TECHNICAL MEMORANDUM

To:	**Ian McAllister, Ashleigh Crompton, Mike Champion, Mark Zan and Ryan Schucroft (Woodfibre LNG)**	**Date: 06 Dec 2025**	
From:	**Holly Pelletier, Cheng Kuang and Patrick Mueller (Lorax)**	**Project #:**	**A633-9**
Subject:	**PE-111578 Weekly Discharge and Compliance Report #92 for November 23 - 29**		

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 #92) was prepared by Lorax and summarizes WDA monitoring conducted for the period of November 23 - 29. 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 #92 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. The lower reach of East Creek was temporarily diverted to Outfall 11 (OUT-11), from September 17, 2024, to November 18, 2025, to facilitate replacement of the Outfall 12 culvert. As of November 19, 2025, East Creek flows have been restored to the lower channel that discharges to Howe Sound through Outfall 12 (OUT-12). 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 23 - 29 monitoring period, with precipitation recorded each day except on November 28 and 29. The total precipitation amount during the monitoring period was 18.4 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
2025-11-23	1.0	10.6	4.8	Overcast
2025-11-24	2.2	6.4	3.9	Overcast
2025-11-25	4.2	5.7	3.9	Scattered Showers
2025-11-26	1.8	8.3	4.8	Overcast
2025-11-27	9.2	8.3	5.7	Scattered Showers
2025-11-28	0	10.6	4.1	Clear
2025-11-29	0	6.3	2.0	Clear

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

From November 23 - 29, the East Sedimentation Pond received water from the M09 Sump, the MOF Sump, the Area 1100 Sump, the Flare Anchor 'A' area 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 3,231 m^3 from the East Sedimentation Pond was transferred to the West Sedimentation Pond from November 23 - 29 (Appendix B, Table B-4).

Routine operation of the East WWTP continued during the monitoring period (November 23 - 29). 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 23 - 29) except on November 29 when the East WWTP was not operated. Daily water volumes processed by the East WWTP are provided in Appendix B (Table B-4).

From November 23 - 29, 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 23 - 29) and recirculated back to the pond or intermittently discharged to Howe Sound. A total of 5,596 m^3 of clarified effluent was intermittently discharged to Howe Sound from station SP-W-OUT each day during the monitoring period (November 23 - 29) except on November 26 and 28. Clarified effluent was not reclaimed for construction use from November 23 - 29. Daily clarified effluent volumes from the 2700GPM 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-6).

2. Monitoring Summary

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

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

- Non-contact diversion ditch outlet monitoring stations (OUT-01, OUT-02). 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 stations OUT-06 and OUT-11.
- 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. Since September 26, 2025 SP-W-OUT has been sampled from the discharge manhole. It is planned to install a manifold that will combine effluent from the individual trains into a single discharge line configured with a sampling port for SP-W-OUT sample collection. The manifold supplies are currently being procured, and installation will proceed once all required supplies are received.
- 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 IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1, WQR2, SP-E-IN, WWTP-E-IN, WWTP-E-OUT, SP-W-IN, SP-W-OUT, 2700GPM-IN, 2700GPM-OUT, W2700T1-OUT, W2700T2-OUT, W2700T3-OUT and W2700T4-OUT during the monitoring period (November 23 - 29). Sampling dates and parameters tested are summarized in Table 2.

Overall, the PE-111578 monitoring requirements that were applicable during the monitoring period (November 23 - 29) 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 23 - 29). Daily field measurements were not collected at the west catchment compliance station (SP-W-OUT) on November 26 and 28 as there was no discharge to Howe Sound on those days nor on November 24 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 27 and 29 as it was not operational at the time of monitoring on those days. 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 23 - 29).

Table 2:
Summary of PE-111578 Monitoring Samples Collected November 23 - 29.

Sampling Date	Sample	Description	Parameters Tested	Monitoring Frequency
November 23, 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 24, 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
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
November 25, 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, Total, Dissolved and Speciated Metals, and Methylmercury.	D, 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
	W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1	Field, Physical & General Parameters, Total, Dissolved and Speciated Metals, and Methylmercury.	P
	IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	Field, Physical & General Parameters, EPHs & PAHs, Total, Dissolved and Speciated Metals, Methylmercury, Chronic Toxicity	Q
	IDZ-E2-0.5	Howe Sound IDZ station E2; 0.5 m below surface		
	IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface		
	IDZ-W2-0.5	Howe Sound IDZ station W2; 0.5 m below surface		
	WQR1-0.5	Reference site 1; 0.5 m below surface		
	WQR2-0.5	Reference site 2; 0.5 m below surface		
November 26, 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
	2700GPM-IN	2700GPM TSS settling system at the influent meter box	Field Parameters.	P
November 27, 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
	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 28, 2025	SP-E-IN	East 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
	WWTP-E-IN	East WWTP at the influent meter box	Field, Physical & General Parameters, VH & BTEX, EPHs & PAHs, Total, Dissolved and Speciated Metals, VOCs, Methylmercury, Dioxins & Furans.	D, M, 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-OUT	West Sedimentation Pond clarified effluent directed back to the West Sedimentation Pond, collected at the manifold that combines effluent from the individual 2700GPM trains into a single line configured with a sampling port	Field & Physical Parameters, Total and Dissolved Metals.	P
	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
	W2700T3-OUT	2700GPM TSS settling system at the outlet of Train 3		
	W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
November 29, 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
	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.
Q – quarterly chronic toxicity.

3. Water Quality Results

3.1 Summary of Reported Results

Analytical results and associated field measurements included in this weekly report (Report #92) are listed below in Table 3, with additional field measurements presented in Table B-3 (Appendix B) and Table C-5 (Appendix C). Testing for methylmercury, dioxins, furans and toxicity may require four weeks or longer to complete. Analytical results not reported will be included in future weekly reports. Reporting of results is pending for the following samples and parameters:

- IDZ-W1, IDZ-W2 and WQR2 collected November 1 (total mercury, methylmercury);
- OUT-01, OUT-02 and OUT-06 collected November 2 (total mercury, methylmercury);
- IDZ-E1, IDZ-E2 and WQR1 collected November 2 (total mercury and methylmercury);
- OUT-01, OUT-02 and OUT-06 collected November 6 (total mercury, methylmercury);
- IDZ-W1, IDZ-W2 and WQR2 collected November 7 (total mercury, methylmercury, dioxins and furans);
- SW-02, SW-03 and SW-07 collected November 9 (total mercury, methylmercury, dioxins and furans);
- SP-W-IN, SP-W-OUT and 2700GPM-IN collected November 10 (dioxins and furans);
- OUT-01, OUT-02 and OUT-06 collected November 10 (total mercury, methylmercury);
- IDZ-W1, IDZ-W2 and WQR2 collected November 11 (dioxins and furans);
- SW-01 and SW-04 collected November 13 (total mercury, methylmercury, dioxins and furans);
- 2700GPM-IN and SP-W-OUT collected November 16 (dioxins and furans);
- OUT-01, OUT-02 and OUT-06 collected November 17 (total mercury, methylmercury);
- OUT-01, OUT-02 and OUT-06 collected November 22 (field and all analytical parameters).
- SP-W-IN and W2700T1-OUT collected November 25 (total mercury, methylmercury);
- SP-W-OUT and 2700GPM-IN collected November 25 (total mercury, methylmercury, dioxins and furans);
- IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, WQR1 and WQR2 collected November 25 at 0.5 m below surface (field and all analytical parameters);
- SP-E-IN, WWTP-E-IN and WWTP-E-OUT collected November 28 (all analytical parameters).

Table 3:
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #92.

Sample	Description	Sampling Date	Parameters Reported
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface	October 20, 2025	Methylmercury.
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		
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 22, 2025	Methylmercury.
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 30, 2025	Methylmercury.
SW-01	Lower Reach of Woodfibre Creek (near the mouth)		
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-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	November 1, 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		
OUT-01	Non-contact water diversion ditch outlet	November 2, 2025	Field, Physical and General Parameters, Total and Dissolved Metals.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
IDZ-E1-0.5	Howe Sound IDZ station E1; 0.5 m below surface		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	November 5, 2025	Dioxins and Furans
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	November 6, 2025	Dioxins and Furans
WWTP-E-IN	East WWTP at the influent meter box		
WWTP-E-OUT	East WWTP at the effluent meter box		
OUT-01	Non-contact water diversion ditch outlet		Field, Physical and General Parameters, Total and Dissolved Metals.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		

Table 3 (continued):
Summary of Analytical Results and Associated Field Measurements Included in Weekly Discharge and Compliance Report #92.

Sample	Description	Sampling Date	Parameters Reported
IDZ-W1-0.5	Howe Sound IDZ station W1; 0.5 m below surface	November 7, 2025	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		
SW-02	Lower Reach of Mill Creek (upstream of the third bridge)	November 9, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
SW-03	Mill Creek Estuary		
SW-07	Upstream Mill Creek (at the diversion inlet)		
OUT-01	Non-contact water diversion ditch outlet	November 10, 2025	Field, Physical and General Parameters, Total and Dissolved Metals.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
OUT-01	Non-contact water diversion ditch outlet	November 17, 2025	Field, Physical and General Parameters, Total and Dissolved Metals.
OUT-02	Non-contact water diversion ditch outlet		
OUT-06	Non-contact water diversion ditch outlet		
SP-E-IN	East Sedimentation Pond influent monitored at cell 1 of the pond	November 22, 2025	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 25, 2025	Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
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 and General Parameters, Total and Dissolved Metals, Hexavalent Chromium, VOCs, and PAHs.
2700GPM-IN	2700GPM TSS settling system at the influent meter box		
W2700T1-OUT	2700GPM TSS settling system at the outlet of Train 1		Field, Physical and General Parameters, Total and Dissolved Metals, and Hexavalent Chromium.
W2700T2-OUT	2700GPM TSS settling system at the outlet of Train 2	November 28, 2025	Field and Physical Parameters, Total and Dissolved Metals.
W2700T3-OUT	2700GPM TSS settling system at the outlet of Train 3		
W2700T4-OUT	2700GPM TSS settling system at the outlet of Train 4		
2700GPM-OUT	West Sedimentation Pond clarified effluent, collected at the manifold that combines effluent from the individual 2700GPM trains into a single line configured with a sampling port		

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 23 - 29 as well as total mercury and methylmercury samples collected October 22 (COMB-WWTP-E-IN), October 30 (COMB-WWTP-E-IN) and November 22 (stations SP-E-IN, WWTP-E-IN and WWTP-E-OUT). Field measurements for the East WWTP effluent samples (WWTP-E-OUT) collected November 23 - 29 and the analytical sample collected November 22 met MDOs for field and analytical parameters, respectively (Appendix B, Table B-1, Table B-3).

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 23 - 29 (Section 1.2; Table B-4 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 5,596 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 23 - 29) except on November 26 and 28.

Field measurements of influent and effluent quality for the West Sedimentation Pond and the 2700GPM TSS settling system collected November 23 - 29 and analytical samples collected November 25 (stations SP-W-IN, SP-W-OUT, 2700GPM-IN and W2700T1-OUT) and November 28 (stations 2700GPM-OUT, W2700T2-OUT, W2700T3-OUT and W2700T4-OUT) were available at the time of reporting (Appendix C, Table C-1 through Table C-5). Field measurements collected November 23 - 29 and the November 25 effluent sample collected at SP-W-OUT met PE-111578 discharge limits and WQGs.

Acute toxicity results for the West Sedimentation Pond clarified effluent collected at the compliance station (SP-W-OUT) on September 29 (as discussed in Report #84) were available at the time of reporting. Results showed 100% survival of rainbow trout and *Daphnia magna* after exposure to the SP-W-OUT sample. Effluent discharged from the West Sedimentation Pond on September 29 passed the acute toxicity test and were not acutely toxic to these organisms.

3.5 Non-Contact Water Diversion Ditch Outlets

Analytical results were available at the time of reporting for the non-contact water diversion ditch outlet samples collected at stations OUT-01, OUT-02 and OUT-06 on November 2, 6, 10 and 17 (as discussed in Reports #89, #90 and #91). The analytical results, field parameters, and WQGs are summarized in Appendix D. Parameter concentrations met WQGs except field pH, total aluminum, total iron and dissolved copper in one or more samples.

Field pH (pH 6.2 to 6.4) was below the lower limit of the WQG (pH 6.5) at OUT-01 on November 2, 10 and 17, at OUT-02 on November 2 and 17 and at OUT-06 on November 17. Total aluminum was above the long-term WQG at all OUT-01 samples collected November 2 to 17 (0.152 to 0.745 mg/L), at OUT-02 on November 2, 10 and 17 (0.158 to 0.652 mg/L) and at OUT-06 on November 10 (0.146 mg/L). Total iron was above the long-term WQG at OUT-01 on November 2 (0.463 mg/L).

Dissolved copper was above the short- and long-term WQGs at OUT-01, OUT-02 and OUT-06 on November 2 (0.00099, 0.00119 and 0.00074 mg/L, respectively) and at OUT-01 and OUT-02 on November 10 (0.00070 and 0.00056 mg/L, respectively). Dissolved copper was also above the long-term WQG at OUT-01 on November 17 (0.00061 mg/L), at OUT-02 on November 6 and 17 (0.00111 and 0.00055 mg/L, respectively) and at OUT-06 on November 10 and 17 (0.00086 and 0.00078 mg/L, respectively).

Parameter concentrations exceeding WQGs are within the range of values observed during the pre-construction baseline monitoring of diversion ditch water quality except the following (Table 4):

- Total aluminum concentrations measured at OUT-01 and OUT-02 on November 2;
- Total iron concentration measured at OUT-01 on November 2; and
- Dissolved copper concentrations measured at OUT-01 and OUT-02 on November 2 and at OUT-02 on November 6

The November 2 OUT-01 and OUT-02 samples were collected on the third day of heavy rains (78.6 mm) that commenced October 31 and continued to November 2. The precipitation generated runoff flows from the slopes above the construction site. Elevated runoff flows typically entrain small particles that contribute to turbidity and total metal concentrations. Total aluminum and total iron were predominately present in the particulate-bound form of the metal and are attributed to particulate from non-contact water background sources.

In general, copper was present primarily in the dissolved form of the metal in the OUT-01 and OUT-02 samples collected November 2, and the OUT-02 sample collected November 6. The dissolved copper concentration was in the range of values observed at Mill and East Creek background stations, located upstream and outside of the construction area, therefore the reported dissolved copper concentrations in these samples are considered to represent background conditions for non-contact water.

Table 4:
Parameters Above the Pre-Construction Baseline Range and WQGs in Non-Contact Water Diversion Ditch Samples collected November 2 and 6 (Stations OUT-01 and OUT-02)

Parameter	Units	WQG	N	N >Baseline	Commentary
Total Aluminum	mg/L	0.037-0.049	4	2	Total aluminum measured at OUT-01 and OUT-02 on November 2 (0.745 and 0.652 mg/L, respectively) were 20.1 and 13.3 times greater than the WQG and 2.1 and 1.8 times greater, respectively, than the maximum concentration observed in the pre-construction baseline monitoring program (0.361 mg/L). It is speculated the total aluminum concentration is associated with heavy rainfall (78.6 mm from October 31 to November 2) that increased suspended particulate concentrations in the non-contact water that likely contributed to higher total aluminum concentrations than those observed in the pre-construction baseline period. Therefore, these results are considered to represent background conditions for non-contact water.
Total Iron	mg/L	0.3	4	1	Total iron measured at OUT-01 on November 2 (0.463 mg/L) was 1.5 times greater than the WQG and 3.0 times greater than the maximum concentration observed in the pre-construction baseline monitoring program (0.156 mg/L). It is speculated the total iron concentration is associated with heavy rainfall (78.6 mm from October 31 to November 2) that increased suspended particulate concentrations in the non-contact water that likely contributed to higher total iron concentrations than those observed in the pre-construction baseline period. Therefore, these results are considered to represent background conditions for non-contact water.
Dissolved Copper	mg/L	0.00020-0.0011	4	3	Dissolved copper measured at OUT-01 and OUT-02 on November 2 (0.00099 and 0.00119 mg/L, respectively) and at OUT-02 on November 6 (0.00111 mg/L) were 5.0, 6.0 and 1.0 times greater than the long-term WQG, respectively, and above the pre-construction baseline monitoring program upper range (0.00076 mg/L). However, the dissolved copper concentration is in the range of values observed at Mill and East Creek background stations, located upstream and outside of the construction area, therefore the reported dissolved copper concentrations in these samples are considered to represent background conditions for non-contact water.

N = number of samples.

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) on November 9 (as discussed in Report #90). 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 and dissolved copper in one or more samples (Appendix E, Table E-1 and Appendix F, Table F-1). Field pH at the background station in Mill Creek (pH 6.2) on November 9 was below the lower range of the WQG (pH 6.5). Total aluminum was above the long-term WQG in samples collected from the lower freshwater reach and the background station in Mill Creek (0.113 and 0.0715 mg/L, respectively) on November 9 and dissolved copper was above the short- and long-term WQGs in the sample collected from the background station in Mill Creek (0.00027 mg/L).

The total aluminum concentration measured in the lower freshwater reach of Mill Creek is within the range of concentrations observed in the pre-construction baseline monitoring period and is 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.

Raised detection limits were reported for all total metals for the Mill Creek Estuary (station SW-03) sample, and the raised detection limit for total copper (<0.00250 mg/L) is above the long-term WQG (0.002 mg/L). A laboratory re-analysis has been requested to achieve a lower detection limit. This item is tracked in Table 5.

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 30 (as discussed in Report #88) were available at the time of reporting. Methylmercury concentrations ranged from <0.000020 to 0.000031 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-2 (freshwater) and Appendix F, Table F-2 (estuarine water).

3.7 Marine Water Receiving Environment

Analytical results and field measurements were available at the time of reporting for marine water samples collected at 0.5 and 2 m below the water surface and 2 m above the seafloor on November 7 (stations IDZ-W1, IDZ-W2 and WQR2), as discussed in Report #89. The analytical results, field parameters, and WQGs are summarized in Appendix D.

Parameter concentrations met WQGs except dissolved oxygen, total boron and total copper in some samples (Appendix D; Tables D-1 through Table D-4). In all samples collected at 2 m above the seafloor on November 1 and 7 (stations IDZ-W1, IDZ-W2 and WQR2) and at 2 m below surface at IDZ-W1 on November 7, dissolved oxygen ranged from 3.95 to 7.81 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) in

all samples collected at 2 m above the seafloor on November 1 and 7 and ranged from 2.59 to 3.38 mg/L. Total copper was above the long-term WQG (0.002 mg/L) in samples collected at IDZ-W2 at 2 m below the surface and at WQR2 at 0.5 m below the surface on November 7 (0.00204 and 0.00268 mg/L, respectively).

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.

Methylmercury analytical results were available at the time of reporting for all marine samples collected October 20 (stations IDZ-E1, IDZ-E2 and WQR1), as discussed in Report #87. For all samples, methylmercury concentrations ranged from <0.000020 to <0.000040 µg/L and met the WQG. The corresponding total mercury results met WQGs. Results are tabulated in Appendix G, Table G-5.

Dioxin and furans results were available at the time of reporting for all marine samples collected November 1 (stations IDZ-W1, IDZ-W2 and WQR2) and November 2 (stations IDZ-E1, IDZ-E2 and WQR1), as discussed in Reports #88 and #89. For all samples, the lower bound PCDD/F TEQ concentrations ranged from 0 to 0.0260 pg/L and the upper bound PCDD/F TEQ concentrations ranged from 0.583 to 2.64 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-6.

Chronic toxicity results for marine receiving environment samples collected September 30 (as discussed in Report #84) and October 9 and 10 (as discussed in Report #85) were available at the time of reporting. Marine water samples were tested for chronic toxicity to inland silverside (fish) and myside shrimp (invertebrate). All chronic toxicity tests were conducted using 100% (undiluted) marine water collected from 0.5 m below the surface at stations IDZ-E1, IDZ-E2, IDZ-W1, IDZ-W2, and marine reference stations WQR1 and WQR2 in the receiving environment of Howe Sound. Salinity adjustment was made prior to testing as per standard test protocol.

The September 30 chronic toxicity test results showed no statistically significant differences between the marine samples and laboratory controls for any of the endpoints tested for inland silverside. Due to a delay in the toxicity lab receiving mysid shrimp, the water samples collected on September 30 were past the holding time for toxicity testing. Hence, additional water samples were collected on October 9 (stations IDZ-E1, IDZ-E2, and WQR1) and October 10 (stations IDZ-W1, IDZ-W2, and WQR2) to complete the mysid shrimp test. Results showed no statistically

significant difference between the marine samples and laboratory controls for any of the endpoints tested for mysid shrimp.

3.8 Quality Control

This section presents the results of the quality control (QC) evaluation for the PE-111578 weekly report (Table 5). 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 5. Any items flagged for follow-up are carried forward to future reports until they are closed.

Table 5:
Weekly Report QC Evaluations and Ongoing Items

QC Procedure	Observation	Investigation/Resolution
Reporting Period (November 23 - 29, Report #92)		
Authorized Works and Monitoring Program Evaluation	The authorized works and monitoring stations have not been established as described in PE-111578.	The PE-111578 authorized works for water management have been constructed, except for some of the conveyance ditches, which require completion of site grading prior to installation. Sumps, pumps and hoses are used for temporary conveyance until the ditches are completed. The lower reach of East Creek was temporarily diverted through Outfall 11 from September 17, 2024 to November 18, 2025. As November 19, 2025, East Creek flows have been returned to the lower Channel that discharges to Howe Sound through the Outfall 12 culverts (OUT-12). The culvert at OUT-01 is being replaced and diversion water flows to OUT-01 have been redirected to OUT-02. 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 #92: Potential Project Influence	Aluminum, copper and iron above WQGs and baseline ranges in non-contact water	On November 2, at stations OUT-01 and OUT-02, the concentration of total aluminum (0.745 and 0.652 mg/L, respectively) and dissolved copper (0.00099 and 0.00119 mg/L, respectively) were above WQGs and the maximum concentration concentrations observed in non-contact ditches during pre-construction baseline monitoring. Total iron concentration (0.463 mg/L) was also above the maximum concentrations observed in the baseline monitoring program (0.156 mg/L) at OUT-01 on November 2. On November 6, the dissolved copper concentration (0.00111 mg/L) at OUT-02, was above the WQG and maximum concentrations observed during pre-construction baseline monitoring of non-contact ditches. The November 2 OUT-01 and OUT-02 samples were collected during on the third day of significant rainfall (78.6 mm) that commenced October 31 and continued to November 2. The precipitation generated runoff flows from the slopes above the construction site. Elevated runoff flows typically entrain small particles that contribute to turbidity and total metal concentrations. Total aluminum and total iron were predominately present in the particulate-bound form of the metals and are attributed to particulate from background sources. In general, copper is present primarily in the dissolved form of the metal in the OUT-01 and OUT- 02 samples collected November 2 and the OUT-02 sample collected November 6. The dissolved copper concentration is in the range of values observed at Mill and East Creek background stations, located upstream and outside of the construction area, therefore the reported dissolved copper concentrations in these samples are considered to represent background conditions for non-contact water. This item is closed.
Report #92: Pending Data	Analytical results not reported.	Field parameters and analytical results for receiving environment samples collected November 25 and analytical results for contact and treated water samples collected November 28, as well as total mercury, methylmercury, dioxins and furans results for contact and treated water samples collected November 25 are pending and will be included in future weekly reports when available. This item remains open.
Report #92: Data QC	Data QC	Raised detection limits were reported for all total metals for the Mill Creek Estuary (station SW-03) resulting in the raised detection limit for total copper (<0.00250 mg/L) above the long-term WQG (0.002 mg/L). A reanalysis has been requested with the laboratory to achieve a lower detection limit. 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, 9 and 22 met the MDO for copper. The WWTP treatment performance for total copper continues to be monitored. This item remains open.
Report #88: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for the receiving environment samples collected November 1 are pending and will be included in future weekly reports when available. This item remains open.
Report #89: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for receiving environment samples collected November 2 and 7 and non-contact water diversion ditch outlet samples collected November 2 and 6, and dioxins and furans results for receiving environment samples collected November 7 are pending and will be included in future weekly reports when available. 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. SP-W-OUT monitoring results collected November 16 and 25, the W2700GPM-OUT sample collected November 28 were compliant with all discharge limits. Follow-up investigation did not identify root cause for the lead and zinc exceedances; however, considering the follow-up monitoring results, the November 10 exceedances are attributed to a one-time event with no on-going sources. This item is closed.
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 are being reviewed. This item remains open.
Report #90: Pending Data	Analytical results not reported.	Total mercury and methylmercury results for receiving environment samples collected November 9 and 13 and for non-contact water diversion ditch outlet samples collected November 10 as well as dioxins and furans results for contact and treated water samples collected November 10 and receiving environment samples collected November 9, 11 and 13 are pending and will be included in future weekly reports when available. This item remains open.
Report #91: Pending Data	Analytical results not reported.	Field parameters and analytical results for non-contact water diversion ditch outlet samples collected November 22, as well as dioxins and furans results for contact and treated water samples collected November 16 and total mercury and methylmercury results for non-contact water diversion ditch outlet samples collected November 22 are pending and will be included in future weekly reports when available. This item remains open.
Report #91: Data QC	Raised detection limit for methylmercury.	A raised detection limit for methylmercury (<0.000160 µg/L) was reported for the sample collected at IDZ-W2 at 0.5 m below surface due to sample matrix effects. A reanalysis has been requested with the laboratory to achieve the standard detection limit for methylmercury. This item remains open.

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

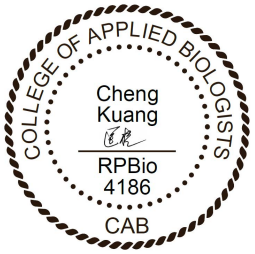
4. Closure

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

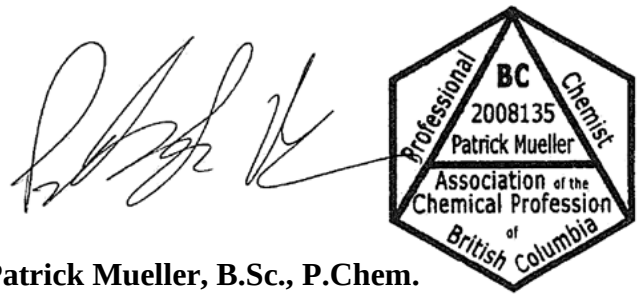
Regards,

LORAX ENVIRONMENTAL SERVICES LTD.

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



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



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

Appendix A:
Figures and Site Images

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:	Dec 04, 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 29, 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

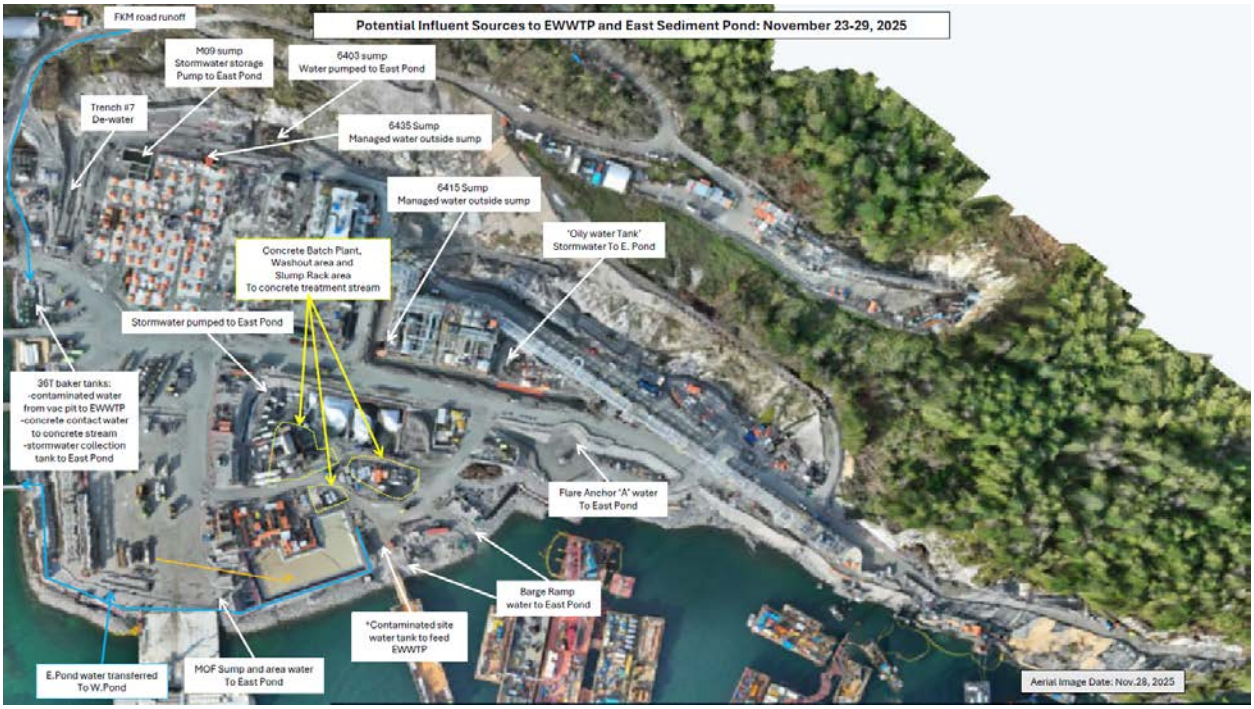


Figure 2: East Catchment contact water management facilities (November 23 - 29).

Figure 3: West Catchment contact water management facilities (November 23 - 29).

Figure 4: Aerial view of the East Sedimentation Pond (November 28, 2025). The East WWTP is located on the left side of the pond.

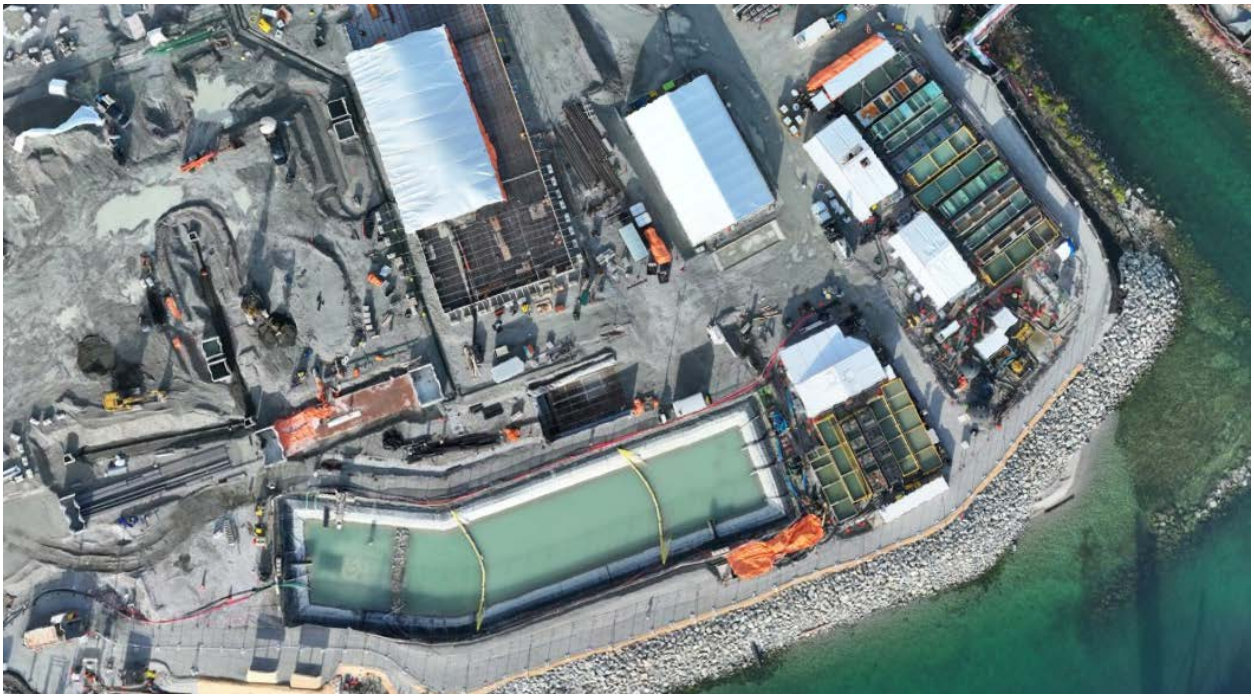


Figure 5: Aerial view of the West Sedimentation Pond (November 28, 2025).

Appendix B:
East Catchment Monitoring Results

Table B-1:
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]	0.0063-0.016 [3,4]
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25D1276-001	2025-11-22	***0.000315***	***0.0263***
WWTP-E-IN	Influent	WWTP-E-IN	VA25D1276-002	2025-11-22	***0.000235***	***0.0147***
COMB-WWTP-E-IN	Influent	COMB-WWTP-E-IN	VA25C8169-003	2025-10-22	***0.000703***	***0.862***
COMB-WWTP-E-IN	Influent	COMB-WWTP-E-IN	VA25C9108-003	2025-10-30	***0.000134***	***0.135***
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25D1276-003	2025-11-22	<0.000020	0.00282

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-2:
East Catchment Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
SP-E-IN	Influent	SP-E-IN	VA25C9825-001	2025-11-06	0.0149	2.35
WWTP-E-IN	Influent	WWTP-E-IN	VA25C9825-002	2025-11-06	0.754	6.05
Effluent						
WWTP-E-OUT	Effluent	WWTP-E-OUT	VA25C9825-003	2025-11-06	0.0260	1.98

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table B-3:
East Catchment Field Measurements Collected During the Monitoring Period (November 23 - 29).

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	2025-11-23 9:59	9.9	11.23	0.24	77.01	60.4	7.3	494	No
SP-E-IN	Influent	2025-11-24 13:01	9.1	11.95	0.28	4.56	6.4	6.6	583	No
SP-E-IN	Influent	2025-11-25 9:05	8.3	11.81	0.2	38.41	31.6	6.7	504	No
SP-E-IN	Influent	2025-11-26 11:14	8.2	12.00	0.26	3.68	5.7	6.5	532	No
SP-E-IN	Influent	2025-11-27 12:51	8.0	11.63	0.23	56.4	45.1	7.3	470.5	No
SP-E-IN	Influent	2025-11-28 15:58	8.4	11.35	0.29	472.45	355.4	7.5	600	No
SP-E-IN	Influent	2025-11-29 11:19	7.5	10.30	0.23	149.62	114.6	7.5	471.7	No
WWTP-E-IN	Influent	2025-11-23 10:07	9.9	11.07	0.21	118.81	91.6	7.3	430	No
WWTP-E-IN	Influent	2025-11-24 12:48	9.0	10.94	0.29	61.3	48.7	7.3	594	No
WWTP-E-IN	Influent	2025-11-25 9:01	7.9	11.42	0.27	24.23	21.1	6.5	548	No
WWTP-E-IN	Influent	2025-11-26 11:05	9.6	11.40	0.24	15.99	14.9	6.6	497.7	No
WWTP-E-IN	Influent	2025-11-28 10:11	7.5	11.94	0.22	96.31	74.8	7.4	450.7	No
Effluent [5]										
WWTP-E-OUT	Effluent	2025-11-23 10:10	9.7	10.67	0.35	4.29	6.2	6.2	705	No
WWTP-E-OUT	Effluent	2025-11-24 12:56	9.1	11.97	0.32	3.26	5.4	6.5	644	No
WWTP-E-OUT	Effluent	2025-11-25 8:57	8.1	13.00	0.30	2.21	4.6	6.3	645	No
WWTP-E-OUT	Effluent	2025-11-26 11:10	8.3	11.90	0.29	9.13	9.8	6.2	593	No
WWTP-E-OUT	Effluent	2025-11-28 16:16	8.1	11.90	0.49	3.62	5.7	6.3	984	No

Notes:
The east catchment did not discharge to Howe Sound during the monitoring period (November 16 - 22). 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 27 and 29 as the East WWTP was not operational at the time of monitoring on those days.
[5] There was no discharge at the authorized discharge location (SP-E-OUT) during the monitoring period (November 23 - 29), 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 27 and 29 as the East WWTP was not operational at the time of monitoring on those days.
[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-4:
East Catchment Daily Discharge Volumes for the Monitoring Period (November 23 - 29).

	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)
Units	**m^3**	**m^3**	**m^3**	**m^3**
PE-111578 Discharge Limit	-	-	1100	- [1]
Date				
2025-11-23	0	1,809	545	0
2025-11-24	0	0	496	0
2025-11-25	0	1,422	518	0
2025-11-26	0	0	130	0
2025-11-27	0	0	17	0
2025-11-28	0	0	182	0
2025-11-29	0	0	0	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 2700GPM-IN	Station W2700T1-OUT	Station W2700T2-OUT	Station W2700T3-OUT
					Influent	Effluent	Effluent	Effluent
					2700GPM-IN	W2700T1-OUT	W2700T2-OUT	W2700T3-OUT
					VA25D1572-002	VA25D1572-003	VA25D1957-001	VA25D1957-002
		Long Term	Short Term		2025-11-25 10:16	2025-11-25 9:53	2025-11-28 9:04	2025-11-28 8:54
General Parameters								
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.8	7.69	7.85	7.62
Specific Conductivity - Field	µS/cm	-	-	-	394	306	351.1	350.6
Temperature - Field	℃	-	-	-	8.3	8.2	7.2	7.2
Salinity - Field	ppt	-	-	-	0.19	0.15	0.17	0.17
Turbidity - Field	NTU	-	-	-	11.12	2.65	2.34	2.44
TSS	mg/L	-	-	25 or 75 [6]	15.3	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.71	12.8	12.64	12.42
Total Hardness	mg/L	-	-	-	86.1	59.8	77.2	75.6
Dissolved Hardness	mg/L	-	-	-	81	58.6	80.2	76.4
Anions and Nutrients								
Sulphate	mg/L	-	-	-	95.1	63.4	-	-
Chloride	mg/L	-	-	-	10.5	5.04	-	-
Fluoride	mg/L	-	1.5	-	0.069	0.08	-	-
Ammonia ($N\text{-}NH_3$)	mg/L	4.7-7.2 [3]	31-48 [3]	-	<0.0050	0.007	-	-
Nitrite ($N\text{-}NO_2$)	mg/L	-	-	-	0.0044	0.0061	-	-
Nitrate ($N\text{-}NO_3$)	mg/L	3.7	339	-	0.504	0.281	-	-
Total Organic Carbon (TOC)	mg/L	-	-	-	1.89	1.05	-	-
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.84	0.65	-	-
Total Metals								
Aluminum, total (T-Al)	mg/L	-	-	-	0.581	0.0229	0.0287	0.0939
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.0008	0.00076	0.00081	0.00082
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.0013	0.00096	0.00121	0.00125
Barium, total (T-Ba)	mg/L	-	-	-	0.0105	0.00242	0.00458	0.00421
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.017	<0.010	<0.010	0.011
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000125	<0.0000050	<0.0000100	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00015	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00165	0.00095	0.00059	0.00261
Iron, total (T-Fe)	mg/L	-	-	-	0.267	0.012	<0.010	0.034
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000497	0.000202	<0.000050	0.0006
Manganese, total (T-Mn)	mg/L	-	-	-	0.0205	0.0221	0.00246	0.00129
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0155	0.00537	0.0117	0.0125
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000125	0.000062	0.000099	0.000087
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000013	0.000015	0.00001	<0.000010
Uranium, total (T-U)	mg/L	-	-	-	0.00578	0.00124	0.00569	0.00583
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.0014	<0.00050	0.00051	0.00082
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0031	<0.0030	<0.0030	0.0062
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	-	-
Dissolved Metals								
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000050	<0.0000050	<0.0000100	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.00074	0.00047	0.00057	0.00083
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.000079	<0.000050	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.00827	0.0216	0.00226	0.0002
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.117	0.0776	0.094	0.0991
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00084	<0.00050	<0.00050	0.00069
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0013	<0.0010	0.0011	0.0019
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	-	-	-	<0.000010	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	<0.0000050	-	-	-
Chrysene	mg/L	0.0001	-	-	<0.000010	-	-	-
Fluoranthene	mg/L	-	-	-	<0.000010	-	-	-
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	-	-	-	<0.000020	-	-	-
Pyrene	mg/L	-	-	-	<0.000010	-	-	-
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) except on November 26 and 28.
[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 Effluent W2700T4-Out VA25D1957-003 2025-11-28 8:45	Station 2700GPM-OUT Effluent W2700-OUT VA25D1957-004 2025-11-28 9:22	Station 2700GPM-OUT Effluent W2700-OUT VA25D1957-005 2025-11-28 9:22
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	- [2]	-	5.5 - 9.0	7.03	7.90	-
Specific Conductivity - Field	µS/cm	-	-	-	408.8	363.8	-
Temperature - Field	℃	-	-	-	6.8	7.4	-
Salinity - Field	ppt	-	-	-	0.2	0.17	-
Turbidity - Field	NTU	-	-	-	3.1	1.35	-
TSS	mg/L	-	-	25 or 75 [6]	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.61	12.51	-
Total Hardness	mg/L	-	-	-	81.8	77.5	73.5
Dissolved Hardness	mg/L	-	-	-	82.7	76.5	76.8
Anions and Nutrients							
Sulphate	mg/L	-	-	-	-	-	-
Chloride	mg/L	-	-	-	-	-	-
Fluoride	mg/L	-	1.5	-	-	-	-
Ammonia ($N\text{-}NH_3$)	mg/L	4.7-29 [3]	31-191 [3]	-	-	-	-
Nitrite ($N\text{-}NO_2$)	mg/L	-	-	-	-	-	-
Nitrate ($N\text{-}NO_3$)	mg/L	3.7	339	-	-	-	-
Total Organic Carbon (TOC)	mg/L	-	-	-	-	-	-
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	-	-
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	0.105	0.0749	0.0726
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00085	0.00084	0.00083
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00135	0.00123	0.00119
Barium, total (T-Ba)	mg/L	-	-	-	0.00387	0.00434	0.00416
Beryllium, total (T-Be)	mg/L	0.1	-	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.017	0.012	0.011
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	<0.0000100	<0.0000050	<0.0000100
Chromium, total (T-Cr)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00298	0.00081	0.00075
Iron, total (T-Fe)	mg/L	-	-	-	0.054	0.031	0.031
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.000429	0.000898	0.000796
Manganese, total (T-Mn)	mg/L	-	-	-	0.026	0.00701	0.00689
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0156	0.0126	0.0126
Nickel, total (T-Ni)	mg/L	0.0083	-	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000103	0.000085	0.000113
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000018	0.000012	0.000011
Uranium, total (T-U)	mg/L	-	-	-	0.00587	0.006	0.0058
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00106	0.00071	0.00073
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0053	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	-	-	-
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000050	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0014	0.00061	0.00176
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	0.000214	0.000353	0.000349
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0223	0.0078	0.0078
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.104	0.0949	0.0966
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.00091	0.00065	0.00066
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0054	0.0013	0.0013
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 () except on November 26 and 28.
[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 VA25D1572-001 2025-11-25 12:29	Station SP-W-OUT Effluent SP-W-OUT VA25D1572-004 2025-11-25 10:54	Station SP-W-OUT Effluent SP-W-OUT-DUP VA25D1572-005 2025-11-25 10:55
		Long Term	Short Term				
General Parameters							
pH - Field	pH units	- [2]	-	5.5 - 9.0	6.61	7.83	7.85
Specific Conductivity - Field	µS/cm	-	-	-	391	406	406
Temperature - Field	℃	-	-	-	8.0	8.4	8.4
Salinity - Field	ppt	-	-	-	0.19	0.2	0.2
Turbidity - Field	NTU	-	-	-	55.72	1.63	1.57
TSS	mg/L	-	-	25 or 75 [6]	62.1	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	≥8	-	-	11.58	11.65	11.57
Total Hardness	mg/L	-	-	-	87.8	87.9	87.1
Dissolved Hardness	mg/L	-	-	-	79.4	86.6	84.2
Anions and Nutrients							
Sulphate	mg/L	-	-	-	97.6	101	101
Chloride	mg/L	-	-	-	9.43	11.3	11.4
Fluoride	mg/L	-	1.5	-	0.075	0.07	0.071
Ammonia (N-NH_3)	mg/L	4.7-29 [3]	31-191 [3]	-	0.0078	0.0087	<0.0050
Nitrite (N-NO_2)	mg/L	-	-	-	0.0039	0.0045	0.0044
Nitrate (N-NO_3)	mg/L	3.7	339	-	0.521	0.507	0.508
Total Organic Carbon (TOC)	mg/L	-	-	-	2.92	1.7	1.75
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	1.89	1.8	1.64
Total Metals							
Aluminum, total (T-Al)	mg/L	-	-	-	3.23	0.078	0.0723
Antimony, total (T-Sb)	mg/L	-	0.27 [4]	-	0.00087	0.00091	0.00088
Arsenic, total (T-As)	mg/L	0.0125	-	-	0.00166	0.00117	0.00122
Barium, total (T-Ba)	mg/L	-	-	-	0.0325	0.00654	0.00617
Beryllium, total (T-Be)	mg/L	0.1	-	-	0.000053	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	-	-	0.023	0.016	0.016
Cadmium, total (T-Cd)	mg/L	0.00012	-	-	0.0000315	<0.0000100	<0.0000050
Chromium, total (T-Cr)	mg/L	-	-	-	0.00135	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	-	0.00089	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	- [2]	- [2]	0.0043	0.00346	0.00077	0.00078
Iron, total (T-Fe)	mg/L	-	-	-	2.49	0.03	0.032
Lead, total (T-Pb)	mg/L	- [2]	- [2]	0.0035	0.0018	0.00304	0.00317
Manganese, total (T-Mn)	mg/L	-	-	-	0.106	0.00655	0.00643
Molybdenum, total (T-Mo)	mg/L	-	-	-	0.0172	0.0166	0.016
Nickel, total (T-Ni)	mg/L	0.0083	-	-	0.00066	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.002	-	-	0.000104	0.000115	0.000108
Silver, total (T-Ag)	mg/L	0.0005	0.0037	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	-	-	-	0.000018	0.000011	0.000011
Uranium, total (T-U)	mg/L	-	-	-	0.00676	0.00611	0.00619
Vanadium, total (T-V)	mg/L	- [2]	-	0.0081	0.00513	0.0009	0.00087
Zinc, total (T-Zn)	mg/L	- [2]	- [2]	0.0133	0.0135	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	-	<0.00050	<0.00050	<0.00050
Dissolved Metals							
Cadmium, dissolved (D-Cd)	mg/L	-	-	-	<0.0000100	<0.0000100	<0.0000050
Copper, dissolved (D-Cu)	mg/L	-	-	-	0.0009	0.00055	0.00056
Iron, dissolved (D-Fe)	mg/L	-	-	-	<0.010	<0.010	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	-	<0.000050	0.00068	0.000705
Manganese, dissolved (D-Mn)	mg/L	-	-	-	0.0114	0.00568	0.00575
Nickel, dissolved (D-Ni)	mg/L	-	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	-	0.116	0.118	0.121
Vanadium, dissolved (D-V)	mg/L	-	-	-	0.0014	0.00076	0.00078
Zinc, dissolved (D-Zn)	mg/L	-	-	-	0.0011	<0.0010	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	mg/L	0.006	-	-	-	<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	0.00001	-	-	-	<0.0000050	<0.0000050
Chrysene	mg/L	0.0001	-	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	-	-	-	-	<0.000010	<0.000010
Fluorene	mg/L	0.012	-	-	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	0.001	-	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	0.001	-	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	-	-	-	<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	0.11	-	-	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.25	-	-	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	5	0.44	-	-	<0.00050	<0.00050
Styrene	mg/L	-	-	-	-	<0.00050	<0.00050
Toluene	mg/L	0.215	-	-	-	<0.00040	<0.00040
Total Xylenes	mg/L	-	-	-	-	<0.00050	<0.00050
Chlorobenzene	mg/L	0.025	-	-	-	<0.00050	<0.00050
1,2-Dichlorobenzene	mg/L	0.042	-	-	-	<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 () except on November 26 and 28.
[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 Dioxin and Furan Toxicity Equivalency Quantity (TEQ) Results Received at the Time of Reporting.

Parameter					**Lower Bound PCDD/F TEQ**	**Upper Bound PCDD/F TEQ**
Unit					**pg/L**	**pg/L**
Station	**Water Type**	**Sample ID**	**Lab ID**	**Sampling Date**		
Influent						
2700GPM-IN	Influent	2700GPM-IN	VA25C9626-002	2025-11-05	2.24	3.18
Effluent						
SP-W-OUT	Effluent	SP-W-OUT	VA25C9626-003	2025-11-05	0.00726	0.915
SP-W-OUT	Effluent	SP-W-OUT-DUP	VA25C9626-004	2025-11-05	0.000675	0.754

Notes:
PCDD = polychlorinated dibenzodioxins (dioxins)
PCDF = polychlorinated dibenzofurans (furans)
TEQ = toxic equivalency
Lower bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned a value of zero (0).
Upper bound PCDD/F TEQ is the sum of the toxic equivalency results for the individual PCDD/F parameters. Non-detectable parameters are assigned the value of the detection limit.

Table C-5:
West Catchment Field Measurements Collected During the Monitoring Period (November 23 - 29).

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	2025-11-23 11:38	9.9	11.22	0.14	81.75	64.0	6.6	287	No
SP-W-IN	Influent	2025-11-24 12:18	9.1	11.15	0.18	3.73	5.8	7.8	383	No
SP-W-IN	Influent	2025-11-25 12:29	8.0	11.58	0.19	55.72	44.6	6.6	391	No
SP-W-IN	Influent	2025-11-26 12:13	8.4	102.9	0.18	37.01	30.6	7.8	368	No
SP-W-IN	Influent	2025-11-27 8:48	7.9	11.64	0.17	45.42	36.9	7.9	360	No
SP-W-IN	Influent	2025-11-28 9:38	7.2	12.38	0.17	19.99	17.9	8.0	363	No
SP-W-IN	Influent	2025-11-29 11:31	6.4	11.53	0.19	95.21	74.0	7.7	397	No
2700GPM-IN	Influent	2025-11-23 9:21	9.7	11.4	0.1	112.13	86.6	7.7	206	No
2700GPM-IN	Influent	2025-11-24 12:23	9.1	11.48	0.19	25.43	22.0	7.8	389	No
2700GPM-IN	Influent	2025-11-25 10:16	8.3	11.71	0.19	11.12	11.3	7.8	394	No
2700GPM-IN	Influent	2025-11-26 12:06	8.3	101.4	0.19	46.77	37.9	7.7	395	No
2700GPM-IN	Influent	2025-11-27 8:24	8.1	11.34	0.18	39.75	32.6	7.8	376	No
2700GPM-IN	Influent	2025-11-28 9:33	7.4	12.34	0.17	38.19	31.5	8.0	348	No
2700GPM-IN	Influent	2025-11-29 13:40	6.5	12.19	0.17	39.2	32.2	7.9	358	No
Effluent [5]										
SP-W-OUT	Effluent	2025-11-23 9:10	9.8	11.24	0.09	9.14	9.8	7.4	187	No
SP-W-OUT	Effluent	2025-11-23 16:12	10.2	11.14	0.12	7.24	8.4	7.1	248	No
SP-W-OUT	Effluent	2025-11-25 10:54	8.4	11.65	0.2	1.63	4.2	7.8	406	No
SP-W-OUT	Effluent	2025-11-27 8:18	8.9	11.70	0.19	1.71	4.3	7.5	388	No
SP-W-OUT	Effluent	2025-11-29 13:54	6.4	12.18	233.6	1.01	3.8	7.8	362	No
2700GPM-OUT	Effluent	2025-11-28 9:22	7.4	12.51	0.17	1.35	4.0	7.9	364	No

Notes:
West catchment influents for November 23 - 29 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, and 4 was intermittently discharged to Howe Sound at the authorized discharge location (SP-W-OUT) each day during the monitoring period (November) except on November 26 and 28, therefore daily field measurements for SP-W-OUT were not collected on those days. There was no discharge at the time of monitoring on November 24; 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-6:
West Catchment Daily Discharge Volumes for the Monitoring Period (November 23 - 29).

	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					
2025-11-23	0	3,843	0	0	3,037
2025-11-24	0	3,780	0	0	882
2025-11-25	0	4,343	0	0	1,052
2025-11-26	0	1,980	0	0	0
2025-11-27	0	1,646	0	0	150
2025-11-28	0	1,212	0	0	0
2025-11-29	0	656	0	0	475

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:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station OUT-01	Station OUT-02	Station OUT-06
				Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet
				OUT-01	OUT-02	OUT-06
				VA25C9331-001	VA25C9331-002	VA25C9331-003
		Long Term	Short Term	2025-11-02 10:55	2025-11-02 11:10	2025-11-02 12:29
General Parameters						
pH - Field	pH units	6.5 - 9.0	-	***6.4***	***6.4***	7.1
Specific Conductivity - Field	µS/cm	-	-	14	23	158
Temperature - Field	℃	-	-	9.7	10	11.1
Salinity - Field	ppt	-	-	0.01	0.01	0.07
Turbidity - Field	NTU	-	-	1.01	2.99	0.51
TSS	mg/L	-	-	<3.0	3.9	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.18	11.52	10.31
Total Hardness	mg/L	-	-	6.33	10.3	73
Dissolved Hardness	mg/L	-	-	12.9	9.46	73.7
Anions and Nutrients						
Sulphate [2]	mg/L	128-218	-	1.73	3.31	7.85
Chloride	mg/L	120	600	0.75	1	0.85
Fluoride [2]	mg/L	-	0.400-1.21	<0.020	<0.020	<0.020
Ammonia (N-NH_3) [2]	mg/L	0.502-153	4.71-26.5	<0.0050	<0.0050	0.0065
Nitrite (N-NO_2) [2]	mg/L	0.0200-0.200	0.06-0.6	<0.0010	<0.0010	<0.0010
Nitrate (N-NO_3)	mg/L	3	32.8	0.0516	0.0455	0.502
Total Organic Carbon (TOC)	mg/L	-	-	4.46	5.64	2.94
Total Inorganic Carbon (DOC)	mg/L	-	-	3.71	5.45	2.74
Total Metals						
Aluminum, total (T-Al) [2]	mg/L	0.0154-1.39	-	***0.745***	***0.652***	0.0439
Antimony, total (T-Sb)	mg/L	0.074	-	0.00014	0.00013	0.00044
Arsenic, total (T-As)	mg/L	0.005	-	0.00031	0.00024	0.00017
Barium, total (T-Ba)	mg/L	1	-	0.00764	0.00644	0.0233
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	0.021
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.00012	0.00011-0.0015	0.0000157	0.0000145	0.0000166
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	0.0006	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000895	-	0.00033	0.00021	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00163	0.00182	0.00076
Iron, total (T-Fe)	mg/L	0.3	1	***0.463***	0.281	<0.010
Lead, total (T-Pb)	mg/L	-	-	0.000947	0.000595	0.000092
Manganese, total (T-Mn) [2]	mg/L	0.768-0.926	0.816-1.34	0.0201	0.0121	0.00119
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000302	0.00195	0.00158
Nickel, total (T-Ni) [2]	mg/L	0.0250-0.0583	-	<0.00050	0.00072	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	0.000077	0.000076	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	0.000011	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000119	0.000527	0.000323
Vanadium, total (T-V)	mg/L	0.12	-	0.00129	0.00121	0.00059
Zinc, total (T-Zn)	mg/L	-	-	0.0116	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	-	-	-
Dissolved Metals						
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.00017	0.000038-0.00043	<0.0000050	0.0000053	0.0000151
Copper, dissolved (D-Cu) [2]	mg/L	0.000200-0.00401	0.000200-0.0126	***0.00099***	***0.00119***	***0.00074***
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.03	0.021	<0.010
Lead, dissolved (D-Pb) [2]	mg/L	0.00129-0.00736	-	0.000073	0.000101	<0.000050
Manganese, dissolved (D-Mn) [2]	mg/L	0.270-0.500	1.97-5.05	0.00261	0.00191	0.00262
Nickel, dissolved (D-Ni) [2]	mg/L	0.000600-0.00210	0.00920-0.0220	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.0148	0.0124	0.0988
Vanadium, dissolved (D-V)	mg/L	-	-	0.0005	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.00273-0.0432	0.00819-0.0769	0.0071	0.0012	0.0024
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.0058	-	-	-	-
Acridine	mg/L	0.003	-	-	-	-
Anthracene	mg/L	0.000012	-	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	-	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-	-
Fluorene	mg/L	0.003	-	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-	-
Phenanthrene	mg/L	0.0003	-	-	-	-
Pyrene	mg/L	0.00002	-	-	-	-
Quinoline	mg/L	0.0034	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.04	-	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-	-
Styrene	mg/L	0.072	-	-	-	-
Toluene	mg/L	0.0005	-	-	-	-
Total Xylenes	mg/L	0.03	-	-	-	-
Chlorobenzene	mg/L	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-	-

Notes:
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
[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 D-2:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station OUT-01	Station OUT-02	Station OUT-06
				Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet
				OUT-01	OUT-02	OUT-06
				VA25C9832-001	VA25C9832-002	VA25C9832-003
		Long Term	Short Term	2025-11-06 13:30	2025-11-06 13:48	2025-11-06
General Parameters						
pH - Field	pH units	6.5 - 9.0	-	7.3	7.2	8.1
Specific Conductivity - Field	µS/cm	-	-	13	21	55
Temperature - Field	℃	-	-	9.4	9.9	9.9
Salinity - Field	ppt	-	-	0	0.01	0.03
Turbidity - Field	NTU	-	-	2.69	2.12	1.04
TSS	mg/L	-	-	<3.0	3.4	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.39	11.33	10.79
Total Hardness	mg/L	-	-	4.11	5.87	22.5
Dissolved Hardness	mg/L	-	-	4.18	8.2	26.4
Anions and Nutrients						
Sulphate [2]	mg/L	128-218	-	1.51	1.6	2.8
Chloride	mg/L	120	600	0.7	0.72	0.78
Fluoride [2]	mg/L	-	0.400-1.21	<0.020	<0.020	<0.020
Ammonia ($N\text{-}NH_3$) [2]	mg/L	0.502-153	4.71-26.5	<0.0050	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.0200-0.200	0.06-0.6	<0.0010	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0459	0.0525	0.202
Total Organic Carbon (TOC)	mg/L	-	-	4.74	6.02	5.51
Total Inorganic Carbon (DOC)	mg/L	-	-	5.24	6.88	5.63
Total Metals						
Aluminum, total (T-Al) [2]	mg/L	0.0154-1.39	-	***0.234***	0.378	0.186
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	0.00014
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	0.00015	0.0002
Barium, total (T-Ba)	mg/L	1	-	0.0032	0.00417	0.00796
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	<0.010
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.00012	0.00011-0.0015	<0.0000050	0.0000062	0.0000057
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000895	-	<0.00010	0.0001	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00067	0.00119	0.00092
Iron, total (T-Fe)	mg/L	0.3	1	0.03	0.133	0.035
Lead, total (T-Pb)	mg/L	-	-	0.000063	0.000192	0.000108
Manganese, total (T-Mn) [2]	mg/L	0.768-0.926	0.816-1.34	0.00471	0.0047	0.00153
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000224	0.000733	0.00073
Nickel, total (T-Ni) [2]	mg/L	0.0250-0.0583	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	0.000065
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000031	0.0002	0.000087
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	0.0006	0.00062
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	-	-	-
Dissolved Metals						
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.00017	0.000038-0.00043	<0.0000050	0.0000064	0.0000051
Copper, dissolved (D-Cu) [2]	mg/L	0.000200-0.00401	0.000200-0.0126	0.00061	***0.00111***	0.00087
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.021	0.024	0.017
Lead, dissolved (D-Pb) [2]	mg/L	0.00129-0.00736	-	<0.000050	0.000101	0.000051
Manganese, dissolved (D-Mn) [2]	mg/L	0.270-0.500	1.97-5.05	0.00102	0.00192	0.00144
Nickel, dissolved (D-Ni) [2]	mg/L	0.000600-0.00210	0.00920-0.0220	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00608	0.00942	0.0383
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.00273-0.0432	0.00819-0.0769	0.0013	0.0011	0.0012
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.0058	-	-	-	-
Acridine	mg/L	0.003	-	-	-	-
Anthracene	mg/L	0.000012	-	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	-	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-	-
Fluorene	mg/L	0.003	-	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-	-
Phenanthrene	mg/L	0.0003	-	-	-	-
Pyrene	mg/L	0.00002	-	-	-	-
Quinoline	mg/L	0.0034	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.04	-	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-	-
Styrene	mg/L	0.072	-	-	-	-
Toluene	mg/L	0.0005	-	-	-	-
Total Xylenes	mg/L	0.03	-	-	-	-
Chlorobenzene	mg/L	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-	-

Notes:
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
[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 D-3:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station OUT-01	Station OUT-02	Station OUT-06
				Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet
				OUT-01	OUT-02	OUT-06
				VA25D0090-001	VA25D0090-002	VA25D0090-003
		Long Term	Short Term	2025-11-10 15:01	2025-11-10 14:35	2025-11-10 16:37
General Parameters						
pH - Field	pH units	6.5 - 9.0	-	***6.2***	6.5	6.6
Specific Conductivity - Field	µS/cm	-	-	14	13	81
Temperature - Field	℃	-	-	9.9	9.8	10.1
Salinity - Field	ppt	-	-	0.01	0	0.04
Turbidity - Field	NTU	-	-	2.77	1.69	0.46
TSS	mg/L	-	-	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	11.04	11.2	10.13
Total Hardness	mg/L	-	-	4.86	4.63	38
Dissolved Hardness	mg/L	-	-	4.84	4.32	37
Anions and Nutrients						
Sulphate [2]	mg/L	128-218	-	1.52	1.46	3.78
Chloride	mg/L	120	600	0.76	0.76	0.8
Fluoride [2]	mg/L	-	0.400-1.21	<0.020	<0.020	<0.020
Ammonia ($N\text{-}NH_3$) [2]	mg/L	0.502-153	4.71-26.5	<0.0050	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.0200-0.200	0.06-0.6	<0.0010	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0398	0.049	0.276
Total Organic Carbon (TOC)	mg/L	-	-	4.76	4.79	4.84
Total Inorganic Carbon (DOC)	mg/L	-	-	4.66	5.46	4.76
Total Metals						
Aluminum, total (T-Al) [2]	mg/L	0.0154-1.39	-	***0.175***	***0.219***	***0.146***
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	0.00022
Arsenic, total (T-As)	mg/L	0.005	-	0.00011	0.0001	0.00019
Barium, total (T-Ba)	mg/L	1	-	0.00341	0.00368	0.0124
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	0.016
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.00012	0.00011-0.0015	<0.0000050	<0.0000050	0.0000107
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	0.00063	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000895	-	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00083	0.00067	0.0009
Iron, total (T-Fe)	mg/L	0.3	1	0.03	0.067	0.028
Lead, total (T-Pb)	mg/L	-	-	<0.000050	0.000065	0.000089
Manganese, total (T-Mn) [2]	mg/L	0.768-0.926	0.816-1.34	0.00118	0.00179	0.00157
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000258	0.000362	0.00104
Nickel, total (T-Ni) [2]	mg/L	0.0250-0.0583	-	<0.00050	0.00086	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	0.000093
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000038	0.000077	0.000146
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050	0.00068
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	-	-	-
Dissolved Metals						
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.00017	0.000038-0.00043	<0.0000050	<0.0000050	0.0000086
Copper, dissolved (D-Cu) [2]	mg/L	0.000200-0.00401	0.000200-0.0126	***0.00070***	***0.00056***	***0.00086***
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.02	0.021	0.012
Lead, dissolved (D-Pb) [2]	mg/L	0.00129-0.00736	-	<0.000050	<0.000050	<0.000050
Manganese, dissolved (D-Mn) [2]	mg/L	0.270-0.500	1.97-5.05	0.00126	0.00129	0.00151
Nickel, dissolved (D-Ni) [2]	mg/L	0.000600-0.00210	0.00920-0.0220	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00799	0.0073	0.0573
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.00273-0.0432	0.00819-0.0769	0.0013	<0.0010	0.0014
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.0058	-	-	-	-
Acridine	mg/L	0.003	-	-	-	-
Anthracene	mg/L	0.000012	-	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	-	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-	-
Fluorene	mg/L	0.003	-	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-	-
Phenanthrene	mg/L	0.0003	-	-	-	-
Pyrene	mg/L	0.00002	-	-	-	-
Quinoline	mg/L	0.0034	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.04	-	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-	-
Styrene	mg/L	0.072	-	-	-	-
Toluene	mg/L	0.0005	-	-	-	-
Total Xylenes	mg/L	0.03	-	-	-	-
Chlorobenzene	mg/L	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-	-

Notes:
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
[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 D-4:
Summary of Freshwater Water Quality Results Received at the Time of Reporting.

Parameter	Unit	Lowest Applicable Guideline [1, 2]		Station OUT-01	Station OUT-02	Station OUT-06
				Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet	Non-contact Water Diversion Ditch Outlet
				OUT-01	OUT-02	OUT-06
				VA25D0675-001	VA25D0675-002	VA25D0675-003
		Long Term	Short Term	2025-11-17 9:32	2025-11-17 8:20	2025-11-17 10:12
General Parameters						
pH - Field	pH units	6.5 - 9.0	-	***6.4***	***6.3***	***6.2***
Specific Conductivity - Field	µS/cm	-	-	14	13	131
Temperature - Field	℃	-	-	9.2	9.3	9.7
Salinity - Field	ppt	-	-	0.01	0	0.06
Turbidity - Field	NTU	-	-	0.96	4.33	1.3
TSS	mg/L	-	-	<3.0	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	14.09	11.15	10.08
Total Hardness	mg/L	-	-	4.64	4.45	62.1
Dissolved Hardness	mg/L	-	-	4.71	4.39	60.4
Anions and Nutrients						
Sulphate [2]	mg/L	128-218	-	1.47	1.52	5.32
Chloride	mg/L	120	600	0.61	0.69	0.74
Fluoride [2]	mg/L	-	0.400-1.21	<0.020	<0.020	<0.020
Ammonia ($N\text{-}NH_3$) [2]	mg/L	0.502-153	4.71-26.5	<0.0050	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.0200-0.200	0.06-0.6	<0.0010	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0324	0.0352	0.36
Total Organic Carbon (TOC)	mg/L	-	-	4.18	4.29	3.55
Total Inorganic Carbon (DOC)	mg/L	-	-	4.51	4.16	3.78
Total Metals						
Aluminum, total (T-Al) [2]	mg/L	0.0154-1.39	-	***0.152***	***0.158***	0.125
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010	<0.00033
Arsenic, total (T-As)	mg/L	0.005	-	0.00013	<0.00010	0.00021
Barium, total (T-Ba)	mg/L	1	-	0.0029	0.00338	0.018
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010	<0.02
Cadmium, total (T-Cd) [2]	mg/L	0.000036-0.00012	0.00011-0.0015	<0.0000050	<0.0000050	<0.0000118
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000389-0.000895	-	<0.00010	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	0.00068	0.00057	0.00092
Iron, total (T-Fe)	mg/L	0.3	1	0.027	0.023	0.046
Lead, total (T-Pb)	mg/L	-	-	<0.000050	0.000087	<0.000113
Manganese, total (T-Mn) [2]	mg/L	0.768-0.926	0.816-1.34	0.0011	0.00096	0.00341
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000252	0.000347	0.00153
Nickel, total (T-Ni) [2]	mg/L	0.0250-0.0583	-	<0.00050	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000035	0.000067	0.000276
Vanadium, total (T-V)	mg/L	0.12	-	<0.00050	<0.00050	<0.00078
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	-	-	-
Dissolved Metals						
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000018-0.00017	0.000038-0.00043	<0.0000050	0.0000054	<0.0000114
Copper, dissolved (D-Cu) [2]	mg/L	0.000200-0.00401	0.000200-0.0126	***0.00061***	***0.00055***	***0.00078***
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.019	0.018	<0.010
Lead, dissolved (D-Pb) [2]	mg/L	0.00129-0.00736	-	<0.000050	0.000109	<0.000050
Manganese, dissolved (D-Mn) [2]	mg/L	0.270-0.500	1.97-5.05	0.00124	0.00132	0.00227
Nickel, dissolved (D-Ni) [2]	mg/L	0.000600-0.00210	0.00920-0.0220	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00671	0.00672	0.0743
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.00273-0.0432	0.00819-0.0769	0.0019	0.0014	0.0014
Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	mg/L	0.0058	-	-	-	-
Acridine	mg/L	0.003	-	-	-	-
Anthracene	mg/L	0.000012	-	-	-	-
Benz(a)anthracene	mg/L	0.000018	-	-	-	-
Benzo(a)pyrene	mg/L	0.00001	-	-	-	-
Chrysene	mg/L	-	-	-	-	-
Fluoranthene	mg/L	0.00004	-	-	-	-
Fluorene	mg/L	0.003	-	-	-	-
1-methylnaphthalene	mg/L	-	-	-	-	-
2-methylnaphthalene	mg/L	-	-	-	-	-
Naphthalene	mg/L	0.001	0.001	-	-	-
Phenanthrene	mg/L	0.0003	-	-	-	-
Pyrene	mg/L	0.00002	-	-	-	-
Quinoline	mg/L	0.0034	-	-	-	-
Volatile Organic Compounds (VOCs)						
Benzene	mg/L	0.04	-	-	-	-
Ethylbenzene	mg/L	0.09	-	-	-	-
Methyl-tert-butyl-ether	mg/L	10	3.4	-	-	-
Styrene	mg/L	0.072	-	-	-	-
Toluene	mg/L	0.0005	-	-	-	-
Total Xylenes	mg/L	0.03	-	-	-	-
Chlorobenzene	mg/L	-	-	-	-	-
1,2-Dichlorobenzene	mg/L	-	-	-	-	-

Notes:
Non-detect results are screened using the detection limit value.
Results ***underlined in bold italics*** exceed the applicable long-term water quality guideline for the protection of freshwater aquatic life.
Shaded results exceed the applicable short-term water quality guideline for the protection of freshwater aquatic life.
[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.

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-02	Station SW-07
				Lower Freshwater Reach of Mill Creek	Upstream Mill Creek
				SW-02	SW-07
				VA25D0048-001	VA25D0048-003
		Long Term	Short Term	2025-11-09 11:13	2025-11-09 12:28
General Parameters					
pH - Field	pH units	6.5 - 9.0	-	7.5	***6.2***
Specific Conductivity - Field	µS/cm	-	-	16.3	14
Temperature - Field	℃	-	-	6.9	6.7
Salinity - Field	ppt	-	-	0.01	0.01
Turbidity - Field	NTU	-	-	0.46	-0.22
TSS	mg/L	-	-	<3.0	<3.0
Dissolved Oxygen - Field	mg/L	>=8	>=5	12.6	12.15
Total Hardness	mg/L	-	-	4.7	4.04
Dissolved Hardness	mg/L	-	-	4.67	4.21
Anions and Nutrients					
Sulphate [2]	mg/L	128	-	2.57	2.59
Chloride	mg/L	120	600	0.73	0.69
Fluoride [2]	mg/L	-	0.400-0.590	<0.020	<0.020
Ammonia ($N\text{-}NH_3$) [2]	mg/L	1.54-48.3	13.3-26.5	<0.0050	<0.0050
Nitrite ($N\text{-}NO_2$) [2]	mg/L	0.02	0.06	<0.0010	<0.0010
Nitrate ($N\text{-}NO_3$)	mg/L	3	32.8	0.0805	0.0783
Total Organic Carbon (TOC)	mg/L	-	-	1.69	1.47
Total Inorganic Carbon (DOC)	mg/L	-	-	1.76	1.42
Total Metals					
Aluminum, total (T-Al) [2]	mg/L	0.0154-0.101	-	***0.113***	***0.0715***
Antimony, total (T-Sb)	mg/L	0.074	-	<0.00010	<0.00010
Arsenic, total (T-As)	mg/L	0.005	-	<0.00010	<0.00010
Barium, total (T-Ba)	mg/L	1	-	0.00321	0.00269
Beryllium, total (T-Be)	mg/L	0.00013	-	<0.000020	<0.000020
Boron, total (T-B)	mg/L	1.2	29	<0.010	<0.010
Cadmium, total (T-Cd) [2]	mg/L	0.0000364	0.000106	0.0000092	0.0000072
Chromium, total (T-Cr) [3]	mg/L	0.001	-	<0.00050	<0.00050
Cobalt, total (T-Co) [2]	mg/L	0.000778	-	<0.00010	<0.00010
Copper, total (T-Cu)	mg/L	-	-	<0.00050	<0.00050
Iron, total (T-Fe)	mg/L	0.3	1	0.043	0.012
Lead, total (T-Pb)	mg/L	-	-	<0.000050	<0.000050
Manganese, total (T-Mn) [2]	mg/L	0.768	0.816	0.00198	0.00087
Molybdenum, total (T-Mo)	mg/L	0.073	46	0.000335	0.000281
Nickel, total (T-Ni) [2]	mg/L	0.0250	-	<0.00050	<0.00050
Selenium, total (T-Se)	mg/L	0.001	-	<0.000050	<0.000050
Silver, total (T-Ag)	mg/L	0.00012	-	<0.000010	<0.000010
Thallium, total (T-Tl)	mg/L	0.0008	-	<0.000010	<0.000010
Uranium, total (T-U)	mg/L	0.0085	0.033	0.000164	0.000148
Vanadium, total (T-V)	mg/L	0.12	-	0.00055	<0.00050
Zinc, total (T-Zn)	mg/L	-	-	<0.0030	<0.0030
Hexavalent Chromium, total	mg/L	0.001	-	<0.00050	<0.00050
Dissolved Metals					
Cadmium, dissolved (D-Cd) [2]	mg/L	0.000020-0.000022	0.000038	0.0000107	0.0000076
Copper, dissolved (D-Cu) [2]	mg/L	0.00020-0.00046	0.00020-0.0026	0.00033	***0.00027***
Iron, dissolved (D-Fe)	mg/L	-	0.35	0.012	<0.010
Lead, dissolved (D-Pb) [2]	mg/L	0.0013-0.0014	-	<0.000050	<0.000050
Manganese, dissolved (D-Mn) [2]	mg/L	0.29-0.35	1.97	0.00316	0.00104
Nickel, dissolved (D-Ni) [2]	mg/L	0.00060-0.00090	0.0092-0.013	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	2.5	-	0.00733	0.0069
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050
Zinc, dissolved (D-Zn) [2]	mg/L	0.0028-0.0058	0.0082-0.0086	0.0013	0.0012
Polycyclic Aromatic Hydrocarbons (PAHs)					
Acenaphthene	mg/L	0.0058	-	<0.000010	<0.000010
Acridine	mg/L	0.003	-	<0.000010	<0.000010
Anthracene	mg/L	0.000012	-	<0.000010	<0.000010
Benz(a)anthracene	mg/L	0.000018	-	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.00001	-	<0.0000050	<0.0000050
Chrysene	mg/L	-	-	<0.000010	<0.000010
Fluoranthene	mg/L	0.00004	-	<0.000010	<0.000010
Fluorene	mg/L	0.003	-	<0.000010	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010	<0.000010
Naphthalene	mg/L	0.001	0.001	<0.000050	<0.000050
Phenanthrene	mg/L	0.0003	-	<0.000020	<0.000020
Pyrene	mg/L	0.00002	-	<0.000010	<0.000010
Quinoline	mg/L	0.0034	-	<0.000050	<0.000050
Volatile Organic Compounds (VOCs)					
Benzene	mg/L	0.04	-	<0.00050	<0.00050
Ethylbenzene	mg/L	0.09	-	<0.00050	<0.00050
Methyl-tert-butyl-ether	mg/L	10	3.4	<0.00050	<0.00050
Styrene	mg/L	0.072	-	<0.00050	<0.00050
Toluene	mg/L	0.0005	-	<0.00040	<0.00040
Total Xylenes	mg/L	0.03	-	<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 ***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:
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]	0.0034-0.0090 [3,4]
Station	**Description**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-01	Woodfibre Creek Lower Reach	SW-01	VA25C9109-001	2025-10-30	0.000022	0.00197
SW-02	Lower Freshwater Reach of Mill Creek (upstream of the third bridge)	SW-02	VA25C9109-002	2025-10-30	<0.000020	0.00094
SW-07	Upstream Mill Creek (at the diversion inlet)	SW-07	VA25C9109-005	2025-10-30	<0.000020	0.00096
SW-04	East Creek Lower Reach	SW-04	VA25C9109-004	2025-10-30	0.000031	0.00104

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 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 VA25D0048-002 2025-11-09 10:35
		Long Term	Short Term	
General Parameters				
pH - Field	pH units	7.0 - 8.7	-	7.4
Specific Conductivity - Field	µS/cm	-	-	27216
Temperature - Field	°C	-	-	8.7
Salinity - Field	ppt	-	-	16.6
Turbidity - Field	NTU	-	-	1.83
TSS	mg/L	-	-	<3.0
Dissolved Oxygen - Field	mg/L	-	-	9.82
Total Hardness	mg/L	-	-	671.00
Dissolved Hardness	mg/L	-	-	440.00
Anions and Nutrients				
Sulphate	mg/L	-	-	271
Chloride	mg/L	-	-	1950
Fluoride	mg/L	-	-	<1.00
Ammonia ($N\text{-}NH_3$)	mg/L	-	-	<0.0050
Nitrite ($N\text{-}NO_2$)	mg/L	-	-	<0.0500
Nitrate ($N\text{-}NO_3$)	mg/L	-	-	<0.250
Total Organic Carbon (TOC)	mg/L	-	-	2.18
Total Inorganic Carbon (DOC)	mg/L	-	-	1.71
Total Metals				
Aluminum, total (T-Al)	mg/L	-	-	0.198
Antimony, total (T-Sb)	mg/L	-	-	<0.00050
Arsenic, total (T-As)	mg/L	-	-	<0.00050
Barium, total (T-Ba)	mg/L	-	-	0.00721
Beryllium, total (T-Be)	mg/L	-	-	<0.000100
Boron, total (T-B)	mg/L	-	-	0.488
Cadmium, total (T-Cd)	mg/L	-	-	<0.0000250
Chromium, total (T-Cr)	mg/L	-	-	<0.00250
Cobalt, total (T-Co)	mg/L	-	-	<0.00050
Copper, total (T-Cu)	mg/L	0.002	0.003	***<0.00250***
Iron, total (T-Fe)	mg/L	-	-	0.106
Lead, total (T-Pb)	mg/L	0.002	0.14	<0.000250
Manganese, total (T-Mn)	mg/L	-	-	0.00588
Molybdenum, total (T-Mo)	mg/L	-	-	0.00148
Nickel, total (T-Ni)	mg/L	-	-	<0.00250
Selenium, total (T-Se)	mg/L	-	-	<0.000250
Silver, total (T-Ag)	mg/L	-	-	<0.000050
Thallium, total (T-Tl)	mg/L	-	-	<0.000050
Uranium, total (T-U)	mg/L	-	-	0.000447
Vanadium, total (T-V)	mg/L	-	-	<0.00250
Zinc, total (T-Zn)	mg/L	-	-	<0.0150
Hexavalent Chromium, total	mg/L	-	-	<0.00050
Dissolved Metals				
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.0000092
Copper, dissolved (D-Cu)	mg/L	-	-	0.00025
Iron, dissolved (D-Fe)	mg/L	-	-	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.000050
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00172
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.561
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010
Polycyclic Aromatic Hydrocarbons (PAHs)				
Acenaphthene	mg/L	-	-	<0.000010
Acridine	mg/L	-	-	<0.000010
Anthracene	mg/L	-	-	<0.000010
Benz(a)anthracene	mg/L	-	-	<0.000010
Benzo(a)pyrene	mg/L	-	-	<0.0000050
Chrysene	mg/L	-	-	<0.000010
Fluoranthene	mg/L	-	-	<0.000010
Fluorene	mg/L	-	-	<0.000010
1-methylnaphthalene	mg/L	-	-	<0.000010
2-methylnaphthalene	mg/L	-	-	<0.000010
Naphthalene	mg/L	-	-	<0.000050
Phenanthrene	mg/L	-	-	<0.000020
Pyrene	mg/L	-	-	<0.000010
Quinoline	mg/L	-	-	<0.000050
Volatile Organic Compounds (VOCs)				
Benzene	mg/L	-	-	<0.00050
Ethylbenzene	mg/L	-	-	<0.00050
Methyl-tert-butyl-ether	mg/L	-	-	<0.00050
Styrene	mg/L	-	-	<0.00050
Toluene	mg/L	-	-	<0.00040
Total Xylenes	mg/L	-	-	<0.00050
Chlorobenzene	mg/L	-	-	<0.00050
1,2-Dichlorobenzene	mg/L	-	-	<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]	0.0086 [3,4]
Station	**Description**	**Sample ID**	**Lab ID**	**Sampling Date**		
SW-03	Mill Creek Estuary	SW-03	VA25C9109-003	2025-10-30	<0.000020	0.00172

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 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-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
				VA25C9311-001	VA25C9311-002	VA25C9311-003	VA25C9311-004	VA25C9311-005	VA25C9311-006
		Long Term	Short Term	2025-11-01 15:00	2025-11-01 14:45	2025-11-01 14:25	2025-11-01 14:05	2025-11-01 13:50	2025-11-01 13:35
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.65	7.52	7.48	7.63	7.47	7.45
Specific Conductivity - Field	µS/cm	-	-	9165	35788	47340	9515	33724	47911
Temperature - Field	°C	-	-	7.8	9.7	10.1	7.8	9.2	9.6
Salinity - Field	ppt	Narrative [2]	-	5.13	22.48	30.63	5.34	21.04	31.01
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	7.61	3.8	1.77	7.36	5.03	1.73
TSS	mg/L	Narrative [2]	Narrative [2]	5.0	4.8	<2.0	5.5	6.2	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.06	***7.81***	***4.78***	10.82	8.68	***4.73***
Total Hardness	mg/L	-	-	653	635	5320	688	1740	5120
Dissolved Hardness	mg/L	-	-	657	617	5030	721	1930	5090
Anions and Nutrients									
Sulphate	mg/L	-	-	310	302	2550	322	820	2250
Chloride	mg/L	-	-	2360	2300	18100	2450	6000	16000
Fluoride	mg/L	-	1.5	<1.0	<1.0	1.2	<1.0	<1.0	1.2
Ammonia (N-NH_3)	mg/L	7.2-13 [3]	48-85 [3]	0.0069	0.006	<0.0050	0.0054	0.0065	<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	1.21	<0.50	<0.50	0.54
Total Organic Carbon (TOC)	mg/L	-	-	2.89	3.15	0.88	2.88	2.42	0.85
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.86	2.92	1.39	2.72	2.25	0.78
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.326	0.314	0.0431	0.33	0.266	0.0357
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	<0.00040	0.00157	<0.00040	0.00067	0.0016
Barium, total (T-Ba)	mg/L	-	-	0.0079	0.0068	0.0108	0.0074	0.0085	0.0109
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	-	0.54	0.51	***3.38***	0.50	1.13	***2.60***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	0.000023	0.000089	<0.000020	0.00003	0.000089
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000128	0.000103	0.000107	0.000123	0.000113	0.000099
Copper, total (T-Cu)	mg/L	0.002	0.003	0.001	0.00087	0.00061	0.00113	0.001	0.00062
Iron, total (T-Fe)	mg/L	-	-	0.236	0.184	0.049	0.212	0.2	0.041
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00011	0.0001	<0.00010	0.00028	<0.00010	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0101	0.0085	0.0106	0.00938	0.00945	0.0113
Molybdenum, total (T-Mo)	mg/L	-	-	0.00168	0.00155	0.00971	0.00172	0.0036	0.00984
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	-	-	0.000556	0.000564	0.00263	0.000602	0.00105	0.00265
Vanadium, total (T-V)	mg/L	0.005	-	0.00081	0.00073	0.00151	0.00077	0.00105	0.00152
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	<0.000020	0.000068	<0.000020	0.000038	0.000073
Copper, dissolved (D-Cu)	mg/L	-	-	0.00058	0.00057	<0.00050	0.00056	0.00056	0.00063
Iron, dissolved (D-Fe)	mg/L	-	-	0.028	0.025	<0.010	0.026	0.02	<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	-	-	0.00564	0.00472	0.00943	0.00549	0.00541	0.00978
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.926	0.846	6.65	0.97	2.53	6.54
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	0.00144	<0.00050	0.00072	0.00144
Zinc, dissolved (D-Zn)	mg/L	-	-	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<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 WQR2 collected November 1 (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 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
				VA25C9311-007	VA25C9311-008	VA25C9311-009
		Long Term	Short Term	2025-11-01 10:25	2025-11-01 10:10	2025-11-01 9:45
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.47	7.46	7.4
Specific Conductivity - Field	µS/cm	-	-	11623	20313	48339
Temperature - Field	°C	-	-	7.7	8.1	9.5
Salinity - Field	ppt	Narrative [2]	-	6.62	12.09	31.30
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	12.94	10.99	1.55
TSS	mg/L	Narrative [2]	Narrative [2]	13.0	16.9	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	10.78	10.18	***3.95***
Total Hardness	mg/L	-	-	1020	1210	5190
Dissolved Hardness	mg/L	-	-	1080	1300	5200
Anions and Nutrients						
Sulphate	mg/L	-	-	527	579	2360
Chloride	mg/L	-	-	3890	4260	16800
Fluoride	mg/L	-	1.5	<1.0	<1.0	1.2
Ammonia (N-NH_3)	mg/L	12-13 [3]	78-85 [3]	0.0076	0.0092	<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	0.5
Total Organic Carbon (TOC)	mg/L	-	-	2.75	2.65	1.08
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.49	2.47	0.98
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.52	0.591	0.032
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	0.00062	0.00068	0.00157
Barium, total (T-Ba)	mg/L	-	-	0.012	0.0126	0.0105
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.75	0.84	***2.59***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000032	0.000032	0.000082
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000211	0.000235	0.000093
Copper, total (T-Cu)	mg/L	0.002	0.003	0.00156	0.00165	0.00059
Iron, total (T-Fe)	mg/L	-	-	0.454	0.487	0.038
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00024	0.00024	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0191	0.0209	0.00955
Molybdenum, total (T-Mo)	mg/L	-	-	0.00233	0.00267	0.00983
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	-	-	0.000641	0.000728	0.00269
Vanadium, total (T-V)	mg/L	0.005	-	0.00142	0.00164	0.00145
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	-	-	0.000023	0.000026	0.000078
Copper, dissolved (D-Cu)	mg/L	-	-	0.00074	0.00072	0.00057
Iron, dissolved (D-Fe)	mg/L	-	-	0.031	0.03	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00836	0.0089	0.00832
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	1.41	1.63	6.47
Vanadium, dissolved (D-V)	mg/L	-	-	0.0006	0.00064	0.0014
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-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
				VA25C9955-001	VA25C9955-002	VA25C9955-003	VA25C9955-004	VA25C9955-005	VA25C9955-006
		Long Term	Short Term	2025-11-07 13:40	2025-11-07 13:55	2025-11-07 14:10	2025-11-07 15:00	2025-11-07 15:15	2025-11-07 15:30
General Parameters									
pH - Field	pH units	7.0 - 8.7	-	7.72	7.31	7.53	7.41	7.23	7.5
Specific Conductivity - Field	µS/cm	-	-	2236	6898	42739	4662	9499	43890
Temperature - Field	°C	-	-	7.3	7.3	10.0	7.5	7.6	10.0
Salinity - Field	ppt	Narrative [2]	-	1.15	3.78	27.34	2.44	5.33	28.16
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	7.32	12.55	1.19	7.19	8.55	0.84
TSS	mg/L	Narrative [2]	Narrative [2]	6.5	10.3	<2.0	9.3	10.4	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	12.04	11.73	***7.05***	11.94	11.52	***6.57***
Total Hardness	mg/L	-	-	205	392	5320	382.00	482	5340
Dissolved Hardness	mg/L	-	-	191	412	5500	382.00	523	5240
Anions and Nutrients									
Sulphate	mg/L	-	-	79	136	2040	124	172	2000
Chloride	mg/L	-	-	740	1240	15100	1140	1510	14700
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]	<0.0050	<0.0050	<0.0050	<0.0050	0.005	<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	-	-	2.7	3.16	1.11	3.09	3.29	1.38
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.81	3.17	1.51	3.08	3.4	1.22
Total Metals									
Aluminum, total (T-Al)	mg/L	-	-	0.329	0.503	0.0316	0.47	0.606	0.0268
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	<0.00040	0.0014	<0.00040	<0.00040	0.00131
Barium, total (T-Ba)	mg/L	-	-	0.0057	0.0096	0.0103	0.0084	0.0109	0.0103
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	-	<0.30	0.34	***2.98***	0.33	0.35	***2.85***
Cadmium, total (T-Cd)	mg/L	0.00012	-	<0.000020	<0.000020	0.000077	<0.000020	0.000027	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	-	-	0.000162	0.00022	0.000122	0.000201	0.000254	0.000138
Copper, total (T-Cu)	mg/L	0.002	0.003	0.001	0.00158	0.00063	0.00135	***0.00204***	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.193	0.366	0.028	0.334	0.444	0.023
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00012	0.00017	<0.00010	0.00016	0.00021	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.00831	0.0147	0.00574	0.013	0.0175	0.00557
Molybdenum, total (T-Mo)	mg/L	-	-	0.0006	0.00089	0.00845	0.00097	0.00111	0.00833
Nickel, total (T-Ni)	mg/L	0.0083	-	<0.00050	<0.00050	<0.00050	<0.00050	0.00052	<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	-	-	0.000215	0.000275	0.00226	0.000321	0.000301	0.00221
Vanadium, total (T-V)	mg/L	0.005	-	0.00061	0.00108	0.00142	0.00105	0.00125	0.00138
Zinc, total (T-Zn)	mg/L	0.01	0.055	<0.0030	<0.0030	0.0033	0.0031	0.0045	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150	<0.00150
Dissolved Metals									
Cadmium, dissolved (D-Cd)	mg/L	-	-	<0.000020	<0.000020	0.000068	<0.000020	<0.000020	0.000071
Copper, dissolved (D-Cu)	mg/L	-	-	0.00055	0.00071	<0.00050	0.00065	0.00079	<0.00050
Iron, dissolved (D-Fe)	mg/L	-	-	0.042	0.028	<0.010	0.025	0.053	0.011
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00413	0.00649	0.00501	0.00649	0.00784	0.00468
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Strontium, dissolved (D-Sr)	mg/L	-	-	0.217	0.462	5.9	0.444	0.605	5.57
Vanadium, dissolved (D-V)	mg/L	-	-	<0.00050	<0.00050	0.00136	<0.00050	0.00052	0.00128
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0024	0.0017	<0.0010	0.0015	0.0013	0.001
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 7 (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
				VA25C9955-007	VA25C9955-008	VA25C9955-009
		Long Term	Short Term	2025-11-07 11:20	2025-11-07 11:40	2025-11-07 11:55
General Parameters						
pH - Field	pH units	7.0 - 8.7	-	7.49	7.57	7.58
Specific Conductivity - Field	µS/cm	-	-	9713	10663	42419
Temperature - Field	°C	-	-	7.6	7.6	10.1
Salinity - Field	ppt	Narrative [2]	-	5.46	6.03	27.12
Turbidity - Field	NTU	Narrative [2]	Narrative [2]	12.33	12.04	0.77
TSS	mg/L	Narrative [2]	Narrative [2]	10.8	12.9	<2.0
Dissolved Oxygen - Field	mg/L	>=8	-	11.2	11.04	***7.50***
Total Hardness	mg/L	-	-	1060	914	5080
Dissolved Hardness	mg/L	-	-	1040	896	5140
Anions and Nutrients						
Sulphate	mg/L	-	-	430	361	2090
Chloride	mg/L	-	-	3440	2590	14700
Fluoride	mg/L	-	1.5	<1.0	<1.0	<1.0
Ammonia (N-NH_3)	mg/L	7.8-13 [3]	52-85 [3]	<0.0050	0.0052	0.0064
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	0.53
Total Organic Carbon (TOC)	mg/L	-	-	3.18	3.96	1.19
Dissolved Organic Carbon (DOC)	mg/L	-	-	2.98	3.27	1.32
Total Metals						
Aluminum, total (T-Al)	mg/L	-	-	0.502	0.574	0.02
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	0.00044	0.00042	0.00128
Barium, total (T-Ba)	mg/L	-	-	0.0117	0.0125	0.0092
Beryllium, total (T-Be)	mg/L	0.1	-	<0.00050	<0.00050	<0.00050
Boron, total (T-B)	mg/L	1.2	-	0.77	0.62	***2.89***
Cadmium, total (T-Cd)	mg/L	0.00012	-	0.000026	0.000026	0.00007
Chromium, total (T-Cr)	mg/L	-	-	<0.00050	<0.00050	<0.00050
Cobalt, total (T-Co)	mg/L	-	-	0.000247	0.000272	0.000117
Copper, total (T-Cu)	mg/L	0.002	0.003	***0.00268***	0.00181	<0.00050
Iron, total (T-Fe)	mg/L	-	-	0.4	0.465	0.016
Lead, total (T-Pb)	mg/L	0.002	0.14	0.00021	0.00021	<0.00010
Manganese, total (T-Mn)	mg/L	-	-	0.0189	0.0214	0.00404
Molybdenum, total (T-Mo)	mg/L	-	-	0.00206	0.00174	0.00802
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	-	-	0.000557	0.000479	0.00205
Vanadium, total (T-V)	mg/L	0.005	-	0.00134	0.00145	0.00125
Zinc, total (T-Zn)	mg/L	0.01	0.055	0.0052	0.0035	<0.0030
Hexavalent Chromium, total	mg/L	0.0015	-	<0.00150	<0.00150	<0.00150
Dissolved Metals						
Cadmium, dissolved (D-Cd)	mg/L	-	-	0.000026	0.000023	0.000072
Copper, dissolved (D-Cu)	mg/L	-	-	0.0007	0.00074	0.00067
Iron, dissolved (D-Fe)	mg/L	-	-	0.028	0.028	<0.010
Lead, dissolved (D-Pb)	mg/L	-	-	<0.00010	<0.00010	<0.00010
Manganese, dissolved (D-Mn)	mg/L	-	-	0.00971	0.00976	0.00312
Nickel, dissolved (D-Ni)	mg/L	-	-	<0.00050	<0.00050	0.00062
Strontium, dissolved (D-Sr)	mg/L	-	-	1.17	0.993	5.31
Vanadium, dissolved (D-V)	mg/L	-	-	0.00053	0.00051	0.00127
Zinc, dissolved (D-Zn)	mg/L	-	-	0.0018	0.001	0.0011
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:
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]	0.013-0.016 [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	VA25C7850-001	2025-10-20	<0.000020	<0.0050
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C7850-002	2025-10-20	<0.000020	<0.0050
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C7850-003	2025-10-20	0.000024	<0.0050
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C7850-004	2025-10-20	<0.000020	<0.0050
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C7850-005	2025-10-20	<0.000040	<0.0050
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C7850-006	2025-10-20	0.000022	<0.0050
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C7850-007	2025-10-20	0.000020	<0.0050
WQR1	2 m Below Surface	WQR1-2m	VA25C7850-008	2025-10-20	0.000021	<0.0050
WQR1	2 m Above Seafloor	WQR1-SF	VA25C7850-009	2025-10-20	0.000021	<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-6:
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	VA25C9353-001	2025-11-02	0.0260	0.645
IDZ-E1	2 m Below Surface	IDZ-E1-2m	VA25C9353-002	2025-11-02	0.0182	0.717
IDZ-E1	2 m Above Seafloor	IDZ-E1-SF	VA25C9353-003	2025-11-02	0	0.732
Station IDZ-E2						
IDZ-E2	0.5 m Below Surface	IDZ-E2-0.5	VA25C9353-004	2025-11-02	0.0173	0.682
IDZ-E2	2 m Below Surface	IDZ-E2-2m	VA25C9353-005	2025-11-02	0	0.708
IDZ-E2	2 m Above Seafloor	IDZ-E2-SF	VA25C9353-006	2025-11-02	0	0.779
Station IDZ-W1						
IDZ-W1	0.5 m Below Surface	IDZ-W1-0.5	VA25C9312-001	2025-11-01	0	1.87
IDZ-W1	2 m Below Surface	IDZ-W1-2m	VA25C9312-002	2025-11-01	0	2.64
IDZ-W1	2 m Above Seafloor	IDZ-W1-SF	VA25C9312-003	2025-11-01	0	2.02
Station IDZ-W2						
IDZ-W2	0.5 m Below Surface	IDZ-W2-0.5	VA25C9312-004	2025-11-01	0.00334	1.98
IDZ-W2	2 m Below Surface	IDZ-W2-2m	VA25C9312-005	2025-11-01	0	2.14
IDZ-W2	2 m Above Seafloor	IDZ-W2-SF	VA25C9312-006	2025-11-01	0	2.05
Reference Station WQR1						
WQR1	0.5 m Below Surface	WQR1-0.5	VA25C9353-007	2025-11-02	0	0.706
WQR1	2 m Below Surface	WQR1-2m	VA25C9353-008	2025-11-02	0.0107	0.610
WQR1	2 m Above Seafloor	WQR1-SF	VA25C9353-009	2025-11-02	0.00146	0.744
Reference Station WQR2						
WQR2	0.5 m Below Surface	WQR2-0.5	VA25C9312-007	2025-11-01	0	0.652
WQR2	2 m Below Surface	WQR2-2m	VA25C9312-008	2025-11-01	0	0.583
WQR2	2 m Above Seafloor	WQR2-SF	VA25C9312-009	2025-11-01	0.0142	0.694

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.