TECHNICAL MEMORANDUM

To:	**Ian McAllister, Ashleigh Crompton, Mike Champion, Mark Zan and Ryan Schucroft (Woodfibre LNG)**	**Date: 21 Nov 2025**	
From:	**Holly Pelletier and Patrick Mueller (Lorax)**	**Project #:**	**A633-9**
Subject:	**PE-111578 Weekly Discharge and Compliance Report #90 for November 9 - 15**		

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 #90) was prepared by Lorax and summarizes WDA monitoring conducted for the period of November 9 - 15. 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 #90 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. 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. To facilitate the replacement of the East Creek discharge culvert at OUT-12 (station SW-04), the lower reach of East Creek was temporarily diverted to an adjacent culvert, OUT-11, on September 17, 2024. To facilitate the reconstruction of the culvert at station OUT-01, non-contact water at the inlet to the culvert at OUT-01 has been temporarily diverted by pumping to station OUT-02 starting on October 12, 2025.

The East WWTP was commissioned April 2024 and the West WWTP was commissioned August 2024. Operation of the West WWTP was subsequently suspended September 25, 2024, for a temporary reconfiguration to conduct pilot-scale evaluations of alternative treatment processes. The evaluations were completed April 2025 and did not yield improved treatment outcomes; therefore, the original treatment process has been maintained. Lower than expected volumes of contaminated contact water have been encountered during construction; therefore, operation of the West WWTP remains suspended and all site waters that require treatment are directed to the East WWTP, with treated effluent discharged to the East Sedimentation Pond.

The 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.

Discharge from the East and West Sedimentation Ponds is controlled using pumps. Prior to water management upgrades that commenced during the week of June 22 - 28, 2025, water stored in the ponds was pumped to a TSS settling system for clarification and then discharged through the authorized outfall structures associated with each pond. Some of the TSS-clarified water was recirculated back to the ponds or was re-used for construction (*e.g.*, dust suppression), and this will continue with the revised configuration. 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.

A flocculant-based TSS settling system (2700GPM) at the West Sedimentation Pond is used to clarify all non-contaminated contact water prior to re-use at site or discharge at SP-W-OUT. Water collected in the East Sediment Pond is periodically transferred to the West Sedimentation Pond to allow treatment by the 2700GPM system. The fully built 2700GPM TSS settling system will have the installed capacity to clarify 14,700 m^3/day of contact water and will consist of six parallel treatment trains, each with an installed capacity of 2450 m^3/day. Only one train will be operated during dry conditions or when contact water flows are below approximately 2450 m^3/day, whereas at higher flows, additional trains will be activated as needed to match the influent volumes. Treatment trains 1, 2, 3 and 4 have been commissioned, and commissioning of treatment trains 5 and 6 was underway during the monitoring period.

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

Variable weather conditions were observed during the November 9 - 15 monitoring period, with precipitation recorded each day except on November 11. The total precipitation amount during the monitoring period was 162.8 mm. 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
2025-11-09	18.6	12.9	5.5	Rain
2025-11-10	20.6	13.4	8.6	Rain
2025-11-11	0	11.6	6.0	Mix of Sun and Cloud
2025-11-12	32.6	9.6	6.4	Heavy Rain
2025-11-13	82.4	11.2	7.0	Heavy Rain
2025-11-14	6.6	8.9	6.3	Mix of Sun and Cloud
2025-11-15	2.0	9.8	6.3	Mix of Sun and Cloud

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

From November 9 - 15, the East Sedimentation Pond received water from the Area 1100 Sump, Trench 7 and recirculated effluent from the East WWTP (Appendix A, Figure 2). There was no discharge to Howe Sound from station SP-E-OUT during the monitoring period. A total of 3,227 m^3 from the East Sedimentation Pond was transferred to the West Sedimentation Pond from November 9 - 15 (Appendix B, Table B-5).

Routine operation of the East WWTP continued during the monitoring period (November 9 - 15). 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 (November 9 - 15). Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-5).

From November 9 - 15, the West Sedimentation Pond received water from the Area 4100 and Area 4200 Sumps, the East Sedimentation Pond 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 each day during the monitoring period (November 9 - 15) and recirculated back to the pond or intermittently discharged to Howe Sound. A total of 14,309 m^3 of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT on November 10, 11, 13, 14 and 15. Clarified effluent was not reclaimed for construction use from November 9 - 15. Daily clarified effluent volumes from the TSS settling system that were recirculated to the West Sedimentation Pond or discharged to Howe Sound, and volumes of water reclaimed for construction use are provided in Appendix C (Table C-7).

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). Non-contact diversion ditch water at OUT-01 has been temporarily redirected to OUT-02 since October 12, 2025, to facilitate the reconstruction of the outfall at OUT-01. Station OUT-01 is not routinely monitored while the diversion is in place except during significant rainfall events, when non-contact water intermittently flows through the outfall (*e.g.*, October 26, 2025).
- Non-contact diversion ditch outlet monitoring station OUT-06.
- East Creek water has been temporarily diverted to OUT-11 since September 17, 2024, to facilitate the replacement of the OUT-12 culvert through which East Creek previously discharged. East Creek is monitored at the inlet to the temporary diversion (freshwater receiving environment station SW-04); therefore, OUT-11 is not currently monitored while the diversion is in place.
- 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. As of September 26, 2025, a manifold is being implemented that combines effluent from the individual trains into a single discharge line configured with a new SP-W-OUT sampling port. Prior to September 26, 2025, the SP-W-OUT monitoring station was not safe to access and the SP-W-OUT station was monitored at the outlet of the individual 2700GPM TSS settling trains.
- Howe Sound reference and IDZ monitoring stations (WQR1, WQR2, IDZ-E1, IDZ-E2, IDZ-W1, and IDZ-W2).

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 approximately 10 m from the location of the SP-W-OUT station. At times when only one 2700GPM treatment train is operated, the 2700GPM-OUT sample has been 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. As previously discussed, since September 26, 2025, a manifold is being implemented that combines effluent from the individual trains into a single discharge line configured with a new SP-W-OUT sampling port.

Water quality was monitored at stations OUT-01, OUT-02, OUT-06, IDZ-W1, IDZ-W2, WQR2, SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T2-OUT, W2700T5-OUT and W2700T6-OUT during the monitoring period (November 9 - 15). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (November 9 - 15) 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 (November 9 - 15). Daily field measurements were not collected at the west catchment compliance station (SP-W-OUT) on November 9 and 12 as there was no discharge to Howe Sound on those days nor on November 11 as there was no discharge at the time of monitoring.

Daily field parameters were not collected at the influent and effluent stations of the East WWTP (WWTP-E-IN and WWTP-E-OUT, respectively) on November 12 as it was not operational at the time of monitoring that day. Daily field parameters were not collected from station WWTP-E-IN on November 11 due to an oversight by field staff. 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 (November 9 - 15).

Table 2:
Summary of PE-111578 Monitoring Samples Collected November 9 - 15.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
November 9, 2025	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_2, W
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	D, M_2, W
	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
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	SW-03	Mill Creek Estuary		
	SW-07	Upstream Mill Creek (at the diversion inlet)		
November 10, 2025	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, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, M_2, 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 new SP-W-OUT sampling port	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, M_2, W
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	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		
	OUT-01	Non-contact water diversion ditch outlet, collected during significant rainfall event where non-contact water flowed through the outfall while still being reconstructed	Field, Physical & General Parameters, Total and Dissolved Metals, and Methylmercury.	M, M_5
	OUT-02	Non-contact water diversion ditch outlet		
	OUT-06	Non-contact water diversion ditch outlet		
November 11, 2025	SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	WWTP-E-OUT	East WWTP at the effluent meter box	Field Parameters.	D
	SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	Field & Physical Parameters, Total, and Dissolved Metals.	P
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M, M_5
	IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
	IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
	IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
	IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
	IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
	WQR2-0.5	Reference site 2; 0.5 m below surface		
	WQR2-2m	Reference site 2; 2 m below surface		
	WQR2-SF	Reference site 2; 2 m above the seafloor		
November 12, 2025	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
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
November 13, 2025	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
	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	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
	SW-01	Lower Reach of Woodfibre Creek (near the mouth)	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	M
	SW-04	Lower Reach of East Creek (near the outlet to the outfall culvert)		

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_2 – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.
M_5 – fall high-frequency (5-in-30) sampling for receiving environment 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.

Table 2 (continued): Summary of PE-111578 Monitoring Samples Collected November 9 - 15.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
November 14, 2025	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
	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	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
November 15, 2025	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
	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	Field Parameters.	D
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P

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_2 – bi-monthly monitoring for physical parameters at WWTP and sedimentation pond stations.
M_5 – fall high-frequency (5-in-30) sampling for receiving environment 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 #90) are listed below in Table 3, with additional field measurements presented in Table B-4 (Appendix B) and Table C-6 (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:

- SP-W-OUT collected September 29 (acute toxicity);
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2 collected September 30 at 0.5 m below surface (chronic toxicity);
- IDZ-E1, IDZ-E2 and WQR1 collected October 9 (chronic toxicity);
- IDZ-W1, IDZ-W2 and WQR2 collected October 10 at 0.5 m below surface (chronic toxicity);
- COMB-WWTP-E-IN collected October 17 (total mercury and methylmercury);
- IDZ-E1, IDZ-E2 and WQR1 collected October 20 (total mercury, methylmercury);
- COMB-WWTP-E-IN collected October 22 (total mercury and methylmercury);
- IDZ-W1, IDZ-W2 and WQR2 collected October 24 (total mercury, methylmercury);
- SW-01, SW-02, SW-03, SW-04 and SW-07 collected October 25 (total mercury, methylmercury);
- OUT-01 collected October 26 (total mercury and methylmercury);
- IDZ-E1, IDZ-E2 and WQR1 collected October 26 (total mercury, methylmercury);
- COMB-WWTP-E-IN collected October 30 (total mercury and methylmercury);
- SW-01, SW-02, SW-03, SW-04, and SW-07 collected October 30 (total mercury, methylmercury);
- IDZ-W1, IDZ-W2 and WQR2 collected November 1 (field and all analytical parameters);
- OUT-01, OUT-02 and OUT-06 collected November 2 (field and all analytical parameters);
- IDZ-E1, IDZ-E2 and WQR1 collected November 2 (total mercury, methylmercury, dioxins and furans);
- SP-W-IN collected November 5 (total mercury and methylmercury);
- SP-W-OUT and 2700GPM-IN collected November 5 (dioxins and furans);

- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected November 6 (total mercury, methylmercury, dioxins and furans);
- OUT-01, OUT-02 and OUT-06 collected November 6 (field and all analytical parameters);
- IDZ-W1, IDZ-W2 and WQR2 collected November 7 (field and all analytical parameters);
- SW-02, SW-03 and SW-07 collected November 9 (field and all analytical parameters);
- SP-W-IN, SP-W-OUT and 2700GPM-IN collected November 10 (total mercury, methylmercury, dioxins and furans);
- W2700T5-OUT and W2700T6-OUT collected November 10 (total mercury and methylmercury);
- OUT-01, OUT-02 and OUT-06 collected November 10 (field and all analytical parameters);
- IDZ-W1, IDZ-W2 and WQR2 collected November 11 (total mercury, methylmercury, dioxins and furans);
- SW-01 and SW-04 collected November 13 (field and all analytical parameters).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #90.

Sample	Description	Sampling Date	Parameters Reported
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	October 10, 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		
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	October 11, 2025	Methylmercury.
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	October 12, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins and Furans.
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)		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	October 14, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins and Furans.
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
OUT-02	Non-contact water diversion ditch outlet		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	October 15, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins and Furans.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	October 17, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, PAHs, Methylmercury, Dioxins and Furans.
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-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	October 20, 2025	Dioxins and Furans.
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-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	October 24, 2025	Dioxins and Furans.
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		

Table 3 (continued):
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #90.

Sample	Description	Sampling Date	Parameters Reported
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	October 25, 2025	Dioxins and Furans.
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)		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	October 26, 2025	Dioxins and Furans.
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
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	October 27, 2025	Dioxins and Furans.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
SW-01	Lower Reach of Woodfibre Creek (near the mouth)	October 30, 2025	Dioxins and Furans.
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)		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	November 2, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
IDZ-E1-2m	Howe Sound IDZ station E1; 2 m below surface		
IDZ-E1-SF	Howe Sound IDZ station E1; 2 m above the seafloor		
IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
IDZ-E2-2m	Howe Sound IDZ station E2; 2 m below surface		
IDZ-E2-SF	Howe Sound IDZ station E2; 2 m above the seafloor		
WQR1-0.5	Reference site 1; 0.5 m below surface		
WQR1-2m	Reference site 1; 2 m below surface		
WQR1-SF	Reference site 1; 2 m above the seafloor		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	November 5, 2025	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		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium and Methylmercury.
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	November 9, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, Methylmercury.
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
SP-W-IN	West Sedimentation Pond influent monitored at cell 1 of the pond	November 10, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
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		Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
W2700T6-OUT	2700GPM TSS settling system at the outlet of Train 6		
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	November 11, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
IDZ-W1-2m	Howe Sound IDZ station W1; 2 m below surface		
IDZ-W1-SF	Howe Sound IDZ station W1; 2 m above the seafloor		
IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
IDZ-W2-2m	Howe Sound IDZ station W2; 2 m below surface		
IDZ-W2-SF	Howe Sound IDZ station W2; 2 m above the seafloor		
WQR2-0.5	Reference site 2; 0.5 m below surface		
WQR2-2m	Reference site 2; 2 m below surface		
WQR2-SF	Reference site 2; 2 m above the seafloor		

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 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 3.4. The water quality monitored at non-contact water diversion ditch outlets and in the receiving environment is described in Section 3.5 to Section 0. 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 November 9 - 15 as well as analytical samples collected November 9 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT). The East WWTP effluent sample (WWTP-E-OUT) collected November 9 met MDOs for field and analytical parameters. (Appendix B, Table B-1, Table B-3 and Table B-4).

East WWTP effluent was directed to the East Sedimentation Pond and there was no discharge from the pond to Howe Sound from the SP-E-OUT authorized discharge location from November 9 - 15 (Section 1.2; Table B-5 of Appendix B). Therefore, water quality samples and field measurements were not collected at this station during the monitoring period.

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 14,309 m^3 of clarified sedimentation pond effluent from the 2700GPM TSS Settling System was intermittently discharged to Howe Sound from SP-W-OUT each day during the monitoring period (November 9 - 15) except on November 9 and 12.

Field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected November 9 - 15 and analytical samples collected November 5 (stations W2700T5-OUT and W2700T6-OUT as discussed in Report #89), November 10 (stations SP-W-IN, SP-W-OUT, 2700GPM-IN, W2700T5-OUT and W2700T6-OUT) and November 11 (station W2700T2-OUT) were available at the time of reporting (Appendix C, Table C-1 through Table C-6). Field measurements collected November 9 - 15 and the November 10 effluent sample collected at SP-W-OUT met PE-111578 discharge limits and WQGs except for total lead and total zinc (Table 4).

Table 4:
Summary of Parameters Exceeding PE-111578 Discharge Limits in Effluent Discharged from SP-W-OUT for Field and Analytical Results Available at the Time of Reporting

Parameter	Units	Discharge Limit	N	N >Limit	Commentary
Total Lead	mg/L	0.0035	2	2	Total lead measured in duplicate samples collected at station SP-W-OUT on November 10 (0.0241 and 0.0250 mg/L) were 6.9 and 7.1 times greater than the PE-111578 discharge limit, respectively. BCER has been notified.
Total Zinc	mg/L	0.0133	2	2	Total zinc measured in duplicate samples collected at station SP-W-OUT on November 10 (0.0186 mg/L in both samples) was 1.4 times greater than the PE-111578 discharge limit. BCER has been notified.

N = number of samples.

Pilot test samples collected November 5 and 10 from Trains 5 and 6 of the 2700GPM TSS settling system (W2700T5-OUT and W2700T6-OUT, respectively) met PE-111578 discharge limits and WQGs (Appendix C, Table C-1 and Table C-2).

3.5 Non-Contact Water Diversion Ditch Outlets

The methylmercury result for the non-contact water diversion ditch outlet sample collected at station OUT-02 on October 14 (as discussed in Report #86) was available at the time of reporting. The methylmercury concentration was <0.000020 µg/L in the sample collected at OUT-02 and was below the WQG. The corresponding total mercury result was also below the WQG. Results are tabulated in Appendix D, Table D-1.

3.6 Freshwater and Estuarine Water Receiving Environment

Analytical results were available at the time of reporting for 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 October 12 and October 17 (as discussed in Report #86). The analytical results, field parameters, and WQGs are summarized in Appendix E (freshwater) and Appendix F (estuarine water).

Parameter concentrations met WQGs except field pH, total aluminum, total iron, dissolved copper and dissolved nickel in some samples (Appendix E, Table E-1 and Table E-2 and Appendix F, Table F-1). Field pH in the Mill Creek estuary (pH 6.5) on October 12 was below the lower range of the WQG (pH 7.0 for estuarine water). Total aluminum was above the long-term WQG in samples collected from Woodfibre Creek on October 12 and 17 (0.139 and 0.0991 mg/L, respectively), from mid-stream in Mill Creek on October 12 (0.107 mg/L), from the background station in Mill Creek on October 17 (0.0384 mg/L) and from East Creek on October 12 (0.345 mg/L). Total iron was above the long-term WQG in samples collected from East Creek on October 12 and 17 (0.350 and 0.342 mg/L, respectively). Dissolved copper was above the long-term WQG in the sample collected from Woodfibre Creek on October 12 and 17 (0.00034 and 0.00060 mg/L, respectively), from mid-stream in Mill Creek on October 12 (0.00031 mg/L), from the background station in Mill Creek on October 17 (0.00022 mg/L) and from East Creek on October 17 (0.00059 mg/L). Dissolved copper was also above the short-term WQG at the background station in Mill Creek on October 17. Dissolved nickel was above the long-term WQG in Woodfibre Creek on October 12 (0.00072 mg/L).

The field pH values and the total aluminum and dissolved copper concentrations observed at downstream stations (SW-01, SW-02, SW-03, and SW-04) are within ranges observed in the pre-construction baseline monitoring program or background stations for the freshwater and estuarine water receiving environment with the exception of total aluminum in East Creek (SW-04) on October 12. Total iron in East Creek was above the baseline monitoring program and background concentrations on October 12 and 17 and dissolved nickel in Woodfibre Creek was above the baseline and background concentrations on October 12.

Elevated field turbidity and TSS (6.37 NTU and 8.8 mg/L) were observed in the East Creek sample collected October 12. On October 12, field staff noted elevated turbidity at the waterfall above station SW-04 (5.83 NTU) and the roadside ditch 5 m upstream of station SW-04 (13.87 NTU) and noted that no construction activity was observed within 30 m of station SW-04 or roadside ditch upstream of SW-04 at the time of sampling (Figure 6). Approximately 32 mm of rainfall was observed on site between October 10 and October 12 that may have increased turbid background runoff from upslope of the East Creek station. The total aluminum concentration noted above pre-

construction baseline range in East Creek on October 12 is predominantly in the particulate-bound form of the metal and is likely associated with elevated turbidity and TSS originating upstream from station SW-04.

Total iron was above the pre-construction baseline range in East Creek on October 12 and 17 (Table 5) and is predominantly in the particulate-bound form of the metal; however, relatively low turbidity and TSS (1.8 NTU and 3.4 mg/L, respectively) was observed in East Creek on October 17. As noted above, elevated field turbidity and TSS (6.37 NTU and 8.8 mg/L) were observed in the East Creek sample collected October 12. Potential sources of total iron to East Creek will be reviewed. This item is tracked in Table 6.

Dissolved nickel was above the range observed in the pre-construction baseline monitoring program in Woodfibre Creek (station SW-01) on October 12 and was greater than the total nickel concentration that was below the analytical detection limit (<0.00050 mg/L). The total fraction would include both the dissolved and particulate-bound forms of the metal; therefore, total nickel should not be less than the dissolved nickel concentration and is suspected to be a quality control issue with the laboratory. A reanalysis has been requested with the laboratory to confirm the results. This item is tracked in Table 6.

Table 5:
Summary of Parameters Above the Pre-Construction Baseline Range and WQGs in East Creek (Station SW-04) for Field and Analytical Results Available at the Time of Reporting

Parameter	Units	WQG	N	N >Limit	Commentary
Total Aluminum	mg/L	0.24	2	1	Total aluminum measured in East Creek on October 12 (0.345 mg/L) was 1.4 times greater than the WQG and 1.3 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.264 mg/L). It is speculated the total aluminum concentration is associated with elevated turbidity and TSS originating upslope from station SW-04.
Total Iron	mg/L	0.30	2	2	Total iron measured in East Creek on October 12 and 17 (0.350 and 0.342 mg/L) were 1.2 and 1.1 times greater than the WQG, respectively, and both 1.3 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.273 mg/L). Potential sources of total iron to East Creek will be reviewed.

N = number of samples.

The field pH and total aluminum and dissolved copper concentrations measured in Woodfibre Creek, Mill Creek and East Creek are considered to represent background conditions and are not attributed to project influence. The samples collected from upstream Mill Creek (station SW-07) represents background water quality in Mill Creek.

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 October 12 and 17 (as discussed in Report #86) were available at the time of reporting. Methylmercury concentrations ranged from <0.000020 to 0.000069 µg/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-3 (freshwater) and Appendix F, Table F-2 (estuarine water).

Dioxins and furans 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 October 12 and 17 (as discussed in Report #86), October 25 (as discussed in Report #87) and October 30 (as discussed in Report #88) were available at the time of reporting. The lower and upper bound PCDD/F TEQ concentrations measured in these samples ranged from 0 to 0.0527 pg/L and from 0.468 to 1.44 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 or at background stations for the freshwater and estuarine water receiving environment. Results are tabulated in Appendix E, Table E-4 and Appendix F, Table F-3.

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 October 14 (stations IDZ-E1, IDZ-E2 and WQR1, as discussed in Report #86), October 15 (stations IDZ-W1, IDZ-W2 and WQR2, as discussed in Report #86), November 2 (stations IDZ-E1, IDZ-E2 and WQR1, as discussed in Report #89) and on November 11 (stations IDZ-W1, IDZ-W2 and WQR2). 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-8). In all samples collected at 2 m above the seafloor on October 14, 15, November 2 and 11, at 2 m below the surface at IDZ-E1 and WQR1 on October 14 and IDZ-W1 and IDZ-W2 on October 15 as well as at 0.5 and 2 m below the surface WQR2 on October 15, dissolved oxygen ranged from 4.23 to 7.51 mg/L and was below the lower limit of the WQG (8 mg/L).

Total boron was also above the WQG (1.2 mg/L) and ranged from 2.02 to 4.33 mg/L in all samples collected October 14 and 15 (stations IDZ-E1, IDZ-E2, WQR1, IDZ-W1, IDZ-W2 and WQR2) and in samples collected at 2 m above the seafloor on November 2 (stations IDZ-E1, IDZ-E2 and

WQR1) and November 11 (stations IDZ-W1, IDZ-W2 and WQR2) as well as at 2 m below the surface at IDZ-E1 on November 2.

Total copper was above both the short- and long-term WQGs (0.003 and 0.002 mg/L, respectively) at 0.5 m below the surface at IDZ-E1 and IDZ-E2 on October 14 and at 2 m below the surface at IDZ-E2 and IDZ-W1 on October 14 and 15, respectively, and ranged from 0.00361 to 0.00628 mg/L. Total copper was also above the long-term WQG (0.002 mg/L) in all samples collected at 0.5 and 2 m below the surface on November 11 (stations IDZ-W1, IDZ-W2 and WQR2) and ranged from 0.00211 to 0.00284 mg/L.

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, total boron and total copper concentrations observed at the IDZ monitoring stations are within concentrations that have been observed in the pre-construction baseline monitoring program or within background ranges observed at marine reference stations with the exception of total copper in samples collected at 0.5 m below the surface at IDZ-E1 and IDZ-E2 on October 14. It is expected that samples collected within the IDZ (*i.e.,* mixing zone) defined in PE-111578 for the authorized discharge locations may have parameter concentrations above pre-construction baseline or background (*i.e.,* reference station) concentrations due to project influence.

Methylmercury analytical results were available at the time of reporting for all marine samples collected October 14 (stations IDZ-E1, IDZ-E2 and WQR1) and October 15 (stations IDZ-W1, IDZ-W2 and WQR2). For all samples, methylmercury concentrations ranged from <0.000020 to 0.000031 µg/L and met the WQG. The corresponding total mercury results also met WQGs. Results are tabulated in Appendix G, Table G-9.

Dioxin and furans results were available at the time of reporting for all marine samples collected October 14 (stations IDZ-E1, IDZ-E2 and WQR1), October 15 (stations IDZ-W1, IDZ-W2 and WQR2), October 20 (stations IDZ-E1, IDZ-E2 and WQR1), October 24 (stations IDZ-W1, IDZ-W2 and WQR2) and October 26 (stations IDZ-E1, IDZ-E2 and WQR1). For all samples, the lower bound PCDD/F TEQ concentrations ranged from 0 to 0.749 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 0.737 to 3.19 pg/L. The lower and upper bound PCDD/F TEQ concentrations were within the concentration ranges observed in the baseline monitoring program or within background ranges observed at marine reference stations. Results are tabulated in Appendix G, Table G-10.

3.8 Quality Control

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 6). 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 6. Any items flagged for follow-up are carried forward to future reports until they are closed.

Table 6:
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (November 9 - 15, Report #90)		
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 has been temporarily diverted through the OUT- 11 outfall since September 17, 2024, to facilitate replacement of the East Creek outfall culvert (OUT-12). The culvert at OUT-01 is being replaced and diversion water flows to OUT-01 have been redirected to OUT-02. 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 #90: Non-complaint Discharge	Total lead and total zinc above discharge limits.	Total lead concentrations measured in duplicate samples collected at station SP-W-OUT on November 10 (0.0241 and 0.0250 mg/L) were 6.9 and 7.1 times greater than the PE-111578 discharge limit, respectively. Total zinc concentrations measured in duplicate samples collected at station SP-W-OUT on November 10 (0.0186 mg/L in both samples) were 1.4 times greater than the PE-111578 discharge limit. BCER has been notified. A root cause investigation is underway. This item remains open.
Report #90: Potential Project Influence	Total iron above WQG and baseline range in East Creek.	Total iron measured in East Creek on October 12 and 17 (0.350 and 0.342 mg/L) were 1.2 and 1.1 times greater than the WQG, respectively, and both 1.3 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.273 mg/L). Potential sources of total iron to East Creek will be reviewed. This item remains open.
Report #90: Data QC	Dissolved nickel greater than total nickel.	Dissolved nickel above the range observed in the pre-construction baseline monitoring program in Woodfibre Creek on October 12 (0.00072 mg/L) was greater than the total nickel concentration that was below the analytical detection limit (<0.00050 mg/L). The total fraction would include both the dissolved and particulate-bound forms of the metal; therefore, total nickel should not be less than the dissolved nickel concentration and is suspected to be a quality control issue with the laboratory. A reanalysis has been requested with the laboratory to confirm the results. This item remains open.
Report #90: Pending Data	Analytical results not reported.	Field parameters and analytical results for non-contact water diversion ditch outlet and receiving environment samples collected November 9, 10, and 13, as well as total mercury, methylmercury, dioxins and furans results for contact and treated water samples collected November 10 and receiving environment samples collected November 11 are pending and will be included in future weekly reports when available. This item remains open.
Ongoing Items from Previous Weekly Reports		
Report #62: WWTP Performance Evaluation	Total copper above the MDO.	The treatment effectiveness for total copper has been inconsistent from January to October. Several modifications to the treatment process have been implemented in 2025 to improve T-Cu removal. The HSMT metal removal media was replaced on June 5. A modification to how the treatment reagents are added was implemented late July. BCER has been notified that additional filtration will be implemented to remove fine particles at the outlet of the treatment plant. High-frequency monitoring at multiple treatment stages is on-going to the evaluate the effectiveness of these changes. The total copper concentration in the WWTP-E-OUT sample collected October 17 (0.00474 mg/L) was above the MDO. Samples collected on September 27, October 4, 22 and 30 as well as November 6 and 9 met the MDO for copper. The WWTP treatment performance for total copper continues to be monitored. This item remains open.
Report #84: Pending Data	Analytical results not reported.	Acute toxicity results for West Sedimentation Pond effluent (SP-W-OUT) collected September 29 and chronic toxicity results for marine receiving environment samples collected September 30 are pending and will be included in future weekly reports when available. This item remains open.
Report #85: Pending Data	Analytical results not reported.	Chronic toxicity results for marine water receiving environment samples collected October 9 and 10 are pending and will be included in future weekly reports when available. This item remains open.
Report #86: WWTP Performance Evaluation	Hexavalent chromium above the MDO.	The total hexavalent chromium concentration was 0.00176 mg/L in the sample collected at WWTP-E-OUT on October 17 and was above the MDO (0.0015 mg/L). The WWTP treatment performance for total hexavalent chromium continues to be monitored. This item remains open.
Report #86: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for the contact water sample collected October 17 are pending and will be included in future weekly reports when available. This item remains open.
Report #87: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for receiving environment, contact water and treated water samples collected October 20, 22, 24 and 25 are pending and will be included in future weekly reports when available. This item remains open.
Report #88: Pending Data	Analytical results not reported.	Field parameters and analytical results for receiving environment samples collected November 1 as well as total mercury and methylmercury results for non-contact water diversion ditch outlet, contact and treated water samples and receiving environment samples collected October 26 and 30 are pending and will be included in future weekly reports when available. This item remains open.
Report #89: Pending Data	Analytical results not reported.	Field parameters and analytical results for non-contact water diversion ditch outlet samples collected November 2 and 6 and receiving environment samples collected November 7 as well as total mercury, methylmercury, dioxins and furans results for receiving environment, contact and treated water samples collected November 2, 5, and 6 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.

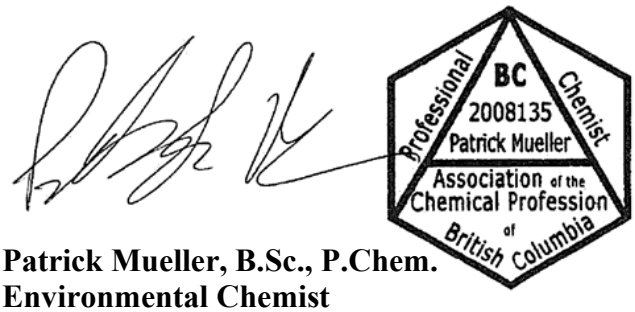
4. Closure

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



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

Appendix A:
Figures and Site Images

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
- East Creek Temporary Diversion
- Non-Contact Ditch
- Culvert / Outfall / Pipeline
- Bathymetry Contour (Major: 50m)
- Bathymetry Contour (Minor: 10m)

DATE SAVED:	Nov 21, 2025
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: Woodfibre LNG

LORAX ENVIRONMENTAL

PROJECT: **Woodfibre LNG Project Construction Phase**

TITLE: Site Layout and Water Quality Monitoring Stations for PE-111578 (November 15, 2025)

PROJECT #: A633-9

FIGURE: 1

P:\@202506\Woodfibre\Drafting Figures\APRX\WLNG Weekly Report Figure\WLNG Weekly Report.aprx Figure 1 - Monitoring and Compliance Locations

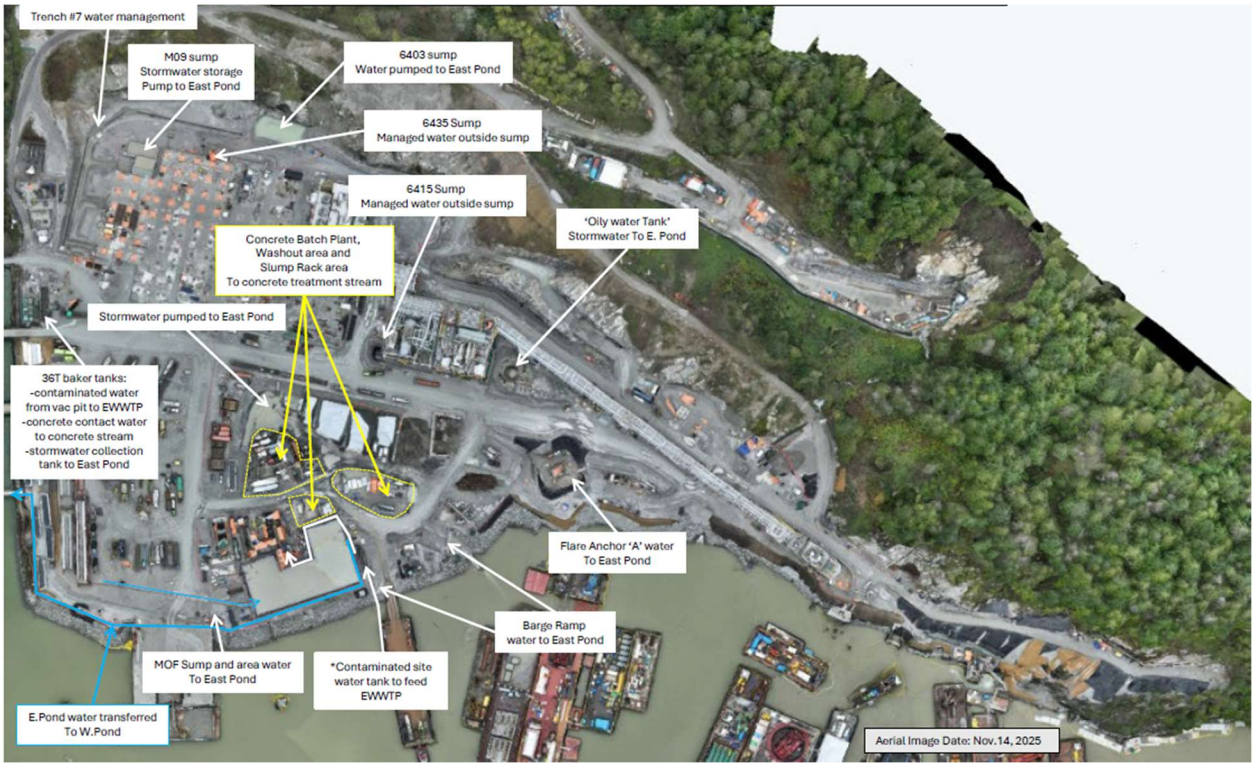


Figure 2: East Catchment contact water management facilities (November 9 - 15).

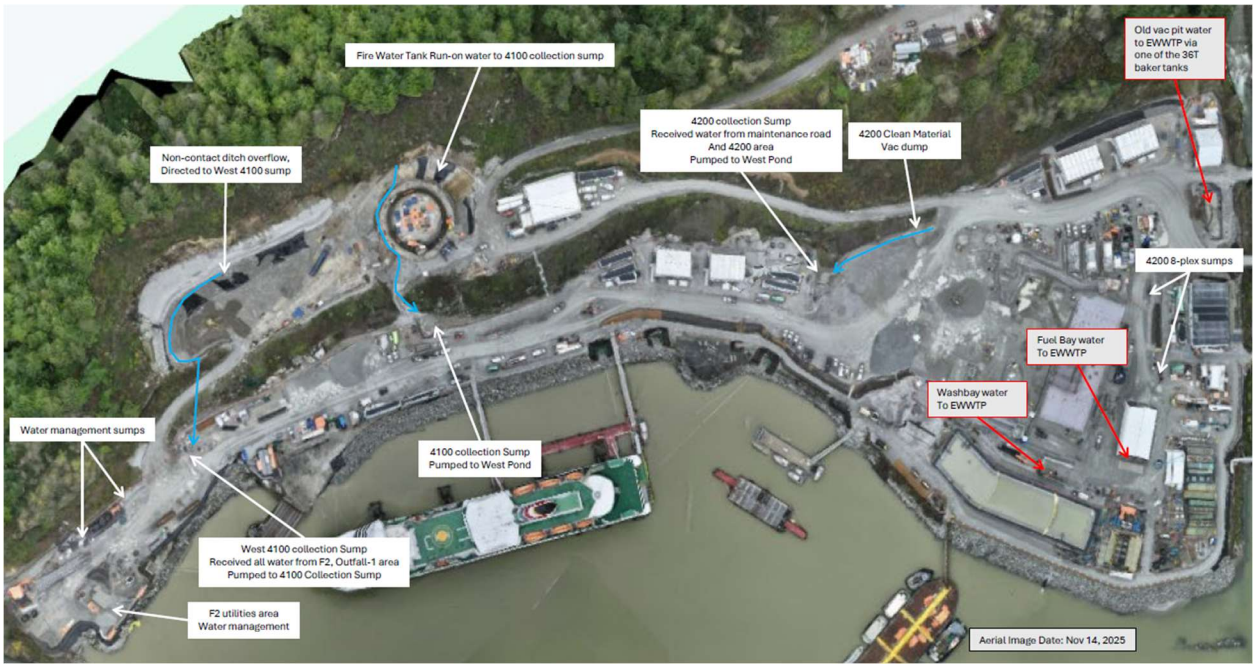


Figure 3: West Catchment contact water management facilities (November 9 - 15).

Figure 4: Aerial view of the East Sedimentation Pond (November 14, 2025). The East WWTP is located on the left side of the pond.

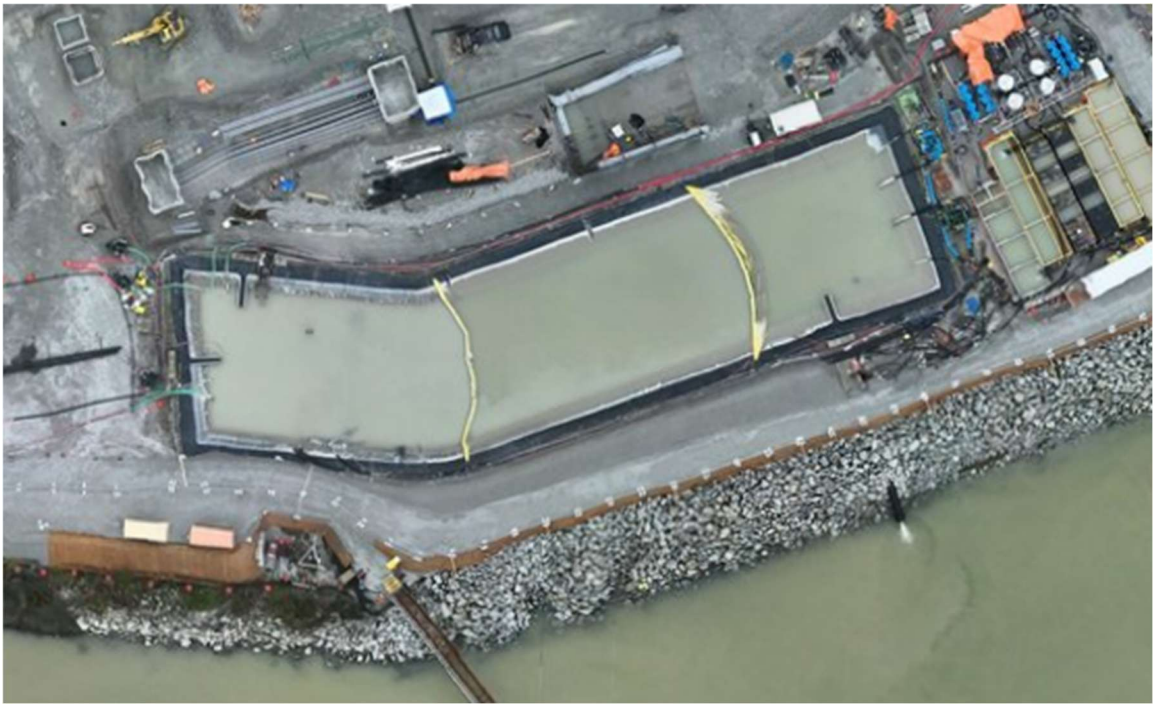


Figure 5: Aerial view of the West Sedimentation Pond (November 14, 2025).

Figure 6: East Creek Station SW-04 showing visible turbidity on October 12, 2025.

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 [1]		PE-111578 Discharge Limit	Station WWTP-E-IN Influent WWTP-E-IN VA25D0038-002 2025-11-09 9:45	Station WWTP-E-OUT Effluent WWTP-E-OUT VA25D0038-003 2025-11-09 15:46
		Long Term	Short Term			
General Parameters						
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.5	6.7
Specific Conductivity - Field	µS/cm	-	-	-	735	819
Temperature - Field	°C	-	-	-	10.9	10.3
Salinity - Field	ppt	-	-	-	0.36	0.4
Turbidity - Field	NTU	-	-	-	12.07	1.45
TSS	mg/L	-	-	25 or 75 [6]	4.2	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.86	11.59
Total Hardness	mg/L	-	-	-	90	24.4
Dissolved Hardness	mg/L	-	-	-	86.2	25
Anions and Nutrients						
Sulphate	mg/L	-	-	-	230	309
Chloride	mg/L	-	-	-	6.61	5.6
Fluoride	mg/L	-	1.5	-	0.129	0.111
Ammonia (N-NH_3)	mg/L	7.8-20 [3]	52-131 [3]	-	<0.0050	0.0142
Nitrite (N-NO_2)	mg/L	-	-	-	<0.0050	<0.0050
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.634	0.577
Total Organic Carbon (TOC)	mg/L	-	-	-	3.13	2.11
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.83	2.07
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	-	0.688	0.0679
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00133	0.00134
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00182	0.00097
Barium, total (T-Ba)	mg/L	-	-	-	0.0216	0.00235
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.075	0.031
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000300	<0.0000200
Chromium, total (T-Cr)	mg/L	-	-	-	0.00162	0.00091
Cobalt, total (T-Co)	mg/L	-	-	-	0.00028	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00529	0.00235
Iron, total (T-Fe)	mg/L	-	-	-	0.487	<0.010
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000574	0.000081
Manganese, total (T-Mn)	mg/L	-	-	-	0.0229	0.00098
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0343	0.0347
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00083	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000234	0.000203
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	-	-	-	0.0194	0.00832
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00353	0.00195
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0166	0.0039
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00098	0.00085
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000250	<0.0000150
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00225	0.00204
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.021	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.000053
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00744	0.00149
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.152	0.0624
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00252	0.00183
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0087	0.0042
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 (November 9 - 15).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] 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 [1]		PE-111578 Discharge Limit	Station SP-E-IN Influent SP-E-IN VA25D0038-001 2025-11-09 11:05
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.3
Specific Conductivity - Field	µS/cm	-	-	-	598
Temperature - Field	°C	-	-	-	10.3
Salinity - Field	ppt	-	-	-	0.29
Turbidity - Field	NTU	-	-	-	7.36
TSS	mg/L	-	-	25 or 75 [6]	4.4
Dissolved Oxygen - Field	mg/L	≥8	-	-	10.45
Total Hardness	mg/L	-	-	-	65.9
Dissolved Hardness	mg/L	-	-	-	64.4
Anions and Nutrients					
Sulphate	mg/L	-	-	-	155
Chloride	mg/L	-	-	-	6.43
Fluoride	mg/L	-	1.5	-	0.172
Ammonia (N-NH_3)	mg/L	12 [3]	83 [3]	-	0.0068
Nitrite (N-NO_2)	mg/L	-	-	-	0.0051
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.421
Total Organic Carbon (TOC)	mg/L	-	-	-	4.11
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.76
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	-	0.494
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00115
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00212
Barium, total (T-Ba)	mg/L	-	-	-	0.0132
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.062
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000250
Chromium, total (T-Cr)	mg/L	-	-	-	0.00092
Cobalt, total (T-Co)	mg/L	-	-	-	0.00016
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00258
Iron, total (T-Fe)	mg/L	-	-	-	0.28
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00036
Manganese, total (T-Mn)	mg/L	-	-	-	0.0138
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0332
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.00024
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	<0.000010
Uranium, total (T-U)	mg/L	-	-	-	0.0188
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0034
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0047
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00059
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000200
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0019
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00279
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.105
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00287
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0015
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 effluents 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 (November 9 - 15).
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] 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[1]					0.0001 [2]	0.0066-0.013 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25D0038-001	2025-11-09	0.000049	0.0033
WWTP-E-IN	Influent	WWTP-E-IN	VA25D0038-002	2025-11-09	0.000058	0.00744
COMB-WWTP-E-IN	Influent	COMB-WWTP-E-IN	VA25C7096-003	2025-10-11	***0.000118***	***0.00896***
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25D0038-003	2025-11-09	0.000023	0.00152

Notes:
East catchment influents and 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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] CCME guideline for total mercury = 0.016 µg/L.
[4] 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 Field Measurements Collected During the Monitoring Period (November 9 - 15).

Parameter			**Temp.**	**Dissolved Oxygen (DO)**	**Salinity**	**Turbidity**	**Estimated TSS [3]**	**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 [6]	5.5 - 9.0	-	-
Lowest Applicable Guideline [1]			-	≥8	-	-	- [2]	- [2]	-	-
Station ID	**Water Type**	**Date**								
Influent [4]										
SP-E-IN	Influent	2025-11-09 11:05	10.3	10.45	0.29	7.36	8.5	7.3	598	No
SP-E-IN	Influent	2025-11-10 13:19	11.4	10.96	0.27	125.94	96.9	7.0	551	No
SP-E-IN	Influent	2025-11-11 12:40	10.8	12.32	0.32	13.33	12.9	7.4	660	No
SP-E-IN	Influent	2025-11-12 16:21	9.6	11.5	0.28	3.58	5.7	7.0	572	No
SP-E-IN	Influent	2025-11-13 10:02	9.3	11.44	0.1	245.92	186.4	7.7	202	No
SP-E-IN	Influent	2025-11-14 8:26	9.6	11.17	0.24	108.99	84.3	7.4	492	No
SP-E-IN	Influent	2025-11-15 9:05	9.5	11.01	0.24	72.51	57.1	6.8	497	No
WWTP-E-IN	Influent	2025-11-09 9:45	10.9	11.86	0.36	12.07	12.0	7.5	735	No
WWTP-E-IN	Influent	2025-11-10 13:27	11.2	10.92	0.18	404.48	304.7	7.1	370	No
WWTP-E-IN	Influent	2025-11-13 9:57	9.4	11.23	0.16	500.45	376.2	7.7	331	No
WWTP-E-IN	Influent	2025-11-14 8:39	9.5	10.92	0.22	114.21	88.2	6.7	452	No
WWTP-E-IN	Influent	2025-11-15 9:10	9.6	10.84	0.2	75.78	59.5	6.8	419	No
Effluent [5]										
WWTP-E-OUT	Effluent	2025-11-09 10:24	9.9	11.04	0.5	2.26	4.7	6.6	998	No
WWTP-E-OUT	Effluent	2025-11-09 15:46	10.3	11.59	0.40	1.45	4.1	6.7	819	No
WWTP-E-OUT	Effluent	2025-11-10 13:23	10.8	11.34	0.46	0.75	3.6	6.4	922	No
WWTP-E-OUT	Effluent	2025-11-11 13:38	11.2	11.32	0.28	1.00	3.7	6.4	570	No
WWTP-E-OUT	Effluent	2025-11-13 10:11	9.8	10.55	0.67	1.43	4.1	6.2	1337	No
WWTP-E-OUT	Effluent	2025-11-14 8:35	9.6	11.85	0.31	1.35	4.0	6.2	638	No
WWTP-E-OUT	Effluent	2025-11-15 9:18	9.6	11.49	0.50	1.77	4.3	6.1	1005	No

Notes:
The east catchment did not discharge to Howe Sound during the monitoring period (November 9 - 15). 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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
[4] Daily field measurements for station SP-E-IN were collected from cell 1 of the East Sedimentation Pond. Daily field measurements for WWTP-E-IN were not collected on November 11 due to an oversight by field staff nor on November 12 as the East WWTP was not operational at the time of monitoring on that day.
[5] There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (November 9 - 15), therefore daily field measurements for SP-E-OUT were not collected on those days. Daily field measurements for WWTP-E-OUT were not collected on November 12 as the East WWTP was not operational that day.
[6] 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-5:
East Catchment Daily Discharge Volumes for the Monitoring Period (November 9 - 15).

	East Sedimentation Pond Effluent	**Transfer to West Sedimentation Pond**	**East WWTP Treated Effluent (Station WWTP-E-OUT)[2]**	**Discharge to Howe Sound (Station SP-E-OUT)**
Unit	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	1100	- [1]
Date				
2025-11-09	0	0	306	0
2025-11-10	0	0	332	0
2025-11-11	0	0	293	0
2025-11-12	0	0	36	0
2025-11-13	0	0	424	0
2025-11-14	0	3,227	525	0
2025-11-15	0	0	445	0

Notes:
Results in orange text exceed the PE-111578 East Sedimentation Pond Discharge Limit.
[1] 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^3/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.
[2] 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 [1]		PE-111578 Discharge Limit	Station W2700T5-OUT Effluent W2700-T5-OUT VA25C9627-001 2025-11-05 10:15	Station W2700T6-OUT Effluent W2700-T6-OUT VA25C9542-001 2025-11-05 7:35	Station 2700GPM-IN Influent 2700GPM-IN VA25D0087-002 2025-11-10 12:14	Station W2700T5-OUT Effluent W2700T5-OUT VA25D0087-006 2025-11-10 12:00
		Long Term	Short Term					
General Parameters								
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.7	8.9	7.8	7.7
Specific Conductivity - Field	µS/cm	-	-	-	394	467	379	404
Temperature - Field	℃	-	-	-	8.0	8.8	10.5	10.6
Salinity - Field	ppt	-	-	-	0.19	0.23	0.18	0.20
Turbidity - Field	NTU	-	-	-	5.38	3.35	76.14	7.80
TSS	mg/L	-	-	25 or 75 [6]	4.9	<3.0	176	3.8
Dissolved Oxygen - Field	mg/L	≥8	-	-	9.81	11.10	10.87	10.78
Total Hardness	mg/L	-	-	-	72.8	70.7	101	68.1
Dissolved Hardness	mg/L	-	-	-	72.2	71.3	70.2	68.0
Anions and Nutrients								
Sulphate	mg/L	-	-	-	112	112	95.3	104
Chloride	mg/L	-	-	-	4.83	10.4	4.84	4.76
Fluoride	mg/L	-	1.5	-	0.075	0.107	0.088	0.086
Ammonia (N-NH_3)	mg/L	0.5-7.2 [3]	3.3-48 [3]	-	0.0300	0.0472	<0.0050	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	-	0.0112	0.0031	0.0048	0.0061
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.640	0.120	0.493	0.558
Total Organic Carbon (TOC)	mg/L	-	-	-	2.44	2.87	4.42	2.50
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.45	2.56	2.55	2.60
Total Metals								
Aluminum, total (T-Al)	mg/L	-	-	-	0.227	0.0513	11	0.450
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00081	0.00093	0.0009	0.00087
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00144	0.00161	0.00271	0.00131
Barium, total (T-Ba)	mg/L	-	-	-	0.00467	0.00406	0.0974	0.00703
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020	0.00018	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	<0.010	<0.010	0.043	0.019
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000100	<0.0000100	0.0000935	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050	0.00356	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010	<0.00010	0.0033	0.00013
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00137	<0.00050	0.0136	0.00110
Iron, total (T-Fe)	mg/L	-	-	-	0.174	0.029	8.98	0.243
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000406	0.000073	0.0058	0.000275
Manganese, total (T-Mn)	mg/L	-	-	-	0.0419	0.0272	0.36	0.0288
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.00921	0.0125	0.0182	0.0148
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050	0.00234	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000076	0.000119	0.000154	0.000080
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	0.000024	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000029	0.000034	0.000038	0.000017
Uranium, total (T-U)	mg/L	-	-	-	0.00281	0.00610	0.0103	0.00653
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00093	0.00070	0.0157	0.00132
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0030	<0.0030	0.0498	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals								
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000050	<0.0000100	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00065	0.00047	0.00164	0.00073
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.037	<0.010	0.012	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000126	0.000096	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0379	0.0268	0.0232	0.0206
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0902	0.108	0.0898	0.0863
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00063	0.00064	0.00156	0.00085
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0012	<0.0010	0.002	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)								
Acenaphthene	mg/L	0.006	-	-	-	-	<0.000010	-
Acridine	mg/L	-	-	-	-	-	<0.000010	-
Anthracene	mg/L	-	-	-	-	-	<0.000010	-
Benz(a)anthracene	mg/L	-	-	-	-	-	<0.000020	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-	***0.0000113***	-
Chrysene	mg/L	0.0001	-	-	-	-	<0.000020	-
Fluoranthene	mg/L	-	-	-	-	-	0.000031	-
Fluorene	mg/L	0.012	-	-	-	-	<0.000010	-
1-methylnaphthalene	mg/L	0.001	-	-	-	-	<0.000010	-
2-methylnaphthalene	mg/L	0.001	-	-	-	-	<0.000010	-
Naphthalene	mg/L	0.001	-	-	-	-	<0.000050	-
Phenanthrene	mg/L	-	-	-	-	-	0.000023	-
Pyrene	mg/L	-	-	-	-	-	0.000035	-
Quinoline	mg/L	-	-	-	-	-	<0.000050	-
Volatile Organic Compounds (VOCs)								
Benzene	mg/L	0.11	-	-	-	-	<0.00050	-
Ethylbenzene	mg/L	0.25	-	-	-	-	<0.00050	-
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	-	<0.00050	-
Styrene	mg/L	-	-	-	-	-	<0.00050	-
Toluene	mg/L	0.215	-	-	-	-	<0.00040	-
Total Xylenes	mg/L	-	-	-	-	-	<0.00050	-
Chlorobenzene	mg/L	0.025	-	-	-	-	<0.00050	-
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	-	<0.00050	-

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 each day during the monitoring period (November 9 - 15) except on November 9 and 12.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] 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 2700GPM TSS Settling System Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station W2700T6-OUT Influent W2700T6-OUT VA25D0087-007 2025-11-10 12:22	Station W2700T2-OUT Effluent W2700T2-OUT VA25D0139-001 2025-11-11 17:40	Station W2700T2-OUT Effluent W2700T2-OUT-DUP VA25D0139-002 2025-11-11 17:40
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	- [2]	-	5.5 - 9.0	8.0	7.4	-
Specific Conductivity - Field	µS/cm	-	-	-	339	344	-
Temperature - Field	°C	-	-	-	10.4	10.5	-
Salinity - Field	ppt	-	-	-	0.16	0.17	-
Turbidity - Field	NTU	-	-	-	8.96	3.74	-
TSS	mg/L	-	-	25 or 75 [6]	<3.0	<3.0	3.2
Dissolved Oxygen - Field	mg/L	≥8	-	-	***5.27***	10.5	-
Total Hardness	mg/L	-	-	-	47.9	65.4	65.6
Dissolved Hardness	mg/L	-	-	-	47.8	62.3	62
Anions and Nutrients							
Sulphate	mg/L	-	-	-	78.9	-	-
Chloride	mg/L	-	-	-	9.39	-	-
Fluoride	mg/L	-	1.5	-	0.102	-	-
Ammonia (N-NH_3)	mg/L	2.0-7.8 [3]	13-52 [3]	-	0.0335	-	-
Nitrite (N-NO_2)	mg/L	-	-	-	0.0124	-	-
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.167	-	-
Total Organic Carbon (TOC)	mg/L	-	-	-	4.00	-	-
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	3.85	-	-
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	0.441	0.164	0.161
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00076	0.00083	0.0008
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00257	0.00121	0.00113
Barium, total (T-Ba)	mg/L	-	-	-	0.00832	0.00523	0.00496
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.014	0.021	0.021
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000110	<0.0000100	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00017	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00099	0.00201	0.00178
Iron, total (T-Fe)	mg/L	-	-	-	0.290	0.087	0.086
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000439	0.000368	0.000167
Manganese, total (T-Mn)	mg/L	-	-	-	0.0405	0.0234	0.0232
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.00889	0.0139	0.0135
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000093	0.000064	0.00007
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000033	0.000015	0.000015
Uranium, total (T-U)	mg/L	-	-	-	0.00120	0.00627	0.00605
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00155	0.00099	0.00101
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	-	-
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000050	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00064	0.00147	0.00098
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.030	0.015	0.015
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000075	0.000055	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0326	0.0225	0.0215
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.0660	0.0773	0.0771
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00102	0.0008	0.00078
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	0.0012	0.0012
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 each day during the monitoring period (November 9 - 15) except on November 9 and 12.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] 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 Sedimentation Pond Influent and Effluent Analytical Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		PE-111578 Discharge Limit	Station SP-W-IN Influent SP-W-IN VA25D0087-001 2025-11-10 12:29	Station SP-W-OUT Effluent SP-W-OUT VA25D0087-003 2025-11-10 11:12	Station SP-W-OUT Effluent SP-W-OUT-DUP VA25D0087-004 2025-11-10 11:13
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.8	7.4	7.5
Specific Conductivity - Field	µS/cm	-	-	-	366	385	414
Temperature - Field	℃	-	-	-	10.7	10.8	10.9
Salinity - Field	ppt	-	-	-	0.18	0.19	0.2
Turbidity - Field	NTU	-	-	-	281.91	3.93	5.02
TSS	mg/L	-	-	25 or 75 [6]	275	<3.0	5.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	10.85	10.86	10.92
Total Hardness	mg/L	-	-	-	116	69.6	71
Dissolved Hardness	mg/L	-	-	-	67.9	71.1	69.3
Anions and Nutrients							
Sulphate	mg/L	-	-	-	84.9	100	108
Chloride	mg/L	-	-	-	4.75	4.57	4.62
Fluoride	mg/L	-	1.5	-	0.088	0.079	0.081
Ammonia (N-NH_3)	mg/L	3.1-7.8 [3]	21-52 [3]	-	0.0078	<0.0050	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	-	0.0064	0.0041	0.005
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.477	0.59	0.591
Total Organic Carbon (TOC)	mg/L	-	-	-	4.19	2.78	2.12
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	2.38	2.52	2.48
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	17.5	0.235	0.233
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00095	0.00143	0.00147
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00329	0.00129	0.0013
Barium, total (T-Ba)	mg/L	-	-	-	0.139	0.00822	0.0082
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000299	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.05	0.021	0.021
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	***0.000128***	<0.0000100	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	0.00526	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00496	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.0133	0.00124	0.00122
Iron, total (T-Fe)	mg/L	-	-	-	13.8	0.131	0.135
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.00818	0.0241	0.0250
Manganese, total (T-Mn)	mg/L	-	-	-	0.549	0.0231	0.0227
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0191	0.0147	0.0149
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00329	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000133	0.000079	0.000079
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	0.000029	0.000012	0.000011
Thallium, total (T-Tl)	mg/L	-	-	-	0.000048	0.000016	0.000016
Uranium, total (T-U)	mg/L	-	-	-	0.0113	0.00633	0.00646
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0232	0.00109	0.00109
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0656	0.0186	0.0186
Hexavalent Chromium, total	mg/L	0.0015	-	-	0.00066	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000100	<0.0000100
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00134	0.00071	0.00072
Iron, dissolved (D-Fe)	mg/L	-	-	-	0.024	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.00288	0.00286
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0281	0.02	0.0198
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.085	0.0873	0.083
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00176	0.00083	0.00083
Zinc, dissolved (D-Zn)	mg/L	-	-	-	<0.0010	0.0048	0.0046
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	0.000011	<0.000010	<0.000010
Acridine	mg/L	-	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	-	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	-	<0.000020	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	-	***0.0000208***	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	-	<0.000030	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	0.000054	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	-	0.000037	<0.000020	<0.000020
Pyrene	mg/L	-	-	-	0.000057	<0.000010	<0.000010
Quinoline	mg/L	-	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.11	-	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	<0.00050	<0.00050	<0.00050

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 each day during the monitoring period (November 9 - 15) except on November 9 and 12.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs for marine waters.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] The BC WQG for total ammonia is salinity, pH and temperature dependent; see Tables 27E and 27F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.
[5] When MeHg ≤0.5% of total Hg, the BC WQG = 0.00002 mg/L. The Canadian WQG = 0.000016 mg/L.
[6] 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-4:
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[1]					0.0001 [2]	0.0028-0.020 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-W-IN	Influent	SP-W-IN	VA25C9625-001	2025-11-05	***0.000159***	***0.0315***
2700GPM-IN	Influent	W2700-IN	VA25C9625-002	2025-11-05	***0.000110***	***0.0173***
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25C9625-003	2025-11-05	0.000031	0.00093
W2700T5-OUT	Effluent	W2700T5-OUT	VA25C9627-001	2025-11-05	<0.000020	0.00077
W2700T6-OUT	Effluent	W2700T6-OUT	VA25C9542-001	2025-11-05	<0.000020	0.00056

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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] CCME guideline for total mercury = 0.016 µg/L.
[4] 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-5:
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						
SP-W-IN	Influent	SP-W-IN	VA25C7026-001	2025-10-10	0.0158	1.63
2700GPM-IN	Influent	2700GPM-IN	VA25C7026-002	2025-10-10	0.0246	1.49
2700GPM-IN	Influent	2700GPM-IN	VA25C7370-001	2025-10-15	0.0242	0.553
2700GPM-IN	Influent	2700GPM-IN	VA25C7852-001	2025-10-20	0.999	2.64
2700GPM-IN	Influent	2700GPM-IN	VA25C8643-002	2025-10-27	0.322	1.73
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25C7026-003	2025-10-10	0.0140	1.22
SP-W-OUT	Effluent	SP-W-OUT-DUP	VA25C7026-004	2025-10-10	0.00366	1.20
SP-W-OUT	Effluent	SP-W-OUT	VA25C7370-002	2025-10-15	0.0101	0.528
SP-W-OUT	Effluent	SP-W-OUT	VA25C7852-002	2025-10-20	0.0268	1.19
SP-W-OUT	Effluent	SP-W-OUT	VA25C8643-003	2025-10-27	0.0664	0.956

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-6:
West Catchment Field Measurements Collected During the Monitoring Period (November 9 - 15).

Parameter			Temperature	Dissolved Oxygen (DO)	Salinity	Turbidity	Estimated TSS [3]	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 [6]	5.5 - 9.0	-	-
Lowest Applicable Guideline [1]			-	≥8	-	-	- [2]	- [2]	-	-
Station ID	**Water Type**	**Date**								
Influent [4]										
SP-W-IN	Influent	2025-11-09 14:50	10.4	11.24	0.20	9.59	10.2	7.1	420	No
SP-W-IN	Influent	2025-11-10 12:29	10.7	10.85	0.18	281.91	213.2	7.8	366	No
SP-W-IN	Influent	2025-11-11 12:11	10.4	10.89	0.17	22.58	19.8	7.6	347	No
SP-W-IN	Influent	2025-11-12 16:54	9.5	10.37	0.16	16.06	15.0	7.8	335	No
SP-W-IN	Influent	2025-11-13 11:03	9.4	11.22	0.08	188.88	143.9	8.0	175	No
SP-W-IN	Influent	2025-11-14 9:26	9.5	10.93	0.09	16.58	15.4	7.6	191	No
SP-W-IN	Influent	2025-11-15 9:34	9.4	10.89	0.19	62.09	49.3	7.0	399	No
2700GPM-IN	Influent	2025-11-09 14:54	9.9	11.29	0.21	11.03	11.2	7.6	439	No
2700GPM-IN	Influent	2025-11-10 12:14	10.5	10.87	0.18	76.14	59.8	7.8	379	No
2700GPM-IN	Influent	2025-11-11 12:30	10.4	11.15	0.17	36.17	30.0	7.8	346	No
2700GPM-IN	Influent	2025-11-12 16:08	9.8	11.13	0.15	18.58	16.9	7.5	320	No
2700GPM-IN	Influent	2025-11-13 10:24	9.6	11.30	0.10	102.24	79.3	6.9	213	No
2700GPM-IN	Influent	2025-11-14 9:13	9.6	11.17	0.09	35.61	29.6	7.6	193	No
2700GPM-IN	Influent	2025-11-15 9:29	9.5	11.18	0.18	59.38	47.3	6.8	377	No
Effluent [5]										
SP-W-OUT	Effluent	2025-11-10 11:12	10.8	10.86	0.19	3.93	5.9	7.4	385	No
SP-W-OUT	Effluent	2025-11-13 10:44	9.5	11.33	0.11	7.81	8.8	7.7	235	No
SP-W-OUT	Effluent	2025-11-13 10:58	9.5	11.14	0.12	7.33	8.5	7.7	246	No
SP-W-OUT	Effluent	2025-11-14 9:16	9.5	11.41	0.09	4.32	6.2	7.6	192	No
SP-W-OUT	Effluent	2025-11-15 8:25	10.1	11.23	0.18	0.83	3.6	7.4	374	No

Notes:
West catchment influents for November 9 - 15 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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] The WQG was not evaluated for parameters with discharge limits.
[3] TSS concentration is estimated from field turbidity measurements using a site-specific relationship TSS = 0.7458 * [turbidity as NTU] + 3.
[4] Daily field measurements for station SP-W-IN were collected from cell 1 of the West Sedimentation Pond.
[5] 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 2, 3, 4, 5 and 6 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) each day during the monitoring period (November 9 - 15) except on November 9 and 12, therefore daily field measurements for SP-W-OUT were not collected on that day. There was no discharge at the time of monitoring on November 11; therefore, daily field parameters were not collected at SP-W-OUT that day.
[6] 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-7:
West Catchment Daily Discharge Volumes for the Monitoring Period (November 9 - 15).

	West Sedimentation Pond Effluent	West TSS Settling System (2700GPM) Clarified Effluent (Station 2700GPM-OUT)[3]	Water Reclaimed for Construction Purposes (Station 2700GPM-OUT)	West WWTP Treated Effluent [1] (Station WWTP-W-OUT)	Discharge to Howe Sound (Station SP-W-OUT)
Unit	**m^3**	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	-	120	- [2]
Date					
2025-11-09	0	2,045	0	0	0
2025-11-10	0	3,968	0	0	3,625
2025-11-11	0	1,136	0	0	28
2025-11-12	0	2,003	0	0	0
2025-11-13	0	5,047	0	0	2,875
2025-11-14	0	3,930	0	0	3,915
2025-11-15	0	3,866	0	0	3,866

Notes:
Results in orange text exceed the PE-111578 West Sedimentation Pond Discharge Limit.
[1] The West WWTP is not being operated therefore discharges are not expected from this facility.
[2] 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^3/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.
[3] 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:
Non-Contact Water Diversion Ditch Outlets 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[1]					0.0001 [2]	0.010 [3,4]
Station	**Description**	**Sample ID**	**Lab ID**	**Sampling Date**		
OUT-02	Non-Contact Water Diversion Ditch Outlet	OUT-02	VA25C7228-001	2025-10-14	<0.000020	0.00200

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] CCME guideline for total mercury = 0.026 µg/L.
[4] 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:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station SW-01	Station SW-02	Station SW-07	Station SW-04
				Woodfibre Creek Lower Reach	Mill Creek Lower Reach	Upstream Mill Creek	East Creek Lower Reach
				SW-01	SW-02	SW-07	SW-04
				VA25C7124-001	VA25C7124-002	VA25C7124-005	VA25C7124-004
		Long Term	Short Term	2025-10-12 11:45	2025-10-12 13:40	2025-10-12 15:45	2025-10-12 14:45
General Parameters							
pH - Field	pH units	6.5 - 9.0	-	6.6	6.6	7.4	7.7
Specific Conductivity - Field	µS/cm	-	-	10	10	15	161
Temperature - Field	°C	-	-	9.6	9.3	8.7	11.7
Salinity - Field	ppt	-	-	0	0	0.01	0.08
Turbidity - Field	NTU	-	-	1.66	2.44	0.99	6.37
TSS	mg/L	-	-	<3.0	<3.0	<3.0	8.8
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.53	11.58	11.4	10.77
Total Hardness	mg/L	-	-	2.91	4.86	4.11	60.6
Dissolved Hardness	mg/L	-	-	-	-	-	-
Anions and Nutrients							
Sulphate [2]	mg/L	128-218	-	0.44	2.25	1.76	20.6
Chloride	mg/L	120	600	0.65	0.82	0.78	7.06
Fluoride [2]	mg/L	-	0.400-1.13	<0.020	<0.020	<0.020	0.134
Ammonia ($N\text{-}NH_3$) [2]	mg/L	1.04-15.3	9.57-25.0	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.0200-0.0800	0.06-0.24	<0.0010	<0.0010	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0365	0.0739	0.0692	0.104
Total Organic Carbon (TOC)	mg/L	-	-	3.47	2.63	2.45	3.77
Total Inorganic Carbon (DOC)	mg/L	-	-	3.15	2.49	2.42	3.76
Total Metals							
Aluminum, total (T-Al) [2]	mg/L	0.0379-0.733	-	***0.139***	***0.107***	0.102	***0.345***
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	<0.00010	0.00025
Arsenic, total (T-As)	mg/L	0.005	-	0.00014	<0.00010	<0.00010	0.00078
Barium, total (T-Ba)	mg/L	1	-	0.0021	0.00297	0.00254	0.0112
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	<0.010	0.014
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.00011	0.00011-0.0013	<0.0000050	0.0000063	0.0000067	0.0000207
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000829	-	<0.00010	<0.00010	<0.00010	0.00014
Copper, total (T-Cu)	mg/L	-	-	<0.00050	<0.00050	<0.00050	0.00166
Iron, total (T-Fe)	mg/L	0.3	1	0.051	0.026	0.017	***0.35***
Lead, total (T-Pb)	mg/L	-	-	0.00008	<0.000050	<0.000050	0.000178
Manganese, total (T-Mn) [2]	mg/L	0.768-0.872	0.816-1.21	0.0021	0.00098	0.00069	0.0334
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000351	0.000568	0.000471	0.0124
Nickel, total (T-Ni) [2]	mg/L	0.0250-0.0506	-	<0.00050	<0.00050	<0.00050	0.00099
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000694	0.000238	0.000252	0.000512
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030	0.0034
Hexavalent Chromium, total	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.00015	0.000038-0.00035	<0.0000050	0.0000086	0.0000097	0.0000119
Copper, dissolved (D-Cu) [2]	mg/L	0.000200-0.00373	0.000586-0.00904	***0.00034***	***0.00031***	0.00031	0.0013
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.032	0.014	0.011	0.017
Lead, dissolved (D-Pb) [2]	mg/L	0.00170-0.00720	-	0.000053	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn) [2]	mg/L	0.330-0.390	1.97-4.29	0.00201	0.00126	0.00159	0.02
Nickel, dissolved (D-Ni) [2]	mg/L	0.000700-0.00200	0.0110-0.0170	***0.00072***	<0.00050	<0.00050	0.00099
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00384	0.00733	0.00609	0.0499
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.00345-0.0159	0.00931-0.0710	<0.0010	<0.0010	<0.0010	0.0019
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.0058	-	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	0.000012	-	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	0.000018	-	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	0.00004	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	0.001	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	0.0003	-	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	0.00002	-	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	0.0034	-	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.04	-	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.09	-	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	10	3.4	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	0.072	-	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0005	-	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	0.03	-	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050

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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] 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 E-2:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station SW-01 Woodfibre Creek Lower Reach SW-01 VA25C7681-001 2025-10-17 10:31	Station SW-02 Mill Creek Lower Reach SW-02 VA25C7681-002 2025-10-17 16:22	Station SW-07 Upstream Mill Creek SW-07 VA25C7681-005 2025-10-17 12:53	Station SW-04 East Creek Lower Reach SW-04 VA25C7681-004 2025-10-17 8:49
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	6.5 - 9.0	-	6.9	7.8	6.7	7.3
Specific Conductivity - Field	µS/cm	-	-	10	24	22	152
Temperature - Field	°C	-	-	9.9	8.8	8.3	11.2
Salinity - Field	ppt	-	-	0	0.01	0.1	0.07
Turbidity - Field	NTU	-	-	0.45	0.17	0.26	1.8
TSS	mg/L	-	-	<3.0	<3.0	<3.0	3.4
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.59	11.84	11.73	10.59
Total Hardness	mg/L	-	-	2.86	6.26	5.4	61.9
Dissolved Hardness	mg/L	-	-	3.05	6.44	5.97	68.5
Anions and Nutrients							
Sulphate [2]	mg/L	128-218	-	0.42	3.43	3.38	9.25
Chloride	mg/L	120	600	0.72	1.63	1.57	6.93
Fluoride [2]	mg/L	-	0.400-1.14	<0.020	<0.020	<0.020	0.135
Ammonia ($N\text{-}NH_3$) [2]	mg/L	1.54-15.3	8.40-24.4	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.0200-0.0800	0.06-0.24	<0.0010	<0.0010	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0399	0.102	0.101	<0.0050
Total Organic Carbon (TOC)	mg/L	-	-	2.79	1.28	1.27	2.63
Total Inorganic Carbon (DOC)	mg/L	-	-	2.79	1.4	1.31	2.18
Total Metals							
Aluminum, total (T-Al) [2]	mg/L	0.0286-0.392	-	***0.0991***	0.0332	***0.0384***	0.0893
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	<0.00010	0.00037
Arsenic, total (T-As)	mg/L	0.005	-	0.0001	<0.00010	<0.00010	0.00068
Barium, total (T-Ba)	mg/L	1	-	0.002	0.00385	0.00358	0.0109
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	0.019	0.019	0.012
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.00011	0.00011-0.0013	<0.0000050	0.0000077	0.0000083	0.0000219
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000836	-	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00066	<0.00050	<0.00050	0.00117
Iron, total (T-Fe)	mg/L	0.3	1	0.033	<0.010	<0.010	***0.342***
Lead, total (T-Pb)	mg/L	-	-	0.000066	<0.000050	<0.000050	0.0002
Manganese, total (T-Mn) [2]	mg/L	0.768-0.877	0.816-1.22	0.00103	0.00024	0.00031	0.038
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000393	0.000709	0.00061	0.014
Nickel, total (T-Ni) [2]	mg/L	0.0250-0.0515	-	<0.00050	<0.00050	<0.00050	0.00051
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000592	0.000128	0.000115	0.000217
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030	0.0033
Hexavalent Chromium, total	mg/L	0.001	-	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.00015	0.000038-0.00036	<0.0000050	0.0000064	0.0000073	0.0000142
Copper, dissolved (D-Cu) [2]	mg/L	0.000200-0.00222	0.000200-0.00287	***0.00060***	0.00028	***0.00022***	***0.00059***
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.022	<0.010	<0.010	0.040
Lead, dissolved (D-Pb) [2]	mg/L	0.00127-0.00547	-	<0.000050	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn) [2]	mg/L	0.320-0.490	1.97-4.37	0.00075	0.00061	0.00033	0.0242
Nickel, dissolved (D-Ni) [2]	mg/L	0.000600-0.00150	0.00940-0.0123	<0.00050	<0.00050	<0.00050	0.00051
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00382	0.0103	0.00948	0.0604
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.00200-0.0180	0.00804-0.0634	<0.0010	<0.0010	<0.0010	0.0027
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.0058	-	<0.000010	<0.000010	<0.000010	<0.000010
Acridine	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	0.000012	-	<0.000010	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	0.000018	-	<0.000010	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	0.00004	-	<0.000010	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.003	-	<0.000010	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	0.001	<0.000050	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	0.0003	-	<0.000020	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	0.00002	-	<0.000010	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	0.0034	-	<0.000050	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)							
Benzene	mg/L	0.04	-	<0.00050	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.09	-	<0.00050	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	10	3.4	<0.00050	<0.00050	<0.00050	<0.00050
Styrene	mg/L	0.072	-	<0.00050	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0005	-	<0.00040	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	0.03	-	<0.00050	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050

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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] 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 E-3:
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[1]					0.0001 [2]	0.0026-0.010 [3,4]
Station	**Description**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C7124-001	2025-10-12	0.000022	0.00229
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C7681-001	2025-10-17	<0.000020	0.00161
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C7124-002	2025-10-12	<0.000020	0.00158
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C7681-002	2025-10-17	<0.000020	0.00052
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C7124-005	2025-10-12	0.000023	0.00138
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C7681-005	2025-10-17	<0.000020	0.00054
SW-04	East Creek Lower Reach	SW-04	VA25C7124-004	2025-10-12	0.000048	0.00188
SW-04	East Creek Lower Reach	SW-04	VA25C7681-004	2025-10-17	0.000069	0.00183

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] CCME guideline for total mercury = 0.026 µg/L.
[4] 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.

Table E-4:
Freshwater 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		
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C7128-001	2025-10-12	0.0115	0.515
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C7683-001	2025-10-17	0.0479	1.11
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C8589-001	2025-10-25	0.000888	0.794
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C9111-001	2025-10-30	0	1.18
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C7128-002	2025-10-12	0.00321	0.534
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C7683-002	2025-10-17	0.0500	1.14
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C8589-002	2025-10-25	0.00977	0.956
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C9111-002	2025-10-30	0	1.27
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C7128-005	2025-10-12	0.00302	0.468
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C7683-005	2025-10-17	0.0111	1.19
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C8589-005	2025-10-25	0.0157	1.13
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C9111-005	2025-10-30	0	1.42
SW-04	East Creek Lower Reach	SW-04	VA25C7128-004	2025-10-12	0.0442	0.503
SW-04	East Creek Lower Reach	SW-04	VA25C7683-004	2025-10-17	0.0527	1.29
SW-04	East Creek Lower Reach	SW-04	VA25C8589-004	2025-10-25	0.0227	1.05
SW-04	East Creek Lower Reach	SW-04	VA25C9111-004	2025-10-30	0	1.44

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.

Appendix F:
Estuarine Water Receiving Environment Results

Table F-1:
Summary of Mill Creek Estuary Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		Station SW-03 Mill Creek Estuary SW-03 VA25C7124-003 2025-10-12 14:10	Station SW-03 Mill Creek Estuary SW-03 VA25C7681-003 2025-10-17 15:28
		Long Term	Short Term		
General Parameters					
pH - Field	pH units	7.0 - 8.7	-	***6.5***	7.4
Specific Conductivity - Field	µS/cm	-	-	2837	32190
Temperature - Field	°C	-	-	9.5	9.9
Salinity - Field	ppt	-	-	1.5	20.0
Turbidity - Field	NTU	-	-	2.4	1.03
TSS	mg/L	-	-	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	-	-	11.52	9.31
Total Hardness	mg/L	-	-	273	169
Dissolved Hardness	mg/L	-	-	-	1710
Anions and Nutrients					
Sulphate	mg/L	-	-	97.9	65.7
Chloride	mg/L	-	-	732	451
Fluoride	mg/L	-	-	<0.400	<0.100
Ammonia (N-NH_3)	mg/L	-	-	0.0085	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.0200	<0.0050
Nitrate (N-NO_3)	mg/L	-	-	<0.100	0.0999
Total Organic Carbon (TOC)	mg/L	-	-	2.18	1.24
Total Inorganic Carbon (DOC)	mg/L	-	-	2.16	1.18
Total Metals					
Aluminum, total (T-Al)	mg/L	-	-	0.13	0.0505
Antimony, total (T-Sb)	mg/L	-	-	<0.00020	<0.00010
Arsenic, total (T-As)	mg/L	-	-	<0.00020	0.00014
Barium, total (T-Ba)	mg/L	-	-	0.00406	0.00513
Beryllium, total (T-Be)	mg/L	-	-	<0.000040	<0.000020
Boron, total (T-B)	mg/L	-	-	0.202	0.129
Cadmium, total (T-Cd)	mg/L	-	-	0.0000108	0.0000102
Chromium, total (T-Cr)	mg/L	-	-	<0.00100	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	<0.00020	<0.00010
Copper, total (T-Cu)	mg/L	0.002	0.003	<0.00100	0.00077
Iron, total (T-Fe)	mg/L	-	-	0.041	0.018
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000100	<0.000050
Manganese, total (T-Mn)	mg/L	-	-	0.00217	0.00224
Molybdenum, total (T-Mo)	mg/L	-	-	0.00104	0.00102
Nickel, total (T-Ni)	mg/L	-	-	<0.00100	<0.00050
Selenium, total (T-Se)	mg/L	-	-	<0.000100	<0.000050
Silver, total (T-Ag)	mg/L	-	-	<0.000020	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	<0.000020	0.000011
Uranium, total (T-U)	mg/L	-	-	0.000352	0.000209
Vanadium, total (T-V)	mg/L	-	-	<0.00100	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0060	<0.0030
Hexavalent Chromium, total	mg/L	-	-	<0.00050	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.0000259	<0.0000500
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00100	<0.00200
Iron, dissolved (D-Fe)	mg/L	-	-	<0.050	<0.100
Lead, dissolved (D-Pb)	mg/L	-	-	<0.000250	<0.000500
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0035	0.0174
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00250	<0.00500
Strontium, dissolved (D-Sr)	mg/L	-	-	1.33	1.91
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00250	<0.00500
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0050	<0.0100
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	-	-	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	-	-	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010
Fluorene	mg/L	-	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010
Naphthalene	mg/L	-	-	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	-	-	<0.00050	<0.00050
Ethylbenzene	mg/L	-	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	-	-	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050
Toluene	mg/L	-	-	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050
Chlorobenzene	mg/L	-	-	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	-	-	<0.00050	<0.00050

Notes:
Non-detect results are screened using the detection limit value.
Results in ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of estuarine water aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of estuarine water aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.

Table F-2:
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[1]					0.0001 [2]	0.0030-0.0077 [3,4]
Station	**Description**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-03	Mill Creek Estuary	SW-03	VA25C7124-003	2025-10-12	<0.000020	0.00153
SW-03	Mill Creek Estuary	SW-03	VA25C7681-003	2025-10-17	<0.000020	0.00060

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] CCME guideline for total mercury = 0.026 µg/L.
[4] 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.

Table F-3:
Estuarine 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	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-03	Mill Creek Estuary	SW-03	VA25C7128-003	2025-10-12	0	0.485
SW-03	Mill Creek Estuary	SW-03	VA25C7683-003	2025-10-17	0.0296	1.07
SW-03	Mill Creek Estuary	SW-03	VA25C8589-003	2025-10-25	0.0121	0.936
SW-03	Mill Creek Estuary	SW-03	VA25C9111-003	2025-10-30	0	1.24

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.

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 [1]		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
				VA25C7226-001	VA25C7226-002	VA25C7226-003	VA25C7226-004	VA25C7226-005	VA25C7226-006
		Long Term	Short Term	2025-10-14 11:25	2025-10-14 11:10	2025-10-14 10:55	2025-10-14 13:35	2025-10-14 13:15	2025-10-14 13:00
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.57	7.55	7.40	7.58	7.53	7.44
Specific Conductivity - Field	µS/cm	-	-	35920	36587	45946	37024	38163	45674
Temperature - Field	°C	-	-	9.0	9.0	9.4	9.3	9.3	9.7
Salinity - Field	ppt	Narrative [2]	-	22.54	23.00	29.58	23.32	24.1	29.41
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	3.50	3.51	1.92	2.90	2.66	1.29
TSS	mg/L	Narrative [2]	Narrative [2]	4.3	5.4	<2.0	2.1	5.2	4.7
Dissolved Oxygen - Field	mg/L	>=8	-	8.58	8.02	***4.67***	8.07	***7.45***	***4.81***
Total Hardness	mg/L	-	-	4610	4810	7020	4180	5560	6790
Dissolved Hardness	mg/L	-	-	3630	3800	5530	3760	3730	5350
Anions and Nutrients									
Sulphate	mg/L	-	-	1530	1690	2290	1460	1710	2200
Chloride	mg/L	-	-	11700	12700	16600	10900	12700	16100
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	12-13 [3]	78-85 [3]	0.0064	0.0065	<0.0050	0.0062	0.0079	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	1.28	1.25	0.94	1.14	1.29	1.02
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.32	1.17	1.03	1.33	1.14	0.99
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.0743	0.0794	0.0296	0.0776	0.0669	0.0255
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00109	0.00110	0.00145	0.00111	0.00122	0.00138
Barium, total (T-Ba)	mg/L	-	-	0.0122	0.0127	0.0112	0.0124	0.0128	0.0114
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	-	***3.17***	***3.23***	***4.33***	***2.91***	***3.31***	***4.19***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000067	0.000065	0.000087	0.000058	0.000075	0.000079
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000138	0.000133	0.000122	0.000098	0.000124	0.000123
Copper, total (T-Cu)	mg/L	0.002	0.003	***0.00628***	0.00115	0.00093	***0.00504***	***0.00361***	0.0009
Iron, total (T-Fe)	mg/L	-	-	0.095	0.102	0.030	0.075	0.094	0.028
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0146	0.0145	0.0110	0.0138	0.0138	0.00912
Molybdenum, total (T-Mo)	mg/L	-	-	0.00622	0.00662	0.00873	0.00815	0.00732	0.00921
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	0.00058	<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	-	-	0.00167	0.00178	0.00238	0.00166	0.00178	0.00231
Vanadium, total (T-V)	mg/L	0.005	-	0.00125	0.00128	0.00140	0.00102	0.00126	0.00143
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030	0.0050	0.0061	<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	-	-	0.000063	0.000060	0.000071	0.000069	0.000073	0.000079
Copper, dissolved (D-Cu)	mg/L	-	-	0.00099	0.00070	<0.00050	0.00479	0.0024	0.00117
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010	<0.010	<0.010	0.019	<0.010	<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	-	-	0.0161	0.0145	0.0114	0.0151	0.0152	0.00995
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	0.00061	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	5.06	5.28	7.28	5.31	5.07	7.03
Vanadium, dissolved (D-V)	mg/L	-	-	0.00112	0.00113	0.00146	0.00112	0.00105	0.00138
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	0.0039	0.0017	0.0081	0.0099	0.0029
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	-	0.000012	<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	-	-	0.000028	<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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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 October 14 (Table G-2).
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] 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 [1]		Reference Station WQR1	Reference Station WQR1	Reference Station WQR1
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR1-0.5	WQR1-2m	WQR1-SF
				VA25C7226-007	VA25C7226-008	VA25C7226-009
		Long Term	Short Term	2025-10-14 10:10	2025-10-14 9:50	2025-10-14 9:30
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.6	7.56	7.4
Specific Conductivity - Field	µS/cm	-	-	34359	35905	46107
Temperature - Field	°C	-	-	8.5	8.8	9.2
Salinity - Field	ppt	Narrative [2]	-	21.45	22.52	29.69
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	2.92	2.51	0.9
TSS	mg/L	Narrative [2]	Narrative [2]	5.6	3.6	4.1
Dissolved Oxygen - Field	mg/L	>=8	-	***6.77***	***5.13***	
Total Hardness	mg/L	-	-	4780	4590	6700
Dissolved Hardness	mg/L	-	-	3780	4170	5500
Anions and Nutrients						
Sulphate	mg/L	-	-	1660	1620	2230
Chloride	mg/L	-	-	12000	12000	16700
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	7.2-13 [3]	48-85 [3]	0.0074	0.0182	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.58
Total Organic Carbon (TOC)	mg/L	-	-	1.17	1.12	<0.50
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.1	1.22	0.75
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.0951	0.0916	0.026
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00113	0.00107	0.00141
Barium, total (T-Ba)	mg/L	-	-	0.0136	0.0131	0.0115
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	***3.15***	***3.12***	***4.20***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.00007	0.000059	0.00009
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000152	0.000139	0.00012
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00082	0.00087	0.00056
Iron, total (T-Fe)	mg/L	-	-	0.124	0.121	0.027
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0159	0.015	0.0112
Molybdenum, total (T-Mo)	mg/L	-	-	0.00692	0.00654	0.00884
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.00177	0.00171	0.00228
Vanadium, total (T-V)	mg/L	0.005	-	0.00137	0.00127	0.00138
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000073	0.000064	0.000079
Copper, dissolved (D-Cu)	mg/L	-	-	0.00083	0.00099	0.0007
Iron, dissolved (D-Fe)	mg/L	-	-	0.026	0.014	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0143	0.0165	0.0124
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	0.00087	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	5.31	5.74	7.08
Vanadium, dissolved (D-V)	mg/L	-	-	0.00119	0.00124	0.0014
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0018	0.0023	0.0013
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] 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 [1]		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	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-W1-0.5	IDZ-W1-2m	IDZ-W1-SF	IDZ-W2-0.5	IDZ-W2-2m	IDZ-W2-SF
				VA25C7388-001	VA25C7388-002	VA25C7388-003	VA25C7388-004	VA25C7388-005	VA25C7388-006
		Long Term	Short Term	2025-10-15 13:55	2025-10-15 13:20	2025-10-15 13:05	2025-10-15 14:50	2025-10-15 14:40	2025-10-15 14:20
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.61	7.47	7.42	7.49	7.42	7.41
Specific Conductivity - Field	µS/cm	-	-	23194	30049	32233	19712	31634	32258
Temperature - Field	°C	-	-	9.2	9.8	9.4	9.9	10	9.5
Salinity - Field	ppt	Narrative [2]	-	20.68	27.03	29.57	16.99	28.45	29.49
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	3.05	1.58	1.10	2.27	1.43	1.18
TSS	mg/L	Narrative [2]	Narrative [2]	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	9.33	***7.08***	***4.65***	9.47	***6.02***	***4.68***
Total Hardness	mg/L	-	-	3360	5520	6180	3250	5810	6330
Dissolved Hardness	mg/L	-	-	2600	4090	6020	3530	5500	6030
Anions and Nutrients									
Sulphate	mg/L	-	-	1370	2060	2380	1360	2250	2380
Chloride	mg/L	-	-	9850	14700	17000	9760	16100	17000
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	7.2-13 [3]	48-85 [3]	0.0070	<0.0050	0.0060	0.0083	0.0054	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.53	<0.50	0.52	0.53
Total Organic Carbon (TOC)	mg/L	-	-	0.54	1.27	<0.50	0.55	1.06	<0.50
Dissolved Organic Carbon (DOC)	mg/L	-	-	1.36	0.89	0.76	1.41	0.91	0.91
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.0713	0.0482	0.0222	0.0544	0.02	0.0197
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00094	0.0014	0.00153	0.00095	0.00147	0.00155
Barium, total (T-Ba)	mg/L	-	-	0.0116	0.0119	0.0121	0.0103	0.0109	0.0117
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	-	***2.33***	***3.10***	***3.80***	***2.02***	***3.49***	***3.69***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000066	0.000079	0.000092	0.000058	0.000085	0.00008
Chromium, total (T-Cr)	mg/L	-	-	0.00291	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000142	0.000103	0.000106	0.000079	0.000079	0.000097
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00145	***0.00461***	0.00067	0.00194	0.00092	0.00057
Iron, total (T-Fe)	mg/L	-	-	0.094	0.058	0.021	0.057	0.021	0.017
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0143	0.0107	0.0151	0.0122	0.00781	0.0107
Molybdenum, total (T-Mo)	mg/L	-	-	0.00580	0.00831	0.00986	0.0055	0.00867	0.00909
Nickel, total (T-Ni)	mg/L	0.0083	-	0.00321	<0.00050	0.00051	<0.00050	<0.00050	0.00056
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	-	-	0.00150	0.00214	0.00243	0.00146	0.00222	0.00236
Vanadium, total (T-V)	mg/L	0.005	-	0.00115	0.0014	0.00149	0.00104	0.00136	0.00141
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	0.003	<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
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000043	0.000059	0.000078	0.000064	0.000074	0.000087
Copper, dissolved (D-Cu)	mg/L	-	-	0.00064	0.00059	0.00062	0.00115	0.00062	0.00083
Iron, dissolved (D-Fe)	mg/L	-	-	0.011	<0.010	<0.010	<0.010	<0.010	<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	-	-	0.0125	0.0119	0.0141	0.0155	0.00925	0.0117
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	0.00053	0.00053
Strontium, dissolved (D-Sr)	mg/L	-	-	2.91	4.47	6.33	3.78	5.97	6.30
Vanadium, dissolved (D-V)	mg/L	-	-	0.00076	0.00115	0.00139	0.00093	0.00132	0.00145
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0014	0.0013	0.0014	0.0020	0.0015	0.0022
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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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 October 15 (Table G-4).
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-4:
Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline [1]		Reference Station WQR2	Reference Station WQR2	Reference Station WQR2
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR2-0.5	WQR2-2m	WQR2-SF
				VA25C7388-007	VA25C7388-008	VA25C7388-009
		Long Term	Short Term	2025-10-15 11:20	2025-10-15 11:05	2025-10-15 11:20
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.56	7.49	7.44
Specific Conductivity - Field	µS/cm	-	-	33490	37249	45831
Temperature - Field	°C	-	-	8.8	9.9	9.5
Salinity - Field	ppt	Narrative [2]	-	20.87	23.5	29.51
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	3.53	2.16	1.60
TSS	mg/L	Narrative [2]	Narrative [2]	3.4	2.9	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	***7.51***	***5.94***	***6.1***
Total Hardness	mg/L	-	-	4360	4600	6160
Dissolved Hardness	mg/L	-	-	4100	4430	6060
Anions and Nutrients						
Sulphate	mg/L	-	-	1700	1780	2370
Chloride	mg/L	-	-	12200	12700	17000
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	12-13 [3]	78-85 [3]	0.0077	0.0088	0.0123
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.54
Total Organic Carbon (TOC)	mg/L	-	-	<0.50	0.58	<0.50
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.96	1.07	<0.50
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.0794	0.0709	0.0254
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	0.00117	0.00117	0.00158
Barium, total (T-Ba)	mg/L	-	-	0.0129	0.0128	0.0118
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	***2.77***	***2.81***	***3.75***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000066	0.000074	0.00009
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000118	0.000119	0.000104
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00092	0.00072	0.00052
Iron, total (T-Fe)	mg/L	-	-	0.116	0.097	0.022
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.00010	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0158	0.0142	0.0115
Molybdenum, total (T-Mo)	mg/L	-	-	0.00667	0.00746	0.00931
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.0017	0.00176	0.00231
Vanadium, total (T-V)	mg/L	0.005	-	0.00129	0.0014	0.00149
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000063	0.000058	0.000084
Copper, dissolved (D-Cu)	mg/L	-	-	0.00076	0.00060	0.00135
Iron, dissolved (D-Fe)	mg/L	-	-	0.012	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.0140	0.0154	0.0122
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	4.55	4.72	6.34
Vanadium, dissolved (D-V)	mg/L	-	-	0.00115	0.00117	0.00143
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0013	0.0023	0.0030
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-5:
Summary of Marine Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		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
				VA25C9349-001	VA25C9349-002	VA25C9349-003	VA25C9349-004	VA25C9349-005	VA25C9349-006
		Long Term	Short Term	2025-11-02 12:10	2025-11-02 12:00	2025-11-02 11:40	2025-11-02 13:50	2025-11-02 13:05	2025-11-02 12:50
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.55	7.16	7.43	7.53	7.47	7.42
Specific Conductivity - Field	µS/cm	-	-	5099	22456	46410	7198	27014	46491
Temperature - Field	°C	-	-	7.5	8.7	10.5	7.5	9.1	10.5
Salinity - Field	ppt	Narrative [2]	-	2.74	13.5	29.98	3.96	16.51	30.03
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	9.76	12.78	1.57	8.30	4.46	1.57
TSS	mg/L	Narrative [2]	Narrative [2]	6.9	3.9	<2.0	6.1	4.9	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.70	11.1	***5.7***	11.36	9.34	***5.59***
Total Hardness	mg/L	-	-	389.00	3180	5840	442	1720	5630
Dissolved Hardness	mg/L	-	-	300.00	2590	4910	480	1470	4710
Anions and Nutrients									
Sulphate	mg/L	-	-	140	1280	2260	166	1490	2080
Chloride	mg/L	-	-	1110	9130	15900	1320	10500	14800
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	1.2
Ammonia (N-NH_3)	mg/L	7.8-31 [3]	52-208 [3]	0.0057	0.0083	<0.0050	0.0051	0.0088	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.64	<0.50	<0.50	<0.50
Total Organic Carbon (TOC)	mg/L	-	-	3.24	2.18	1.15	3.23	1.86	1.1
Dissolved Organic Carbon (DOC)	mg/L	-	-	3.34	2.42	1.13	3.22	2.7	1.25
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.426	0.165	0.0212	0.372	0.26	0.0194
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.00091	0.00162	<0.00040	0.00063	0.00146
Barium, total (T-Ba)	mg/L	-	-	0.0098	0.0097	0.0102	0.0093	0.0097	0.01
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	-	0.42	***2.15***	***3.54***	0.39	1.15	***3.27***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000051	0.000088	<0.000020	0.000033	0.000097
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000155	0.000126	0.000115	0.000137	0.000135	0.000108
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00168	0.00137	0.00149	0.00178	0.00167	0.00067
Iron, total (T-Fe)	mg/L	-	-	0.306	0.15	0.02	0.258	0.22	0.018
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00013	<0.00010	<0.00010	0.00012	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0137	0.00861	0.00515	0.0125	0.0112	0.00466
Molybdenum, total (T-Mo)	mg/L	-	-	0.00232	0.00565	0.00919	0.00271	0.00361	0.00889
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	-	-	0.000347	0.00143	0.00241	0.000365	0.000839	0.00233
Vanadium, total (T-V)	mg/L	0.005	-	0.00098	0.00129	0.00149	0.00096	0.00112	0.00139
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	0.0031	0.004	<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
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.00005	0.000088	<0.000020	0.000031	0.000081
Copper, dissolved (D-Cu)	mg/L	-	-	0.00087	0.00064	<0.00050	0.00127	0.00104	0.00052
Iron, dissolved (D-Fe)	mg/L	-	-	0.034	0.017	<0.010	0.035	0.027	<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	-	-	0.00655	0.00529	0.00463	0.00678	0.00651	0.0061
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.396	3.35	6.24	0.618	1.81	5.74
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	0.00097	0.00149	<0.00050	0.00071	0.00133
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0013	0.0012	<0.0010	0.0016	0.0014	<0.0010
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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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 November 2 (Table G-6).
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-6:
Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline [1]		Reference Station WQR1	Reference Station WQR1	Reference Station WQR1
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR1-0.5	WQR1-2m	WQR1-SF
				VA25C9349-007	VA25C9349-008	VA25C9349-009
		Long Term	Short Term	2025-11-02 10:55	2025-11-02 10:45	2025-11-02 10:25
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.74	7.31	7.33
Specific Conductivity - Field	µS/cm	-	-	4783	12635	47960
Temperature - Field	°C	-	-	7.2	7.8	9.6
Salinity - Field	ppt	Narrative [2]	-	2.56	7.24	31.04
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	9.15	8.40	1.59
TSS	mg/L	Narrative [2]	Narrative [2]	9.8	10.1	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.62	11.14	***4.42***
Total Hardness	mg/L	-	-	478	1510	6060
Dissolved Hardness	mg/L	-	-	374	1310	5590
Anions and Nutrients						
Sulphate	mg/L	-	-	174	575	2360
Chloride	mg/L	-	-	1360	4240	16600
Fluoride	mg/L	-	1.5	<1.0	<1.0	1.3
Ammonia (N-NH_3)	mg/L	7.2-20 [3]	48-135 [3]	0.0083	0.0084	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.54
Total Organic Carbon (TOC)	mg/L	-	-	3.78	3.06	1.16
Dissolved Organic Carbon (DOC)	mg/L	-	-	3.31	2.96	1.00
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.485	0.369	0.0194
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.00058	0.00161
Barium, total (T-Ba)	mg/L	-	-	0.011	0.0115	0.0103
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.41	1.04	***3.6***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000038	0.000086
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.0002	0.000191	0.000131
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00165	0.00149	0.00054
Iron, total (T-Fe)	mg/L	-	-	0.347	0.31	0.025
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00013	0.00013	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0151	0.0144	0.00854
Molybdenum, total (T-Mo)	mg/L	-	-	0.00105	0.0027	0.00965
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000289	0.000725	0.00253
Vanadium, total (T-V)	mg/L	0.005	-	0.00114	0.00131	0.00151
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.000023	0.000087
Copper, dissolved (D-Cu)	mg/L	-	-	0.0009	0.00085	0.00083
Iron, dissolved (D-Fe)	mg/L	-	-	0.041	0.031	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00742	0.00764	0.00811
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.501	1.58	6.39
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	0.00064	0.00152
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-7:
Summary of Marine Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1]		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	0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				IDZ-W1-0.5	IDZ-W1-2m	IDZ-W1-SF	IDZ-W2-0.5	IDZ-W2-2m	IDZ-W2-SF
				VA25D0134-001	VA25D0134-002	VA25D0134-003	VA25D0134-004	VA25D0134-005	VA25D0134-006
		Long Term	Short Term	2025-11-11 9:16	2025-11-11 9:18	2025-11-11 9:24	2025-11-11 10:53	2025-11-11 10:54	2025-11-11 11:04
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.67	7.38	7.4	7.73	7.44	7.39
Specific Conductivity - Field	µS/cm	-	-	6643	25843	47321	6492	27428	47535
Temperature - Field	°C	-	-	7.3	8.7	9.7	7.4	8.7	9.6
Salinity - Field	ppt	Narrative [2]	-	3.63	15.72	30.58	3.55	16.78	30.73
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	11.59	6.40	0.75	11.91	5.77	1.20
TSS	mg/L	Narrative [2]	Narrative [2]	10.2	13.3	7.0	7.6	8.9	4.6
Dissolved Oxygen - Field	mg/L	>=8	-	11.71	9.7	***4.42***	11.66	9.48	***4.23***
Total Hardness	mg/L	-	-	510	963	5820	544	835	6280
Dissolved Hardness	mg/L	-	-	879	2800	6360	549	2580	6260
Anions and Nutrients									
Sulphate	mg/L	-	-	183	337	2320	205	321	2310
Chloride	mg/L	-	-	1410	2530	16500	1570	2400	16500
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	7.2-20 [3]	48-135 [3]	0.0065	0.0069	<0.0050	0.0059	0.0062	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.51	<0.50	<0.50	1.53
Total Organic Carbon (TOC)	mg/L	-	-	2.32	1.99	0.84	2.13	2.66	0.69
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.14	1.54	0.84	2.04	1.82	0.77
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.885	0.767	0.0146	0.643	0.591	0.016
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	0.00041	0.00147	<0.00040	<0.00040	0.0016
Barium, total (T-Ba)	mg/L	-	-	0.0177	0.0176	0.0096	0.014	0.0154	0.0102
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	-	0.46	0.71	***3.36***	0.45	0.60	***3.50***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000028	0.000076	<0.000020	0.000024	0.000081
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000337	0.000343	0.000143	0.000282	0.000292	0.000143
Copper, total (T-Cu)	mg/L	0.002	0.003	***0.00266***	***0.00256***	<0.00050	***0.00211***	***0.00216***	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.583	0.562	0.012	0.47	0.475	0.016
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00015	0.00013	<0.00010	0.00011	0.00011	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0187	0.0183	0.00828	0.0168	0.0153	0.0101
Molybdenum, total (T-Mo)	mg/L	-	-	0.00116	0.00172	0.00858	0.00122	0.00157	0.0091
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	-	-	0.000341	0.000509	0.00226	0.000356	0.00049	0.00242
Vanadium, total (T-V)	mg/L	0.005	-	0.00195	0.00188	0.00137	0.00152	0.00161	0.00141
Zinc, total (T-Zn)	mg/L	0.01	0.055	<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
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.000036	0.000081	<0.000020	0.000031	0.000078
Copper, dissolved (D-Cu)	mg/L	-	-	<0.00050	<0.00050	0.00051	0.00056	<0.00050	0.00084
Iron, dissolved (D-Fe)	mg/L	-	-	0.025	0.013	<0.010	0.022	0.015	<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	-	-	0.00617	0.00653	0.00944	0.00568	0.00671	0.015
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00057
Strontium, dissolved (D-Sr)	mg/L	-	-	0.957	3.19	6.37	0.639	2.84	6.75
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	0.00091	0.0014	<0.00050	0.00084	0.00144
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0011	0.0013	0.0029	<0.0010	0.0021	0.0023
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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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 November 11 (Table G-8).
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-8:
Summary of Marine Water Quality Results Received at the Time of Reporting

Parameter	Unit	Lowest Applicable Guideline [1]		Reference Station WQR2	Reference Station WQR2	Reference Station WQR2
				0.5 m Below Surface	2 m Below Surface	2 m Above Seafloor
				WQR2-0.5	WQR2-2m	WQR2-SF
				VA25D0134-007	VA25D0134-008	VA25D0134-009
		Long Term	Short Term	2025-11-11 14:26	2025-11-11 14:27	2025-11-11 14:32
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.68	7.27	7.37
Specific Conductivity - Field	µS/cm	-	-	6055	21601	47654
Temperature - Field	°C	-	-	7.8	8.4	9.5
Salinity - Field	ppt	Narrative [2]	-	3.3	12.97	30.81
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	14.67	7.11	1.29
TSS	mg/L	Narrative [2]	Narrative [2]	11	11	3.2
Dissolved Oxygen - Field	mg/L	>=8	-	11.62	10.47	***4.26***
Total Hardness	mg/L	-	-	341	554.00	5980
Dissolved Hardness	mg/L	-	-	406	2650.00	5940
Anions and Nutrients						
Sulphate	mg/L	-	-	121	212	2300
Chloride	mg/L	-	-	956	1610	16400
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	7.2-20 [3]	48-135 [3]	0.0085	0.0093	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	<0.10	<0.10	<0.10
Nitrate (N-NO_3)	mg/L	3.7	339	<0.50	<0.50	0.71
Total Organic Carbon (TOC)	mg/L	-	-	2.03	2.37	0.71
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.07	1.71	0.83
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.848	0.716	0.0301
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	<0.0010	<0.0010	<0.0010
Arsenic, total (T-As)	mg/L	0.0125	0.0125	<0.00040	<0.00040	0.00146
Barium, total (T-Ba)	mg/L	-	-	0.0179	0.0165	0.0101
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.31	0.41	***3.44***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	<0.000020	0.000077
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000364	0.000298	0.000149
Copper, total (T-Cu)	mg/L	0.002	0.003	***0.00284***	***0.00238***	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.637	0.537	0.031
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00013	0.00012	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0196	0.0177	0.00971
Molybdenum, total (T-Mo)	mg/L	-	-	0.00083	0.00117	0.00922
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	<0.00050	<0.00050	<0.00050
Silver, total (T-Ag)	mg/L	0.0005	0.0037	<0.00010	<0.00010	<0.00010
Thallium, total (T-Tl)	mg/L	-	-	<0.000050	<0.000050	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.00022	0.000339	0.00235
Vanadium, total (T-V)	mg/L	0.005	-	0.00205	0.00173	0.00144
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	0.00004	0.000073
Copper, dissolved (D-Cu)	mg/L	-	-	0.00098	0.00068	0.00105
Iron, dissolved (D-Fe)	mg/L	-	-	0.068	0.014	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00906	0.00715	0.0134
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.479	2.99	6.69
Vanadium, dissolved (D-V)	mg/L	-	-	0.00057	0.00089	0.00145
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	0.0011	0.002
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.006	-	<0.000010	<0.000010	<0.000010
Acridine	mg/L	-	-	<0.000010	<0.000010	<0.000010
Anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	<0.000010	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	<0.000010	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	<0.000050	<0.000050	<0.000050
Phenanthrene	mg/L	-	-	<0.000020	<0.000020	<0.000020
Pyrene	mg/L	-	-	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	-	-	<0.000050	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.11	-	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	<0.00050	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	<0.00050	<0.00050	<0.00050
Styrene	mg/L	-	-	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.215	-	<0.00040	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	<0.00050	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	<0.00050	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	<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.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] The approved total ammonia nitrogen BC WQG is salinity, pH and temperature dependent; see Tables 26E and 26F in BC WQG guidance document.
[4] The working BC WQG for trivalent antimony [SB(III)] is 0.27 mg/L and is applied to total antimony results.

Table G-9:
Marine 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[1]					0.0001 [2]	0.016-0.019 [3,4]
Station	**Position in Water Column**	**Sample ID**	**Lab ID**	**Sampling Date**		
Station IDZ-E1						
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C7226-001	2025-10-14	0.000026	<0.0050
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C7226-002	2025-10-14	0.000023	<0.0050
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C7226-003	2025-10-14	<0.000020	<0.0050
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C7226-004	2025-10-14	0.000027	<0.0050
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C7226-005	2025-10-14	<0.000020	<0.0050
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C7226-006	2025-10-14	0.000031	<0.0050
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C7388-001	2025-10-15	<0.000020	<0.0050
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C7388-002	2025-10-15	0.000025	<0.0050
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C7388-003	2025-10-15	<0.000020	<0.0050
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C7388-004	2025-10-15	<0.000020	<0.0050
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C7388-005	2025-10-15	<0.000020	<0.0050
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C7388-006	2025-10-15	<0.000020	<0.0050
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C7226-007	2025-10-14	<0.000020	<0.0050
WQR1	2 m Below Surface	WQR1-2m	VA25C7226-008	2025-10-14	0.000028	<0.0050
WQR1	2 m Above Seafloor	WQR1-SF	VA25C7226-009	2025-10-14	<0.000020	<0.0050
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C7388-007	2025-10-15	<0.000020	<0.0050
WQR2	2 m Below Surface	WQR2-2m	VA25C7388-008	2025-10-15	<0.000020	<0.0050
WQR2	2 m Above Seafloor	WQR2-SF	VA25C7388-009	2025-10-15	<0.000020	<0.0050

Notes:
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of marine aquatic life.
[1] The lowest applicable guidelines from approved or working BC WQGs, Canadian (CCME) WQGs and Federal WQGs.
[2] 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.
[3] CCME guideline for total mercury = 0.016 µg/L.
[4] 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.

Table G-10:
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**		
Station IDZ-E1						
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C7227-001	2025-10-14	0.00123	2.02
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C7851-001	2025-10-20	0.0125	0.911
IDZ-E1	0.5 m Below Surface	IDZ-E1-0.5	VA25C8630-001	2025-10-26	0.0640	0.993
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C7227-002	2025-10-14	0	3.19
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C7851-002	2025-10-20	0.0326	0.906
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C8630-002	2025-10-26	0.0209	1.04
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C7227-003	2025-10-14	0.0170	0.832
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C7851-003	2025-10-20	0.0368	0.827
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C8630-003	2025-10-26	0.0173	0.816
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C7227-004	2025-10-14	0	2.49
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C7851-004	2025-10-20	0.0145	0.851
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C8630-004	2025-10-26	0.0315	0.880
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C7227-005	2025-10-14	0.000440	1.04
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C7851-005	2025-10-20	0.0171	0.894
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C8630-005	2025-10-26	0.0347	0.903
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C7227-006	2025-10-14	0.00706	1.09
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C7851-006	2025-10-20	0.0102	0.848
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C8630-006	2025-10-26	0.00903	0.924
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C7391-001	2025-10-15	0	1.20
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C8525-001	2025-10-24	0.00827	0.995
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C7391-002	2025-10-15	0	0.878
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C8525-002	2025-10-24	0.0277	0.808
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C7391-003	2025-10-15	0.00198	0.737
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C8525-003	2025-10-24	0.0479	1.07
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C7391-004	2025-10-15	0	0.844
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C8525-004	2025-10-24	0.00725	0.828
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C7391-005	2025-10-15	0	0.792
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C8525-005	2025-10-24	0.0204	0.990
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C7391-006	2025-10-15	0.0253	0.839
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C8525-006	2025-10-24	0.0248	0.947
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C7227-007	2025-10-14	0.0123	0.783
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C7851-007	2025-10-20	0.118	1.23
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C8630-007	2025-10-26	0.0526	1.58
WQR1	2 m Below Surface	WQR1-2m	VA25C7227-008	2025-10-14	0	1.13
WQR1	2 m Below Surface	WQR1-2m	VA25C7851-008	2025-10-20	0.0304	0.941
WQR1	2 m Below Surface	WQR1-2m	VA25C8630-008	2025-10-26	0.0177	0.876
WQR1	2 m Above Seafloor	WQR1-SF	VA25C7227-009	2025-10-14	0	1.07
WQR1	2 m Above Seafloor	WQR1-SF	VA25C7851-009	2025-10-20	0.0792	1.19
WQR1	2 m Above Seafloor	WQR1-SF	VA25C8630-009	2025-10-26	0.749	1.55
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C7391-007	2025-10-15	0.0312	1.22
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C8525-007	2025-10-24	0.00868	0.846
WQR2	2 m Below Surface	WQR2-2m	VA25C7391-008	2025-10-15	0.0263	1.23
WQR2	2 m Below Surface	WQR2-2m	VA25C8525-008	2025-10-24	0.0110	0.949
WQR2	2 m Above Seafloor	WQR2-SF	VA25C7391-009	2025-10-15	0.460	1.05
WQR2	2 m Above Seafloor	WQR2-SF	VA25C8525-009	2025-10-24	0.0353	0.990

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.