative <sup>2</sup>	4.8	4.9	<2.0	5.9	6.1	2.3
Dissolved Oxygen - Field	mg/L	>=8	-	12.40	12.06	<b><u>7.86</u></b>	12.29	11.79	<b><u>7.82</u></b>
Total Hardness	mg/L	-	-	719	1210	5200	895	1500	4870
Dissolved Hardness	mg/L	-	-	666	898	4850	952	1290	4960
Anions and Nutrients									
Sulphate	mg/L	-	-	234	440	1990	317	450	1860
Chloride	mg/L	-	-	2270	3940	15100	2880	3970	14500
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH <sub>3</sub> )	mg/L	7.2-18 <sup>3</sup>	48-121 <sup>3</sup>	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	2.32	2.43	1	2.61	2.38	1.05
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.26	2.41	1.35	2.34	2.77	1.21
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.416	0.266	0.0394	0.338	0.274	0.044
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.00044	0.0014	<0.00040	0.00048	0.00139
Barium, total (T-Ba)	mg/L	-	-	0.0096	0.0085	0.0101	0.0086	0.0088	0.0099
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.57	0.83	<b><u>2.95</u></b>	0.65	1.02	<b><u>2.81</u></b>
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000028	0.000069	<0.000020	0.000026	0.000071
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000191	0.000159	0.000123	0.000176	0.000165	0.00011
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00133	0.0012	0.00057	0.00149	0.00161	0.00057
Iron, total (T-Fe)	mg/L	-	-	0.319	0.207	0.031	0.257	0.21	0.048
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00011	<0.00010	<0.00010	0.00011	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0123	0.00954	0.00436	0.0107	0.00925	0.00466
Molybdenum, total (T-Mo)	mg/L	-	-	0.00143	0.00261	0.00825	0.00176	0.00264	0.00791
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000429	0.000698	0.0023	0.000548	0.000828	0.00216
Vanadium, total (T-V)	mg/L	0.005	-	0.00112	0.00092	0.00142	0.00101	0.00098	0.00144
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	<0.0030	0.0033	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	<0.000020	0.000073	0.000022	0.000028	0.000069
Copper, dissolved (D-Cu)	mg/L	-	-	0.0007	0.00077	0.00068	0.00078	0.00059	0.00054
Iron, dissolved (D-Fe)	mg/L	-	-	0.021	0.021	<0.010	0.02	0.017	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0057	0.00524	0.00344	0.00481	0.00462	0.00362
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.784	1.05	5.27	1.11	1.46	5.56
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	0.00121	<0.00050	0.00053	0.00133
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0021	0.0021	0.0018	0.0024	0.0026	0.002
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table were collected when the site was discharging intermittently for <30 days, therefore the turbidity and TSS short-term WQGs were evaluated. Background conditions at each depth (0.5 and 2 m below surface and 2 m above the seafloor) were established using reference station WQR1 collected January 14 (Table G-3).

<sup>3</sup> The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.

<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-3:  
Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline <sup>1</sup>		Reference Station WQR2	Reference Station WQR2	Reference Station WQR2	Reference Station WQR1	Reference Station WQR1	Reference Station WQR1
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR2-0.5	WQR2-2m	WQR2-SF	WQR1-0.5	WQR1-2m	WQR1-SF
		VA26A0598-010	VA26A0598-011	VA26A0598-012	VA26A0856-007	VA26A0856-008	VA26A0856-009		
		Long Term	Short Term	2026-01-11 11:10	2026-01-11 11:25	2026-01-11 11:40	2026-01-14 9:45	2026-01-14 9:30	2026-01-14 9:18
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.61	7.58	7.49	7.51	7.29	7.41
Specific Conductivity - Field	µS/cm	-	-	19250	42689	46189	7244	18947	45533
Temperature - Field	°C	-	-	5.5	8.4	9.5	4.6	5.2	9.5
Salinity - Field	ppt	Narrative <sup>2</sup>	-	11.33	27.23	29.76	3.96	11.13	29.30
Turbidity - Field	NTU	Narrative <sup>2</sup>	Narrative <sup>2</sup>	1.66	0.93	1.01	9.77	8.6	1.35
TSS	mg/L	Narrative <sup>2</sup>	Narrative <sup>2</sup>	<2.0	<2.0	<2.0	7.8	10.9	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	9.36	<u>7.15</u>	<u>7.38</u>	12.51	11.51	<u>6.17</u>
Total Hardness	mg/L	-	-	1660	3110	5500	792	2040	5550
Dissolved Hardness	mg/L	-	-	1830	2870	4800	849	2030	5240
Anions and Nutrients									
Sulphate	mg/L	-	-	735	1400	2280	240	771	1990
Chloride	mg/L	-	-	5390	10100	16700	2490	6290	15800
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH <sub>3</sub> )	mg/L	7.2-18 <sup>3</sup>	48-121 <sup>3</sup>	0.0196	0.0076	<0.0050	<0.0050	<0.0050	0.0073
Nitrite (N-NO <sub>2</sub> )	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO <sub>3</sub> )	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	0.58
Total Organic Carbon (TOC)	mg/L	-	-	1.57	1.18	0.69	2.58	2.37	1.00
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.34	1.24	0.91	2.32	2.36	1.12
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.0571	0.0364	0.0125	0.545	0.37	0.0263
Antimony, total (T-Sb)	mg/L	-	0.27 <sup>4</sup>	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00054	0.00105	0.00174	<0.00040	0.00062	0.00163
Barium, total (T-Ba)	mg/L	-	-	0.0087	0.01	0.0099	0.0121	0.0124	0.0106
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	<u>1.38</u>	<u>2.35</u>	<u>3.66</u>	0.56	<u>1.29</u>	<u>3.27</u>
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000027	0.000059	0.000089	<0.000020	0.000042	0.000089
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.00011	0.000123	0.000132	0.000255	0.000209	0.000128
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00154	0.00184	<u>0.00227</u>	0.00155	0.00133	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.112	0.084	0.019	0.427	0.333	0.028
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	0.00016	0.00011	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.00918	0.00794	0.0032	0.0169	0.0144	0.00506
Molybdenum, total (T-Mo)	mg/L	-	-	0.00315	0.00573	0.0109	0.00154	0.00345	0.0091
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	0.00059	<0.00050	<0.00050	0.00054
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000875	0.00157	0.00257	0.000405	0.001	0.0024
Vanadium, total (T-V)	mg/L	0.005	-	0.00079	0.00119	0.00184	0.00139	0.00154	0.00159
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	0.0031	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000047	0.000051	0.000067	<0.000020	0.000029	0.000076
Copper, dissolved (D-Cu)	mg/L	-	-	0.00066	0.00061	0.0005	0.00055	0.00068	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.045	0.019	<0.010	0.024	0.019	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0115	0.00692	0.00182	0.00686	0.00677	0.00381
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	2.65	3.99	6.72	0.981	2.32	5.76
Vanadium, dissolved (D-V)	mg/L	-	-	0.00084	0.00103	0.00153	0.0005	0.00078	0.00142
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0018	0.0014	0.0012	0.0013	0.0013	0.0021
Polycyclic Aromatic Hydrocarbons (PAHs)									
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)									
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Notes:

Results **underlined in bold italics** exceed the applicable long-term water quality guideline for the protection of marine water aquatic life.

Shaded results exceed the applicable short-term water quality guideline for the protection of marine water aquatic life.

<sup>1</sup> The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

<sup>2</sup> Induced guidelines for change from background conditions arising from discharges to the aquatic environment. Salinity WQG was not evaluated. The water quality data presented in the table are marine reference stations and represent background conditions, therefore the turbidity and TSS WQGs were not evaluated.

<sup>3</sup> The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.

<sup>4</sup> The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.



**Table G-4:**  
**Marine Water Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.**

Parameter					Lower Bound PCDD/F TEQ	Upper Bound PCDD/F TEQ
Unit					pg/L	pg/L
Station	Position in Water Column	Sample ID	Lab ID	Sampling Date		
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25D3426-001	2025-12-15	0.0978	1.69
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25D3426-002	2025-12-15	0.292	2.30
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25D3426-003	2025-12-15	0.0839	1.40
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25D3426-004	2025-12-15	0.0923	1.46
WQR1	0.5 m Below Surface	WQR1-0.5	VA25D3426-005	2025-12-15	0.601	1.52
WQR2	0.5 m Below Surface	WQR2-0.5	VA25D3426-006	2025-12-15	0.220	1.35

**Notes:**

PCDD = polychlorinated dibenzodioxins (dioxins)

PCDF = polychlorinated dibenzofurans (furans)

TEQ = toxic equivalency

Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).

Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.