Eagle Mountain - Woodfibre Gas Pipeline Project

BCER Waste Discharge Permit Weekly Report

Contents

Preamble

This weekly report for the British Columbia Energy Regulator (BCER) Waste Discharge Permit (BCER number PE-110163) for the FortisBC Eagle Mountain – Woodfibre Gas Pipeline (EGP) Project includes the results of water quality monitoring and sampling of the receiving environments (upstream and downstream) and points of discharge.

FortisBC has retained Triton Environmental Consultants Ltd. as the Qualified Professional to implement and oversee the monitoring and sampling program in the receiving environments. The data represented below, including laboratory reported exceedances, represent background conditions from the receiving environment sampling as shown on the Waste Discharge Permit.

Introduction

The results provided in this document are submitted to BC Energy Regulator (BCER) by FortisBC as per the requirements listed in the Waste Discharge Permit PE-110163 Section 4.2:

> The Permittee shall summarize the results of the discharge and receiving environment compliance sampling and monitoring program in a report that shall be submitted weekly over the term of this permit. The sampling and monitoring results shall be suitably tabulated and include comparison to the respective British Columbia Approved and Working Water Quality Guidelines for Freshwater & Marine Aquatic Life, as published by the Ministry of Environment & Climate Change Strategy. Any exceedance of regulatory guidelines shall be clearly highlighted, and any missed sampling events/missing data shall 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 the subject permit, and also made publicly available on the FortisBC Eagle Mountain-Woodfibre Gas Pipeline Project | Talking Energy webpage.

Sampling Methodology

The monitoring and sampling has been carried out in accordance with the procedures described in the most recent edition of the “British Columbia Field Sampling Manual” using field equipment and lab samples to meet daily and real time requirements for the Waste Discharge Permit.

At the receiving environments, real time and daily readings are being monitored at the same time with one piece of equipment, allowing all the daily readings real time. Visible sheen will be monitored with visual inspections during times of discharge or sampling.
At the point of discharge from the WTP, the parameters are being monitored using field equipment and sondes/real time meters. Table 1 and Table 2 below show how each parameter is being monitored.

Table 1. Monitor Details for the Point of Discharge from the Water Treatment System-BC Rail and Woodfibre

Permit Frequency	Parameters	Details
During discharges	Visible Sheen	In field inspection
Daily (or per batch)	DO	Monitoring using YSI ProDSS
	ORP	Monitoring using YSI ProDSS
	Salinity	Monitoring using YSI ProDSS
Real Time (or per batch)	pH	Monitoring using GF Dryloc pH Series NPT
	Temperature	Monitoring using LevelPro PT100 Temperature and Signet 2350 Temp sensor
	NTU	Monitoring using Observator NEP9504GPI
	Electrical Conductivity	Monitoring using ProCon C450
Weekly (or per batch) Lab Samples	List prescribed in permit	Lab samples

Table 2. Monitor Details for the Receiving Environment (upstream and downstream)-BC Rail and Woodfibre

Permit Frequency	Parameters	Details
During discharges	Visible Sheen	In field inspection
Daily	DO	Monitoring using Sonde- AquaTROLL 600 datalogger
	ORP	Monitoring using Sonde- AquaTROLL 600 datalogger
	Salinity	Monitoring using Sonde- AquaTROLL 600 datalogger
Real Time	pH	Monitoring using Sonde- AquaTROLL 600 datalogger
	Temperature	Monitoring using Sonde- AquaTROLL 600 datalogger
	NTU	Monitoring using Sonde- AquaTROLL 600 datalogger
	Electrical Conductivity	Monitoring using Sonde- AquaTROLL 600 datalogger
Weekly Lab Samples	List prescribed in permit	Lab samples

Summary-BC Rail Site

Site Activities and Exceedances

- Weekly upstream and downstream taken by Triton.
- Water produced by the water treatment plant is being recirculated for tunneling and to create grout for tunneling.
- No discharge occurred during this reporting period.

Discharge from Water Treatment Plant

Table 3 below includes information on water quality and lab sampling during discharges. Appendix A includes a full set of lab results with real time/field samples from discharges.

Table 3: Discharge from Water Treatment System Information

Location	Date of Discharge	Date of Lab Sample (for the discharge)	Real Time Monitored	Field Samples Taken	Discharge Rate (batch)	Discharge Volume (batch)	Results
BC Rail- No discharges during this time period							

*Max discharge is 515 m3/day

Receiving Environment Monitoring-Squamish River

Table 4 and 5 below includes information on water quality and lab sampling. Appendix B includes a full set of lab results with real time data. The receiving environment is being monitored as outlined in the permit with additional oversight by the QP.

Table 4: Upstream Monitoring Information

Location	Date of Lab Sample	Real Time Monitored	Results
Squamish River Upstream	2025-02-06	Yes *	Full set of lab sample results, photo and documentation are provided in Appendix B.

Table 5: Downstream Monitoring Information

	Date of Lab Sample	Real Time Monitored	Results
Squamish River Downstream	2025-02-06	Yes *	Full set of lab sample results, photo and documentation are provided in Appendix B.

***** Sondes set up to log temperature, specific conductivity, salinity (in PSU), pH, ORP, DO (mg/L), and turbidity (NTU) at 15-minute intervals.

Summary-Woodfibre

Site Activities and Exceedances

- Weekly upstream, downstream and end of pipe taken by Triton.
- Ongoing tunnelling at WLNG.
- The discharge volumes from the WTP on February 8th and February 9th exceeded the maximum discharge volume of 1500 m^3 per day. Please see Table 6 for discharge volume summaries.

Discharge from Water Treatment Plant

Table 6 below includes information on the discharge water. Appendix C includes real time/field samples from the discharge.

Table 6: Discharges from Water Treatment System

Location	Date of Discharge	Real Time Monitored and Daily Monitoring	Discharge Volume
Woodfibre	2025-02-03	Yes-Appendix C	722m^3
Woodfibre	2025-02-04	Yes-Appendix C	693m^3
Woodfibre	2025-02-05	Yes-Appendix C	710m^3
Woodfibre	2025-02-06	Yes-Appendix C	791m^3
Woodfibre	2025-02-07	Yes-Appendix C*lab sample day	994m^3
Woodfibre	2025-02-08	Yes-Appendix C	1661m^3
Woodfibre	2025-02-09	Yes-Appendix C	1675m^3

*Max discharge is 1500m^3/day

Receiving Environment Monitoring-East Creek

Table 7 and 8 below includes information on water quality and lab sampling. Appendix D includes a full set of lab results with real time data. The receiving environment is being monitored as outlined in the permit with additional oversight by the QP.

Table 7: Upstream Monitoring Information

Location	Date of Lab Sample	Real Time Monitored	Results
East Creek Upstream	2025-02-07	Yes *	Full set of lab sample results, photo and documentation are provided in Appendix D.

Table 8: Downstream Monitoring Information

	Date of Lab Sample	Real Time Monitored	Results
East Creek Downstream	2025-02-07	Yes *	Full set of lab sample results, photo and documentation are provided in Appendix D.

***** Sondes set up to log temperature, specific conductivity, salinity (in PSU), pH, ORP, DO (mg/L), and turbidity (NTU) at 15-minute interval

Appendix A: BCR Site Point of Discharge from Water Treatment Plant Documentation

BCR Site Batch Sample Analysis

No Discharges

BCR Site Batch Sample Lab Documentation

No Discharges

BCR Site WTP Discharge Field Notes and Logs
No Discharges

Appendix B: BCR Site Receiving Environment Documentation

BCR Site Receiving Environment Sample Analysis

TRITON	Sample ID	Reviewed and signed off by:	COLLEGE OF APPLIED BIOLOGISTS Farshad Shafiei RPBio 3781 CAB		Farshad Shafiei Ph.D., R.P.Bio.	SQU US1 (Upstream)	SQU DS1 (Downstream)	Sample or value notes	BCWQ FAL - Short Term	BCWQ FAL - Long Term	BCWQ MAL - Short Term	BCWQ MAL - Long Term
	LAB ID					VA25A2704-001	VA25A2704-002					
	Date Sampled					06-Feb-2025	06-Feb-2025					
	Time Sampled					13:35	14:25					
Analyte	Units	FAL-ST [1,2]	FAL-LT [1,2]	MAL-ST [1]	MAL-LT [1,2]	Water	Water		Guideline notes			
						N/A	N/A					
In Situ Parameters												
pH (field)	pH units	6.5-9.0	6.5-9.0	7.0-8.7	7.0-8.7	7.04	7.04		If natural pH < 6.5, no statisticaly significant decrease from background. No restriction in increase except in areas with unique flora or fauna. Unrestricted change permitted within range of 6.5 to 9.0. If natural pH > 9.0, no statistically significant increase from background. Refer to BC Water Quality Guidelines for more information.		Unrestricted change within this range (for protection of mollusc embryo development).	
Temperature (field)	°C	Max +/- from BKG 1°C [4]	-	Max +/- from BKG 1°C [4]	-	1.3	0.9		Guideline is species-dependent. Short-term daily temperature guideline is 19°C for streams with unknown fish distribution. Refer to footnote 4 for background temperature range for the Squamish River. Refer to BC Water Quality Guidelines for more information Hourly rate of change not to exceed 1°C. Calculation: US value +/- 1 = guideline range		Guideline for marine waters are based on natural ambient conditions. Max and min. 1°C change from natural condition. Natural temperature cycle characteristic of the site should not be altered in amplitude or frequency by human activities. Max rate of any human-induced temperature change not to exceed 0.5°C hourly. treams with unknown fish distribution. Refer to footnote 4 for background temperature range for the Squamish River.	
Conductivity (field)	µS/cm	-	-	-	-	141	111					
Turbidity (field)	NTU	Varies with background, see note Guideline = 9.93	Varies with background, see note Guideline = 3.46 5-week discrete sampling average = 3.0 (DS)	Varies with background, see note Guideline = 9.93	Varies with background, see note Guideline = 3.46 5-week discrete sampling average = 3.0 (DS)	1.93	3.37		Change from background of 8 NTU at any one time for a duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 8 = DS guideline Change from background of 5 NTU at any time when background is 8 - 50 NTU during high flows or in turbid waters. Calculation: US value + 5 = DS guideline Change from background of 10% when background is > 50 NTU at any time during high flows or in turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 2 NTU at any one time for 30 days in clear flows. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.	Change from background of 8 NTU at any one time for a duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 8 = DS guideline Change from background of 5 NTU at any time when background is 8 - 50 NTU during high flows or in turbid waters. Calculation: US value + 5 = DS guideline Change from background of 10% when background is > 50 NTU at any time during high flows or in turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 2 NTU at any one time for 30 days in clear flows. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.
Dissolved Oxygen (field)	mg/L	Varies with life stage, see note	Varies with life stage, see note	Varies with life stage, see note	Varies with life stage, see note	13.79	12.42		Buried embryo/alevin minimum 9 mg/L, all other life stages 5 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 11 mg/L, all other life stages 8 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 9 mg/L, all other life stages 5 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 11 mg/L, all other life stages 8 mg/L. Refer to BC Water Quality Guidelines for more information.
General Parameters												
Hardness (as $CaCO_3$) (total)	mg/L	-	-	-	-	27.6	27					
Total Dissolved Solids	mg/L	-	-	-	-	88	84					
Total Suspended Solids	mg/L	Varies with background, see note Guideline = 71.8	Varies with background, see note Guideline = 16.8 5-week discrete sampling average = < 3.0 (DS)	Varies with background, see note Guideline = 71.8	Varies with background, see note Guideline = 16.8 5-week discrete sampling average = < 3.0 (DS)	46.8	< 3.0		Change from background of 25 mg/L at any one time for duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 25 = DS guideline Change from background of 10 mg/L at any one time when background 25-100 mg/L during high flows or turbid waters. Calculation: US value + 10 = DS guideline Change from background of 10% when background is > 100 mg/L at any time during high flows or turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 5 mg/L @ one time for a druation of 30 days in clear flow. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.	Change from background of 25 mg/L at any one time for duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 25 = DS guideline Change from background of 10 mg/L at any one time when background 25-100 mg/L during high flows or turbid waters. Calculation: US value + 10 = DS guideline Change from background of 10% when background is > 100 mg/L at any time during high flows or turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 5 mg/L @ one time for a druation of 30 days in clear flow. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	1.12	0.6			Long-term (30-day) median within 20% of background median [3]		
Total Alkalinity ($CaCO_3$)	mg/L	-	Categorical	-	-	25	23.9			Guideline is for alkalinity (as CaCO3) and categorizes the sensitivity of a water body to acid inputs. Alkalinity < 10 mg/L is considered highly sensitive to acid inputs; 10 - 20 mg/L is considered moderately sensitive to acid inputs; > 20 mg/L is considered low sensitivity.		
Total Sulfide (as S)	mg/L	-	-	-	-	< 0.0015	< 0.0015					
Total Sulfide (un-ionized as H_2S)	mg/L	-	0.002	-	-	< 0.0015	< 0.0015			Working guideline		
Total Sulfide (as H_2S)	mg/L	-	-	-	-	< 0.0016	< 0.0016					
Anions and Nutrients												
Ammonia	mg/L ammonia-N	Varies with pH and temperature. See note. Guideline = 22.8	Varies with pH and temperature. See note. Guideline = 1.99	Varies with pH and temperature. See note. Guideline = 270	Varies with pH, temperature and salinity. See note. Guideline = 1.99	0.308	0.132		Guideline for ammonia as N and is pH and temperature dependent. Refer to Table 27D in BC WQG for guideline values.	Guideline for ammonia as N and is pH and temperature dependent. Refer to Table 27C in BC WQG for guideline values.	Guideline for ammonia as N. Guideline is pH, temperature and salinity dependent. Refer to Table 27F in BC WQG for guideline values.	Guideline for ammonia as N. Guideline is pH, temperature and salinity dependent. Refer to Table 27E in BC WQG for guideline values.
Bromide	mg/L	-	-	-	-	< 0.050	< 0.050					
Chloride	mg/L	600	150	+/- 10% from BKG	+/- 10% from BKG	13.1	9.25				Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.	Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.
Fluoride	mg/L	Varies with hardness Guideline = 0.817	-	1.5	-	0.031	0.026		Guideline has interim status. Guideline is calculated with the following equation: Guideline = [-51.73 + 92.57 log10 (hardness)] * 0.01			
Nitrate (as N)	mg/L	32.8	3	-	3.7	0.603	0.226					
Nitrite (as N)	mg/L	Varies with chloride. See note. Guideline = 0.6	Varies with chloride. See note. Guideline = 0.08	-	-	0.0319	0.0091		Varies with chloride. Refer to Table 27B in BC WQG for guideline values.	Varies with chloride. Refer to Table 27B in BC WQG for guideline values.		
Total Nitrogen	mg/L	-	-	-	-	0.976	0.436					
Total Phosphorous	mg/L	-	0.005 to 0.015	-	-	0.117	0.0495			Guideline is for lakes, refer to BCWQ guideline for nutrients and algae for more information. Guideline does not apply to site.		
Sulfate (as SO_4)	mg/L	-	Varies with hardness. See note. Guideline = 128	-	-	9.38	8.23			Guidelines for hardness ranges below: Hardness 0 - 30: 128 Hardness 31 - 75: 218 Hardness 76 - 180: 309 Hardness 181 - 250: 429		
Total Metals												
Aluminum (Al)-Total	mg/L	-	Varies with pH, DOC, hardness Guideline = 0.06 5-week field average = 0.047 (US), 0.05 (DS)	-	-	0.043	0.0497			Guideline varies with pH, hardness and Dissolved Organic Carbon (DOC). Guideline is calculated with the following equation: Guideline = (EXP((0.645 * LN(DOC)) + (2.255 * LN(hardness)) + (1.995 * pH) + (-0.284 * (LN(hardness) * pH))-9.898)/3/1000) If hardness or DOC is below the hardness or DOC range, the minimum hardness or DOC will be applied in the calculation.		
Antimony (Sb)-Total	mg/L	0.25	0.074	-	-	< 0.00010	< 0.00010					
Arsenic (As)-Total	mg/L	-	0.005	-	0.0125	0.00022	0.00024					Interim guideline status
Barium (Ba)-Total	mg/L	-	1	-	-	0.0114	0.0113			Working guideline status		
Beryllium (Be)-Total	mg/L	-	0.00013	-	0.100	< 0.000100	< 0.000100			Working guideline status		Working guideline status
Bismuth (Bi)-Total	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Boron (B)-Total	mg/L	-	1.2	-	1.2	0.026	0.022					
Cadmium (Cd)-Total	mg/L	-	-	-	0.00012	0.0000066	0.000008					Working guideline status
Calcium (Ca)-Total	mg/L	-	-	-	-	8.55	8.54					
Cesium (Cs)-Total	mg/L	-	-	-	-	0.00004	0.000037					
Chromium (Cr) - Total	mg/L	-	-	-	-	< 0.00050	< 0.00050					
Chromium (Cr(III))-Total	mg/L	-	0.0089	-	0.056	< 0.00050	< 0.00050			Working guideline status		Working guideline status
Chromium (Cr(VI))-Total	mg/L	-	0.0025	-	0.0015	< 0.00050	< 0.00050			Working guideline status		Working guideline status
Cobalt (Co)-Total	mg/L	0.11	0.004	-	-	0.00015	0.00015					
Copper (Cu)-Total	mg/L	-	-	0.003	0.0014 5-week field average = 0.00013 (US), 0.00014 (DS)	0.0006	0.0006					
Iron (Fe)-Total	mg/L	1	-	-	-	0.374	0.386					
Lead (Pb)-Total	mg/L	-	-	0.14	0.002 5-week field average = < 0.00005 (US), < 0.00005 (DS)	< 0.000050	< 0.000050					
Lithium (Li)-Total	mg/L	-	-	-	-	0.0026	0.0028					
Magnesium (Mg)-Total	mg/L	-	-	-	-	1.52	1.38					
Manganese (Mn)-Total	mg/L	Varies with hardness Guideline = 0.844	Varies with hardness Guideline = 0.768	-	-	0.0248	0.0245		Guideline varies with hardness. The guideline is calculated using the following equation: Guideline = (0.0044 * hardness + 0.605) Guideline applies to samples with hardness 25-259 mg/L. Lowest value for guideline is 0.77 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.	Guideline varies with hardness, refer to BC Water Quality Guidelines for more information. The guideline is calculated using the following formula: Guideline = (0.01102 * hardness + 0.54) Guideline applies to samples with hardness 37-450 mg/L. Lowest value for guideline is 0.81 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.		
Mercury (Hg)-Total	mg/L	-	Varies with methyl mercury Guideline = N/A	-	-	< 0.0000050	< 0.0000050			When MeHg ≤ 0.5% of total Hg, guideline is equal to 0.02 mg/L Guideline = 0.1/[MeHg/totalHg]. When MeHg ≤ 0.5% of total Hg, guideline is equal to 0.02 mg/L		
Molybdenum (Mo)-Total	mg/L	46	7.6	-	-	0.00064	0.000635					
Nickel (Ni)-Total	mg/L	-	-	-	0.0083	< 0.00050	< 0.00050					Working guideline status
Potassium (K)-Total	mg/L	-	-	-	-	1.81	1.44					
Rubidium (Rb)-Total	mg/L	-	-	-	-	0.00229	0.00188					
Selenium (Se)-Total	mg/L	-	0.002	-	0.002	< 0.000050	0.00005			Guideline for freshwater aquatic life (water column). Alert concentration is 0.001 mg/L, with separate guideliens for sediment, invertebrate and fish tissue. Refer to BC Water Quality Guidelines for more information on guideliens and sampling guidance.		Guideline for marine aquatic life (water column). Alert concentration is 0.001 mg/L, with separate guideliens for sediment, invertebrate and fish tissue. Refer to BC Water Quality Guidelines for more
Silicon (Si)-Total	mg/L	-	-	-	-	7.32	7.08					
Silver (Ag)-Total	mg/L	Varies with hardness, see note Guideline = 0.0001	Varies with hardness, see note Guideline = 0.00005 5-week field average = 0.00001 (US), 0.0000124 (DS)	0.003	0.0015	< 0.000010	< 0.000010		Varies with hardness Guideline ranges: Hardness ≤ 100: 0.0001 Hardness > 100: 0.003	Varies with hardness Guideline ranges: Hardness ≤ 100: 0.00005 Hardness > 100: 0.0015		Guideline applies to open coast and estuaries. Guideline is applicable to the EGP site.
Sodium (Na)-Total	mg/L	-	-	-	-	8.54	7.34					
Strontium (Sr)-Total	mg/L	-	-	-	-	0.0624	0.0622					
Sulfur (S)-Total	mg/L	-	-	-	-	2.94	2.79					
Tellurium (Te)-Total	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Thallium (Tl)-Total	mg/L	-	0.00003	-	-	< 0.000010	< 0.000010			30-day average, site-specific objective for the lower Columbia River, BC. Guideline is for reference only and does not apply to tnhe EGP site.		
Thorium (Th)-Total	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Tin (Sn)-Total	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Titanium (Ti)-Total	mg/L	-	-	-	-	0.00092	0.00131					
Tungsten (W)-Total	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Uranium (U)-Total	mg/L	0.0165	0.0075	-	-	0.000031	0.000034			Working guideline status		
Vanadium (V)-Total	mg/L	-	0.06	-	0.005 5-week field average = 0.00148 (US), 0.00132 (DS)	0.00168	0.00146					Working guideline status
Zinc (Zn)-Total	mg/L	-	-	0.055	Guideline = 0.010 5-week field average = 0.00322 (US), 0.00312 (DS)	0.0041	< 0.0030					
Zirconium (Zr)-Total	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Dissolved Metals												
Aluminum (Al)-Dissolved	mg/L	-	-	-	-	0.0099	0.0123					
Antimony (Sb)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Arsenic (As)-Dissolved	mg/L	-	-	-	-	0.00017	0.00017					
Barium (Ba)-Dissolved	mg/L	-	-	-	-	0.00995	0.0107					
Beryllium (Be)-Dissolved	mg/L	-	-	-	-	< 0.000100	< 0.000100					
Bismuth (Bi)-Dissolved	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Boron (B)-Dissolved	mg/L	-	-	-	-	0.023	0.019					
Cadmium (Cd)-Dissolved	mg/L	Varies with hardness, see note Guideline = 0.000156	Varies with hardness, see note Guideline = 0.000076	-	-	0.0000066	0.0000075		Guideline is hardness dependent. Guideline is appilcable to water hardness between 7.0 and 455 mg/L. Guideline is calculated with the following formula: Guideline = (EXP(1.03 * (LN(hardness)) - 5.274)/1000) Lowest value for guideline is 0.000018 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.	Guideline is hardness dependent. Guideline is applicable to hardness between 3.4 and 285 mg/L. Guideline is calculated with the following formula: Guideline = (EXP(0.736 * (LN(hardness)) - 4.943)/1000) Lowest value for guiedeline is 0.00004. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.		
Calcium (Ca)-Dissolved	mg/L	-	Categorical, see note	-	-	8.1	8			Guideline categorizes the sensitivity of a water body to acid inputs (i.e. buffering capacity). Standard is 4 mg/L dissolved Ca for the most sensitive waterbodies,5 - 8 mg/L for waterbodies with moderate sensitivity to acid inputs. Waterbodies with dissolved calcium > 8mg/L are considered to have low sensitivity to acid inputs.		
Cesium (Cs)-Dissolved	mg/L	-	-	-	-	0.000034	0.000032					
Chromium (Cr)-Dissolved	mg/L	-	-	-	-	< 0.00050	< 0.00050					
Chromium (Cr(III))-Dissolved	mg/L	-	-	-	-	-	-					
Chromium (Cr(VI))-Dissolved	mg/L	-	-	-	-	-	-					
Cobalt (Co)-Dissolved	mg/L	-	-	-	-	0.00012	0.00012					
Copper (Cu)-Dissolved	mg/L	Guideline varies with other parameters, see note Guideline = 0.0009	Guideline varies with other parameters, see note Guideline = 0.0002 5-week field average = 0.00052 (US), 0.000496 (DS)	-	-	0.00045	0.00044		Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date	Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date		
Iron (Fe)-Dissolved	mg/L	0.35	-	-	-	0.249	0.25					
Lead (Pb)-Dissolved	mg/L	-	Guideline varies with DOC and hardness Guideline = 0.00167 5-week field average = < 0.00005 (US), < 0.00005 (DS)	-	-	< 0.000050	< 0.000050			Guideline varies with DOC and hardness, refer to BC Water Quality Guidelines for more information. Guideline uses equation (EXP((0.514*LN(DOC))+(0.214*(LN(Hardness)))+0.4354))/2/1000 where DOC range is 0.5-31.5 mg/L and hardness range is 4.7-511 mg/L.		
Lithium (Li)-Dissolved	mg/L	-	-	-	-	0.0025	0.0026					
Magnesium (Mg)-Dissolved	mg/L	-	-	-	-	1.39	1.23					
Manganese (Mn)-Dissolved	mg/L	-	-	-	-	0.0229	0.022					
Mercury (Hg)-Dissolved	mg/L	-	-	-	-	< 0.0000050	< 0.0000050					
Molybdenum (Mo)-Dissolved	mg/L	-	-	-	-	0.000628	0.000585					
Nickel (Ni)-Dissolved	mg/L	Guideline varies with other parameters, see note Guideline = 0.0161	Guideline varies with other parameters, see note Guideline = 0.00105 5-week field average = < 0.0005 (US), < 0.0005 (DS)	-	-	< 0.00050	< 0.00050		Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date	Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date		
Phosphorus (P)-Dissolved	mg/L	-	-	-	-	0.062	< 0.050					
Potassium (K)-Dissolved	mg/L	-	-	-	-	1.64	1.26					
Rubidium (Rb)-Dissolved	mg/L	-	-	-	-	0.0021	0.00167					
Selenium (Se)-Dissolved	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Silicon (Si)-Dissolved	mg/L	-	-	-	-	6.79	6.45					
Silver (Ag)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Sodium (Na)-Dissolved	mg/L	-	-	-	-	7.99	6.38					
Strontium (Sr)-Dissolved	mg/L	-	-	-	-	0.0593	0.0593					
Sulfur (S)-Dissolved	mg/L	-	-	-	-	2.68	2.42					
Tellurium (Te)-Dissolved	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Thallium (Tl)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Thorium (Th)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Tin (Sn)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Titanium (Ti)-Dissolved	mg/L	-	-	-	-	< 0.00030	< 0.00030					
Tungsten (W)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Uranium (U)-Dissolved	mg/L	-	-	-	-	0.000026	0.000029					
Vanadium (V)-Dissolved	mg/L	-	-	-	-	0.00138	0.00109					
Zinc (Zn)-Dissolved	mg/L	Varies with DOC and hardness Guideline = 0.014	Varies with pH, DOC, hardness Guideline = 0.0034 5-week field average = 0.0026 (US), 0.0021 (DS)	-	-	0.0038	0.0029		Guideline varies with DOC and hardness. Guideline is calculated using the following formula: Guideline = (EXP((0.833 * (LN(hardness))) + (0.24 * (LN(DOC))) + 0.526)/2/1000) If hardness or DOC is below the hardness or DOC range, the minimum hardness or DOC will be applied in the calculation.	Guideline varies with pH, hardness and Dissolved Organic Carbon (DOC). Guideline is calculated using the following formula: Guideline = (EXP((0.974 * (LN(hardness))) - (0.815 * pH) + (0.398 * (LN(DOC))) + 4.625)/2/1000) Guideline only applies to water with pH between 6.5 and 8.13, DOC between 0.3 and 22.9 mg/L, anmd hardness between 23.4 and 399 mg/L. If hardness or DOC is below the hardness or DOC range, the minimum hardness or DOC will be applied in the calculation.		
Zirconium (Zr)-Dissolved	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Applied Guideline:		**British Columbia Approved and Working Water Quality Guidelines (NOV 2023) for Freshwater Aquatic Life (FAL) & Marine Aquatic Life (MAL) Short-Term (ST) & Long-Term (LT)**										

[1]BC MOECCS. 2023. BC Water Qualtiy Guidelines for the Protection of Aquatic Life, Wildlife & Agriculture. Accessed from: wqg_summary_aquaticlife_wildlife_agri.pdf (gov.bc.ca)

[2]BC MOECCS. 2021. BC Working Water Qualtiy Guidelines for the Protection of Aquatic Life, Widlife & Agriculture. Accessed from: bc_env_working_water_quality_guidelines.pdf (gov.bc.ca)

[3]Note that long-term guidelines apply to averaged data to account for chronic impacts to aquatic life. Ideally, five samples collected at evenly spaced intervals over 30 days is considered to be the minimum number needed to calculate the long-term average of any parameter, though this may vary by parameter and site conditions. Long-term guidelines applied here are for reference only and may not indicate chronic impacts to aquatic life if exceedances occur in the short term.

[4]Background temperature ranges: Dec-Feb: 2.0-4.0C; Mar-Apr: 4.0-6.0C; May-June: 6.0-12.0C; Jul-Sept: 9.0-12.0C; Oct-Nov: 3.0-5.0

Reference: Triton Environmental Consulants Ltd. 2023. Memo - Background water quality values for the BC Rail Discharge to Squamish River

For guidelines dependent on other parameters, when hardness, pH or DOC are below the range stated in the guideline, the lowest value in the range is used to calculate the guideline.

Parameters Used to Calculate Guidelines

Analyte	Units	Method of Measurements	Values: SQU US1 (Upstream)	Values: SQU DS1 (Downstream)
pH (field)	pH units	Field pH taken using handheld meters during sampling used in calculations	7.04	7.04
Temperature (field)	°C	Field temperature taken using handheld meters during sampling used in calculations	1.3	0.9
Turbidity (field)	NTU	Field turbidity taken using handheld meters during sampling used in calculations	1.93	3.37
Hardness (as CaCO3) (total)	mg/L	Laboratory tested total hardness taken at each respective sample site on the day of sampling used in guideline calculations	27.6	27
Dissolved Organic Carbon	mg/L	Laboratory tested dissolved organic carbon tested at the lab used in guideline calculations	1.12	0.6
Total Alkalinity ($CaCO_3$)	mg/L	Laboratory tested total alkalinity used in calculations	25	23.9
Chloride	mg/L	Laboratory tested chloride taken at each respective sample site on the day of sampling used in guideline calculations	13.1	9.25

BCR Site Receiving Environment Lab Documentation

CERTIFICATE OF ANALYSIS

Work Order	:			
Client	:		Laboratory	
Contact	:		Account Manager	
Address	:		Address	
Telephone	:		Telephone	
Project	:		Date Samples Received	: 06-Feb-2025 16:55
PO	:		Date Analysis Commenced	: 07-Feb-2025
C-O-C number	:	----	Issue Date	: 16-Feb-2025 19:14
Sampler	:	----		
Site	:	Water Analysis		
Quote number	:	VA25-TRIT100-001		
No. of samples received	:	3		
No. of samples analysed	:	3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
		Inorganics, Edmonton, Alberta
		Metals, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Administration, Burnaby, British Columbia
		Inorganics, Burnaby, British Columbia
		Inorganics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
°C	degrees celsius
mg/L	milligrams per litre
pH units	pH units
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SQU US 1	SQU DS 1	BCR Duplicate	----	----
					Client sampling date / time	06-Feb-2025 13:35	06-Feb-2025 14:25	06-Feb-2025 13:35	----	----
						VA25A2704-001	VA25A2704-002	VA25A2704-003	----	----
						Result	Result	Result	----	----
Field Tests										
Conductivity, field	----	EF001/VA	0.10	µS/cm		141.00	111.00	141.00	----	----
pH, field	----	EF001/VA	0.10	pH units		7.04	7.04	7.04	----	----
Temperature, field	----	EF001/VA	0.10	°C		1.30	0.90	1.30	----	----
Physical Tests										
Hardness (as CaCO3), dissolved	----	EC100/VA	0.60	mg/L		25.9	25.0	26.2	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		27.6	27.0	28.0	----	----
Solids, total dissolved [TDS]	----	E162/VA	10	mg/L		88	84	91	----	----
Solids, total suspended [TSS]	----	E160/VA	3.0	mg/L		46.8	<3.0	<3.0	----	----
Alkalinity, total (as CaCO3)	----	E290/VA	2.0	mg/L		25.0	23.9	25.0	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/VA	0.0050	mg/L		0.308	0.132	0.318	----	----
Bromide	24959-67-9	E235.Br-L/VA	0.050	mg/L		<0.050	<0.050	<0.050	----	----
Chloride	16887-00-6	E235.Cl/VA	0.50	mg/L		13.1	9.25	13.1	----	----
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L		0.031	0.026	0.032	----	----
Nitrate (as N)	14797-55-8	E235.NO3-L/VA	0.0050	mg/L		0.603	0.226	0.602	----	----
Nitrite (as N)	14797-65-0	E235.NO2-L/VA	0.0010	mg/L		0.0319	0.0091	0.0302	----	----
Nitrogen, total	7727-37-9	E366/VA	0.030	mg/L		0.976	0.436	0.980	----	----
Phosphorus, total	7723-14-0	E372-U/VA	0.0020	mg/L		0.117	0.0495	0.109	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L		9.38	8.23	9.38	----	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		1.12	0.60	0.82	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SQU US 1	SQU DS 1	BCR Duplicate	----	----
					Client sampling date / time	06-Feb-2025 13:35	06-Feb-2025 14:25	06-Feb-2025 13:35	----	----
						VA25A2704-001	VA25A2704-002	VA25A2704-003	----	----
						Result	Result	Result	----	----
Total Sulfides										
Sulfide, total (as S)	18496-25-8	E395/VA	0.0015	mg/L		<0.0015	<0.0015	0.0015	----	----
Sulfide, un-ionized (as H2S), from total	7783-06-4	EC395/VA	0.0015	mg/L		<0.0015	<0.0015	<0.0015	----	----
Sulfide, total (as H2S)	7783-06-4	E395/VA	0.0016	mg/L		<0.0016	<0.0016	<0.0016	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L		0.0430	0.0497	0.0419	----	----
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L		0.00022	0.00024	0.00019	----	----
Barium, total	7440-39-3	E420/VA	0.00010	mg/L		0.0114	0.0113	0.0109	----	----
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	----	----
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	----	----
Boron, total	7440-42-8	E420/VA	0.010	mg/L		0.026	0.022	0.026	----	----
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L		0.0000066	0.0000080	0.0000095	----	----
Calcium, total	7440-70-2	E420/VA	0.050	mg/L		8.55	8.54	8.72	----	----
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L		0.000040	0.000037	0.000041	----	----
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L		0.00015	0.00015	0.00014	----	----
Copper, total	7440-50-8	E420/VA	0.00050	mg/L		0.00060	0.00060	0.00064	----	----
Iron, total	7439-89-6	E420/VA	0.010	mg/L		0.374	0.386	0.374	----	----
Lead, total	7439-92-1	E420/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	----	----
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L		0.0026	0.0028	0.0027	----	----
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L		1.52	1.38	1.50	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SQU US 1	SQU DS 1	BCR Duplicate	----	----
					Client sampling date / time	06-Feb-2025 13:35	06-Feb-2025 14:25	06-Feb-2025 13:35	----	----
						VA25A2704-001	VA25A2704-002	VA25A2704-003	----	----
						Result	Result	Result	----	----
Total Metals										
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L		0.0248	0.0245	0.0247	----	----
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	----	----
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L		0.000640	0.000635	0.000654	----	----
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L		0.100	<0.050	0.110	----	----
Potassium, total	7440-09-7	E420/VA	0.050	mg/L		1.81	1.44	1.81	----	----
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L		0.00229	0.00188	0.00221	----	----
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L		<0.000050	0.000050	<0.000050	----	----
Silicon, total	7440-21-3	E420/VA	0.10	mg/L		7.32	7.08	7.33	----	----
Silver, total	7440-22-4	E420/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	----	----
Sodium, total	7440-23-5	E420/VA	0.050	mg/L		8.54	7.34	8.70	----	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L		0.0624	0.0622	0.0613	----	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L		2.94	2.79	2.89	----	----
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	----	----
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	----	----
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Tin, total	7440-31-5	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L		0.00092	0.00131	0.00097	----	----
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L		0.000031	0.000034	0.000029	----	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L		0.00168	0.00146	0.00157	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SQU US 1	SQU DS 1	BCR Duplicate	----	----
					Client sampling date / time	06-Feb-2025 13:35	06-Feb-2025 14:25	06-Feb-2025 13:35	----	----
						VA25A2704-001	VA25A2704-002	VA25A2704-003	----	----
						Result	Result	Result	----	----
Total Metals										
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L		0.0041	<0.0030	0.0038	----	----
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	----	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/VA	0.0010	mg/L		0.0099	0.0123	0.0104	----	----
Antimony, dissolved	7440-36-0	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Arsenic, dissolved	7440-38-2	E421/VA	0.00010	mg/L		0.00017	0.00017	0.00020	----	----
Barium, dissolved	7440-39-3	E421/VA	0.00010	mg/L		0.00995	0.0107	0.00973	----	----
Beryllium, dissolved	7440-41-7	E421/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	----	----
Bismuth, dissolved	7440-69-9	E421/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	----	----
Boron, dissolved	7440-42-8	E421/VA	0.010	mg/L		0.023	0.019	0.023	----	----
Cadmium, dissolved	7440-43-9	E421/VA	0.0000050	mg/L		0.0000066	0.0000075	0.0000079	----	----
Calcium, dissolved	7440-70-2	E421/VA	0.050	mg/L		8.10	8.00	8.16	----	----
Cesium, dissolved	7440-46-2	E421/VA	0.000010	mg/L		0.000034	0.000032	0.000038	----	----
Chromium, dissolved	7440-47-3	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Cobalt, dissolved	7440-48-4	E421/VA	0.00010	mg/L		0.00012	0.00012	0.00013	----	----
Copper, dissolved	7440-50-8	E421/VA	0.00020	mg/L		0.00045	0.00044	0.00047	----	----
Iron, dissolved	7439-89-6	E421/VA	0.010	mg/L		0.249	0.250	0.259	----	----
Lead, dissolved	7439-92-1	E421/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	----	----
Lithium, dissolved	7439-93-2	E421/VA	0.0010	mg/L		0.0025	0.0026	0.0025	----	----
Magnesium, dissolved	7439-95-4	E421/VA	0.0050	mg/L		1.39	1.23	1.41	----	----
Manganese, dissolved	7439-96-5	E421/VA	0.00010	mg/L		0.0229	0.0220	0.0233	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SQU US 1	SQU DS 1	BCR Duplicate	----	----
					Client sampling date / time	06-Feb-2025 13:35	06-Feb-2025 14:25	06-Feb-2025 13:35	----	----
						VA25A2704-001	VA25A2704-002	VA25A2704-003	----	----
						Result	Result	Result	----	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/VA	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	----	----
Molybdenum, dissolved	7439-98-7	E421/VA	0.000050	mg/L		0.000628	0.000585	0.000633	----	----
Nickel, dissolved	7440-02-0	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Phosphorus, dissolved	7723-14-0	E421/VA	0.050	mg/L		0.062	<0.050	0.082	----	----
Potassium, dissolved	7440-09-7	E421/VA	0.050	mg/L		1.64	1.26	1.70	----	----
Rubidium, dissolved	7440-17-7	E421/VA	0.00020	mg/L		0.00210	0.00167	0.00206	----	----
Selenium, dissolved	7782-49-2	E421/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	----	----
Silicon, dissolved	7440-21-3	E421/VA	0.050	mg/L		6.79	6.45	6.88	----	----
Silver, dissolved	7440-22-4	E421/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	----	----
Sodium, dissolved	7440-23-5	E421/VA	0.050	mg/L		7.99	6.38	8.15	----	----
Strontium, dissolved	7440-24-6	E421/VA	0.00020	mg/L		0.0593	0.0593	0.0613	----	----
Sulfur, dissolved	7704-34-9	E421/VA	0.50	mg/L		2.68	2.42	2.69	----	----
Tellurium, dissolved	13494-80-9	E421/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	----	----
Thallium, dissolved	7440-28-0	E421/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	----	----
Thorium, dissolved	7440-29-1	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Tin, dissolved	7440-31-5	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Titanium, dissolved	7440-32-6	E421/VA	0.00030	mg/L		<0.00030	<0.00030	<0.00030	----	----
Tungsten, dissolved	7440-33-7	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Uranium, dissolved	7440-61-1	E421/VA	0.000010	mg/L		0.000026	0.000029	0.000027	----	----
Vanadium, dissolved	7440-62-2	E421/VA	0.00050	mg/L		0.00138	0.00109	0.00140	----	----
Zinc, dissolved	7440-66-6	E421/VA	0.0010	mg/L		0.0038	0.0029	0.0042	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SQU US 1	SQU DS 1	BCR Duplicate	----	----
					Client sampling date / time	06-Feb-2025 13:35	06-Feb-2025 14:25	06-Feb-2025 13:35	----	----
						VA25A2704-001	VA25A2704-002	VA25A2704-003	----	----
						Result	Result	Result	----	----
Dissolved Metals										
Zirconium, dissolved	7440-67-7	E421/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	----	----
Dissolved mercury filtration location	----	EP509/VA	-	-		Field	Field	Field	----	----
Dissolved metals filtration location	----	EP421/VA	-	-		Field	Field	Field	----	----
Speciated Metals										
Chromium, hexavalent [Cr VI], total	18540-29-9	E532/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Chromium, trivalent [Cr III], total	16065-83-1	EC535/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Aggregate Organics										
Phenols, total (4AAP)	----	E562/EO	0.0010	mg/L		----	----	<0.0010	----	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	[redacted]	Page	: 1 of 18
Client		Laboratory	[redacted]
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project		Date Samples Received	: 06-Feb-2025 16:55
PO		Issue Date	: 13-Feb-2025 12:08
C-O-C number	: ----		
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Method Blank value outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Method Blank (MB) Values								
Anions and Nutrients	QC-1867261-001	----	Phosphorus, total	7723-14-0	E372-U	0.0027 B mg/L	0.002 mg/L	Blank result exceeds permitted value

Result Qualifiers

Qualifier	Description
B	*Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water** Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Aggregate Organics : Phenols (4AAP) in Water by Colorimetry										
Amber glass total (sulfuric acid)										
BCR Duplicate	E562	06-Feb-2025	10-Feb-2025	28 days	4 days	✓	10-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
BCR Duplicate	E298	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
SQU DS 1	E298	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
SQU US 1	E298	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	10-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
BCR Duplicate	E235.Br-L	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
SQU DS 1	E235.Br-L	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
SQU US 1	E235.Br-L	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Anions and Nutrients : Chloride in Water by IC										
HDPE										
BCR Duplicate	E235.Cl	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE										
SQU DS 1	E235.Cl	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE										
SQU US 1	E235.Cl	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
BCR Duplicate	E235.F	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
SQU DS 1	E235.F	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
SQU US 1	E235.F	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
BCR Duplicate	E235.NO3-L	06-Feb-2025	08-Feb-2025	3 days	2 days	✓	08-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
SQU DS 1	E235.NO3-L	06-Feb-2025	08-Feb-2025	3 days	2 days	✓	08-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
SQU US 1	E235.NO3-L	06-Feb-2025	08-Feb-2025	3 days	2 days	✓	08-Feb-2025	3 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
BCR Duplicate	E235.NO2-L	06-Feb-2025	08-Feb-2025	3 days	2 days	✓	08-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
SQU DS 1	E235.NO2-L	06-Feb-2025	08-Feb-2025	3 days	2 days	✓	08-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
SQU US 1	E235.NO2-L	06-Feb-2025	08-Feb-2025	3 days	2 days	✓	08-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
BCR Duplicate	E235.SO4	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
SQU DS 1	E235.SO4	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
SQU US 1	E235.SO4	06-Feb-2025	08-Feb-2025	28 days	2 days	✓	08-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
BCR Duplicate	E366	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
SQU DS 1	E366	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
SQU US 1	E366	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
BCR Duplicate	E372-U	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
SQU DS 1	E372-U	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
SQU US 1	E372-U	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	09-Feb-2025	28 days	3 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
BCR Duplicate	E509	06-Feb-2025	10-Feb-2025	28 days	4 days	✓	10-Feb-2025	28 days	4 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
SQU DS 1	E509	06-Feb-2025	10-Feb-2025	28 days	4 days	✓	10-Feb-2025	28 days	4 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
SQU US 1	E509	06-Feb-2025	10-Feb-2025	28 days	4 days	✓	10-Feb-2025	28 days	4 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
BCR Duplicate	E421	06-Feb-2025	07-Feb-2025	180 days	1 days	✓	08-Feb-2025	180 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
SQU DS 1	E421	06-Feb-2025	07-Feb-2025	180 days	1 days	✓	08-Feb-2025	180 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
SQU US 1	E421	06-Feb-2025	07-Feb-2025	180 days	1 days	✓	08-Feb-2025	180 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
BCR Duplicate	EF001	06-Feb-2025	----	----	----		10-Feb-2025	----	4 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
SQU DS 1	EF001	06-Feb-2025	----	----	----		10-Feb-2025	----	4 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
SQU US 1	EF001	06-Feb-2025	----	----	----		10-Feb-2025	----	4 days	
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
BCR Duplicate	E358-L	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	07-Feb-2025	28 days	1 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
SQU DS 1	E358-L	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	07-Feb-2025	28 days	1 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
SQU US 1	E358-L	06-Feb-2025	07-Feb-2025	28 days	1 days	✓	07-Feb-2025	28 days	1 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
BCR Duplicate	E290	06-Feb-2025	08-Feb-2025	14 days	2 days	✓	09-Feb-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
SQU DS 1	E290	06-Feb-2025	08-Feb-2025	14 days	2 days	✓	09-Feb-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
SQU US 1	E290	06-Feb-2025	08-Feb-2025	14 days	2 days	✓	09-Feb-2025	14 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TDS by Gravimetry										
HDPE BCR Duplicate	E162	06-Feb-2025	----	----	----		11-Feb-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE SQU DS 1	E162	06-Feb-2025	----	----	----		11-Feb-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE SQU US 1	E162	06-Feb-2025	----	----	----		11-Feb-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE BCR Duplicate	E160	06-Feb-2025	----	----	----		11-Feb-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE SQU DS 1	E160	06-Feb-2025	----	----	----		11-Feb-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE SQU US 1	E160	06-Feb-2025	----	----	----		11-Feb-2025	7 days	5 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide) BCR Duplicate	E532	06-Feb-2025	----	----	----		07-Feb-2025	28 days	1 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide) SQU DS 1	E532	06-Feb-2025	----	----	----		07-Feb-2025	28 days	1 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide) SQU US 1	E532	06-Feb-2025	----	----	----		07-Feb-2025	28 days	1 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) [ON MECP]										
BCR Duplicate	E508	06-Feb-2025	11-Feb-2025	28 days	5 days	✓	11-Feb-2025	28 days	5 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) [ON MECP]										
SQU DS 1	E508	06-Feb-2025	11-Feb-2025	28 days	5 days	✓	11-Feb-2025	28 days	5 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) [ON MECP]										
SQU US 1	E508	06-Feb-2025	11-Feb-2025	28 days	5 days	✓	11-Feb-2025	28 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
BCR Duplicate	E420	06-Feb-2025	07-Feb-2025	180 days	1 days	✓	08-Feb-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
SQU DS 1	E420	06-Feb-2025	07-Feb-2025	180 days	1 days	✓	08-Feb-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
SQU US 1	E420	06-Feb-2025	07-Feb-2025	180 days	1 days	✓	08-Feb-2025	180 days	2 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
BCR Duplicate	E395	06-Feb-2025	----	----	----		12-Feb-2025	7 days	6 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
SQU DS 1	E395	06-Feb-2025	----	----	----		12-Feb-2025	7 days	6 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
SQU US 1	E395	06-Feb-2025	----	----	----		12-Feb-2025	7 days	6 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
TSS by Gravimetry	E160	1870203	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	1870205	1	19	5.2	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1867634	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1867633	1	15	6.6	5.0	✓
Fluoride in Water by IC	E235.F	1867632	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1867636	1	15	6.6	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1867635	1	16	6.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1867637	1	15	6.6	5.0	✓
Alkalinity Species by Titration	E290	1867630	1	15	6.6	5.0	✓
Ammonia by Fluorescence	E298	1867262	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1867263	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1867266	1	4	25.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1867261	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1867050	1	19	5.2	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1867043	1	17	5.8	5.0	✓
Total Mercury in Water by CVAAS	E508	1870030	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1869428	1	11	9.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1867605	1	7	14.2	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1868530	1	16	6.2	5.0	✓
Laboratory Control Samples (LCS)							
TSS by Gravimetry	E160	1870203	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	1870205	1	19	5.2	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1867634	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1867633	1	15	6.6	5.0	✓
Fluoride in Water by IC	E235.F	1867632	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1867636	1	15	6.6	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1867635	1	16	6.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1867637	1	15	6.6	5.0	✓
Alkalinity Species by Titration	E290	1867630	1	15	6.6	5.0	✓
Ammonia by Fluorescence	E298	1867262	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1867263	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1867266	1	4	25.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1867261	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1867050	1	19	5.2	5.0	✓

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Control Samples (LCS) - Continued							
Dissolved Metals in Water by CRC ICPMS	E421	1867043	1	17	5.8	5.0	✓
Total Mercury in Water by CVAAS	E508	1870030	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1869428	1	11	9.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1867605	1	7	14.2	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1868530	1	16	6.2	5.0	✓
Method Blanks (MB)							
TSS by Gravimetry	E160	1870203	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	1870205	1	19	5.2	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1867634	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1867633	1	15	6.6	5.0	✓
Fluoride in Water by IC	E235.F	1867632	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1867636	1	15	6.6	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1867635	1	16	6.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1867637	1	15	6.6	5.0	✓
Alkalinity Species by Titration	E290	1867630	1	15	6.6	5.0	✓
Ammonia by Fluorescence	E298	1867262	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1867263	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1867266	1	4	25.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1867261	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1867050	1	19	5.2	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1867043	1	17	5.8	5.0	✓
Total Mercury in Water by CVAAS	E508	1870030	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1869428	1	11	9.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1867605	1	7	14.2	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1868530	1	16	6.2	5.0	✓
Matrix Spikes (MS)							
Bromide in Water by IC (Low Level)	E235.Br-L	1867634	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1867633	1	15	6.6	5.0	✓
Fluoride in Water by IC	E235.F	1867632	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1867636	1	15	6.6	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1867635	1	16	6.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1867637	1	15	6.6	5.0	✓
Ammonia by Fluorescence	E298	1867262	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1867263	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1867266	1	4	25.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1867261	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1867050	1	19	5.2	5.0	✓

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS) - Continued							
Dissolved Metals in Water by CRC ICPMS	E421	1867043	1	17	5.8	5.0	✓
Total Mercury in Water by CVAAS	E508	1870030	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1869428	1	11	9.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1867605	1	7	14.2	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1868530	1	16	6.2	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
TSS by Gravimetry	E160 ALS Environmental - Vancouver	Water	APHA 2540 D (mod)	Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, following by drying of the filter at 104 ± 1°C, with gravimetric measurement of the filtered solids. Samples containing very high dissolved solid content (i.e. seawaters, brackish waters) may produce a positive bias by this method. Alternate analysis methods are available for these types of samples.
TDS by Gravimetry	E162 ALS Environmental - Vancouver	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Bromide in Water by IC (Low Level)	E235.Br-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Chloride in Water by IC	E235.Cl ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC	E235.SO4 ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Alkalinity Species by Titration	E290 ALS Environmental - Vancouver	Water	APHA 2320 B (mod)	Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Ammonia by Fluorescence	E298 ALS Environmental - Vancouver	Water	Method Fialab 100, 2018	Ammonia in water is determined by automated continuous flow analysis with membrane diffusion and fluorescence detection, after reaction with OPA (ortho-phthalaldehyde). This method is approved under US EPA 40 CFR Part 136 (May 2021)
Dissolved Organic Carbon by Combustion (Low Level)	E358-L ALS Environmental - Vancouver	Water	APHA 5310 B (mod)	Dissolved Organic Carbon (Non-Purgeable), also known as NPOC (dissolved), is a direct measurement of DOC after a filtered (0.45 micron) sample has been acidified and purged to remove inorganic carbon (IC). Analysis is by high temperature combustion with infrared detection of CO2. NPOC does not include volatile organic species that are purged off with IC. For samples where the majority of DC (dissolved carbon) is comprised of IC (which is common), this method is more accurate and more reliable than the DOC by subtraction method (i.e. DC minus DIC).
Total Nitrogen by Colourimetry	E366 ALS Environmental - Vancouver	Water	Chinchilla Scientific Nitrate Method, 2011	Following digestion, total nitrogen is is determined colourimetrically using a discrete analyzer utilizing the vanadium chloride reduction method. This method of analysis is approved under US EPA 40 CFR Part 136 (May 2021).
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Vancouver	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.
Total Sulfide by Colourimetry (Automated Flow)	E395 ALS Environmental - Vancouver	Water	APHA 4500 -S E-Auto-Colorimetry	Sulfide is determined using the gas dialysis automated methlyene blue colourimetric method. Results expressed "as H2S" if reported represent the maximum possible H2S concentration based on the total sulfide concentration in the sample. The H2S calculation converts Total Sulphide as (S2-) and reports it as Total Sulphide as (H2S)
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Vancouver	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Water by CRC ICPMS	E421 ALS Environmental - Vancouver	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 ALS Environmental - Vancouver	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Dissolved Mercury in Water by CVAAS	E509 ALS Environmental - Vancouver	Water	APHA 3030B/EPA 1631E (mod)	Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Hexavalent Chromium (Cr VI) by IC	E532 ALS Environmental - Vancouver	Water	APHA 3500-Cr C (Ion Chromatography)	Hexavalent Chromium is measured by Ion chromatography-Post column reaction and UV detection. Results are based on an un-filtered, field-preserved sample.
Phenols (4AAP) in Water by Colorimetry	E562 ALS Environmental - Edmonton	Water	EPA 9066	This automated method is based on the distillation of phenol and subsequent reaction of the distillate with alkaline ferricyanide (K3Fe(CN)6) and 4-amino-antipyrine (4-AAP) to form a red complex which is measured colorimetrically.
Dissolved Hardness (Calculated)	EC100 ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as CaCO3), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations. Hardness from total Ca/Mg is normally comparable to Dissolved Hardness in non-turbid waters.
Un-ionized Total Hydrogen Sulfide (calculated)	EC395 ALS Environmental - Vancouver	Water	APHA 4500 -S H	Un-ionized sulfide is calculated using results from total sulfide analysis, pH, temperature, and ionic strength of the sample. Calculation of un-ionized sulfide using total sulfide concentrations may be biased high due to particulate forms of sulfide measured during total sulfide testing.
Total Trivalent Chromium (Cr III) by Calculation	EC535 ALS Environmental - Vancouver	Water	APHA 3030B/6020A/EPA 7196A (mod)	Chromium (III)-Total is calculated as the difference between the total chromium and the total hexavalent chromium (Cr(VI)) results.The Limit of Reporting for Chromium (III) varies as a function of the test results.
Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine	EF001 ALS Environmental - Vancouver	Water	Field Measurement (Client Supplied)	Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3 or Chloramine measurements provided by client and recorded on ALS report may affect the validity of results.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 ALS Environmental - Vancouver	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.
Preparation for Dissolved Organic Carbon for Combustion	EP358 ALS Environmental - Vancouver	Water	APHA 5310 B (mod)	Preparation for Dissolved Organic Carbon
Digestion for Total Nitrogen in water	EP366 ALS Environmental - Vancouver	Water	APHA 4500-P J (mod)	Samples for total nitrogen analysis are digested using a heated persulfate digestion. Nitrogen compounds are converted to nitrate in this digestion.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Vancouver	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.
Dissolved Metals Water Filtration	EP421 ALS Environmental - Vancouver	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
Dissolved Mercury Water Filtration	EP509 ALS Environmental - Vancouver	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HCl.

QUALITY CONTROL REPORT

Work Order	: [redacted]	Page	: 1 of 17
Client	:	Laboratory	
Contact	:	Account Manager	
Address	:	Address	[redacted]
Telephone	:	Telephone	
Project	:	Date Samples Received	: 06-Feb-2025 16:55
PO	:	Date Analysis Commenced	: 07-Feb-2025
C-O-C number	: ----	Issue Date	: 13-Feb-2025 12:08
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
[redacted]		Edmonton Inorganics, Edmonton, Alberta
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Administration, Burnaby, British Columbia
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Inorganics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 1867630)											
VA25A2695-003	Anonymous	Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	141	142	0.778%	20%	----
Physical Tests (QC Lot: 1870203)											
VA25A2724-015	Anonymous	Solids, total suspended [TSS]	----	E160	3.0	mg/L	4360	4580	5.10%	20%	----
Physical Tests (QC Lot: 1870205)											
FJ2500393-001	Anonymous	Solids, total dissolved [TDS]	----	E162	10	mg/L	2370	2330	1.68%	20%	----
Anions and Nutrients (QC Lot: 1867261)											
FJ2500391-003	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.0085	0.0087	0.0002	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1867262)											
FJ2500391-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0183	0.0181	0.0002	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1867266)											
VA25A1957-005	Anonymous	Nitrogen, total	7727-37-9	E366	1.50	mg/L	44.3	44.5	0.441%	20%	----
Anions and Nutrients (QC Lot: 1867632)											
VA25A2695-001	Anonymous	Fluoride	16984-48-8	E235.F	0.100	mg/L	<0.100	<0.100	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1867633)											
VA25A2695-001	Anonymous	Chloride	16887-00-6	E235.Cl	2.50	mg/L	352	352	0.00613%	20%	----
Anions and Nutrients (QC Lot: 1867634)											
VA25A2695-001	Anonymous	Bromide	24959-67-9	E235.Br-L	0.250	mg/L	<0.250	<0.250	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1867635)											
VA25A2695-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0250	mg/L	1.04	1.04	0.424%	20%	----
Anions and Nutrients (QC Lot: 1867636)											
VA25A2695-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0050	mg/L	0.0125	0.0133	0.0008	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1867637)											
VA25A2695-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	1.50	mg/L	11.3	10.9	0.44	Diff <2x LOR	----
Organic / Inorganic Carbon (QC Lot: 1867263)											
FJ2500391-001	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	0.50	mg/L	2.62	2.78	0.16	Diff <2x LOR	----
Total Sulfides (QC Lot: 1872369)											
VA25A2559-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 1867050)											
VA25A2699-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.294	0.291	1.08%	20%	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00028	0.00028	0.000003	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 1867050) - continued											
VA25A2699-001	Anonymous	Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00057	0.00064	0.00006	Diff <2x LOR	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0828	0.0854	3.14%	20%	----
		Beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		Bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Boron, total	7440-42-8	E420	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.0000213	0.0000232	0.0000019	Diff <2x LOR	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	43.2	42.7	1.14%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.000084	0.000088	0.000004	Diff <2x LOR	----
		Chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00016	0.00016	0.000002	Diff <2x LOR	----
		Copper, total	7440-50-8	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Iron, total	7439-89-6	E420	0.010	mg/L	0.323	0.328	1.54%	20%	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	0.000177	0.000172	0.000005	Diff <2x LOR	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	0.0019	0.0019	0.000004	Diff <2x LOR	----
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	4.46	4.54	1.68%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.0140	0.0138	1.53%	20%	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.00220	0.00238	7.77%	20%	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	0.00056	0.00055	0.000004	Diff <2x LOR	----
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Potassium, total	7440-09-7	E420	0.050	mg/L	0.666	0.660	1.01%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00058	0.00054	0.00004	Diff <2x LOR	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.000365	0.000336	0.000029	Diff <2x LOR	----
		Silicon, total	7440-21-3	E420	0.10	mg/L	2.26	2.20	2.68%	20%	----
		Silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		Sodium, total	7440-23-5	E420	0.050	mg/L	2.77	2.84	2.57%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.345	0.352	2.08%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	23.1	23.1	0.124%	20%	----
		Tellurium, total	13494-80-9	E420	0.00020	mg/L	0.00044	0.00031	0.00013	Diff <2x LOR	----
		Thallium, total	7440-28-0	E420	0.000010	mg/L	0.000013	0.000015	0.000002	Diff <2x LOR	----
		Thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Titanium, total	7440-32-6	E420	0.00030	mg/L	0.00750	0.00648	14.6%	20%	----
		Tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000259	0.000273	5.45%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 1867050) - continued											
VA25A2699-001	Anonymous	Vanadium, total	7440-62-2	E420	0.00050	mg/L	0.00077	0.00079	0.00002	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	0.0066	0.0068	0.0002	Diff <2x LOR	----
		Zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Total Metals (QC Lot: 1870030)											
VA25A2691-001	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1867043)											
VA25A2699-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	0.0101	0.0105	3.94%	20%	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.00026	0.00026	0.0000006	Diff <2x LOR	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00036	0.00036	0.000003	Diff <2x LOR	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.0740	0.0729	1.48%	20%	----
		Beryllium, dissolved	7440-41-7	E421	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		Bismuth, dissolved	7440-69-9	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Boron, dissolved	7440-42-8	E421	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	0.0000139	0.0000151	0.0000012	Diff <2x LOR	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	40.8	42.6	4.08%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	0.000016	0.000012	0.000004	Diff <2x LOR	----
		Chromium, dissolved	7440-47-3	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Cobalt, dissolved	7440-48-4	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Copper, dissolved	7440-50-8	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Iron, dissolved	7439-89-6	E421	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Lead, dissolved	7439-92-1	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Lithium, dissolved	7439-93-2	E421	0.0010	mg/L	0.0017	0.0017	0.00004	Diff <2x LOR	----
		Magnesium, dissolved	7439-95-4	E421	0.0050	mg/L	4.20	4.29	2.14%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.00140	0.00142	0.917%	20%	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.00234	0.00229	2.48%	20%	----
		Nickel, dissolved	7440-02-0	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Phosphorus, dissolved	7723-14-0	E421	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Potassium, dissolved	7440-09-7	E421	0.050	mg/L	0.555	0.553	0.422%	20%	----
		Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000351	0.000364	0.000013	Diff <2x LOR	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	1.66	1.69	1.83%	20%	----
		Silver, dissolved	7440-22-4	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		Sodium, dissolved	7440-23-5	E421	0.050	mg/L	2.70	2.63	2.41%	20%	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	0.350	0.347	1.04%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Dissolved Metals (QC Lot: 1867043) - continued											
VA25A2699-001	Anonymous	Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	21.6	21.7	0.266%	20%	----
		Tellurium, dissolved	13494-80-9	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Thallium, dissolved	7440-28-0	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		Thorium, dissolved	7440-29-1	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, dissolved	7440-31-5	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Titanium, dissolved	7440-32-6	E421	0.00030	mg/L	<0.00030	<0.00030	0	Diff <2x LOR	----
		Tungsten, dissolved	7440-33-7	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.000269	0.000271	0.730%	20%	----
		Vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0033	0.0031	0.0001	Diff <2x LOR	----
		Zirconium, dissolved	7440-67-7	E421	0.00030	mg/L	<0.00030	<0.00030	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1869428)											
VA25A2509-006	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 1867605)											
VA25A2685-004	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
Aggregate Organics (QC Lot: 1868530)											
CG2501434-001	Anonymous	Phenols, total (4AAP)	----	E562	0.0010	mg/L	0.0021	0.0024	0.0003	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 1867630)						
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
Physical Tests (QCLot: 1870203)						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Physical Tests (QCLot: 1870205)						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Anions and Nutrients (QCLot: 1867261)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	# 0.0027	B
Anions and Nutrients (QCLot: 1867262)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1867266)						
Nitrogen, total	7727-37-9	E366	0.03	mg/L	<0.030	----
Anions and Nutrients (QCLot: 1867632)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 1867633)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 1867634)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 1867635)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1867636)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 1867637)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Organic / Inorganic Carbon (QCLot: 1867263)						
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	<0.50	----
Total Sulfides (QCLot: 1872369)						
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	----
Total Metals (QCLot: 1867050)						
Aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
Barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1867050) - continued						
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
Zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1870030)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1867043)						
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	<0.0010	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	<0.00010	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	<0.00010	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	<0.00010	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	<0.000020	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	<0.000050	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	<0.010	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	<0.0000050	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	<0.050	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	<0.000010	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	<0.00050	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	<0.00010	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	<0.010	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	<0.000050	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	<0.0010	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	<0.0050	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	<0.00010	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	<0.000050	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	<0.00050	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	<0.050	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	<0.050	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	<0.00020	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	<0.000050	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	<0.050	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	<0.000010	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	<0.050	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	<0.00020	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	<0.50	----
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	<0.00020	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	<0.000010	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	<0.00010	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	<0.00010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 1867043) - continued						
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	<0.00030	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	<0.00010	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	<0.000010	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	<0.00050	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	<0.00020	----
Dissolved Metals (QCLot: 1869428)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 1867605)						
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	<0.00050	----
Aggregate Organics (QCLot: 1868530)						
Phenols, total (4AAP)	----	E562	0.001	mg/L	<0.0010	----

Qualifiers

Qualifier	Description
B	*Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.*

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 1867630)									
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	500 mg/L	103	85.0	115	----
Physical Tests (QCLot: 1870203)									
Solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	98.7	85.0	115	----
Physical Tests (QCLot: 1870205)									
Solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	107	85.0	115	----
Anions and Nutrients (QCLot: 1867261)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.05 mg/L	96.4	80.0	120	----
Anions and Nutrients (QCLot: 1867262)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	105	85.0	115	----
Anions and Nutrients (QCLot: 1867266)									
Nitrogen, total	7727-37-9	E366	0.03	mg/L	0.5 mg/L	97.3	75.0	125	----
Anions and Nutrients (QCLot: 1867632)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	99.5	90.0	110	----
Anions and Nutrients (QCLot: 1867633)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1867634)									
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	97.5	85.0	115	----
Anions and Nutrients (QCLot: 1867635)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1867636)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	101	90.0	110	----
Anions and Nutrients (QCLot: 1867637)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	102	90.0	110	----
Organic / Inorganic Carbon (QCLot: 1867263)									
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	8.57 mg/L	101	80.0	120	----
Total Sulfides (QCLot: 1872369)									
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	0.08 mg/L	104	80.0	120	----
Total Metals (QCLot: 1867050)									

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1867050) - continued									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	97.6	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	101	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	104	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	107	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	91.8	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	98.8	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	92.8	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	102	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	93.9	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	99.8	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	100	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	102	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	105	80.0	120	----
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	100	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	91.4	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	101	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	102	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	102	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	102	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	101	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	110	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	103	80.0	120	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	102	80.0	120	----
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	103	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	97.2	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	102	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	101	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	86.9	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	104	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	99.8	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	95.9	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	102	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	96.6	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	101	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	100	80.0	120	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1867050) - continued									
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	104	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	100	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	97.7	80.0	120	----
Total Metals (QCLot: 1870030)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	97.5	80.0	120	----
Dissolved Metals (QCLot: 1867043)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	96.3	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	95.7	80.0	120	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	1 mg/L	100	80.0	120	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.25 mg/L	98.3	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	94.7	80.0	120	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	1 mg/L	97.6	80.0	120	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	1 mg/L	97.3	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	98.0	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	95.2	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	95.5	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	98.5	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	98.1	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	98.2	80.0	120	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	1 mg/L	102	80.0	120	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.5 mg/L	100	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	95.0	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	97.0	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	98.1	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	97.9	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	98.1	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	103	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	104	80.0	120	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	0.1 mg/L	97.3	80.0	120	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	1 mg/L	97.6	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	100	80.0	120	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.1 mg/L	92.9	80.0	120	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	50 mg/L	100	80.0	120	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	0.25 mg/L	95.8	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	92.6	80.0	120	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 1867043) - continued									
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	0.1 mg/L	97.6	80.0	120	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	1 mg/L	100	80.0	120	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	0.1 mg/L	94.4	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	97.7	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	96.2	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	99.1	80.0	120	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.005 mg/L	97.3	80.0	120	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.5 mg/L	99.4	80.0	120	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	98.6	80.0	120	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	0.1 mg/L	93.3	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	95.3	80.0	120	----
Speciated Metals (QCLot: 1867605)									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	0.25 mg/L	101	80.0	120	----
Aggregate Organics (QCLot: 1868530)									
Phenols, total (4AAP)	----	E562	0.001	mg/L	0.02 mg/L	96.6	85.0	115	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 1867261)										
FJ2500391-004	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0494 mg/L	0.05 mg/L	98.8	70.0	130	----
Anions and Nutrients (QCLot: 1867262)										
FJ2500391-002	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.109 mg/L	0.1 mg/L	109	75.0	125	----
Anions and Nutrients (QCLot: 1867266)										
VA25A2704-001	SQU US 1	Nitrogen, total	7727-37-9	E366	ND mg/L	----	ND	70.0	130	----
Anions and Nutrients (QCLot: 1867632)										
VA25A2695-002	Anonymous	Fluoride	16984-48-8	E235.F	0.971 mg/L	1 mg/L	97.1	75.0	125	----
Anions and Nutrients (QCLot: 1867633)										
VA25A2695-002	Anonymous	Chloride	16887-00-6	E235.Cl	ND mg/L	----	ND	75.0	125	----
Anions and Nutrients (QCLot: 1867634)										
VA25A2695-002	Anonymous	Bromide	24959-67-9	E235.Br-L	0.470 mg/L	0.5 mg/L	94.1	75.0	125	----
Anions and Nutrients (QCLot: 1867635)										
VA25A2695-002	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	2.44 mg/L	2.5 mg/L	97.6	75.0	125	----
Anions and Nutrients (QCLot: 1867636)										
VA25A2695-002	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.485 mg/L	0.5 mg/L	97.0	75.0	125	----
Anions and Nutrients (QCLot: 1867637)										
VA25A2695-002	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	98.3 mg/L	100 mg/L	98.3	75.0	125	----
Organic / Inorganic Carbon (QCLot: 1867263)										
FJ2500391-002	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	5.01 mg/L	5 mg/L	100	70.0	130	----
Total Sulfides (QCLot: 1872369)										
VA25A2665-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.245 mg/L	0.2 mg/L	123	75.0	125	----
Total Metals (QCLot: 1867050)										
VA25A2699-002	Anonymous	Aluminum, total	7429-90-5	E420	0.204 mg/L	0.2 mg/L	102	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0196 mg/L	0.02 mg/L	97.9	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0203 mg/L	0.02 mg/L	101	70.0	130	----
		Barium, total	7440-39-3	E420	0.0194 mg/L	0.02 mg/L	97.0	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0390 mg/L	0.04 mg/L	97.5	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.0107 mg/L	0.01 mg/L	107	70.0	130	----
		Boron, total	7440-42-8	E420	0.095 mg/L	0.1 mg/L	95.2	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00401 mg/L	0.004 mg/L	100	70.0	130	----
		Calcium, total	7440-70-2	E420	3.85 mg/L	4 mg/L	96.3	70.0	130	----
		Cesium, total	7440-46-2	E420	0.0100 mg/L	0.01 mg/L	100	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0406 mg/L	0.04 mg/L	101	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 1867050) - continued										
VA25A2699-002	Anonymous	Cobalt, total	7440-48-4	E420	0.0204 mg/L	0.02 mg/L	102	70.0	130	----
		Copper, total	7440-50-8	E420	0.0200 mg/L	0.02 mg/L	100	70.0	130	----
		Iron, total	7439-89-6	E420	2.00 mg/L	2 mg/L	100	70.0	130	----
		Lead, total	7439-92-1	E420	0.0205 mg/L	0.02 mg/L	102	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0922 mg/L	0.1 mg/L	92.2	70.0	130	----
		Magnesium, total	7439-95-4	E420	1.01 mg/L	1 mg/L	101	70.0	130	----
		Manganese, total	7439-96-5	E420	0.0212 mg/L	0.02 mg/L	106	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0186 mg/L	0.02 mg/L	93.0	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0402 mg/L	0.04 mg/L	100	70.0	130	----
		Phosphorus, total	7723-14-0	E420	8.97 mg/L	10 mg/L	89.7	70.0	130	----
		Potassium, total	7440-09-7	E420	3.92 mg/L	4 mg/L	97.9	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0207 mg/L	0.02 mg/L	104	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0398 mg/L	0.04 mg/L	99.6	70.0	130	----
		Silicon, total	7440-21-3	E420	9.37 mg/L	10 mg/L	93.7	70.0	130	----
		Silver, total	7440-22-4	E420	0.00396 mg/L	0.004 mg/L	98.9	70.0	130	----
		Sodium, total	7440-23-5	E420	2.19 mg/L	2 mg/L	109	70.0	130	----
		Strontium, total	7440-24-6	E420	0.0195 mg/L	0.02 mg/L	97.5	70.0	130	----
		Sulfur, total	7704-34-9	E420	19.7 mg/L	20 mg/L	98.7	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0379 mg/L	0.04 mg/L	94.8	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00395 mg/L	0.004 mg/L	98.7	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0204 mg/L	0.02 mg/L	102	70.0	130	----
		Tin, total	7440-31-5	E420	0.0193 mg/L	0.02 mg/L	96.3	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0391 mg/L	0.04 mg/L	97.8	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0198 mg/L	0.02 mg/L	99.2	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00392 mg/L	0.004 mg/L	97.9	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.1000 mg/L	0.1 mg/L	100.0	70.0	130	----
		Zinc, total	7440-66-6	E420	0.390 mg/L	0.4 mg/L	97.6	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0368 mg/L	0.04 mg/L	92.0	70.0	130	----
Total Metals (QCLot: 1870030)										
VA25A2691-002	Anonymous	Mercury, total	7439-97-6	E508	0.0000994 mg/L	0 mg/L	99.4	70.0	130	----
Dissolved Metals (QCLot: 1867043)										
VA25A2699-002	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.198 mg/L	0.2 mg/L	98.9	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0179 mg/L	0.02 mg/L	89.3	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0204 mg/L	0.02 mg/L	102	70.0	130	----
		Barium, dissolved	7440-39-3	E421	0.0205 mg/L	0.02 mg/L	102	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0416 mg/L	0.04 mg/L	104	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.00885 mg/L	0.01 mg/L	88.5	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.098 mg/L	0.1 mg/L	97.8	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00405 mg/L	0.004 mg/L	101	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	4.02 mg/L	4 mg/L	100	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.00918 mg/L	0.01 mg/L	91.8	70.0	130	----
		Chromium, dissolved	7440-47-3	E421	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0200 mg/L	0.02 mg/L	100	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 1867043) - continued										
VA25A2699-002	Anonymous	Copper, dissolved	7440-50-8	E421	0.0199 mg/L	0.02 mg/L	99.5	70.0	130	----
		Iron, dissolved	7439-89-6	E421	1.97 mg/L	2 mg/L	98.7	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0183 mg/L	0.02 mg/L	91.4	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.103 mg/L	0.1 mg/L	103	70.0	130	----
		Magnesium, dissolved	7439-95-4	E421	0.962 mg/L	1 mg/L	96.2	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	0.0204 mg/L	0.02 mg/L	102	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	0.0180 mg/L	0.02 mg/L	90.2	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0400 mg/L	0.04 mg/L	100.0	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	9.69 mg/L	10 mg/L	96.9	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	3.84 mg/L	4 mg/L	95.9	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0201 mg/L	0.02 mg/L	100	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0409 mg/L	0.04 mg/L	102	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	9.41 mg/L	10 mg/L	94.1	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00370 mg/L	0.004 mg/L	92.6	70.0	130	----
		Sodium, dissolved	7440-23-5	E421	1.97 mg/L	2 mg/L	98.3	70.0	130	----
		Strontium, dissolved	7440-24-6	E421	0.0187 mg/L	0.02 mg/L	93.7	70.0	130	----
		Sulfur, dissolved	7704-34-9	E421	19.4 mg/L	20 mg/L	97.3	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0383 mg/L	0.04 mg/L	95.8	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00363 mg/L	0.004 mg/L	90.7	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0187 mg/L	0.02 mg/L	93.4	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0183 mg/L	0.02 mg/L	91.4	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0378 mg/L	0.04 mg/L	94.5	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0179 mg/L	0.02 mg/L	89.6	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00363 mg/L	0.004 mg/L	90.8	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.0993 mg/L	0.1 mg/L	99.3	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.415 mg/L	0.4 mg/L	104	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0355 mg/L	0.04 mg/L	88.9	70.0	130	----
Dissolved Metals (QCLot: 1869428)										
VA25A2509-007	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000961 mg/L	0 mg/L	96.1	70.0	130	----
Speciated Metals (QCLot: 1867605)										
VA25A2685-005	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.261 mg/L	0.25 mg/L	104	70.0	130	----
Aggregate Organics (QCLot: 1868530)										
CG2501434-002	Anonymous	Phenols, total (4AAP)	----	E562	0.0202 mg/L	0.02 mg/L	101	75.0	125	----

Chain of Custody (COC) / Analytical Request Form

ALS Environmental
www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC Number: 17 -

Report To	Contact and company name below will appear on the final report	Report Format / Distribution		Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)
Company:	[redacted]	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)		Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply
Contact:	[redacted]	Quality Control (QC) Report with Report ☑ ☐ NO		PRIORITY (Business Days): 4 day [P4-20%] ☐ / 3 day [P3-25%] ☐ / 2 day [P2-50%] ☐ — EMERGENCY: 1 Business day [E1 - 100%] ☐ / Same Day, Weekend or Statutory holiday [E2 - 200% (Laboratory opening fees may apply)] ☐
Phone:	[redacted]	☑ Compare Results to Criteria on Report - provide details below if box checked		
	[redacted]	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX		
Street:	[redacted]	Email 1 or Fax	[redacted]	Date and Time Required for all E&P TATs: Feb 14 / 2025 hh mm
City/Province:	[redacted]	Email 2	[redacted]	For tests that can not be performed according to the service level selected, you will be contacted.
Postal Code:	[redacted]	Email 3	[redacted]	
Invoice To	[redacted]		[redacted]	
	[redacted]	Select Invoice	[redacted]	
Company:	[redacted]	Email 1 or Fax	[redacted]	
Contact:	[redacted]	Email 2	[redacted]	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	VA25-TRIT100-001	AFE/Cost Center:	PO#
Job #:	11964	Major/Minor Code:	Routing Code:
PO / AFE:	11964 - Task 20 - Phase 3C-4C	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):		ALS Contact: [redacted]	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Total metals + mercury	Dissolved metals + mercury	Total hexavalent chromium	Total trivalent chromium	TSS	TDS	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus)	Total sulfide (low) (as H2S), Unionized Sulfide (low)	Anions scan (Br, Cl, F, NO2, NO3, SO4)	General parameters (alkalinity)	DOC					SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
						F					P	P			F/P							
	SQU US 1	Feb 6/25	1:35	Water	R	R	R	R	R	R	R	R	R	R	R						N	9
	pH: 7.04 cond: 141 temp: 1.3																					
	SQU DS 1	Feb 6/25	2:25	Water	R	R	R	R	R	R	R	R	R	R	R						N	9
	pH: 7.04 cond: 111 temp: 0.9																					

Environmental Division
Vancouver
Work Order Reference
VA25A2704

Telephone : +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to ad (electr
Are samples taken from a Regulated DW System? ☐ ☑ NO	
Are samples for human consumption/ use? ☐ ☑ NO	Triton Project # 11964

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐
Ice Packs ☑ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐
Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			

SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by: [redacted]	Time: 4:50	Received by:	Date:	Time:	Received by:	Date: Feb 6	Time: 4:55

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Page 2 of 2

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Report To	Contact and company name below will appear on the final report
Company:	[redacted]
Contact:	
Phone:	
Street:	
City/Province:	
Postal Code:	
Invoice To	
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)

Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A

☐ Compare Results to Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: [redacted]

Email 2:

Email 3:

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax:

Email 2:

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply

☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum

☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum

☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum

☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum

☐ Same day [E2] if received by 10am M-S - 200% rush surcharge.

Additional fees may apply to rush requests on weekends, statutory holidays and for non-routine tests.

Date and Time Required for all E&P TATs: Feb dd-mmm-yy hh:mm am/pm

For all tests with rush TATs requested, please contact your AM to confirm availability.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	VA25-TRIT100-001	AFE/Cost Center:	PO#:
Job #:	11964	Major/Minor Code:	Routing Code:
PO / AFE:	11964 - Task 20 - Phase 3C-4C	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact: [redacted]	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Total metals + mercury	Dissolved metals + mercury	Total hexavalent chromium	Total trivalent chromium	TSS	TDS	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus)	Total sulfide (low) (as H2S), Unionized Sulfide (low)	Anions scan (Br, Cl, F, NO2, NO3, SO4)	General parameters (alkalinity)	DOC	Phenols			SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
							F					P	P			F/P						
	BCR Duplicate	Feb 6/25	1:35	Water	9	R	R	R	R	R	R	R	R	R	R	R	R					
	pH: 7.04 cond: 141 temp: 1.3																					
	~~BCR Field Blank~~			~~Water~~	~~9~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~					
	~~BCR Trip Blank~~			Water	~~6~~	~~R~~		~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~		~~R~~	~~R~~					

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?

☐ YES ☑ NO

Are samples for human consumption/ use?

☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

ESDAT EDD to ESdat_CA+tritonenv@ESdatLabSync.net, reports also to stephanie.renkers@triton-env.com

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			

SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
[redacted]	Time: 4:50	Received by:	Date:	Time:	Received by:	Date: Feb 6	Time: 4:55 pm

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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LY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form.**

BCR Site Receiving Environment Field Notes and Logs

FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-2-6-Renkers-6BC2C

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Downstream of Discharge
Inspection Date:	02/06/2025	**Location:**	BC Rail Site
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.725333 -123.165205
Temperature(c):	Low -8 High 0	**Permit:**	AE 111824
Weather Conditions:	Overcast	**Ground Conditions:**	Snow

Observations

Time: 14:25:00 **Flow Volume (visual):** low

Notes:

Odour Detected?:	No	**Notes:**	
Unusual Colour?	No	**Notes:**	
Unusual Observations?	No	**Notes:**	
Sheen on Water?	No	**Notes:**	

Samples Collected - Parameters

Total Metals + Mercury	Yes	**General Parameters (Alkalinity)**	Yes	**Other Sample:**	
Dissolved Metals + Mercury	Yes	**Total Sulfide, Unionized Sulfide**	Yes		
TSS	Yes	**Anions**	Yes		
TDS	Yes	**Total Trivalent Chromium**	Yes	**QA Samples:**	No
Nutrients	Yes	**VOC/VPH**	No		
DOC	Yes	**EPH, PAH, LEPH/HEPH**	No		
		Trout LC50	No		

Logger Maintenance

Logger Maintenance Performed?	No	**Photo of COC with Lab Signature?**	Yes

Describe Logger Maintenance

Photos

Photo: 1

Location: SQU DS

Description: Upstream view

Photo: 2

Location: SQU DS

Description: Across view

Photos

Photo: 3

Location: SQU DS

Description: Downstream view

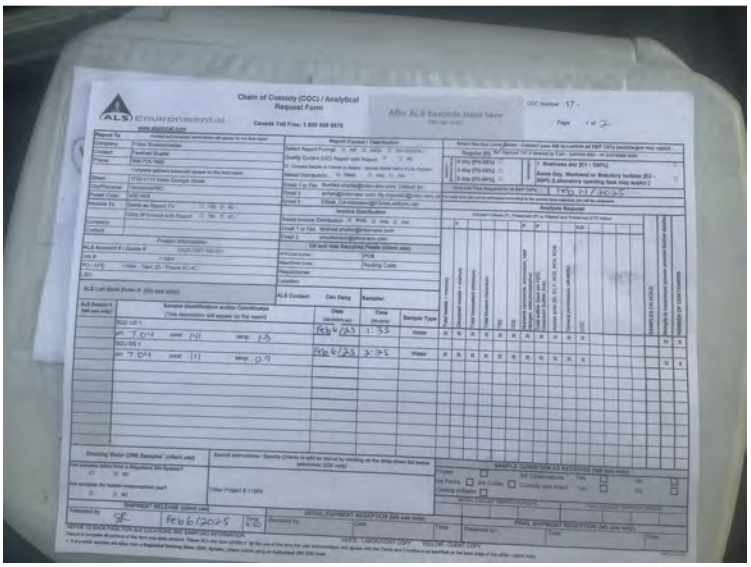


Photo: 4

Location: SQU DS

Description: Lab COC

Photos

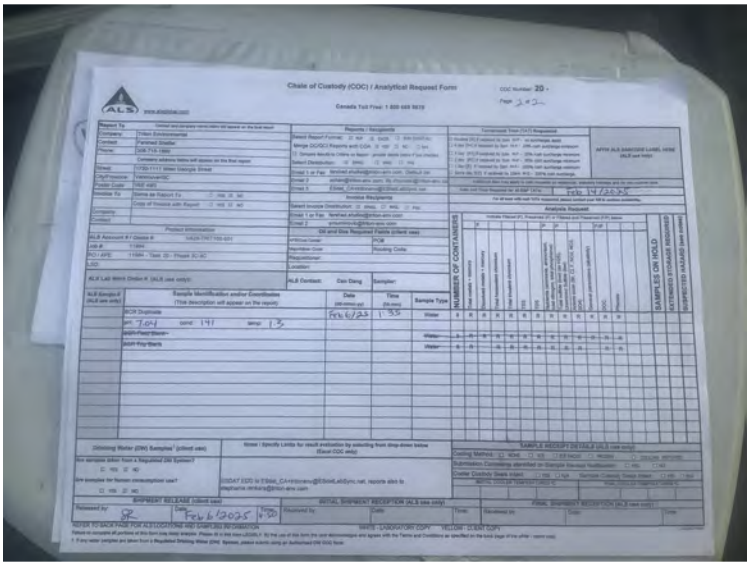


Photo: 5

Location: SQU DS

Description: Lab COC

Sign Off

Report Prepared By:	Stephanie Renkers	**Report Reviewed:**	Yes
Report Reviewer:		**Professional(s) of Record:**	
Name:			
Designation:			
Designation Number:			

FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-2-6-Renkers-1A627

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Upstream of Discharge
Inspection Date:	02/06/2025	**Location:**	BC Rail Site
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.726866 -123.163912
Temperature(c):	Low -8 High 0	**Permit:**	AE 111824
Weather Conditions:	Overcast	**Ground Conditions:**	Snow

Observations

Time: 13:35:00 **Flow Volume (visual):** low

Notes:

Odour Detected?:	No	**Notes:**	
Unusual Colour?	No	**Notes:**	
Unusual Observations?	No	**Notes:**	
Sheen on Water?	No	**Notes:**	

Samples Collected - Parameters

Total Metals + Mercury	Yes	**General Parameters (Alkalinity)**	Yes	**Other Sample:**	
Dissolved Metals + Mercury	Yes	**Total Sulfide, Unionized Sulfide**	Yes		
TSS	Yes	**Anions**	Yes		
TDS	Yes	**Total Trivalent Chromium**	Yes	**QA Samples:**	Yes
Nutrients	Yes	**VOC/VPH**	No		
DOC	Yes	**EPH, PAH, LEPH/HEPH**	No		
		Trout LC50	No		

Logger Maintenance

Logger Maintenance Performed?	No	**Photo of COC with Lab Signature?**	Yes

Describe Logger Maintenance

Photos

Photo: 1

Location: SQU US

Description: Upstream view

Photo: 2

Location: SQU US

Description: Across view

Photos

Photo: 3

Location: SQU US

Description: Downstream view

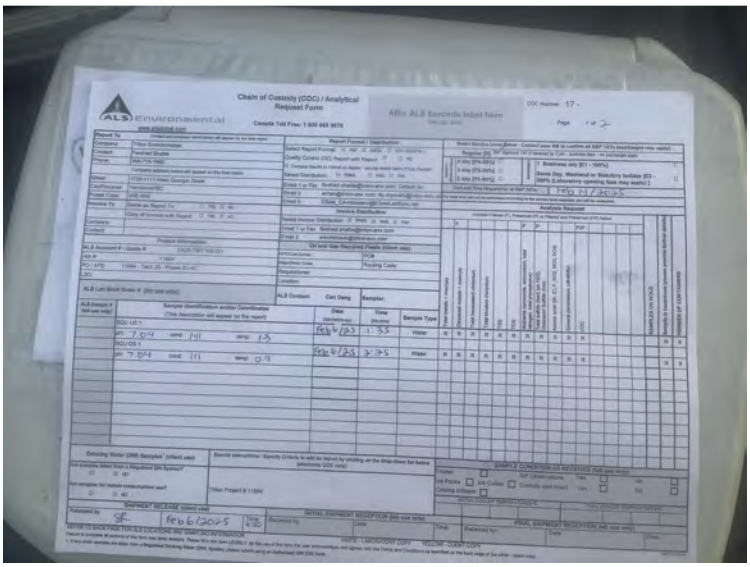


Photo: 4

Location: SQU US

Description: Lab COC

2025-2-6-Renkers-1A627

Photos

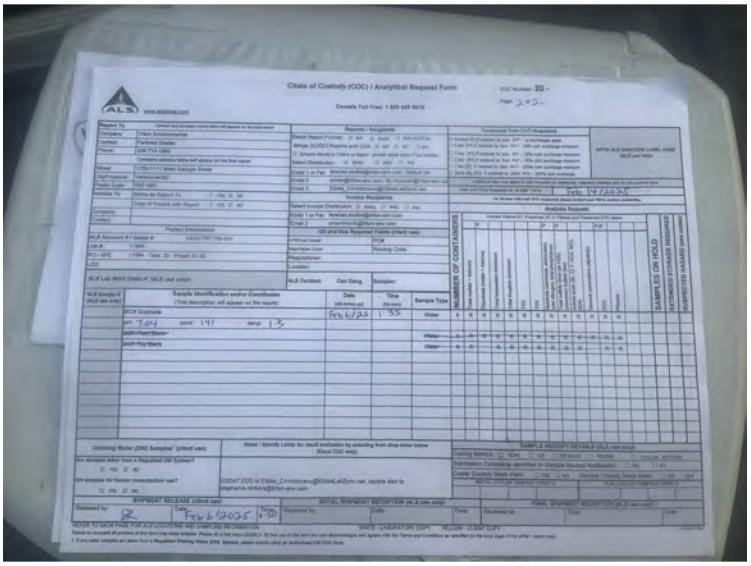


Photo: 5

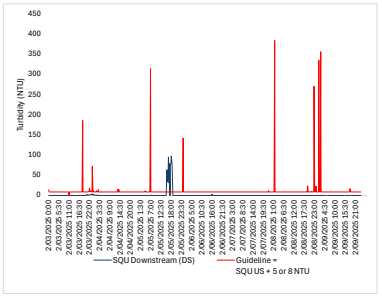
Location: SQU US

Description: Lab COC

Sign Off

Report Prepared By:	Stephanie Renkers	**Report Reviewed:**	Yes
Report Reviewer:		**Professional(s) of Record:**	
Name:			
Designation:			
Designation Number:			

BCR Plant Site	SQU Downstream (DS)							SQU Upstream (US)						
Date	Temperature (c)	Specific Conductivity (µS/cm)	Salinity PSU	pH	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Date	Temperature (c)	Specific Conductivity (µS/cm)	Salinity PSU	pH	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Guideline = SQU US + 5 or 8 NTU
2/03/2025 0:00	1.1	87.3	0.0	6.9	12.0	0.0	2/03/2025 0:00	0.7	14.8	0.0	5.2	14.3	8.5	13.5
2/03/2025 0:15	1.1	87.0	0.0	6.9	12.0	0.0	2/03/2025 0:15	0.2	0.0	0.0	2.4	14.5	0.1	8.1
2/03/2025 0:30	1.2	86.6	0.0	6.9	12.1	0.0	2/03/2025 0:30	0.0	0.0	0.0	4.4	14.6	0.0	8.0
2/03/2025 0:45	1.2	86.3	0.0	6.9	12.0	0.0	2/03/2025 0:45	-0.3	0.0	0.0	4.9	14.6	0.0	8.0
2/03/2025 1:00	1.2	86.0	0.0	6.9	12.0	0.0	2/03/2025 1:00	-0.7	0.0	0.0	5.2	14.8	0.0	8.0
2/03/2025 1:15	1.2	85.8	0.0	6.9	12.0	0.0	2/03/2025 1:15	-1.1	0.0	0.0	4.2	14.9	0.0	8.0
2/03/2025 1:30	1.1	85.7	0.0	6.9	12.0	0.0	2/03/2025 1:30	-1.5	0.0	0.0	4.3	15.1	0.0	8.0
2/03/2025 1:45	1.1	85.2	0.0	6.9	12.0	0.0	2/03/2025 1:45	-1.8	0.0	0.0	4.4	15.3	0.0	8.0
2/03/2025 2:00	1.1	84.6	0.0	6.8	12.0	0.0	2/03/2025 2:00	-2.0	0.0	0.0	4.5	15.5	0.0	8.0
2/03/2025 2:15	1.1	84.3	0.0	6.8	12.0	0.0	2/03/2025 2:15	-2.3	0.0	0.0	4.6	15.7	0.0	8.0
2/03/2025 2:30	1.1	84.0	0.0	6.8	12.0	0.0	2/03/2025 2:30	-2.4	0.0	0.0	4.3	15.7	0.0	8.0
2/03/2025 2:45	1.1	83.7	0.0	6.8	12.0	0.0	2/03/2025 2:45	-2.5	0.0	0.0	4.3	15.8	0.0	8.0
2/03/2025 3:00	1.0	83.5	0.0	6.8	12.0	0.0	2/03/2025 3:00	-2.6	0.0	0.0	4.4	15.9	0.0	8.0
2/03/2025 3:15	1.0	83.2	0.0	6.8	12.0	0.0	2/03/2025 3:15	-2.8	0.0	0.0	4.5	16.0	0.0	8.0
2/03/2025 3:30	1.0	83.2	0.0	6.8	12.0	0.0	2/03/2025 3:30	-2.9	0.0	0.0	4.6	16.1	0.0	8.0
2/03/2025 3:45	0.9	83.1	0.0	6.8	12.0	0.0	2/03/2025 3:45	-3.1	0.0	0.0	4.5	16.2	0.0	8.0
2/03/2025 4:00	0.9	83.3	0.0	6.8	12.1	0.0	2/03/2025 4:00	-3.3	0.0	0.0	4.5	16.4	0.0	8.0
2/03/2025 4:15	0.9	83.1	0.0	6.9	12.2	0.0	2/03/2025 4:15	-3.5	0.0	0.0	4.3	16.5	0.0	8.0
2/03/2025 4:30	0.8	83.1	0.0	6.9	12.2	0.0	2/03/2025 4:30	-3.6	0.0	0.0	4.4	16.6	0.0	8.0
2/03/2025 4:45	0.8	82.9	0.0	6.9	12.2	0.0	2/03/2025 4:45	-3.8	0.0	0.0	3.8	16.7	0.0	8.0
2/03/2025 5:00	0.8	82.7	0.0	6.9	12.2	0.0	2/03/2025 5:00	-3.9	0.0	0.0	4.7	16.8	0.0	8.0
2/03/2025 5:15	0.8	82.5	0.0	6.9	12.2	0.0	2/03/2025 5:15	-4.0	0.0	0.0	4.6	16.9	0.0	8.0
2/03/2025 5:30	0.8	82.5	0.0	6.9	12.2	0.0	2/03/2025 5:30	-4.1	0.0	0.0	4.6	17.0	0.0	8.0
2/03/2025 5:45	0.8	82.4	0.0	6.9	12.2	0.0	2/03/2025 5:45	-4.2	0.0	0.0	4.6	17.0	0.0	8.0
2/03/2025 6:00	0.8	82.1	0.0	6.9	12.2	0.0	2/03/2025 6:00	-4.3	0.0	0.0	3.9	17.1	0.0	8.0
2/03/2025 6:15	-4.5	0.0	0.0	4.1	17.2	0.0	2/03/2025 6:15	-4.5	0.0	0.0	4.1	17.2	0.0	8.0
2/03/2025 6:30	0.7	82.1	0.0	6.9	12.2	0.0	2/03/2025 6:30	-4.6	0.0	0.0	4.0	17.3	0.0	8.0
2/03/2025 6:45	0.6	82.2	0.0	6.9	12.2	0.0	2/03/2025 6:45	-4.7	0.0	0.0	4.4	17.4	0.0	8.0
2/03/2025 7:00	0.6	82.1	0.0	6.9	12.3	0.0	2/03/2025 7:00	0.8	14.3	0.0		13.1	0.0	8.0
2/03/2025 7:15	0.5	82.0	0.0	7.0	12.4	0.0	2/03/2025 7:15	1.0	23.7	0.0		13.1	0.0	8.0
2/03/2025 7:30	0.5	81.6	0.0	6.9	12.4	0.0	2/03/2025 7:30	1.0	90.8	0.0	6.8	13.1	0.0	8.0
2/03/2025 7:45	0.5	81.2	0.0	7.0	12.4	0.0	2/03/2025 7:45	1.2	92.4	0.0	7.1	13.0	0.0	8.0
2/03/2025 8:00	0.5	80.9	0.0	7.0	12.5	0.0	2/03/2025 8:00	1.3	92.3	0.0	7.1	13.0	0.0	8.0
2/03/2025 8:15	0.4	80.6	0.0	7.0	12.5	0.0	2/03/2025 8:15	1.3	91.9	0.0	7.1	13.1	0.0	8.0
2/03/2025 8:30	0.4	80.5	0.0	7.0	12.5	0.0	2/03/2025 8:30	1.3	91.8	0.0	7.2	13.1	0.0	8.0
2/03/2025 8:45	0.4	80.3	0.0	7.0	12.5	0.0	2/03/2025 8:45	1.3	91.7	0.0	7.2	13.1	0.0	8.0
2/03/2025 9:00	0.4	80.2	0.0	7.0	12.5	0.0	2/03/2025 9:00	1.3	91.6	0.0	7.2	13.1	0.0	8.0
2/03/2025 9:15	0.4	80.1	0.0	7.0	12.5	0.0	2/03/2025 9:15	1.3	91.6	0.0	7.1	13.1	0.0	8.0
2/03/2025 9:30	0.4	79.9	0.0	7.0	12.5	0.0	2/03/2025 9:30	1.3	93.9	0.0	7.1	13.1	0.0	8.0
2/03/2025 9:45	0.4	79.7	0.0	7.0	12.5	0.0	2/03/2025 9:45	1.3	92.8	0.0	7.1	13.1	0.0	8.0
2/03/2025 10:00	0.4	79.7	0.0	7.0	12.5	0.0	2/03/2025 10:00	1.3	91.9	0.0	7.1	13.1	0.0	8.0
2/03/2025 10:15	0.4	80.3	0.0	7.0	12.5	0.0	2/03/2025 10:15	1.3	91.5	0.0	7.1	13.1	0.0	8.0
2/03/2025 10:30	0.3	79.4	0.0	7.0	12.6	0.0	2/03/2025 10:30	1.3	91.8	0.0	7.1	13.2	0.0	8.0
2/03/2025 10:45	0.3	79.0	0.0	7.0	12.6	0.0	2/03/2025 10:45	1.3	93.8	0.0	7.1	13.2	0.0	8.0
2/03/2025 11:00	0.3	79.4	0.0	7.1	12.6	0.0	2/03/2025 11:00	1.3	101.3	0.0	7.1	13.1	0.0	0.0
2/03/2025 11:15	0.3	81.6	0.0	7.1	12.6	0.0	2/03/2025 11:15	1.3	105.4	0.0	7.1	13.1	0.0	8.0
2/03/2025 11:30	0.3	87.5	0.0	7.0	12.7	0.0	2/03/2025 11:30	1.4	109.9	0.0	7.1	13.1	0.0	8.0
2/03/2025 11:45	0.4	91.8	0.0	7.0	12.7	0.0	2/03/2025 11:45	1.4	113.6	0.1	7.1	13.2	0.0	8.0
2/03/2025 12:00	0.4	93.5	0.0	7.0	12.7	0.0	2/03/2025 12:00	1.6	126.6	0.1	7.0	13.0	0.0	8.0
2/03/2025 12:15	0.5	98.8	0.1	7.0	12.7	0.0	2/03/2025 12:15	1.6	127.4	0.1	7.0	13.0	0.0	8.0
2/03/2025 12:30	0.5	102.1	0.1	7.0	12.6	0.0	2/03/2025 12:30	1.7	120.3	0.1	7.1	13.2	0.0	8.0
2/03/2025 12:45	0.6	100.1	0.1	7.0	12.7	0.0	2/03/2025 12:45	1.7	116.4	0.1	7.1	13.2	0.0	8.0
2/03/2025 13:00	0.6	97.6	0.1	7.0	12.8	0.0	2/03/2025 13:00	1.8	125.8	0.1	7.1	13.1	0.0	8.0
2/03/2025 13:15	0.7	100.6	0.1	7.0	12.7	0.0	2/03/2025 13:15	1.9	126.1	0.1	7.1	13.1	0.0	8.0
2/03/2025 13:30	0.7	101.8	0.1	7.0	12.7	0.0	2/03/2025 13:30	1.9	118.4	0.1	7.1	13.1	0.0	8.0
2/03/2025 13:45	0.8	101.1	0.1	7.0	12.7	0.0	2/03/2025 13:45	1.2	7.0	0.0	7.1	14.0	0.0	8.0
2/03/2025 14:00	0.8	94.2	0.0	6.8	12.6	0.0	2/03/2025 14:00	1.0	7.9	0.0	6.4	14.2	0.0	8.0
2/03/2025 14:15	0.8	89.4	0.0	7.0	12.7	0.0	2/03/2025 14:15	0.2	0.0	0.0	5.2	14.3	0.0	8.0
2/03/2025 14:30	0.8	85.8	0.0	6.9	12.6	0.0	2/03/2025 14:30	-0.1	0.0	0.0	4.7	14.5	0.0	8.0
2/03/2025 14:45	0.8	84.4	0.0	6.9	12.7	0.0	2/03/2025 14:45	-0.4	0.0	0.0	5.5	14.6	0.0	8.0
2/03/2025 15:00	0.8	83.7	0.0	7.0	12.7	0.0	2/03/2025 15:00	-0.7	0.0	0.0	5.5	14.8	0.0	8.0
2/03/2025 15:15	0.8	83.7	0.0	6.9	12.6	0.0	2/03/2025 15:15	-1.1	0.0	0.0	5.2	15.0	0.0	8.0
2/03/2025 15:30	0.8	83.6	0.0	6.9	12.6	0.0	2/03/2025 15:30	-1.6	0.0	0.0	5.5	15.2	0.0	8.0
2/03/2025 15:45	0.8	83.6	0.0	6.9	12.6	0.0	2/03/2025 15:45	-1.9	0.0	0.0	5.0	15.4	0.0	8.0
2/03/2025 16:00	0.9	83.8	0.0	6.9	12.6	0.0	2/03/2025 16:00	-2.2	0.0	0.0	5.5	15.6	0.0	8.0
2/03/2025 16:15	0.9	83.9	0.0	6.9	12.6	0.0	2/03/2025 16:15	-2.4	0.0	0.0	5.5	15.8	0.0	8.0
2/03/2025 16:30	0.8	83.7	0.0	6.9	12.6	0.0	2/03/2025 16:30	-2.5	0.0	0.0	5.4	15.9	0.0	8.0
2/03/2025 16:45	0.9	83.8	0.0	6.9	12.6	0.0	2/03/2025 16:45	-2.6	0.0	0.0	5.6	16.0	0.0	8.0
2/03/2025 17:00	0.8	82.8	0.0	6.9	12.7	0.0	2/03/2025 17:00	-2.8	0.0	0.0	5.2	16.0	0.0	8.0
2/03/2025 17:15	0.8	81.7	0.0	7.0	12.8	0.0	2/03/2025 17:15	-2.9	0.0	0.0	5.5	16.1	0.0	8.0
2/03/2025 17:30	0.8	80.4	0.0	7.0	12.8	0.0	2/03/2025 17:30	-2.5	0.0	0.0	5.8	16.2	0.0	8.0
2/03/2025 17:45	0.7	79.4	0.0	7.0	12.8	0.0	2/03/2025 17:45	-1.1	0.0	0.0		15.6	0.0	8.0
2/03/2025 18:00	0.7	78.7	0.0	7.0	12.8	0.0	2/03/2025 18:00	0.2	0.0	0.0		14.6	0.0	8.0
2/03/2025 18:15	0.7	78.1	0.0	7.0	12.8	0.0	2/03/2025 18:15	1.3	8.1	0.0	2.4	13.5	179.8	184.8
2/03/2025 18:30	0.7	77.3	0.0	7.0	12.7	0.0	2/03/2025 18:30	1.5	88.3	0.0	7.6	13.3	0.0	8.0
2/03/2025 18:45	0.6	76.7	0.0	7.0	12.7	0.0	2/03/2025 18:45	1.6	88.6	0.0	7.7	13.2	0.0	8.0
2/03/2025 19:00	0.6	76.3	0.0	7.0	12.7	0.0	2/03/2025 19:00	1.6	88.4	0.0	7.6	13.2	0.0	8.0
2/03/2025 19:15	0.6	76.0	0.0	7.0	12.7	0.3	2/03/2025 19:15	1.6	88.4	0.0	7.6	13.1	0.0	8.0
2/03/2025 19:30	0.6	76.0	0.0	7.0	12.6	0.0	2/03/2025 19:30	1.6	88.5	0.0	7.6	13.1	0.0	8.0
2/03/2025 19:45	0.5	75.8	0.0	6.9	12.6	0.0	2/03/2025 19:45	1.6	88.4	0.0	7.5	13.1	0.0	8.0
2/03/2025 20:00	0.5	75.9	0.0	7.0	12.6	0.0	2/03/2025 20:00	1.5	88.6	0.0	7.5	13.1	0.0	8.0
2/03/2025 20:15	0.5	75.7	0.0	7.0	12.7	0.2	2/03/2025 20:15	1.5	88.7	0.0	7.5	13.1	0.0	8.0
2/03/2025 20:30	0.5	75.4	0.0	7.0	12.6	1.7	2/03/2025 20:30	1.5	88.0	0.0	7.4	13.1	1.3	9.3
2/03/2025 20:45	0.4	75.1	0.0	6.9	12.7	0.2	2/03/2025 20:45	1.5	88.1	0.0	7.4	13.1	0.0	8.0
2/03/2025 21:00	0.4	74.6	0.0	6.9	12.7	0.2	2/03/2025 21:00	1.4	87.3	0.0	7.4	13.2	0.0	8.0
2/03/2025 21:15	0.4	74.1	0.0	7.0	12.7	1.0	2/03/2025 21:15	1.4	86.5	0.0	7.4	13.2	0.0	8.0
2/03/2025 21:30	0.3	73.5	0.0	7.0	12.7	1.3	2/03/2025 21:30	1.4	85.7	0.0	7.4	13.2	1.1	9.1
2/03/2025 21:45	0.3	72.9	0.0	7.0	12.7	1.2	2/03/2025 21:45	1.4	85.4	0.0	7.5	13.3	2.1	10.1
2/03/2025 22:00	0.3	72.7	0.0	7.0	12.8	1.4	2/03/2025 22:00	1.4	85.5	0.0	7.5	13.3	12.4	17.4
2/03/2025 22:15	0.3	73.2	0.0	7.1	12.8	0.5	2/03/2025 22:15	1.4	86.4	0.0	7.5	13.2	0.7	8.7
2/03/2025 22:30	0.4	75.5	0.0	7.0	12.7	1.0	2/03/2025 22:30	1.5	88.8	0.0	7.5	13.2	2.5	10.5
2/03/2025 22:45	0.5	78.0	0.0	7.0	12.7	1.4	2/03/2025 22:45	1.5	91.0	0.0	7.5	13.2	0.0	8.0
2/03/2025 23:00	0.5	80.4	0.0	7.0	12.7	1.5	2/03/2025 23:00	1.6	92.6	0.0	7.5	13.2	0.6	8.6
2/03/2025 23:15	0.6	82.9	0.0	7.0	12.7	2.5	2/03/2025 23:15	1.7	94.8	0.0	7.5	13.2	0.0	8.0
2/03/2025 23:30	0.7	85.2	0.0	7.1	12.6	2.2	2/03/2025 23:30	1.8	98.1	0.0	7.5	13.1	66.9	71.9
2/03/2025 23:45	0.8	87.4	0.0	7.1	12.6	3.3	2/03/2025 23:45	1.8	101.3	0.0	7.5	13.1	1.5	9.5
2/04/2025 0:00	0.8	88.4	0.0	7.1	12.6	0.4	2/04/2025 0:00	1.9	101.2	0.0	7.4	13.1	0.0	8.0
2/04/2025 0:15	0.9	88.3	0.0	7.1	12.6	1.3	2/04/2025 0:15	1.9	100.7	0.0	7.4	13.0	2.6	10.6
2/04/2025 0:30	0.9	87.1	0.0	7.1	12.6	0.3	2/04/2025 0:30	2.0	98.2	0.0	7.5	13.1	0.0	8.0
2/04/2025 0:45	0.9	85.8	0.0	7.1	12.6	0.5	2/04/2025 0:45	2.0	98.8	0.0	7.4	13.1	0.0	8.0
2/04/2025 1:00	0.9	84.4	0.0	7.1	12.6	0.3	2/04/2025 1:00	2.0	95.9	0.0	7.4	13.1	0.0	8.0
2/04/2025 1:15	1.0	83.0	0.0	7.1	12.6	0.3	2/04/2025 1:15	2.0	94.9	0.0	7.4	13.0	0.0	8.0
2/04/2025 1:30	1.0	81.7	0.0	7.1	12.6	0.1	2/04/2025 1:30	2.0	93.8	0.0	7.4	13.1	0.0	8.0
2/04/2025 1:45	1.0	79.7	0.0	7.1	12.6	0.0	2/04/2025 1:45	2.0	93.3	0.0	7.4	13.0	3.4	11.4
2/04/2025 2:00	1.0	79.8	0.0	7.1	12.6	0.1	2/04/2025 2:00	2.0	92.8	0.0	7.4	13.0	0.0	8.0



2/04/2025 2:15	1.0	80.4	0.0	7.1	12.6	0.0	2/04/2025 2:15	2.0	93.5	0.0	7.4	13.0	0.0	8.0
2/04/2025 2:30	0.9	79.5	0.0	7.1	12.6	0.0	2/04/2025 2:30	2.0	92.3	0.0	7.3	13.0	0.0	8.0
2/04/2025 2:45	0.9	79.7	0.0	7.1	12.6	0.0	2/04/2025 2:45	1.9	77.7	0.0	7.3	13.0	6.1	14.1
2/04/2025 3:00	1.0	79.7	0.0	7.1	12.6	0.0	2/04/2025 3:00	1.8	8.1	0.0	7.3	13.1	0.0	8.0
2/04/2025 3:15	0.9	80.2	0.0	7.1	12.6	0.0	2/04/2025 3:15	1.4	5.0	0.0	7.3	13.8	0.0	8.0
2/04/2025 3:30	0.9	80.5	0.0	7.1	12.6	0.0	2/04/2025 3:30	1.2	7.0	0.0	7.4	14.1	0.0	8.0
2/04/2025 3:45	0.9	81.0	0.0	7.0	12.6	0.0	2/04/2025 3:45	1.0	7.3	0.0	7.4	14.2	0.0	8.0
2/04/2025 4:00	0.9	81.2	0.0	7.0	12.5	0.0	2/04/2025 4:00	1.0	7.0	0.0	7.4	14.0	0.0	8.0
2/04/2025 4:15	0.9	81.4	0.0	7.0	12.5	0.0	2/04/2025 4:15	0.9	25.5	0.0	7.0	14.1	0.0	8.0
2/04/2025 4:30	0.9	81.4	0.0	7.0	12.5	0.0	2/04/2025 4:30	0.2	0.0	0.0	4.0	14.4	0.0	8.0
2/04/2025 4:45	0.9	81.6	0.0	7.0	12.5	0.0	2/04/2025 4:45	-0.3	0.0	0.0	4.3	14.6	0.0	8.0
2/04/2025 5:00	0.9	82.0	0.0	7.0	12.5	0.0	2/04/2025 5:00	-0.9	0.0	0.0	6.8	14.9	0.0	8.0
2/04/2025 5:15	0.9	81.9	0.0	7.0	12.5	0.0	2/04/2025 5:15	-1.4	0.0	0.0	6.4	15.2	0.0	8.0
2/04/2025 5:30	0.9	81.3	0.0	7.0	12.6	0.0	2/04/2025 5:30	-2.1	0.0	0.0	6.5	15.5	0.0	8.0
2/04/2025 5:45	0.9	81.4	0.0	7.0	12.5	0.0	2/04/2025 5:45	-2.5	0.0	0.0	6.7	15.8	0.0	8.0
2/04/2025 6:00	0.9	81.5	0.0	7.0	12.5	0.0	2/04/2025 6:00	-2.8	0.0	0.0	6.4	16.0	0.0	8.0
2/04/2025 6:15	0.9	81.7	0.0	7.0	12.5	0.0	2/04/2025 6:15	-3.1	0.0	0.0	6.1	16.2	0.0	8.0
2/04/2025 6:30	0.9	82.0	0.0	7.0	12.6	0.0	2/04/2025 6:30	-3.1	0.0	0.0	6.1	16.4	0.0	8.0
2/04/2025 6:45	0.8	81.2	0.0	7.1	12.6	0.0	2/04/2025 6:45	0.8	95.3	0.0		13.5	0.0	8.0
2/04/2025 7:00	0.8	81.0	0.0	7.1	12.6	0.0	2/04/2025 7:00	1.5	93.7	0.0	1.3	13.2	0.0	8.0
2/04/2025 7:15	0.8	80.5	0.0	7.1	12.6	0.0	2/04/2025 7:15	1.6	93.4	0.0	7.3	13.2	0.0	8.0
2/04/2025 7:30	0.8	80.8	0.0	7.1	12.6	0.0	2/04/2025 7:30	1.7	92.2	0.0	7.7	13.1	0.0	8.0
2/04/2025 7:45	0.8	81.2	0.0	7.1	12.6	0.0	2/04/2025 7:45	1.7	92.0	0.0	7.7	13.1	0.0	8.0
2/04/2025 8:00	0.8	80.7	0.0	7.1	12.6	0.0	2/04/2025 8:00	1.7	91.0	0.0	7.7	13.1	0.0	8.0
2/04/2025 8:15	0.8	80.6	0.0	7.1	12.6	0.0	2/04/2025 8:15	1.7	90.8	0.0	7.7	13.1	0.0	8.0
2/04/2025 8:30	0.8	80.5	0.0	7.1	12.6	0.0	2/04/2025 8:30	1.7	90.8	0.0	7.7	13.1	0.0	8.0
2/04/2025 8:45	0.8	80.7	0.0	7.2	12.6	0.0	2/04/2025 8:45	1.7	90.6	0.0	7.7	13.1	0.0	8.0
2/04/2025 9:00	0.8	80.7	0.0	7.2	12.6	0.0	2/04/2025 9:00	1.7	90.6	0.0	7.7	13.1	0.0	8.0
2/04/2025 9:15	0.7	80.8	0.0	7.2	12.6	0.0	2/04/2025 9:15	1.7	91.1	0.0	7.7	13.1	0.0	8.0
2/04/2025 9:30	0.8	80.7	0.0	7.2	12.6	0.0	2/04/2025 9:30	1.7	91.4	0.0	7.7	13.1	0.0	8.0
2/04/2025 9:45	0.8	80.4	0.0	7.2	12.6	0.0	2/04/2025 9:45	1.7	91.3	0.0	7.7	13.1	0.0	8.0
2/04/2025 10:00	0.8	80.7	0.0	7.2	12.6	0.0	2/04/2025 10:00	1.7	90.8	0.0	7.6	13.1	0.0	8.0
2/04/2025 10:15	0.7	80.8	0.0	7.2	12.6	0.0	2/04/2025 10:15	1.7	90.2	0.0	7.6	13.2	0.0	8.0
2/04/2025 10:30	0.7	80.4	0.0	7.2	12.6	0.0	2/04/2025 10:30	1.7	90.1	0.0	7.6	13.2	0.0	8.0
2/04/2025 10:45	0.7	82.6	0.0	7.2	12.6	0.0	2/04/2025 10:45	1.7	90.8	0.0	7.6	13.2	0.0	8.0
2/04/2025 11:00	0.7	79.8	0.0	7.2	12.7	0.0	2/04/2025 11:00	1.7	91.5	0.0	7.6	13.2	0.0	8.0
2/04/2025 11:15	0.7	80.3	0.0	7.2	12.7	0.0	2/04/2025 11:15	1.7	95.4	0.0	7.6	13.2	0.0	8.0
2/04/2025 11:30	0.8	81.7	0.0	7.2	12.7	0.0	2/04/2025 11:30	1.7	101.7	0.0	7.6	13.2	0.0	8.0
2/04/2025 11:45	0.8	82.3	0.0	7.1	12.7	0.0	2/04/2025 11:45	1.8	106.4	0.0	7.6	13.1	0.0	8.0
2/04/2025 12:00	0.8	88.7	0.0	7.1	12.7	0.0	2/04/2025 12:00	1.9	113.2	0.1	7.5	13.1	0.0	8.0
2/04/2025 12:15	0.9	95.6	0.1	7.1	12.7	0.0	2/04/2025 12:15	2.0	118.0	0.1	7.5	13.1	0.0	8.0
2/04/2025 12:30	0.9	98.0	0.1	7.1	12.7	0.0	2/04/2025 12:30	2.1	130.2	0.1	7.5	13.0	0.0	8.0
2/04/2025 12:45	1.1	109.9	0.1	7.1	12.6	0.0	2/04/2025 12:45	2.2	137.0	0.1	7.4	12.9	0.0	8.0
2/04/2025 13:00	1.1	110.0	0.1	7.1	12.6	0.0	2/04/2025 13:00	2.3	126.4	0.1	7.4	13.0	0.0	8.0
2/04/2025 13:15	1.2	103.3	0.1	7.0	12.6	0.0	2/04/2025 13:15	2.2	116.7	0.1	7.5	13.1	9.4	14.4
2/04/2025 13:30	1.2	99.7	0.1	7.1	12.7	0.0	2/04/2025 13:30	2.3	126.0	0.1	7.5	13.1	0.0	8.0
2/04/2025 13:45	1.3	102.8	0.1	7.1	12.6	0.0	2/04/2025 13:45	2.0	5.7	0.0	7.4	13.6	6.6	14.6
2/04/2025 14:00	1.4	104.8	0.1	7.0	12.6	0.0	2/04/2025 14:00	1.0	5.9	0.0	7.1	14.0	0.0	8.0
2/04/2025 14:15	1.4	102.3	0.1	7.0	12.5	0.0	2/04/2025 14:15	0.9	25.6	0.0	7.0	14.0	0.0	8.0
2/04/2025 14:30	1.4	95.5	0.1	7.0	12.5	0.0	2/04/2025 14:30	0.5	0.0	0.0	6.2	14.3	0.0	8.0
2/04/2025 14:45	1.5	90.2	0.0	7.0	12.5	0.0	2/04/2025 14:45	0.3	0.0	0.0	6.6	14.4	0.0	8.0
2/04/2025 15:00	1.5	88.1	0.0	7.0	12.5	0.0	2/04/2025 15:00	0.2	0.0	0.0	6.2	14.4	0.0	8.0
2/04/2025 15:15	1.5	87.5	0.0	7.0	12.5	0.0	2/04/2025 15:15	0.2	0.0	0.0	6.4	14.4	0.0	8.0
2/04/2025 15:30	1.6	87.5	0.0	7.0	12.4	0.0	2/04/2025 15:30	0.2	0.0	0.0	6.3	14.4	0.0	8.0
2/04/2025 15:45	1.6	87.2	0.0	6.9	12.3	0.0	2/04/2025 15:45	0.2	0.0	0.0	6.4	14.4	0.0	8.0
2/04/2025 16:00	1.6	88.0	0.0	6.9	12.2	0.0	2/04/2025 16:00	0.2	0.0	0.0	6.5	14.4	0.0	8.0
2/04/2025 16:15	1.6	87.9	0.0	6.9	12.2	0.0	2/04/2025 16:15	0.1	0.0	0.0	6.4	14.4	0.0	8.0
2/04/2025 16:30	1.6	88.1	0.0	6.9	12.2	0.0	2/04/2025 16:30	0.0	0.0	0.0	6.2	14.5	0.0	8.0
2/04/2025 16:45	1.6	88.2	0.0		12.3	0.0	2/04/2025 16:45	-0.1	0.0	0.0	5.9	14.5	0.0	8.0
2/04/2025 17:00	1.6	88.6	0.0	6.9	12.3	0.0	2/04/2025 17:00	-0.2	0.0	0.0	6.1	14.6	0.0	8.0
2/04/2025 17:15	1.6	88.8	0.0	6.9	12.3	0.0	2/04/2025 17:15	-0.3	0.0	0.0	6.1	14.6	0.0	8.0
2/04/2025 17:30	1.6	89.2	0.0	6.9	12.3	0.0	2/04/2025 17:30	-0.5	0.0	0.0	6.2	14.7	0.0	8.0
2/04/2025 17:45	1.6	89.5	0.0	7.0	12.3	0.0	2/04/2025 17:45	-0.7	0.0	0.0	5.9	14.8	0.0	8.0
2/04/2025 18:00	1.6	89.8	0.0	6.9	12.3	0.0	2/04/2025 18:00	-0.9	0.0	0.0	6.1	14.9	0.0	8.0
2/04/2025 18:15	1.6	89.9	0.0	6.9	12.3	0.0	2/04/2025 18:15	-1.0	0.0	0.0	6.4	15.0	0.0	8.0
2/04/2025 18:30	1.5	90.1	0.0	7.0	12.4	0.0	2/04/2025 18:30	-1.1	0.0	0.0	6.5	15.0	0.0	8.0
2/04/2025 18:45	1.5	90.2	0.0	7.0	12.4	0.0	2/04/2025 18:45	-1.3	0.0	0.0	6.3	15.2	0.0	8.0
2/04/2025 19:00	1.5	90.3	0.0	6.9	12.3	0.0	2/04/2025 19:00	-1.5	0.0	0.0	6.4	15.2	0.0	8.0
2/04/2025 19:15	1.4	90.3	0.0	7.0	12.3	0.0	2/04/2025 19:15	-1.6	0.0	0.0	6.5	15.3	0.0	8.0
2/04/2025 19:30	1.4	90.7	0.0	7.0	12.2	0.0	2/04/2025 19:30	-1.8	0.0	0.0	6.4	15.4	0.0	8.0
2/04/2025 19:45	1.4	91.0	0.0	7.0	12.3	0.0	2/04/2025 19:45	-1.8	0.0	0.0	6.6	15.5	0.0	8.0
2/04/2025 20:00	1.3	91.1	0.0	7.0	12.3	0.0	2/04/2025 20:00	-2.0	0.0	0.0	6.3	15.6	0.0	8.0
2/04/2025 20:15	1.3	91.3	0.0	7.0	12.3	0.0	2/04/2025 20:15	-2.1	0.0	0.0	6.6	15.7	0.0	8.0
2/04/2025 20:30	1.3	91.5	0.0	6.9	12.3	0.0	2/04/2025 20:30	-2.2	0.0	0.0	6.6	15.8	0.0	8.0
2/04/2025 20:45	1.2	91.7	0.0	6.8	12.2	0.0	2/04/2025 20:45	-2.3	0.0	0.0	6.7	15.8	0.0	8.0
2/04/2025 21:00	1.2	92.0	0.0	6.9	12.2	0.0	2/04/2025 21:00	-2.4	0.0	0.0	6.8	15.8	0.0	8.0
2/04/2025 21:15	1.2	92.1	0.0	6.9	12.1	0.0	2/04/2025 21:15	-2.5	0.0	0.0	6.9	16.0	0.0	8.0
2/04/2025 21:30	1.2	92.0	0.0	6.9	12.1	0.0	2/04/2025 21:30	-2.7	0.0	0.0	6.7	16.0	0.0	8.0
2/04/2025 21:45	1.1	91.7	0.0	6.8	12.1	0.0	2/04/2025 21:45	-2.9	0.0	0.0	6.9	16.2	0.0	8.0
2/04/2025 22:00	1.1	92.1	0.0	6.8	12.1	0.0	2/04/2025 22:00	-3.0	0.0	0.0	7.1	16.2	0.0	8.0
2/04/2025 22:15	1.1	91.8	0.0	6.9	12.1	0.0	2/04/2025 22:15	-3.1	0.0	0.0	7.0	16.3	0.0	8.0
2/04/2025 22:30	1.0	90.5	0.0	7.0	12.1	0.0	2/04/2025 22:30	-3.3	0.0	0.0	7.0	16.5	0.0	8.0
2/04/2025 22:45	0.9	88.9	0.0	7.0	12.3	0.0	2/04/2025 22:45	-2.9	0.0	0.0	7.2	16.4	0.0	8.0
2/04/2025 23:00	0.9	87.7	0.0	7.0	12.3	0.0	2/04/2025 23:00	1.0	93.0	0.0		13.3	0.0	8.0
2/04/2025 23:15	0.7	85.5	0.0	7.0	12.4	0.0	2/04/2025 23:15	1.5	95.1	0.0	7.3	12.9	0.0	8.0
2/04/2025 23:30	0.7	83.6	0.0	7.0	12.4	0.0	2/04/2025 23:30	1.5	93.2	0.0	7.9	13.0	0.0	8.0
2/04/2025 23:45	0.7	82.5	0.0	7.0	12.4	0.0	2/04/2025 23:45	1.5	91.9	0.0	8.0	13.0	0.0	8.0
2/05/2025 0:00	0.6	81.6	0.0	7.0	12.5	0.0	2/05/2025 0:00	1.5	91.5	0.0	7.8	13.0	0.0	8.0
2/05/2025 0:15	0.5	80.6	0.0	7.0	12.5	0.0	2/05/2025 0:15	1.5	91.5	0.0	7.7	13.0	0.0	8.0
2/05/2025 0:30	0.4	80.4	0.0	6.9	12.5	0.0	2/05/2025 0:30	1.5	91.3	0.0	7.5	13.0	0.0	8.0
2/05/2025 0:45	0.4	80.3	0.0	6.9	12.5	0.0	2/05/2025 0:45	1.5	91.7	0.0	7.5	13.0	0.0	8.0
2/05/2025 1:00	0.4	80.1	0.0	7.0	12.5	0.0	2/05/2025 1:00	1.5	91.7	0.0	7.5	13.0	0.0	8.0
2/05/2025 1:15	0.4	80.0	0.0	6.9	12.5	0.0	2/05/2025 1:15	1.5	92.1	0.0	7.5	13.0	0.0	8.0
2/05/2025 1:30	0.3	80.2	0.0	6.9	12.5	0.0	2/05/2025 1:30	1.5	91.9	0.0	7.5	13.0	0.0	8.0
2/05/2025 1:45	0.3	79.4	0.0	7.0	12.6	0.0	2/05/2025 1:45	1.5	92.1	0.0	7.5	13.0	0.0	8.0
2/05/2025 2:00	0.3	80.0	0.0	7.0	12.6	0.0	2/05/2025 2:00	1.4	92.3	0.0	7.5	13.0	0.0	8.0
2/05/2025 2:15	0.3	79.8	0.0	7.0	12.6	0.0	2/05/2025 2:15	1.4	92.4	0.0	7.5	13.0	0.0	8.0
2/05/2025 2:30	0.3	79.5	0.0	7.0	12.6	0.0	2/05/2025 2:30	1.4	92.0	0.0	7.5	13.0	0.0	8.0
2/05/2025 2:45	0.3	79.0	0.0	7.0	12.6	0.0	2/05/2025 2:45	1.4	92.5	0.0	7.5	13.1	0.0	8.0
2/05/2025 3:00	0.3	78.9	0.0	7.0	12.6	0.0	2/05/2025 3:00	1.4	94.5	0.0	7.5	13.0	0.0	8.0
2/05/2025 3:15	0.3	79.2	0.0	7.0	12.6	0.0	2/05/2025 3:15	1.4	93.3	0.0	7.5	13.0	0.0	8.0
2/05/2025 3:30	0.3	78.9	0.0	7.0	12.6	0.0	2/05/2025 3:30	1.4	93.0	0.0	7.5	13.0	0.0	8.0
2/05/2025 3:45	0.4	78.9	0.0	7.0	12.7	0.0	2/05/2025 3:45	1.1	4.9	0.0	7.5	13.3	1.5	9.5
2/05/2025 4:00	0.4	79.1	0.0	7.0	12.7	0.0	2/05/2025 4:00	1.0	6.7	0.0	7.3	14.0	2.2	10.2
2/05/2025 4:15	0.4	79.4	0.0	7.0	12.7	0.0	2/05/2025 4:15	0.2	0.0	0.0	7.0	14.4	0.0	8.0
2/05/2025 4:30	0.4	79.9	0.0	7.0	12.6	0.0	2/05/2025 4:30	-0.5	0.0	0.0	4.9	14.7	0.0	8.0
2/05/2025 4:45	0.5	80.2	0.0	7.0	12.7	0.0	2/05/2025 4:45	-1.1	0.0	0.0	6.4	15.1	0.0	8.0
2/05/2025 5:00	0.5	80.9	0.0	7.0	12.6	0.0	2/05/2025 5:00	-1.6	0.0	0.0	6.6	15.2	0.0	8.0
2/05/2025 5:15	0.5	81.0	0.0	7.0	12.7	0.0	2/05/2025 5:15	-2.1	0.0	0.0	6.3	15.6	0.0	8.0
2/05/2025 5:30	0.5	81.2	0.0	7.0	12.7	0.0	2/05/2025 5:30	-2.8	0.0	0.0	6.4	16.1	0.0	8.0

2/05/2025 5:45	0.5	81.4	0.0	7.0	12.6	0.0	2/05/2025 5:45	-3.1	0.0	0.0	6.6	16.3	0.0	8.0
2/05/2025 6:00	0.5	81.5	0.0	7.0	12.6	0.0	2/05/2025 6:00	-3.5	0.0	0.0	6.3	16.6	0.0	8.0
2/05/2025 6:15	0.5	81.5	0.0	7.0	12.5	0.0	2/05/2025 6:15	-3.8	0.0	0.0	6.4	16.8	0.0	8.0
2/05/2025 6:30	0.5	81.2	0.0	7.1	12.6	0.0	2/05/2025 6:30	-3.8	0.0	0.0	6.7	16.9	0.0	8.0
2/05/2025 6:45	0.5	81.0	0.0	7.1	12.6	0.0	2/05/2025 6:45	-1.3	0.0	0.0		14.9	308.0	313.0
2/05/2025 7:00	0.5	80.8	0.0	7.1	12.6	0.0	2/05/2025 7:00	1.0	26.2	0.0		13.3	0.0	8.0
2/05/2025 7:15	0.5	81.1	0.0	7.1	12.6	0.1	2/05/2025 7:15	1.1	93.9	0.0	4.1	13.3	0.0	8.0
2/05/2025 7:30	0.5	80.8	0.0	7.1	12.6	0.2	2/05/2025 7:30	1.3	87.0	0.0	7.3	13.1	0.0	8.0
2/05/2025 7:45	0.5	80.8	0.0	7.1	12.6	0.0	2/05/2025 7:45	1.3	91.5	0.0	7.6	13.1	0.0	8.0
2/05/2025 8:00	0.5	80.7	0.0	7.1	12.6	0.0	2/05/2025 8:00	1.4	90.9	0.0	7.6	13.1	0.0	8.0
2/05/2025 8:15	0.5	80.7	0.0	7.1	12.6	0.0	2/05/2025 8:15	1.4	90.7	0.0	7.6	13.1	0.0	8.0
2/05/2025 8:30	0.5	80.6	0.0	7.1	12.6	0.0	2/05/2025 8:30	1.4	90.7	0.0	7.6	13.2	0.0	8.0
2/05/2025 8:45	0.5	80.6	0.0	7.1	12.6	0.0	2/05/2025 8:45	1.4	90.9	0.0	7.7	13.2	0.0	8.0
2/05/2025 9:00	0.5	80.8	0.0	7.1	12.6	0.0	2/05/2025 9:00	1.5	91.1	0.0	7.7	13.2	0.0	8.0
2/05/2025 9:15	0.5	81.0	0.0	7.1	12.6	0.0	2/05/2025 9:15	1.5	91.3	0.0	7.7	13.2	0.0	8.0
2/05/2025 9:30	0.5	82.3	0.0	7.1	12.6	0.0	2/05/2025 9:30	1.5	92.2	0.0	7.7	13.2	0.0	8.0
2/05/2025 9:45	0.5	83.2	0.0	7.1	12.6	0.0	2/05/2025 9:45	1.5	93.0	0.0	7.7	13.1	0.0	8.0
2/05/2025 10:00	0.5	83.3	0.0	7.1	12.6	0.0	2/05/2025 10:00	1.5	94.0	0.0	7.7	13.1	0.0	8.0
2/05/2025 10:15	0.5	82.8	0.0	7.1	12.6	0.0	2/05/2025 10:15	1.5	95.4	0.0	7.7	13.1	0.0	8.0
2/05/2025 10:30	0.5	81.8	0.0	7.1	12.7	0.0	2/05/2025 10:30	1.5	95.4	0.0	7.7	13.1	0.0	8.0
2/05/2025 10:45	0.5	82.1	0.0	7.1	12.7	0.0	2/05/2025 10:45	1.5	94.4	0.0	7.8	13.1	0.0	8.0
2/05/2025 11:00	0.6	84.9	0.0	7.1	12.8	0.0	2/05/2025 11:00	1.5	93.1	0.0	7.8	13.1	0.0	8.0
2/05/2025 11:15	0.6	88.1	0.0	7.1	12.7	0.0	2/05/2025 11:15	1.5	92.4	0.0	7.8	13.2	0.0	8.0
2/05/2025 11:30	0.7	92.6	0.0	7.1	12.7	0.0	2/05/2025 11:30	1.5	93.1	0.0	7.8	13.2	0.0	8.0
2/05/2025 11:45	0.8	94.9	0.1	7.1	12.7	0.0	2/05/2025 11:45	1.6	97.6	0.0	7.8	13.3	0.0	8.0
2/05/2025 12:00	0.9	99.4	0.1	7.1	12.6	0.0	2/05/2025 12:00	1.7	103.5	0.0	7.7	13.2	0.0	8.0
2/05/2025 12:15	1.0	103.4	0.1	7.0	12.6	0.0	2/05/2025 12:15	1.8	110.0	0.0	7.7	13.2	0.0	8.0
2/05/2025 12:30	1.1	102.3	0.1	7.0	12.7	0.0	2/05/2025 12:30	1.9	115.6	0.1	7.6	13.1	0.0	8.0
2/05/2025 12:45	1.2	101.7	0.1	7.0	12.6	0.0	2/05/2025 12:45	2.0	124.7	0.1	7.5	13.0	0.0	8.0
2/05/2025 13:00	1.2	102.7	0.1	7.0	12.6	0.0	2/05/2025 13:00	2.1	123.4	0.1	7.5	13.0	0.0	8.0
2/05/2025 13:15	1.3	105.2	0.1	7.0	12.6	0.0	2/05/2025 13:15	2.2	121.5	0.1	7.5	13.0	0.0	8.0
2/05/2025 13:30	1.3	105.7	0.1	7.0	12.5	0.0	2/05/2025 13:30	2.2	119.8	0.1	7.5	13.1	0.0	8.0
2/05/2025 13:45	1.3	104.9	0.1	7.0	12.5	0.0	2/05/2025 13:45	2.3	119.4	0.1	7.5	13.1	0.0	8.0
2/05/2025 14:00	1.2	102.7	0.1	7.0	12.6	0.0	2/05/2025 14:00	2.4	126.0	0.1	7.5	13.0	0.0	8.0
2/05/2025 14:15	1.3	105.2	0.1	7.0	12.6	0.0	2/05/2025 14:15	2.1	6.0	0.0	7.4	13.7	0.0	8.0
2/05/2025 14:30	1.3	105.7	0.1	7.0	12.5	0.0	2/05/2025 14:30	1.0	6.0	0.0	7.4	14.1	0.0	8.0
2/05/2025 14:45	1.3	104.9	0.1	7.0	12.5	0.0	2/05/2025 14:45	1.0	9.7	0.0	7.6	14.3	0.0	8.0
2/05/2025 15:00	1.3	100.1	0.1	7.0	12.5	0.0	2/05/2025 15:00	0.7	30.4	0.0	7.4	14.3	0.0	8.0
2/05/2025 15:15	1.4	97.6	0.1	7.0	12.5	0.6	2/05/2025 15:15	0.6	0.0	0.0	6.9	14.3	0.0	8.0
2/05/2025 15:30	1.4	95.1	0.1	7.0	12.4	63.0	2/05/2025 15:30	0.5	0.0	0.0	6.5	14.3	0.0	8.0
2/05/2025 15:45	1.4	91.4	0.0	6.9	12.3	32.4	2/05/2025 15:45	0.4	0.0	0.0	5.9	14.4	0.0	8.0
2/05/2025 16:00	1.4	91.2	0.0	7.0	12.4	43.0	2/05/2025 16:00	0.4	0.0	0.0	6.5	14.4	0.0	8.0
2/05/2025 16:15	1.5	90.8	0.0	6.9	12.4	54.4	2/05/2025 16:15	0.3	0.0	0.0	6.6	14.4	0.0	8.0
2/05/2025 16:30	1.5	90.7	0.0	6.9	12.3	94.7	2/05/2025 16:30	0.3	0.0	0.0	6.5	14.4	0.0	8.0
2/05/2025 16:45	1.5	90.8	0.0	6.9	12.3	30.4	2/05/2025 16:45	0.2	0.0	0.0	6.6	14.4	0.0	8.0
2/05/2025 17:00	1.5	90.9	0.0	6.9	12.3	78.1	2/05/2025 17:00	0.2	0.0	0.0	6.5	14.5	0.0	8.0
2/05/2025 17:15	1.5	90.8	0.0	6.9	12.3	0.0	2/05/2025 17:15	0.1	0.0	0.0	6.4	14.5	0.0	8.0
2/05/2025 17:30	1.5	90.6	0.0	6.9	12.3	74.1	2/05/2025 17:30	0.0	0.0	0.0	6.3	14.5	0.0	8.0
2/05/2025 17:45	1.5	90.5	0.0	6.9	12.3	80.8	2/05/2025 17:45	-0.2	0.0	0.0	6.3	14.6	0.0	8.0
2/05/2025 18:00	1.4	90.1	0.0	6.9	12.3	97.5	2/05/2025 18:00	-0.3	0.0	0.0	6.2	14.6	0.0	8.0
2/05/2025 18:15	1.4	91.5	0.0	6.9	12.2	79.4	2/05/2025 18:15	-0.4	0.0	0.0	6.2	14.7	0.0	8.0
2/05/2025 18:30	1.4	92.0	0.0	6.9	12.3	58.6	2/05/2025 18:30	-0.6	0.0	0.0	6.1	14.8	0.0	8.0
2/05/2025 18:45	1.4	91.8	0.0	7.0	12.3	0.0	2/05/2025 18:45	-0.8	0.0	0.0	6.1	14.9	0.0	8.0
2/05/2025 19:00	1.4	91.8	0.0	6.9	12.3	0.0	2/05/2025 19:00	-1.0	0.0	0.0	6.2	15.0	0.0	8.0
2/05/2025 19:15	1.4	92.1	0.0	6.9	12.0	0.0	2/05/2025 19:15	-1.1	0.0	0.0	6.3	15.1	0.0	8.0
2/05/2025 19:30	1.4	92.7	0.0	6.9	11.9	0.0	2/05/2025 19:30	-1.2	0.0	0.0	6.1	15.1	0.0	8.0
2/05/2025 19:45	1.4	92.8	0.0	6.9	12.1	0.0	2/05/2025 19:45	-1.4	0.0	0.0	6.0	15.3	0.0	8.0
2/05/2025 20:00	1.3	93.1	0.0	6.9	12.2	0.0	2/05/2025 20:00	-1.6	0.0	0.0	6.2	15.4	0.0	8.0
2/05/2025 20:15	1.3	93.3	0.0	6.9	12.3	0.0	2/05/2025 20:15	-1.8	0.0	0.0	6.2	15.5	0.0	8.0
2/05/2025 20:30	1.3	93.5	0.0	6.9	12.2	0.0	2/05/2025 20:30	-2.0	0.0	0.0	6.2	15.6	0.0	8.0
2/05/2025 20:45	1.3	93.7	0.0	7.0	12.3	0.0	2/05/2025 20:45	-2.1	0.0	0.0	6.4	15.7	0.0	8.0
2/05/2025 21:00	1.3	93.8	0.0	6.9	12.2	0.0	2/05/2025 21:00	-2.2	0.0	0.0	6.3	15.8	0.0	8.0
2/05/2025 21:15	1.2	93.2	0.0	6.9	12.1	0.0	2/05/2025 21:15	-2.3	0.0	0.0	6.3	15.8	0.0	8.0
2/05/2025 21:30	1.2	92.8	0.0	6.9	12.1	0.0	2/05/2025 21:30	-2.3	0.0	0.0	6.1	15.8	0.0	8.0
2/05/2025 21:45	1.2	93.1	0.0	6.9	12.0	0.0	2/05/2025 21:45	-2.3	0.0	0.0	6.3	15.9	0.0	8.0
2/05/2025 22:00	1.2	94.1	0.0	6.9	12.0	0.0	2/05/2025 22:00	-2.4	0.0	0.0	6.2	15.9	0.0	8.0
2/05/2025 22:15	1.2	93.4	0.0	6.9	12.0	0.0	2/05/2025 22:15	-2.6	0.0	0.0	6.3	16.0	0.0	8.0
2/05/2025 22:30	1.2	94.5	0.1	6.9	11.6	0.0	2/05/2025 22:30	-2.7	0.0	0.0	6.4	16.1	0.0	8.0
2/05/2025 22:45	1.2	94.7	0.1	6.9	12.0	0.0	2/05/2025 22:45	-2.7	0.0	0.0	6.4	16.1	0.0	8.0
2/05/2025 23:00	1.1	94.6	0.1	6.9	12.0	0.0	2/05/2025 23:00	-2.7	0.0	0.0	6.4	16.1	0.0	8.0
2/05/2025 23:15	1.1	94.6	0.1	6.9	12.1	0.0	2/05/2025 23:15	-2.6	0.0	0.0	6.2	16.1	0.0	8.0
2/05/2025 23:30	1.1	94.4	0.0	6.9	12.1	0.0	2/05/2025 23:30	-2.6	0.0	0.0	6.4	16.1	0.0	8.0
2/05/2025 23:45	1.0	94.3	0.0	6.9	12.0	0.0	2/05/2025 23:45	-2.6	0.0	0.0	6.3	16.1	0.0	8.0
2/06/2025 0:00	1.0	93.9	0.0	6.9	12.1	0.0	2/06/2025 0:00	-2.6	0.0	0.0	6.3	16.1	0.0	8.0
2/06/2025 0:15	1.0	93.5	0.0	6.9	12.2	0.0	2/06/2025 0:15	-0.9	0.0	0.0		14.6	136.5	141.5
2/06/2025 0:30	1.0	93.3	0.0	6.9	12.2	0.0	2/06/2025 0:30	1.4	97.4	0.0		12.9	0.0	8.0
2/06/2025 0:45	0.9	92.6	0.0	6.9	12.3	0.0	2/06/2025 0:45	1.6	99.9	0.0	7.5	12.9	0.0	8.0
2/06/2025 1:00	0.9	91.5	0.0	7.0	12.3	0.0	2/06/2025 1:00	1.6	98.2	0.0	7.7	12.9	0.0	8.0
2/06/2025 1:15	0.8	90.6	0.0	7.0	12.3	0.0	2/06/2025 1:15	1.7	97.4	0.0	7.8	12.9	0.0	8.0
2/06/2025 1:30	0.8	90.0	0.0	7.0	12.3	0.0	2/06/2025 1:30	1.7	97.2	0.0	7.8	12.8	0.0	8.0
2/06/2025 1:45	0.8	89.5	0.0	7.0	12.3	0.0	2/06/2025 1:45	1.7	98.9	0.0	7.8	12.9	0.0	8.0
2/06/2025 2:00	0.8	89.1	0.0	7.0	12.4	0.0	2/06/2025 2:00	1.7	98.3	0.0	7.8	12.9	0.0	8.0
2/06/2025 2:15	0.8	88.7	0.0	7.0	12.4	0.0	2/06/2025 2:15	1.7	97.8	0.0	7.8	12.9	0.0	8.0
2/06/2025 2:30	0.7	88.1	0.0	7.0	12.4	0.0	2/06/2025 2:30	1.7	97.3	0.0	7.9	12.9	0.0	8.0
2/06/2025 2:45	0.7	87.6	0.0	7.0	12.4	0.0	2/06/2025 2:45	1.8	97.5	0.0	7.9	12.9	0.0	8.0
2/06/2025 3:00	0.7	87.6	0.0	7.0	12.4	0.0	2/06/2025 3:00	1.8	98.0	0.0	7.8	12.9	0.0	8.0
2/06/2025 3:15	0.7	87.8	0.0	7.0	12.4	0.0	2/06/2025 3:15	1.8	100.6	0.0	7.8	12.9	0.0	8.0
2/06/2025 3:30	0.8	88.5	0.0	7.0	12.4	0.0	2/06/2025 3:30	1.8	100.7	0.0	7.7	12.9	0.0	8.0
2/06/2025 3:45	0.7	89.4	0.0	7.0	12.4	0.0	2/06/2025 3:45	1.8	100.4	0.0	7.6	12.9	0.0	8.0
2/06/2025 4:00	0.7	89.3	0.0	7.0	12.3	0.0	2/06/2025 4:00	1.8	103.4	0.0	7.5	12.8	0.0	8.0
2/06/2025 4:15	0.7	91.5	0.0	7.0	12.3	0.0	2/06/2025 4:15	1.8	106.1	0.0	7.5	12.8	0.0	8.0
2/06/2025 4:30	0.8	94.2	0.0	7.0	12.3	0.0	2/06/2025 4:30	1.9	108.0	0.0	7.5	12.7	0.0	8.0
2/06/2025 4:45	0.8	95.1	0.1	7.0	12.3	0.0	2/06/2025 4:45	1.9	109.0	0.0	7.5	12.7	0.0	8.0
2/06/2025 5:00	0.8	95.6	0.1	7.0	12.3	0.0	2/06/2025 5:00	1.9	111.7	0.1	7.5	12.7	0.0	8.0
2/06/2025 5:15	0.8	97.1	0.1	7.0	12.2	0.0	2/06/2025 5:15	1.9	113.1	0.1	7.5	12.6	0.0	8.0
2/06/2025 5:30	0.8	97.7	0.1	6.9	12.2	0.0	2/06/2025 5:30	1.8	111.9	0.1	7.5	12.6	0.0	8.0
2/06/2025 5:45	0.7	95.9	0.1	7.0	12.2	0.0	2/06/2025 5:45	1.8	106.8	0.0	7.5	12.7	0.0	8.0
2/06/2025 6:00	0.7	94.7	0.1	7.0	12.3	0.0	2/06/2025 6:00	1.8	109.0	0.0	7.5	12.7	0.0	8.0
2/06/2025 6:15	0.7	95.2	0.1	6.9	12.3	0.0	2/06/2025 6:15	1.8	109.1	0.0	7.5	12.7	0.0	8.0
2/06/2025 6:30	0.7	94.9	0.1	6.9	12.3	0.0	2/06/2025 6:30	1.7	105.3	0.0	7.5	12.7	0.0	8.0
2/06/2025 6:45	0.6	92.9	0.0	6.9	12.2	0.0	2/06/2025 6:45	1.7	102.7	0.0	7.5	12.8	0.0	8.0
2/06/2025 7:00	0.6	92.5	0.0	6.9	12.3	0.0	2/06/2025 7:00	1.7	101.6	0.0	7.5	12.8	0.0	8.0
2/06/2025 7:15	0.6	91.1	0.0	7.0	12.3	0.0	2/06/2025 7:15	1.7	101.4	0.0	7.5	12.8	0.0	8.0
2/06/2025 7:30	0.6	90.5	0.0	7.0	12.3	0.0	2/06/2025 7:30	1.7	100.7	0.0	7.5	12.8	0.0	8.0
2/06/2025 7:45	0.6	90.0	0.0	7.0	12.4	0.0	2/06/2025 7:45	1.7	99.8	0.0	7.5	12.8	0.0	8.0
2/06/2025 8:00	0.6	89.4	0.0	7.0	12.4	0.0	2/06/2025 8:00	1.6	98.8	0.0	7.5	12.8	0.0	8.0
2/06/2025 8:15	0.6	88.0	0.0	7.0	12.4	0.0	2/06/2025 8:15	1.6	97.6	0.0	7.5	12.9	0.0	8.0
2/06/2025 8:30	0.6	87.8	0.0	6.9	12.4	0.0	2/06/2025 8:30	1.6	96.7	0.0	7.5	12.9	0.0	8.0
2/06/2025 8:45	0.5	87.1	0.0	7.0	12.4	0.0	2/06/2025 8:45	1.6	96.3	0.0	7.5	13.0	0.0	8.0
2/06/2025 9:00	0.5	86.9	0.0	7.0	12.4	0.0	2/06/2025 9:00	1.6	96.0	0.0	7.5	13.0	0.0	8.0

2/06/2025 9:15	0.5	86.7	0.0	7.0	12.5	0.0	2/06/2025 9:15	1.6	95.8	0.0	7.5	13.0	0.0	8.0
2/06/2025 9:30	0.5	86.3	0.0	7.0	12.5	0.0	2/06/2025 9:30	1.6	95.7	0.0	7.5	13.0	0.0	8.0
2/06/2025 9:45	0.5	86.2	0.0	7.0	12.5	0.0	2/06/2025 9:45	1.6	95.3	0.0	7.5	13.0	0.0	8.0
2/06/2025 10:00	0.5	85.8	0.0	7.0	12.5	0.0	2/06/2025 10:00	1.6	95.4	0.0	7.5	13.0	0.0	8.0
2/06/2025 10:15	0.5	85.7	0.0	7.0	12.5	0.0	2/06/2025 10:15	1.6	95.7	0.0	7.5	13.0	0.0	8.0
2/06/2025 10:30	0.5	85.6	0.0	7.0	12.5	0.0	2/06/2025 10:30	1.6	96.1	0.0	7.5	13.0	0.0	8.0
2/06/2025 10:45	0.5	85.7	0.0	7.0	12.5	0.0	2/06/2025 10:45	1.6	96.1	0.0	7.5	13.1	0.0	8.0
2/06/2025 11:00	0.5	85.7	0.0	7.0	12.5	0.0	2/06/2025 11:00	1.7	98.5	0.0	7.5	13.1	0.0	8.0
2/06/2025 11:15	0.6	85.7	0.0	7.0	12.6	0.0	2/06/2025 11:15	1.7	98.8	0.0	7.5	13.1	0.0	8.0
2/06/2025 11:30	0.6	86.7	0.0	7.0	12.6	0.0	2/06/2025 11:30	1.7	98.0	0.0	7.5	13.1	0.0	8.0
2/06/2025 11:45	0.6	86.7	0.0	7.0	12.6	0.0	2/06/2025 11:45	1.7	96.1	0.0	7.5	13.2	0.0	8.0
2/06/2025 12:00	0.6	86.3	0.0	7.0	12.7	0.0	2/06/2025 12:00	1.8	95.3	0.0	7.5	13.3	0.0	8.0
2/06/2025 12:15	0.7	86.1	0.0	7.0	12.7	0.0	2/06/2025 12:15	1.8	98.0	0.0	7.5	13.3	0.0	8.0
2/06/2025 12:30	0.7	85.1	0.0	7.1	12.8	0.0	2/06/2025 12:30	1.9	104.7	0.0	7.5	13.3	0.0	8.0
2/06/2025 12:45	0.8	87.1	0.0	7.0	12.8	0.0	2/06/2025 12:45	2.0	106.9	0.0	7.5	13.2	0.0	8.0
2/06/2025 13:00	0.9	89.4	0.0	7.0	12.8	0.0	2/06/2025 13:00	2.1	112.5	0.1	7.5	13.2	0.0	8.0
2/06/2025 13:15	1.0	95.2	0.1	7.0	12.7	0.0	2/06/2025 13:15	2.3	121.2	0.1	7.4	13.1	0.0	8.0
2/06/2025 13:30	1.1	99.9	0.1	7.0	12.7	0.0	2/06/2025 13:30	2.4	119.0	0.1	7.4	13.1	0.0	8.0
2/06/2025 13:45	1.2	101.5	0.1	6.9	12.7	0.0	2/06/2025 13:45	2.4	115.9	0.1	7.4	13.1	0.0	8.0
2/06/2025 14:00	1.3	99.9	0.1	7.0	12.7	0.0	2/06/2025 14:00	2.5	117.7	0.1	7.4	13.1	0.0	8.0
2/06/2025 14:15	1.4	103.9	0.1	6.9	12.6	0.0	2/06/2025 14:15	2.7	121.2	0.1	7.4	13.1	0.0	8.0
2/06/2025 14:30	1.5	106.9	0.1	6.9	12.6	0.0	2/06/2025 14:30	2.8	129.9	0.1	7.4	12.9	0.0	8.0
2/06/2025 14:45	1.6	109.7	0.1	6.9	12.5	0.0	2/06/2025 14:45	2.3	5.9	0.0	7.4	13.6	0.0	8.0
2/06/2025 15:00	1.6	110.1	0.1	6.9	12.5	0.0	2/06/2025 15:00	1.1	6.0	0.0	7.4	14.1	0.0	8.0
2/06/2025 15:15	1.6	109.0	0.1	6.9	12.4	0.0	2/06/2025 15:15	2.4	108.3	0.0	7.5	13.1	0.0	8.0
2/06/2025 15:30	1.6	107.3	0.1	6.9	12.4	0.0	2/06/2025 15:30	2.6	104.2	0.0	7.3	12.9	0.0	8.0
2/06/2025 15:45	1.4	96.6	0.1	7.0	12.7	2.4	2/06/2025 15:45	2.6	103.2	0.0	7.3	12.9	0.0	8.0
2/06/2025 16:00	1.5	95.0	0.1	6.9	12.5	0.0	2/06/2025 16:00	2.6	103.0	0.0	7.3	13.0	0.0	8.0
2/06/2025 16:15	1.5	94.0	0.0	6.9	12.3	0.0	2/06/2025 16:15	2.7	102.6	0.0	7.3	12.9	0.0	8.0
2/06/2025 16:30	1.5	93.7	0.0	6.9	12.5	0.0	2/06/2025 16:30	2.7	102.6	0.0	7.3	12.9	0.0	8.0
2/06/2025 16:45	1.5	93.3	0.0	6.9	12.5	0.0	2/06/2025 16:45	2.7	102.8	0.0	7.3	13.0	0.0	8.0
2/06/2025 17:00	1.6	93.1	0.0	6.9	12.4	0.0	2/06/2025 17:00	2.7	102.6	0.0	7.3	12.9	0.0	8.0
2/06/2025 17:15	1.6	92.9	0.0	6.9	12.2	0.0	2/06/2025 17:15	2.7	102.8	0.0	7.3	12.9	0.0	8.0
2/06/2025 17:30	1.6	93.2	0.0	6.9	12.3	0.0	2/06/2025 17:30	2.7	102.5	0.0	7.3	12.9	0.0	8.0
2/06/2025 17:45	1.5	92.9	0.0	6.9	12.1	0.0	2/06/2025 17:45	2.7	102.6	0.0	7.3	12.9	0.0	8.0
2/06/2025 18:00	1.5	92.6	0.0	6.8	11.9	0.0	2/06/2025 18:00	2.7	103.0	0.0	7.3	12.9	0.0	8.0
2/06/2025 18:15	1.5	92.6	0.0	6.9	12.1	0.0	2/06/2025 18:15	2.6	103.2	0.0	7.3	12.9	0.0	8.0
2/06/2025 18:30	1.5	92.5	0.0	6.8	12.0	0.0	2/06/2025 18:30	2.6	102.8	0.0	7.3	12.8	0.0	8.0
2/06/2025 18:45	1.5	92.2	0.0	6.9	12.1	0.0	2/06/2025 18:45	2.6	103.2	0.0	7.3	12.8	0.0	8.0
2/06/2025 19:00	1.4	92.2	0.0	6.9	12.3	0.0	2/06/2025 19:00	2.6	103.2	0.0	7.3	12.8	0.0	8.0
2/06/2025 19:15	1.4	91.9	0.0	6.9	12.1	0.0	2/06/2025 19:15	2.5	103.5	0.0	7.3	12.7	0.0	8.0
2/06/2025 19:30	1.4	92.1	0.0	6.9	12.2	0.0	2/06/2025 19:30	2.5	103.6	0.0	7.3	12.7	0.0	8.0
2/06/2025 19:45	1.4	92.1	0.0	6.9	12.2	0.0	2/06/2025 19:45	2.5	103.7	0.0	7.2	12.7	0.0	8.0
2/06/2025 20:00	1.3	92.2	0.0	6.8	11.9	0.0	2/06/2025 20:00	2.4	103.8	0.0	7.2	12.7	0.0	8.0
2/06/2025 20:15	1.3	92.0	0.0	6.9	12.1	0.0	2/06/2025 20:15	2.4	104.1	0.0	7.3	12.7	0.0	8.0
2/06/2025 20:30	1.3	92.2	0.0	6.9	12.2	0.0	2/06/2025 20:30	2.4	104.6	0.0	7.2	12.6	0.0	8.0
2/06/2025 20:45	1.3	92.4	0.0	6.8	12.0	0.0	2/06/2025 20:45	2.3	104.4	0.0	7.2	12.7	0.0	8.0
2/06/2025 21:00	1.2	92.6	0.0	6.8	11.8	0.0	2/06/2025 21:00	2.3	104.6	0.0	7.2	12.6	0.0	8.0
2/06/2025 21:15	1.2	92.6	0.0	6.9	12.0	0.0	2/06/2025 21:15	2.3	104.9	0.0	7.2	12.6	0.0	8.0
2/06/2025 21:30	1.2	92.8	0.0	6.9	12.1	0.0	2/06/2025 21:30	2.3	104.8	0.0	7.2	12.6	0.0	8.0
2/06/2025 21:45	1.2	92.5	0.0	6.9	12.2	0.0	2/06/2025 21:45	2.3	104.6	0.0	7.2	12.6	0.0	8.0
2/06/2025 22:00	1.1	92.6	0.0	6.8	12.1	0.0	2/06/2025 22:00	2.2	105.1	0.0	7.2	12.6	0.0	8.0
2/06/2025 22:15	1.1	92.7	0.0	6.9	12.2	0.0	2/06/2025 22:15	2.2	105.0	0.0	7.2	12.6	0.0	8.0
2/06/2025 22:30	1.1	92.6	0.0	6.9	12.2	0.0	2/06/2025 22:30	2.2	105.7	0.0	7.2	12.6	0.0	8.0
2/06/2025 22:45	1.1	93.1	0.0	6.9	12.2	0.0	2/06/2025 22:45	2.2	104.6	0.0	7.2	12.6	0.0	8.0
2/06/2025 23:00	1.1	92.9	0.0	6.9	12.2	0.0	2/06/2025 23:00	2.2	105.2	0.0	7.2	12.6	0.0	8.0
2/06/2025 23:15	1.0	93.0	0.0	6.9	12.1	0.0	2/06/2025 23:15	2.2	105.7	0.0	7.2	12.6	0.0	8.0
2/06/2025 23:30	1.0	93.1	0.0	6.9	12.1	0.0	2/06/2025 23:30	2.1	105.7	0.0	7.2	12.6	0.0	8.0
2/06/2025 23:45	1.0	93.1	0.0	6.9	12.0	0.0	2/06/2025 23:45	2.1	105.7	0.0	7.2	12.6	0.0	8.0
2/07/2025 0:00	1.0	93.3	0.0	6.9	12.1	0.0	2/07/2025 0:00	2.1	105.9	0.0	7.2	12.6	0.0	8.0
2/07/2025 0:15	1.0	93.3	0.0	6.9	11.9	0.0	2/07/2025 0:15	2.1	105.5	0.0	7.2	12.6	0.0	8.0
2/07/2025 0:30	1.0	93.2	0.0	6.9	12.0	0.0	2/07/2025 0:30	2.1	105.6	0.0	7.2	12.6	0.0	8.0
2/07/2025 0:45	0.9	93.2	0.0	6.9	12.1	0.0	2/07/2025 0:45	2.0	105.3	0.0	7.2	12.7	0.0	8.0
2/07/2025 1:00	0.9	93.0	0.0	6.9	12.2	0.0	2/07/2025 1:00	1.9	104.9	0.0	7.3	12.7	0.0	8.0
2/07/2025 1:15	0.9	92.8	0.0	6.9	12.2	0.0	2/07/2025 1:15	1.9	104.4	0.0	7.3	12.7	0.0	8.0
2/07/2025 1:30	0.8	92.2	0.0	6.9	12.3	0.0	2/07/2025 1:30	1.9	102.8	0.0	7.3	12.8	0.0	8.0
2/07/2025 1:45	0.8	91.1	0.0	7.0	12.3	0.0	2/07/2025 1:45	1.8	100.8	0.0	7.3	12.8	0.0	8.0
2/07/2025 2:00	0.8	90.6	0.0	7.0	12.3	0.0	2/07/2025 2:00	1.8	98.7	0.0	7.3	12.9	0.0	8.0
2/07/2025 2:15	0.8	89.6	0.0	7.0	12.3	0.0	2/07/2025 2:15	1.8	98.1	0.0	7.3	12.9	0.0	8.0
2/07/2025 2:30	0.7	88.4	0.0	7.0	12.4	0.0	2/07/2025 2:30	1.8	97.7	0.0	7.3	12.9	0.0	8.0
2/07/2025 2:45	0.7	88.2	0.0	7.0	12.4	0.0	2/07/2025 2:45	1.8	97.5	0.0	7.3	12.9	0.0	8.0
2/07/2025 3:00	0.7	81.9	0.0	7.0	12.4	0.0	2/07/2025 3:00	1.8	97.1	0.0	7.3	12.9	0.0	8.0
2/07/2025 3:15	0.7	87.6	0.0	7.0	12.4	0.0	2/07/2025 3:15	1.8	97.8	0.0	7.4	12.9	0.0	8.0
2/07/2025 3:30	0.7	87.4	0.0	7.0	12.4	0.0	2/07/2025 3:30	1.8	98.7	0.0	7.3	12.9	0.0	8.0
2/07/2025 3:45	0.7	87.6	0.0	7.0	12.4	0.0	2/07/2025 3:45	1.8	99.1	0.0	7.3	12.9	0.0	8.0
2/07/2025 4:00	0.7	87.8	0.0	7.0	12.4	0.0	2/07/2025 4:00	1.8	101.3	0.0	7.3	12.9	0.0	8.0
2/07/2025 4:15	0.7	88.2	0.0	7.0	12.4	0.0	2/07/2025 4:15	1.8	103.2	0.0	7.3	12.8	0.0	8.0
2/07/2025 4:30	0.7	88.2	0.0	7.0	12.4	0.0	2/07/2025 4:30	1.8	104.6	0.0	7.3	12.8	0.0	8.0
2/07/2025 4:45	0.7	89.8	0.0	7.0	12.4	0.0	2/07/2025 4:45	1.8	105.5	0.0	7.3	12.8	0.0	8.0
2/07/2025 5:00	0.7	91.5	0.0	7.0	12.3	0.0	2/07/2025 5:00	1.8	105.6	0.0	7.3	12.8	0.0	8.0
2/07/2025 5:15	0.7	91.9	0.0	7.0	12.3	0.0	2/07/2025 5:15	1.8	106.0	0.0	7.3	12.8	0.0	8.0
2/07/2025 5:30	0.7	92.6	0.0	7.0	12.3	0.0	2/07/2025 5:30	1.8	105.3	0.0	7.3	12.8	0.0	8.0
2/07/2025 5:45	0.7	92.5	0.0	7.0	12.3	0.0	2/07/2025 5:45	1.8	105.0	0.0	7.3	12.8	0.0	8.0
2/07/2025 6:00	0.7	92.5	0.0	7.0	12.3	0.0	2/07/2025 6:00	1.8	105.3	0.0	7.3	12.8	0.0	8.0
2/07/2025 6:15	0.6	92.4	0.0	7.0	12.4	0.0	2/07/2025 6:15	1.8	106.0	0.0	7.3	12.8	0.0	8.0
2/07/2025 6:30	0.6	92.6	0.0	7.0	12.3	0.0	2/07/2025 6:30	1.7	106.5	0.0	7.3	12.8	0.0	8.0
2/07/2025 6:45	0.6	92.9	0.0	7.0	12.3	0.0	2/07/2025 6:45	1.7	105.7	0.0	7.3	12.8	0.0	8.0
2/07/2025 7:00	0.6	92.5	0.0	7.0	12.4	0.0	2/07/2025 7:00	1.7	104.9	0.0	7.3	12.8	0.0	8.0
2/07/2025 7:15	0.6	92.0	0.0	7.0	12.4	0.0	2/07/2025 7:15	1.7	105.1	0.0	7.3	12.8	0.0	8.0
2/07/2025 7:30	0.5	91.9	0.0	7.0	12.4	0.0	2/07/2025 7:30	1.7	106.4	0.0	7.3	12.8	0.0	8.0
2/07/2025 7:45	0.5	92.3	0.0	7.0	12.4	0.0	2/07/2025 7:45	1.7	105.8	0.0	7.3	12.8	0.0	8.0
2/07/2025 8:00	0.5	92.6	0.0	7.0	12.3	0.0	2/07/2025 8:00	1.6	105.1	0.0	7.3	12.8	0.0	8.0
2/07/2025 8:15	0.5	92.5	0.0	7.0	12.3	0.0	2/07/2025 8:15	1.6	104.7	0.0	7.3	12.8	0.0	8.0
2/07/2025 8:30	0.5	92.0	0.0	7.0	12.3	0.0	2/07/2025 8:30	1.6	106.2	0.0	7.3	12.8	0.0	8.0
2/07/2025 8:45	0.5	92.6	0.0	7.0	12.4	0.0	2/07/2025 8:45	1.6	105.2	0.0	7.3	12.8	0.0	8.0
2/07/2025 9:00	0.5	92.5	0.0	7.0	12.3	0.0	2/07/2025 9:00	1.5	102.3	0.0	7.3	12.8	0.0	8.0
2/07/2025 9:15	0.4	91.1	0.0	7.0	12.4	0.0	2/07/2025 9:15	1.5	100.1	0.0	7.3	12.9	0.0	8.0
2/07/2025 9:30	0.4	90.4	0.0	7.0	12.4	0.0	2/07/2025 9:30	1.4	99.6	0.0	7.3	12.9	0.0	8.0
2/07/2025 9:45	0.4	89.4	0.0	7.0	12.4	0.0	2/07/2025 9:45	1.4	100.3	0.0	7.3	12.9	0.0	8.0
2/07/2025 10:00	0.4	89.2	0.0	7.0	12.4	0.0	2/07/2025 10:00	1.4	99.5	0.0	7.3	12.9	0.0	8.0
2/07/2025 10:15	0.3	88.9	0.0	7.0	12.5	0.0	2/07/2025 10:15	1.4	98.2	0.0	7.3	13.0	0.0	8.0
2/07/2025 10:30	0.3	88.7	0.0	7.0	12.5	0.0	2/07/2025 10:30	1.4	97.7	0.0	7.3	13.1	0.0	8.0
2/07/2025 10:45	0.3	88.0	0.0	7.0	12.5	0.0	2/07/2025 10:45	1.4	97.5	0.0	7.3	13.1	0.0	8.0
2/07/2025 11:00	0.3	87.7	0.0	7.0	12.5	0.0	2/07/2025 11:00	1.4	97.6	0.0	7.3	13.1	0.0	8.0
2/07/2025 11:15	0.3	87.4	0.0	7.0	12.6	0.0	2/07/2025 11:15	1.5	98.2	0.0	7.3	13.1	0.0	8.0
2/07/2025 11:30	0.4	87.3	0.0	7.0	12.6	0.0	2/07/2025 11:30	1.5	98.2	0.0	7.3	13.2	0.0	8.0
2/07/2025 11:45	0.4	87.3	0.0	7.0	12.6	0.0	2/07/2025 11:45	1.5	98.0	0.0	7.3	13.2	0.0	8.0
2/07/2025 12:00	0.4	87.4	0.0	7.0	12.6	0.0	2/07/2025 12:00	1.6	97.4	0.0	7.3	13.2	0.0	8.0
2/07/2025 12:15	0.4	87.4	0.0	7.0	12.7	0.0	2/07/2025 12:15	1.7	98.0	0.0	7.3	13.3	0.0	8.0
2/07/2025 12:30	0.5	87.3	0.0	7.0	12.7	0.0	2/07/2025 12:30	1.7	98.3	0.0	7.3	13.3	0.0	8.0

2/07/2025 12:45	0.5	87.3	0.0	7.0	12.7	0.0	2/07/2025 12:45	1.8	98.7	0.0	7.3	13.3	0.0	8.0
2/07/2025 13:00	0.6	87.4	0.0	7.0	12.7	0.0	2/07/2025 13:00	1.9	101.0	0.0	7.3	13.3	0.0	8.0
2/07/2025 13:15	0.7	87.7	0.0	7.0	12.7	0.0	2/07/2025 13:15	2.0	105.0	0.0	7.3	13.3	0.0	8.0
2/07/2025 13:30	0.8	88.7	0.0	7.0	12.8	0.0	2/07/2025 13:30	2.1	106.3	0.0	7.3	13.2	0.0	8.0
2/07/2025 13:45	0.9	92.1	0.0	7.0	12.8	0.0	2/07/2025 13:45	2.3	107.7	0.0	7.3	13.2	0.0	8.0
2/07/2025 14:00	1.1	93.3	0.0	7.0	12.8	0.0	2/07/2025 14:00	2.4	108.8	0.0	7.3	13.2	0.0	8.0
2/07/2025 14:15	1.1	94.2	0.0	7.0	12.7	0.0	2/07/2025 14:15	2.5	113.3	0.1	7.2	13.2	0.0	8.0
2/07/2025 14:30	1.3	95.8	0.1	7.0	12.7	0.0	2/07/2025 14:30	2.7	116.5	0.1	7.2	13.1	0.0	8.0
2/07/2025 14:45	1.5	99.1	0.1	7.0	12.6	0.0	2/07/2025 14:45	2.8	122.4	0.1	7.2	13.0	0.0	8.0
2/07/2025 15:00	1.6	101.6	0.1	6.9	12.6	0.0	2/07/2025 15:00	3.0	129.8	0.1	7.1	12.8	0.0	8.0
2/07/2025 15:15	1.7	105.9	0.1	6.9	12.5	0.0	2/07/2025 15:15	3.1	130.4	0.1	7.1	12.7	0.0	8.0
2/07/2025 15:30	1.8	107.5	0.1	6.9	12.4	0.0	2/07/2025 15:30	3.0	122.2	0.1	7.1	12.7	0.0	8.0
2/07/2025 15:45	1.8	104.6	0.1	6.9	12.4	0.0	2/07/2025 15:45	3.0	114.7	0.1	7.1	12.8	0.0	8.0
2/07/2025 16:00	1.8	100.2	0.1	6.9	12.4	0.0	2/07/2025 16:00	2.9	106.5	0.0	7.1	13.0	0.0	8.0
2/07/2025 16:15	1.8	98.1	0.1	6.9	12.3	0.0	2/07/2025 16:15	2.9	92.8	0.0	7.1	13.0	0.0	8.0
2/07/2025 16:30	1.9	95.1	0.1	6.8	11.9	0.0	2/07/2025 16:30	2.7	5.8	0.0	7.1	13.4	0.0	8.0
2/07/2025 16:45	1.8	94.3	0.0	6.8	11.8	0.0	2/07/2025 16:45	2.8	5.9	0.0	7.1	13.5	0.0	8.0
2/07/2025 17:00	1.8	93.0	0.0	6.8	12.1	0.0	2/07/2025 17:00	2.5	6.0	0.0	7.1	13.6	0.0	8.0
2/07/2025 17:15	1.7	92.5	0.0	6.8	12.2	0.0	2/07/2025 17:15	2.5	6.0	0.0	7.1	13.6	0.0	8.0
2/07/2025 17:30	1.7	92.1	0.0	6.8	12.4	0.0	2/07/2025 17:30	2.4	6.0	0.0	7.1	13.7	0.0	8.0
2/07/2025 17:45	1.7	91.9	0.0	6.9	12.4	0.0	2/07/2025 17:45	2.4	6.0	0.0	7.1	13.7	0.0	8.0
2/07/2025 18:00	1.7	91.8	0.0	6.7	12.3	0.0	2/07/2025 18:00	2.3	6.1	0.0	7.1	13.7	0.0	8.0
2/07/2025 18:15	1.6	91.7	0.0	6.9	12.3	0.0	2/07/2025 18:15	2.2	5.9	0.0	7.1	13.7	0.0	8.0
2/07/2025 18:30	1.6	91.6	0.0	6.9	12.4	0.0	2/07/2025 18:30	2.1	6.1	0.0	7.1	13.8	0.0	8.0
2/07/2025 18:45	1.5	91.6	0.0	6.9	12.4	0.0	2/07/2025 18:45	2.1	6.1	0.0	7.1	13.8	0.0	8.0
2/07/2025 19:00	1.5	91.6	0.0	6.8	12.3	0.0	2/07/2025 19:00	2.0	6.1	0.0	7.1	13.9	0.0	8.0
2/07/2025 19:15	1.4	91.5	0.0	6.9	12.3	0.0	2/07/2025 19:15	1.9	6.0	0.0	7.1	13.9	0.0	8.0
2/07/2025 19:30	1.4	91.4	0.0	6.9	12.3	0.0	2/07/2025 19:30	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 19:45	1.4	91.3	0.0	6.9	12.3	0.0	2/07/2025 19:45	1.9	6.1	0.0	7.1	13.9	0.1	8.1
2/07/2025 20:00	1.3	91.4	0.0	6.8	12.3	0.0	2/07/2025 20:00	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 20:15	1.3	91.4	0.0	6.9	12.3	0.0	2/07/2025 20:15	1.9	6.1	0.0	7.1	13.9	0.0	8.0
2/07/2025 20:30	1.3	91.5	0.0	6.9	12.3	0.0	2/07/2025 20:30	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 20:45	1.3	91.6	0.0	6.9	12.3	0.0	2/07/2025 20:45	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 21:00	1.3	91.7	0.0	6.8	12.3	0.0	2/07/2025 21:00	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 21:15	1.3	91.8	0.0	6.9	12.2	0.0	2/07/2025 21:15	1.9	6.1	0.0	7.1	13.9	0.0	8.0
2/07/2025 21:30	1.3	92.1	0.0	6.9	12.2	0.0	2/07/2025 21:30	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 21:45	1.3	92.0	0.0	6.9	12.3	0.0	2/07/2025 21:45	1.9	6.2	0.0	7.1	13.9	0.0	8.0
2/07/2025 22:00	1.3	92.1	0.0	6.8	12.2	0.0	2/07/2025 22:00	1.9	6.3	0.0	7.1	14.0	0.0	8.0
2/07/2025 22:15	1.3	92.2	0.0	6.9	12.2	0.0	2/07/2025 22:15	1.9	6.0	0.0	7.1	13.9	3.7	11.7
2/07/2025 22:30	1.3	92.3	0.0	6.9	12.2	0.0	2/07/2025 22:30	1.8	6.2	0.0	7.1	14.0	0.0	8.0
2/07/2025 22:45	1.3	92.3	0.0	6.9	12.2	0.0	2/07/2025 22:45	1.8	6.2	0.0	7.1	14.0	0.0	8.0
2/07/2025 23:00	1.3	92.3	0.0	6.9	12.2	0.0	2/07/2025 23:00	1.7	6.3	0.0	7.1	14.0	0.0	8.0
2/07/2025 23:15	1.3	92.4	0.0	6.9	12.1	0.0	2/07/2025 23:15	1.7	6.1	0.0	7.2	14.0	0.0	8.0
2/07/2025 23:30	1.3	92.3	0.0	6.9	12.1	0.0	2/07/2025 23:30	1.7	6.3	0.0	7.1	14.0	0.0	8.0
2/07/2025 23:45	1.3	92.4	0.0	6.9	12.2	0.0	2/07/2025 23:45	1.7	6.3	0.0	7.2	14.0	0.0	8.0
2/08/2025 0:00	1.3	92.4	0.0	6.8	12.1	0.0	2/08/2025 0:00	1.7	6.3	0.0	7.2	14.0	0.0	8.0
2/08/2025 0:15	1.3	92.5	0.0	6.9	12.2	0.0	2/08/2025 0:15	1.7	6.2	0.0	7.2	14.1	0.0	8.0
2/08/2025 0:30	1.3	92.7	0.0	6.9	12.2	0.0	2/08/2025 0:30	1.6	6.3	0.0	7.2	14.1	0.0	8.0
2/08/2025 0:45	1.3	92.6	0.0	6.9	12.2	0.0	2/08/2025 0:45	1.6	6.3	0.0	7.2	14.1	0.0	8.0
2/08/2025 1:00	1.3	92.6	0.0	6.8	12.2	0.0	2/08/2025 1:00	1.6	6.3	0.0	7.1	14.1	0.0	8.0
2/08/2025 1:15	1.3	92.7	0.0	6.9	12.1	0.0	2/08/2025 1:15	1.6	6.0	0.0	7.2	14.1	0.0	8.0
2/08/2025 1:30	1.3	92.5	0.0	6.9	12.2	0.0	2/08/2025 1:30	1.8	7.0	0.0	7.1	13.0	378.5	383.5
2/08/2025 1:45	1.3	92.5	0.0	6.9	12.2	0.0	2/08/2025 1:45	2.3	104.0	0.0	7.1	12.7	0.0	8.0
2/08/2025 2:00	1.3	92.4	0.0	6.8	12.2	0.0	2/08/2025 2:00	2.3	103.9	0.0	7.1	12.7	0.0	8.0
2/08/2025 2:15	1.2	92.0	0.0	6.9	12.2	0.0	2/08/2025 2:15	2.3	103.1	0.0	7.1	12.8	0.0	8.0
2/08/2025 2:30	1.2	91.8	0.0	6.9	12.3	0.0	2/08/2025 2:30	2.3	102.1	0.0	7.2	12.8	0.0	8.0
2/08/2025 2:45	1.2	91.3	0.0	7.0	12.3	0.0	2/08/2025 2:45	2.2	100.5	0.0	7.2	12.8	0.0	8.0
2/08/2025 3:00	1.2	90.9	0.0	6.8	12.3	0.0	2/08/2025 3:00	2.2	99.0	0.0	7.2	12.9	0.0	8.0
2/08/2025 3:15	1.2	90.7	0.0	7.0	12.3	0.0	2/08/2025 3:15	2.2	98.4	0.0	7.2	12.9	0.0	8.0
2/08/2025 3:30	1.2	90.1	0.0	7.0	12.3	0.0	2/08/2025 3:30	2.2	97.9	0.0	7.2	12.9	0.0	8.0
2/08/2025 3:45	1.2	89.5	0.0	7.0	12.3	0.0	2/08/2025 3:45	2.2	97.5	0.0	7.2	12.9	0.0	8.0
2/08/2025 4:00	1.1	88.9	0.0	7.0	12.4	0.0	2/08/2025 4:00	2.2	97.4	0.0	7.2	12.9	0.0	8.0
2/08/2025 4:15	1.1	88.8	0.0	7.0	12.3	0.0	2/08/2025 4:15	2.2	98.1	0.0	7.2	12.9	0.0	8.0
2/08/2025 4:30	1.1	88.0	0.0	7.0	12.3	0.0	2/08/2025 4:30	2.3	98.3	0.0	7.2	12.9	0.0	8.0
2/08/2025 4:45	1.2	87.9	0.0	7.0	12.3	0.0	2/08/2025 4:45	2.3	99.9	0.0	7.2	12.9	0.0	8.0
2/08/2025 5:00	1.2	88.0	0.0	6.8	12.3	0.0	2/08/2025 5:00	2.3	100.4	0.0	7.2	12.8	0.0	8.0
2/08/2025 5:15	1.2	88.8	0.0	7.0	12.3	0.0	2/08/2025 5:15	2.3	98.9	0.0	7.2	12.8	0.0	8.0
2/08/2025 5:30	1.2	88.7	0.0	7.0	12.3	0.0	2/08/2025 5:30	2.3	98.2	0.0	7.2	12.9	0.0	8.0
2/08/2025 5:45	1.2	88.2	0.0	7.0	12.3	0.0	2/08/2025 5:45	2.3	98.5	0.0	7.2	12.9	0.0	8.0
2/08/2025 6:00	1.2	87.8	0.0	6.8	12.3	0.0	2/08/2025 6:00	2.4	101.3	0.0	7.2	12.8	0.0	8.0
2/08/2025 6:15	1.3	88.2	0.0	7.0	12.3	0.0	2/08/2025 6:15	2.4	105.0	0.0	7.2	12.8	0.0	8.0
2/08/2025 6:30	1.3	89.5	0.0	7.0	12.3	0.0	2/08/2025 6:30	2.4	105.0	0.0	7.1	12.7	0.0	8.0
2/08/2025 6:45	1.3	91.2	0.0	7.0	12.3	0.0	2/08/2025 6:45	2.4	105.3	0.0	7.1	12.7	0.0	8.0
2/08/2025 7:00	1.3	91.5	0.0	6.8	12.3	0.0	2/08/2025 7:00	2.4	105.9	0.0	7.1	12.7	0.0	8.0
2/08/2025 7:15	1.3	92.1	0.0	7.0	12.3	0.0	2/08/2025 7:15	2.4	105.3	0.0	7.1	12.7	0.0	8.0
2/08/2025 7:30	1.3	92.2	0.0	7.0	12.2	0.0	2/08/2025 7:30	2.4	103.4	0.0	7.1	12.7	0.0	8.0
2/08/2025 7:45	1.3	92.0	0.0	7.0	12.2	0.0	2/08/2025 7:45	2.4	101.0	0.0	7.1	12.8	0.0	8.0
2/08/2025 8:00	1.3	91.3	0.0	7.0	12.2	0.0	2/08/2025 8:00	2.4	99.4	0.0	7.2	12.8	0.0	8.0
2/08/2025 8:15	1.3	89.1	0.0	7.0	12.3	0.0	2/08/2025 8:15	2.4	99.7	0.0	7.2	12.8	0.0	8.0
2/08/2025 8:30	1.3	88.4	0.0	7.0	12.3	0.0	2/08/2025 8:30	2.4	100.8	0.0	7.2	12.8	0.0	8.0
2/08/2025 8:45	1.3	88.8	0.0	7.0	12.3	0.0	2/08/2025 8:45	2.4	102.5	0.0	7.2	12.7	0.0	8.0
2/08/2025 9:00	1.3	89.2	0.0	6.9	12.3	0.0	2/08/2025 9:00	2.4	102.7	0.0	7.1	12.7	0.0	8.0
2/08/2025 9:15	1.3	90.2	0.0	7.0	12.3	0.0	2/08/2025 9:15	2.4	103.9	0.0	7.2	12.7	0.0	8.0
2/08/2025 9:30	1.3	90.5	0.0	7.0	12.3	0.0	2/08/2025 9:30	2.4	104.7	0.0	7.1	12.7	0.0	8.0
2/08/2025 9:45	1.3	91.4	0.0	7.0	12.2	0.0	2/08/2025 9:45	2.5	107.8	0.0	7.1	12.7	0.0	8.0
2/08/2025 10:00	1.3	92.1	0.0	6.8	12.2	0.0	2/08/2025 10:00	2.5	107.6	0.0	7.1	12.7	0.0	8.0
2/08/2025 10:15	1.3	92.7	0.0	7.0	12.2	0.0	2/08/2025 10:15	2.4	103.4	0.0	7.1	12.8	0.0	8.0
2/08/2025 10:30	1.3	92.6	0.0	7.0	12.2	0.0	2/08/2025 10:30	2.4	100.7	0.0	7.1	12.9	0.0	8.0
2/08/2025 10:45	1.3	90.7	0.0	7.0	12.3	0.0	2/08/2025 10:45	2.4	99.8	0.0	7.1	12.9	0.0	8.0
2/08/2025 11:00	1.3	90.6	0.0	6.8	12.3	0.0	2/08/2025 11:00	2.4	100.9	0.0	7.1	12.9	0.0	8.0
2/08/2025 11:15	1.3	89.5	0.0	7.0	12.4	0.0	2/08/2025 11:15	2.4	100.2	0.0	7.2	13.0	0.0	8.0
2/08/2025 11:30	1.3	89.5	0.0	7.0	12.4	0.0	2/08/2025 11:30	2.4	98.4	0.0	7.2	13.1	0.0	8.0
2/08/2025 11:45	1.3	88.6	0.0	7.0	12.5	0.0	2/08/2025 11:45	2.4	96.4	0.0	7.2	13.1	0.0	8.0
2/08/2025 12:00	1.4	87.9	0.0	6.8	12.5	0.0	2/08/2025 12:00	2.5	95.9	0.0	7.2	13.2	0.0	8.0
2/08/2025 12:15	1.4	86.9	0.0	7.0	12.6	0.0	2/08/2025 12:15	2.5	96.4	0.0	7.2	13.2	0.0	8.0
2/08/2025 12:30	1.4	86.5	0.0	7.0	12.6	0.0	2/08/2025 12:30	2.6	96.6	0.0	7.2	13.2	0.0	8.0
2/08/2025 12:45	1.4	86.5	0.0	7.0	12.6	0.0	2/08/2025 12:45	2.6	96.0	0.0	7.2	13.2	0.0	8.0
2/08/2025 13:00	1.5	86.5	0.0	7.0	12.7	0.0	2/08/2025 13:00	2.6	95.8	0.0	7.2	13.3	0.0	8.0
2/08/2025 13:15	1.5	86.3	0.0	7.0	12.7	0.0	2/08/2025 13:15	2.7	95.7	0.0	7.2	13.3	0.0	8.0
2/08/2025 13:30	1.6	86.2	0.0	7.0	12.7	0.0	2/08/2025 13:30	2.7	95.5	0.0	7.2	13.3	0.0	8.0
2/08/2025 13:45	1.6	86.1	0.0	7.0	12.7	0.0	2/08/2025 13:45	2.8	94.9	0.0	7.2	13.3	0.0	8.0
2/08/2025 14:00	1.7	85.9	0.0	7.1	12.7	0.0	2/08/2025 14:00	2.9	95.0	0.0	7.2	13.3	0.0	8.0
2/08/2025 14:15	1.7	85.7	0.0	7.0	12.7	0.0	2/08/2025 14:15	2.9	96.5	0.0	7.2	13.3	0.0	8.0
2/08/2025 14:30	1.8	85.7	0.0	7.1	12.8	0.0	2/08/2025 14:30	3.0	98.4	0.0	7.2	13.3	0.0	8.0
2/08/2025 14:45	1.9	86.9	0.0	7.1	12.7	0.0	2/08/2025 14:45	3.1	101.0	0.0	7.2	13.2	0.0	8.0
2/08/2025 15:00	1.9	88.3	0.0	7.1	12.7	0.0	2/08/2025 15:00	3.2	106.8	0.0	7.2	13.2	0.0	8.0
2/08/2025 15:15	2.0	91.2	0.0	7.0	12.7	0.0	2/08/2025 15:15	3.4	115.1	0.1	7.1	13.0	0.0	8.0
2/08/2025 15:30	2.2	96.1	0.1	7.0	12.6	0.0	2/08/2025 15:30	3.6	123.4	0.1	7.1	12.9	0.0	8.0
2/08/2025 15:45	2.4	101.6	0.1	7.0	12.4	0.0	2/08/2025 15:45	3.8	128.4	0.1	7.0	12.7	0.0	8.0
2/08/2025 16:00	2.5	107.5	0.1	6.9	12.4	0.0	2/08/2025 16:00	3.8	127.6	0.1	7.0	12.7	0.0	8.0

2/08/2025 16:15	2.6	107.5	0.1	6.9	12.3	0.0
2/08/2025 16:30	2.5	105.5	0.1	6.9	12.3	0.0
2/08/2025 16:45	2.5	101.5	0.1	6.9	12.4	0.0
2/08/2025 17:00	2.5	97.2	0.1	6.9	12.4	0.0
2/08/2025 17:15	2.4	94.3	0.0	6.9	12.4	0.0
2/08/2025 17:30	2.4	93.4	0.0	6.9	12.4	0.0
2/08/2025 17:45	2.3	92.9	0.0	6.9	12.3	0.0
2/08/2025 18:00	2.3	92.1	0.0	6.9	12.4	0.0
2/08/2025 18:15	2.2	91.7	0.0	7.0	12.4	0.0
2/08/2025 18:30	2.1	91.4	0.0	7.0	12.4	0.0
2/08/2025 18:45	2.1	91.1	0.0	6.9	12.3	0.0
2/08/2025 19:00	2.0	91.1	0.0	6.9	12.3	0.0
2/08/2025 19:15	2.0	91.0	0.0	7.0	12.3	0.0
2/08/2025 19:30	1.9	91.1	0.0	7.0	12.3	0.0
2/08/2025 19:45	1.9	91.0	0.0	7.0	12.3	0.0
2/08/2025 20:00	1.9	91.0	0.0	7.0	12.3	0.0
2/08/2025 20:15	1.9	91.1	0.0	7.0	12.3	0.0
2/08/2025 20:30	1.8	91.1	0.0	6.9	12.2	0.0
2/08/2025 20:45	1.8	91.3	0.0	7.0	12.2	0.0
2/08/2025 21:00	1.8	91.4	0.0	7.0	12.2	0.0
2/08/2025 21:15	1.8	91.6	0.0	7.0	12.2	0.0
2/08/2025 21:30	1.8	92.0	0.0	6.9	12.2	0.0
2/08/2025 21:45	1.8	92.1	0.0	7.0	12.2	0.0
2/08/2025 22:00	1.7	92.2	0.0	6.9	12.2	0.0
2/08/2025 22:15	1.7	92.2	0.0	6.9	12.2	0.0
2/08/2025 22:30	1.7	92.0	0.0	7.0	12.1	0.0
2/08/2025 22:45	1.7	91.7	0.0	7.0	12.2	0.0
2/08/2025 23:00	1.7	91.6	0.0	7.0	12.2	0.0
2/08/2025 23:15	1.7	91.5	0.0	7.0	12.2	0.0
2/08/2025 23:30	1.7	91.4	0.0	6.9	12.1	0.0
2/08/2025 23:45	1.7	91.4	0.0	6.9	12.1	0.0
2/09/2025 0:00	1.7	91.3	0.0	6.9	12.2	0.0
2/09/2025 0:15	1.7	91.2	0.0	7.0	12.2	0.0
2/09/2025 0:30	1.7	91.1	0.0	6.9	12.2	0.0
2/09/2025 0:45	1.7	90.9	0.0	6.9	12.2	0.0
2/09/2025 1:00	1.7	90.7	0.0	6.9	12.2	0.0
2/09/2025 1:15	1.7	90.4	0.0	7.0	12.2	0.0
2/09/2025 1:30	1.7	90.4	0.0	7.0	12.2	0.0
2/09/2025 1:45	1.7	90.3	0.0	7.0	12.2	0.0
2/09/2025 2:00	1.7	90.2	0.0	7.0	12.2	0.0
2/09/2025 2:15	1.7	90.2	0.0	6.9	12.2	0.0
2/09/2025 2:30	1.7	90.2	0.0	7.0	12.2	0.0
2/09/2025 2:45	1.7	89.6	0.0	6.9	12.2	0.0
2/09/2025 3:00	1.6	89.3	0.0	7.0	12.3	0.0
2/09/2025 3:15	1.6	89.1	0.0	7.0	12.2	0.0
2/09/2025 3:30	1.6	89.0	0.0	7.0	12.2	0.0
2/09/2025 3:45	1.6	88.3	0.0	7.0	12.3	0.0
2/09/2025 4:00	1.6	87.2	0.0	7.0	12.3	0.0
2/09/2025 4:15	1.6	87.0	0.0	7.0	12.3	0.0
2/09/2025 4:30	1.5	86.8	0.0	7.0	12.3	0.0
2/09/2025 4:45	1.5	86.5	0.0	7.0	12.3	0.0
2/09/2025 5:00	1.5	86.2	0.0	7.0	12.3	
2/09/2025 5:15	1.5	85.9	0.0	7.0	12.4	0.0
2/09/2025 5:30	1.5	85.8	0.0	7.0	12.3	0.0
2/09/2025 5:45	1.5	88.8	0.0	7.0	12.3	0.0
2/09/2025 6:00	1.5	88.4	0.0		12.3	
2/09/2025 6:15	1.5	86.6	0.0	7.0	12.3	0.0
2/09/2025 6:30	1.5	85.6	0.0	7.0	12.3	0.0
2/09/2025 6:45	1.5	85.3	0.0	7.0	12.3	0.0
2/09/2025 7:00	1.6	89.0	0.0	7.0	12.3	0.0
2/09/2025 7:15	1.5	88.9	0.0	7.0	12.3	0.0
2/09/2025 7:30	1.5	88.3	0.0	7.0	12.3	0.0
2/09/2025 7:45	1.5	88.7	0.0	7.0	12.3	0.0
2/09/2025 8:00	1.5	90.8	0.0	7.0	12.2	0.0
2/09/2025 8:15	1.5	91.0	0.0	7.0	12.2	0.0
2/09/2025 8:30	1.4	89.8	0.0	7.0	12.3	0.0
2/09/2025 8:45	1.4	89.4	0.0	7.0	12.3	0.0
2/09/2025 9:00	1.4	89.4	0.0	7.0	12.3	0.0
2/09/2025 9:15	1.4	89.8	0.0	7.0	12.3	0.0
2/09/2025 9:30	1.4	90.9	0.0	7.0	12.3	0.0
2/09/2025 9:45	1.4	91.2	0.0	7.0	12.3	0.0
2/09/2025 10:00	1.4	92.3	0.0	7.0	12.3	0.0
2/09/2025 10:15	1.4	93.1	0.0	7.0	12.3	0.0
2/09/2025 10:30	1.4	92.8	0.0	7.0	12.3	0.0
2/09/2025 10:45	1.4	92.1	0.0	7.0	12.3	0.0
2/09/2025 11:00	1.4	91.4	0.0	7.0	12.3	0.0
2/09/2025 11:15	1.4	90.8	0.0	7.0	12.4	0.0
2/09/2025 11:30	1.4	90.2	0.0	7.0	12.4	0.0
2/09/2025 11:45	1.4	90.2	0.0	7.0	12.5	0.0
2/09/2025 12:00	1.4	90.1	0.0	6.9	12.5	0.0
2/09/2025 12:15	1.5	89.3	0.0	7.0	12.6	0.0
2/09/2025 12:30	1.5	89.0	0.0	7.0	12.6	0.0
2/09/2025 12:45	1.5	88.8	0.0	7.0	12.6	0.0
2/09/2025 13:00	1.5	88.7	0.0	7.0	12.7	0.0
2/09/2025 13:15	1.5	87.8	0.0	7.0	12.7	0.0
2/09/2025 13:30	1.5	87.5	0.0	7.1	12.7	0.0
2/09/2025 13:45	1.6	87.1	0.0	7.1	12.8	0.0
2/09/2025 14:00	1.6	86.9	0.0	7.1	12.8	0.0
2/09/2025 14:15	1.6	86.9	0.0	7.1	12.8	0.0
2/09/2025 14:30	1.6	86.3	0.0	7.1	12.8	0.0
2/09/2025 14:45	1.6	86.1	0.0	7.1	12.8	0.0
2/09/2025 15:00	1.6	86.0	0.0	7.1	12.8	
2/09/2025 15:15	1.7	85.8	0.0	7.1	12.9	0.0
2/09/2025 15:30	1.8	85.6	0.0	7.1	12.9	0.0
2/09/2025 15:45	1.9	86.1	0.0	7.1	12.9	0.0
2/09/2025 16:00	2.0	86.7	0.0	7.1	12.8	0.0
2/09/2025 16:15	2.1	87.5	0.0	7.1	12.8	0.0
2/09/2025 16:30	2.2	90.8	0.0	7.0	12.8	0.0
2/09/2025 16:45	2.4	99.3	0.1	7.0	12.6	0.0
2/09/2025 17:00	2.4	103.7	0.1	7.0	12.5	0.0
2/09/2025 17:15	2.4	103.9	0.1	7.0	12.4	0.0
2/09/2025 17:30	2.3	102.1	0.1	7.0	12.4	0.0
2/09/2025 17:45	2.2	99.4	0.1	7.0	12.4	0.0
2/09/2025 18:00	2.1	96.5	0.1		12.4	
2/09/2025 18:15	2.1	94.2	0.0	6.9	12.3	0.0
2/09/2025 18:30	2.0	92.5	0.0	6.9	12.4	0.0
2/09/2025 18:45	1.9	91.8	0.0	6.9	12.4	0.0
2/09/2025 19:00	1.9	91.6	0.0	6.9	12.4	0.0
2/09/2025 19:15	1.8	91.3	0.0	6.9	12.3	0.0
2/09/2025 19:30	1.7	91.3	0.0	6.9	12.4	0.0

2/08/2025 16:15	3.8	119.5	0.1	7.0	12.7	0.0	8.0
2/08/2025 16:30	3.7	114.6	0.1	7.0	12.7	0.0	8.0
2/08/2025 16:45	3.6	106.2	0.0	7.0	12.8	0.0	8.0
2/08/2025 17:00	3.5	103.3	0.0	7.0	12.9	0.0	8.0
2/08/2025 17:15	3.3	6.4	0.0	7.0	12.9	0.0	8.0
2/08/2025 17:30	3.1	5.1	0.0	7.0	13.1	0.0	8.0
2/08/2025 17:45	3.0	4.6	0.0	7.0	13.2	0.0	8.0
2/08/2025 18:00	2.8	5.3	0.0	7.0	13.3	0.0	8.0
2/08/2025 18:15	2.8	5.6	0.0	7.0	13.3	0.0	8.0
2/08/2025 18:30	2.7	4.5	0.0	7.0	13.2	0.8	8.8
2/08/2025 18:45	2.6	4.2	0.0	7.0	13.2	0.0	8.0
2/08/2025 19:00	2.6	5.4	0.0	7.0	13.3	0.0	8.0
2/08/2025 19:15	2.6	5.8	0.0	7.0	13.2	18.3	23.3
2/08/2025 19:30	2.5	5.2	0.0	7.0	13.2	0.0	8.0
2/08/2025 19:45	2.5	4.4	0.0	7.0	13.1	0.0	8.0
2/08/2025 20:00	2.4	4.7	0.0	7.0	13.2	0.0	8.0
2/08/2025 20:15	2.4	5.0	0.0	7.0	13.1	0.0	8.0
2/08/2025 20:30	2.4	4.6	0.0	7.0	13.2	0.0	8.0
2/08/2025 20:45	2.3	4.3	0.0	7.0	13.2	0.0	8.0
2/08/2025 21:00	2.3	4.2	0.0	7.2	13.2	0.0	8.0
2/08/2025 21:15	2.3	5.7	0.0	7.0	13.2	1.5	9.5
2/08/2025 21:30	2.3	4.8	0.0	7.0	13.2	0.0	8.0
2/08/2025 21:45	2.3	4.7	0.0	7.0	13.2	0.0	8.0
2/08/2025 22:00	2.3	5.3	0.0	7.0	13.2	0.0	8.0
2/08/2025 22:15	2.3	5.5	0.0	7.0	13.1	0.0	8.0
2/08/2025 22:30	2.3	4.9	0.0	7.0	13.2	0.0	8.0
2/08/2025 22:45	2.3	4.2	0.0	6.9	13.1	264.6	269.6
2/08/2025 23:00	2.3	4.5	0.0	7.0	13.1	0.0	8.0
2/08/2025 23:15	2.4	5.6	0.0	7.0	13.1	1.0	9.0
2/08/2025 23:30	2.4	4.1	0.0	7.0	13.0	0.0	8.0
2/08/2025 23:45	2.4	3.4	0.0	7.0	13.1	17.2	22.2
2/09/2025 0:00	2.4	4.2	0.0	6.9	13.0	0.5	8.5
2/09/2025 0:15	2.4	5.6	0.0	7.0	12.9	0.0	8.0
2/09/2025 0:30	2.4	5.6	0.0	7.0	13.0	0.0	8.0
2/09/2025 0:45	2.4	4.6	0.0	7.0	12.9	0.0	8.0
2/09/2025 1:00	2.4	4.5	0.0	7.0	13.0	0.0	8.0
2/09/2025 1:15	2.4	4.2	0.0	7.0	12.9	329.4	334.4
2/09/2025 1:30	2.4	4.5	0.0	7.0	12.9	0.0	8.0
2/09/2025 1:45	2.4	4.4	0.0	7.0	12.9	7.7	15.7
2/09/2025 2:00	2.4	5.2	0.0	7.0	12.9	0.0	8.0
2/09/2025 2:15	2.5	6.8	0.0	7.0	12.8	350.6	355.6
2/09/2025 2:30	2.7	100.2	0.0	7.0	12.7	0.0	8.0
2/09/2025 2:45	2.7	99.7	0.0	7.0	12.7	0.0	8.0
2/09/2025 3:00	2.6	99.2	0.0	7.0	12.7	0.0	8.0
2/09/2025 3:15	2.6	98.5	0.0	7.1	12.8	0.0	8.0
2/09/2025 3:30	2.6	97.7	0.0	7.1	12.8	0.0	8.0
2/09/2025 3:45	2.6	95.9	0.0	7.1	12.9	0.0	8.0
2/09/2025 4:00	2.6	95.4	0.0	7.1	12.9	0.0	8.0
2/09/2025 4:15	2.6	95.4	0.0	7.1	12.9	0.0	8.0
2/09/2025 4:30	2.5	95.2	0.0	7.1	12.9	0.0	8.0
2/09/2025 4:45	2.5	95.1	0.0	7.1	12.9	0.0	8.0
2/09/2025 5:00	2.6	95.7	0.0	7.1	12.9	0.0	8.0
2/09/2025 5:15	2.6	99.5	0.0	7.1	12.8	0.0	8.0
2/09/2025 5:30	2.7	100.8	0.0	7.1	12.8	0.0	8.0
2/09/2025 5:45	2.6	98.2	0.0	7.1	12.8	0.0	8.0
2/09/2025 6:00	2.6	95.1	0.0	7.1	12.8	0.0	8.0
2/09/2025 6:15	2.6	97.2	0.0	7.1	12.9	0.0	8.0
2/09/2025 6:30	2.6	97.5	0.0	7.1	12.8	0.0	8.0
2/09/2025 6:45	2.7	101.7	0.0	7.1	12.7	0.0	8.0
2/09/2025 7:00	2.6	100.7	0.0	7.1	12.7	0.0	8.0
2/09/2025 7:15	2.6	99.9	0.0	7.1	12.8	0.0	8.0
2/09/2025 7:30	2.6	104.2	0.0	7.1	12.7	0.0	8.0
2/09/2025 7:45	2.6	106.0	0.0	7.1	12.7	0.0	8.0
2/09/2025 8:00	2.6	103.6	0.0	7.1	12.7	0.0	8.0
2/09/2025 8:15	2.5	101.5	0.0	7.1	12.8	0.0	8.0
2/09/2025 8:30	2.5	101.2	0.0	7.1	12.8	0.0	8.0
2/09/2025 8:45	2.5	102.8	0.0	7.1	12.8	0.0	8.0
2/09/2025 9:00	2.5	103.2	0.0	7.1	12.7	0.0	8.0
2/09/2025 9:15	2.5	103.7	0.0	7.1	12.7	0.0	8.0
2/09/2025 9:30	2.5	105.3	0.0	7.1	12.7	0.0	8.0
2/09/2025 9:45	2.5	106.9	0.0	7.1	12.7	0.0	8.0
2/09/2025 10:00	2.5	106.4	0.0	7.1	12.8	0.0	8.0
2/09/2025 10:15	2.5	104.7	0.0	7.1	12.8	0.0	8.0
2/09/2025 10:30	2.5	103.8	0.0	7.1	12.9	0.0	8.0
2/09/2025 10:45	2.5	102.5	0.0	7.1	12.9	0.0	8.0
2/09/2025 11:00	2.5	102.1	0.0	7.1	13.0	0.0	8.0
2/09/2025 11:15	2.5	101.1	0.0	7.1	13.0	0.0	8.0
2/09/2025 11:30	2.5	101.5	0.0	7.1	13.0	0.0	8.0
2/09/2025 11:45	2.5	100.6	0.0	7.1	13.1	0.0	8.0
2/09/2025 12:00	2.6	99.9	0.0	7.1	13.1	0.0	8.0
2/09/2025 12:15	2.6	99.5	0.0	7.1	13.2	0.0	8.0
2/09/2025 12:30	2.6	99.5	0.0	7.1	13.2	0.0	8.0
2/09/2025 12:45	2.6	98.7	0.0	7.1	13.2	0.0	8.0
2/09/2025 13:00	2.6	97.5	0.0	7.1	13.3	0.0	8.0
2/09/2025 13:15	2.6	97.1	0.0	7.1	13.3	0.0	8.0
2/09/2025 13:30	2.6	96.5	0.0	7.1	13.3	0.0	8.0
2/09/2025 13:45	2.6	96.3	0.0	7.1	13.3	0.0	8.0
2/09/2025 14:00	2.6	95.9	0.0	7.1	13.3	0.0	8.0
2/09/2025 14:15	2.6	95.2	0.0	7.2	13.4	0.0	8.0
2/09/2025 14:30	2.7	95.1	0.0	7.2	13.4	0.0	8.0
2/09/2025 14:45	2.7	95.3	0.0	7.2	13.4	0.0	8.0
2/09/2025 15:00	2.8	95.0	0.0	7.2	13.4	0.0	8.0
2/09/2025 15:15	2.9	95.1	0.0	7.2	13.5	0.0	8.0
2/09/2025 15:30	3.1	98.0	0.0	7.2	13.4	0.0	8.0
2/09/2025 15:45	3.2	99.2	0.0	7.1	13.4	0.0	8.0
2/09/2025 16:00	3.3	99.0	0.0	7.1	13.4	0.0	8.0
2/09/2025 16:15	3.4	105.3	0.0	7.1	13.3	0.0	8.0
2/09/2025 16:30	3.6	118.4	0.1	7.0	13.1	0.0	8.0
2/09/2025 16:45	3.7	123.9	0.1	7.0	12.8	0.0	8.0
2/09/2025 17:00	3.6	122.2	0.1	7.0	12.8	0.0	8.0
2/09/2025 17:15	3.5	117.3	0.1	6.9	12.7	0.0	8.0
2/09/2025 17:30	3.4	112.0	0.1	6.9	12.8	0.0	8.0
2/09/2025 17:45	3.2	105.2	0.0	6.9	12.9	0.0	8.0
2/09/2025 18:00	2.9	4.4	0.0	6.9	13.0	10.7	15.7
2/09/2025 18:15	2.5	5.9	0.0	7.0	13.8	3.2	11.2
2/09/2025 18:30	2.2	6.0	0.0	7.0	13.9	0.0	8.0
2/09/2025 18:45	2.0	6.0	0.0	7.1	14.0	0.0	8.0
2/09/2025 19:00	1.8	6.1	0.0	7.1	14.1	0.0	8.0
2/09/2025 19:15	1.8	6.0	0.0	7.1	14.1	0.0	8.0
2/09/2025 19:30	1.8	6.2	0.0	7.1	14.1	0.0	8.0

2/09/2025 19:45	1.7	91.0	0.0	6.9	12.4	0.0	2/09/2025 19:45	1.8	6.1	0.0	7.1	14.1	0.0	8.0
2/09/2025 20:00	1.7	91.0	0.0	6.9	12.4	0.0	2/09/2025 20:00	1.7	6.2	0.0	7.1	14.2	0.0	8.0
2/09/2025 20:15	1.6	90.9	0.0	6.9	12.4	0.0	2/09/2025 20:15	1.7	6.1	0.0	7.2	14.2	0.0	8.0
2/09/2025 20:30	1.6	91.2	0.0	7.0	12.4	0.0	2/09/2025 20:30	1.6	6.2	0.0	7.1	14.2	0.0	8.0
2/09/2025 20:45	1.5	91.2	0.0	7.0	12.3	0.0	2/09/2025 20:45	1.6	6.2	0.0	7.1	14.2	0.0	8.0
2/09/2025 21:00	1.5	91.3	0.0	7.0	12.3	0.0	2/09/2025 21:00	1.5	6.2	0.0	7.1	14.3	0.0	8.0
2/09/2025 21:15	1.5	91.5	0.0	7.0	12.3	0.0	2/09/2025 21:15	1.5	6.0	0.0	7.2	14.2	0.0	8.0
2/09/2025 21:30	1.5	92.7	0.0	7.0	12.3	0.0	2/09/2025 21:30	1.4	6.3	0.0	7.1	14.3	0.0	8.0
2/09/2025 21:45	1.5	91.7	0.0	6.9	12.3	0.0	2/09/2025 21:45	1.4	6.3	0.0	7.1	14.3	0.0	8.0
2/09/2025 22:00	1.4	91.9	0.0	6.9	12.3	0.0	2/09/2025 22:00	1.4	6.3	0.0	7.1	14.3	0.0	8.0
2/09/2025 22:15	1.4	91.9	0.0	6.9	12.3	0.0	2/09/2025 22:15	1.4	6.2	0.0	7.2	14.3	0.0	8.0
2/09/2025 22:30	1.4	92.1	0.0	6.9	12.3	0.0	2/09/2025 22:30	1.3	6.3	0.0	7.2	14.3	0.0	8.0
2/09/2025 22:45	1.4	92.0	0.0	6.9	12.3	0.0	2/09/2025 22:45	1.2	6.4	0.0	7.1	14.4	0.0	8.0
2/09/2025 23:00	1.4	92.1	0.0	6.9	12.3	0.0	2/09/2025 23:00	1.1	6.4	0.0	7.2	14.4	0.0	8.0
2/09/2025 23:15	1.4	92.1	0.0	6.9	12.3	0.0	2/09/2025 23:15	1.1	6.3	0.0	7.2	14.4	0.0	8.0
2/09/2025 23:30	1.4	92.1	0.0	6.9	12.3	0.0	2/09/2025 23:30	1.1	6.4	0.0	7.2	14.4	0.0	8.0
2/09/2025 23:45	1.3	92.2	0.0	6.9	12.2	0.0	2/09/2025 23:45	1.2	6.4	0.0	7.2	14.4	0.0	8.0

Appendix C: Woodfibre Site Point of Discharge from Water Treatment Plant Documentation

Woodfibre Site Sample Analysis

TRITON	Sample ID	Reviewed and signed off by: Farshad Shafiei Ph.D., R.P.Bio.	(Seal: College of Applied Biologists, Farshad Shafiei, RPBio 3781, CAB)	WLNG EOP	Sample or value notes	BCWQ FAL - Short Term	BCWQ MAL - Short Term
	LAB ID			VA25A2785-003			
	Date Sampled			07-Feb-2025			
	Time Sampled			13:41			
Analyte	Units	FAL-ST [1,2]	MAL-ST [1]	Water			
				N/A		Guideline notes	
In Situ Parameters							
pH (field)	pH units	6.5-9.0	7.0-8.7	7.51		If natural pH < 6.5, no statisticaly significant decrease from background. No restriction in increase except in areas with unique flora or fauna. Unrestricted change permitted within range of 6.5 to 9.0. If natural pH > 9.0, no statistically significant increase from background. Refer to BC Water Quality Guidelines for more information.	Unrestricted change within this range (for protection of mollusc embryo development).
Temperature (field)	°C	Multiple guidelines dependent on water use and species, see notes: Short-term daily temperature = 15°C, or Max +/- 1°C from optimum temperature range for most sensitive salmonid species present, or Short-term daily temperature is 19°C, or Max +/- from BKG 1°C	Max +/- from BKG 1°C	8.9		Guideline is species-dependent. Short-term daily temperature is 15°C for streams with Bull Trout &/or Dolly Varden, Max +/- 1°C from the optimum range as shown in Table 43B of the BCWG for aquatic life for each life history phase of the most sensitive salmoind species present, Mean Weekly Max Temperature guideline is18°C, Short-term daily temperature guideline is 19°C for streams with unknown fish distribution, or Max +/- 1°C from background. Refer to footnote 4 for background temperature range for East Creek.	Guideline for marine waters are based on natural ambient conditions. Refer to footnote 4 for background temperature range for East Creek. Calculation: US value +/- 1 = guideline range
Conductivity (field)	µS/cm	-	-	170			
Turbidity (field)	NTU	Varies with background, see note Guideline = 10.6	Varies with background, see note Guideline = 10.6	2.60		Change from background of 8 NTU at any one time for a duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 8 = DS guideline Change from background of 5 NTU at any time when background is 8 - 50 NTU during high flows or in turbid waters. Calculation: US value + 5 = DS guideline Change from background of 10% when background is > 50 NTU at any time during high flows or in turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 8 NTU at any one time for a duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 8 = DS guideline Change from background of 5 NTU at any time when background is 8 - 50 NTU during high flows or in turbid waters. Calculation: US value + 5 = DS guideline Change from background of 10% when background is > 50 NTU at any time during high flows or in turbid waters. Calculation: US value + (US value*0.1) = DS guideline
Dissolved Oxygen (field)	mg/L	Varies with life stage, see note	Varies with life stage, see note	-		Buried embryo/alevin minimum 9 mg/L, all other life stages 5 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 9 mg/L, all other life stages 5 mg/L. Refer to BC Water Quality Guidelines for more information.
General Parameters							
Hardness (as $CaCO_3$) (total)	mg/L	-	-	54.1			
Total Dissolved Solids	mg/L	-	-	93			
Total Suspended Solids	mg/L	Varies with background, see note Guideline = 28	Varies with background, see note Guideline = 28	< 3.0		Change from background of 25 mg/L at any one time for duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 25 = DS guideline Change from background of 10 mg/L at any one time when background 25-100 mg/L during high flows or turbid waters. Calculation: US value + 10 = DS guideline Change from background of 10% when background is > 100 mg/L at any time during high flows or turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 25 mg/L at any one time for duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 25 = DS guideline Change from background of 10 mg/L at any one time when background 25-100 mg/L during high flows or turbid waters. Calculation: US value + 10 = DS guideline Change from background of 10% when background is > 100 mg/L at any time during high flows or turbid waters. Calculation: US value + (US value*0.1) = DS guideline
Dissolved Organic Carbon (DOC)	mg/L	-	-	0.72			
Total Phenols	mg/L	0.05	-	< 0.0010		Interim guideline	Interim guideline
Total Alkalinity ($CaCO_3$)	mg/L	-	-	54.1			
Total Sulfide (as S)	mg/L	-	-	< 0.0015			
Total Sulfide (un-ionized as H_2S)	mg/L	-	-	< 0.0015			
Total Sulfide (as H_2S)	mg/L	-	-	< 0.0016			
Anions and Nutrients							
Ammonia	mg/L ammonia-N	Varies with pH and temperature. See note. Guideline = 12.9	Varies with pH and temperature. See note. Guideline = 33	0.0187		Guideline for ammonia as N and is pH and temperature dependent. Refer to Table 27D in BC WQG for guideline values.	Guideline for ammonia as N. Guideline is pH, temperature and salinity dependent. Refer to Table 27F in BC WQG for guideline values.
Bromide	mg/L	-	-	< 0.050			
Chloride	mg/L	600	+/- 10% from BKG	12.3			Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.
Fluoride	mg/L	Varies with hardness Guideline = 1.087	1.5	0.199		Guideline has interim status. Guideline is calculated with the following equation: Guideline = [-51.73 + 92.57 log10 (hardness)] * 0.01	
Nitrate (as N)	mg/L	32.8	-	0.0162			
Nitrite (as N)	mg/L	Varies with chloride. Table 27B, see note. Guideline = 0.60	-	0.0014		Varies with chloride. Refer to Table 27B in BC WQG for guideline values.	
Total Nitrogen	mg/L	-	-	0.294			
Total Phosphorous	mg/L	-	-	0.0038			
Sulfate (as SO_4)	mg/L	-	-	6.44			
Total Metals							
Aluminum (Al)-Total	mg/L	-	-	0.0368			
Antimony (Sb)-Total	mg/L	0.25	-	0.00153			
Arsenic (As)-Total	mg/L	-	-	0.00082			
Barium (Ba)-Total	mg/L	-	-	0.00462			
Beryllium (Be)-Total	mg/L	-	-	< 0.000100			
Bismuth (Bi)-Total	mg/L	-	-	< 0.000050			
Boron (B)-Total	mg/L	-	-	0.02			
Cadmium (Cd)-Total	mg/L	-	-	0.0000309			
Calcium (Ca)-Total	mg/L	-	-	20.1			
Cesium (Cs)-Total	mg/L	-	-	0.000021			
Chromium (Cr) - Total	mg/L	-	-	< 0.00050			
Chromium (Cr(III))-Total	mg/L	-	-	< 0.00050			
Chromium (Cr(VI))-Total	mg/L	-	-	< 0.00050			
Cobalt (Co)-Total	mg/L	0.11	-	< 0.00010			
Copper (Cu)-Total	mg/L	-	0.003	0.00056			
Iron (Fe)-Total	mg/L	1	-	< 0.010			
Lead (Pb)-Total	mg/L		0.14	0.000111			
Lithium (Li)-Total	mg/L	-	-	0.0074			
Magnesium (Mg)-Total	mg/L	-	-	0.947			
Manganese (Mn)-Total	mg/L	Varies with hardness Guideline = 1.136	-	0.0154		Guideline varies with hardness. The guideline is calculated using the following equation: Guideline = (0.0044 * hardness + 0.605) Guideline applies to samples with hardness 25-259 mg/L. Lowest value for guideline is 0.77 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.	
Mercury (Hg)-Total	mg/L	-	-	< 0.0000050			
Molybdenum (Mo)-Total	mg/L	46	-	0.02			
Nickel (Ni)-Total	mg/L	-	-	<0.00050			
Potassium (K)-Total	mg/L	-	-	2.42			
Rubidium (Rb)-Total	mg/L	-	-	0.00414			
Selenium (Se)-Total	mg/L	-	-	0.000054			
Silicon (Si)-Total	mg/L	-	-	5.01			
Silver (Ag)-Total	mg/L	Varies with hardness, see note Guideline = 0.0001	0.003	< 0.000010		Varies with hardness Guideline ranges: Hardness ≤ 100: 0.0001 Hardness > 100: 0.003	
Sodium (Na)-Total	mg/L	-	-	7.78			
Strontium (Sr)-Total	mg/L	-	-	0.0454			
Sulfur (S)-Total	mg/L	-	-	2.13			
Tellurium (Te)-Total	mg/L	-	-	< 0.00020			
Thallium (Tl)-Total	mg/L	-	-	0.000016			
Thorium (Th)-Total	mg/L	-	-	< 0.00010			
Tin (Sn)-Total	mg/L	-	-	< 0.00010			
Titanium (Ti)-Total	mg/L	-	-	< 0.00030			
Tungsten (W)-Total	mg/L	-	-	0.00124			
Uranium (U)-Total	mg/L	0.0165	-	0.000683			
Vanadium (V)-Total	mg/L	-	-	< 0.00050			
Zinc (Zn)-Total	mg/L	-	0.055	0.0088			
Zirconium (Zr)-Total	mg/L	-	-	< 0.00020			
Dissolved Metals							
Aluminum (Al)-Dissolved	mg/L	-	-	0.0236			
Antimony (Sb)-Dissolved	mg/L	-	-	0.00139			
Arsenic (As)-Dissolved	mg/L	-	-	0.00072			
Barium (Ba)-Dissolved	mg/L	-	-	0.00431			
Beryllium (Be)-Dissolved	mg/L	-	-	< 0.000100			
Bismuth (Bi)-Dissolved	mg/L	-	-	< 0.000050			
Boron (B)-Dissolved	mg/L	-	-	0.022			
Cadmium (Cd)-Dissolved	mg/L	Varies with hardness, see note Guideline = 0.000312	-	0.0000251		Guideline is hardness dependent. Guideline is appilcable to water hardness between 7.0 and 455 mg/L. Guideline is calculated with the following formula: Guideline = (EXP(1.03 * (LN(hardness)) - 5.274)/1000) Lowest value for guideline is 0.000018 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.	
Calcium (Ca)-Dissolved	mg/L	-	-	20.6			
Cesium (Cs)-Dissolved	mg/L	-	-	0.000016			
Chromium (Cr)-Dissolved	mg/L	-	-	< 0.00050			
Cobalt (Co)-Dissolved	mg/L	-	-	< 0.00010			
Copper (Cu)-Dissolved	mg/L	Guideline varies with other parameters, see note Guideline = 0.0014	-	0.00055		Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date	
Iron (Fe)-Dissolved	mg/L	0.35	-	< 0.010			
Lead (Pb)-Dissolved	mg/L	-	-	0.000104			
Lithium (Li)-Dissolved	mg/L	-	-	0.0073			
Magnesium (Mg)-Dissolved	mg/L	-	-	0.896			
Manganese (Mn)-Dissolved	mg/L	-	-	0.0152			
Mercury (Hg)-Dissolved	mg/L	-	-	< 0.000005			
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.0184			
Nickel (Ni)-Dissolved	mg/L	Guideline varies with pH, temperature, DOC, and hardness Guideline: 0.0277	-	< 0.00050		Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date	
Phosphorus (P)-Dissolved	mg/L	-	-	< 0.050			
Potassium (K)-Dissolved	mg/L	-	-	2.53			
Rubidium (Rb)-Dissolved	mg/L	-	-	0.004			
Selenium (Se)-Dissolved	mg/L	-	-	0.000061			
Silicon (Si)-Dissolved	mg/L	-	-	4.45			
Silver (Ag)-Dissolved	mg/L	-	-	< 0.000010			
Sodium (Na)-Dissolved	mg/L	-	-	7.82			
Strontium (Sr)-Dissolved	mg/L	-	-	0.0428			
Sulfur (S)-Dissolved	mg/L	-	-	1.92			
Tellurium (Te)-Dissolved	mg/L	-	-	< 0.00020			
Thallium (Tl)-Dissolved	mg/L	-	-	0.000014			
Thorium (Th)-Dissolved	mg/L	-	-	< 0.00010			
Tin (Sn)-Dissolved	mg/L	-	-	< 0.00010			
Titanium (Ti)-Dissolved	mg/L	-	-	< 0.00030			
Tungsten (W)-Dissolved	mg/L	-	-	0.00124			
Uranium (U)-Dissolved	mg/L	-	-	0.000673			
Vanadium (V)-Dissolved	mg/L	-	-	< 0.00050			
Zinc (Zn)-Dissolved	mg/L	Varies with DOC and hardness Guideline = 0.022	-	0.0097		Guideline varies with DOC and hardness. Guideline is calculated using the following formula: Guideline = (EXP((0.833 * (LN(hardness))) + (0.24 * (LN(DOC))) + 0.526)/2/1000) If hardness or DOC is below the hardness or DOC range, the minimum hardness or DOC will be applied in the calculation.	
Zirconium (Zr)-Dissolved	mg/L	-	-	< 0.00020			
Volatile Organic Compounds							
Chlorobenzene	µg/L	-	-	< 0.50			
Chloromethane	µg/L	-	-	< 5.0			
Dichlorobenzene, 1,2-	µg/L	-	-	< 0.50			
Dichlorobenzene, 1,3-	µg/L	-	-	< 0.50			
Dichlorobenzene, 1,4-	µg/L	-	-	< 0.50			
Dichloropropane, 1,2-	µg/L	-	-	< 0.50			
Dichloropropylene, cis+trans-1,3-	µg/L	-	-	< 0.75			
Dichloropropylene, cis-1,3-	µg/L	-	-	< 0.50			
Tetrachloroethane, 1,1,1,2-	µg/L	-	-	< 0.50			
Tetrachloroethane, 1,1,2,2-	µg/L	-	-	< 0.20			
Trichloroethane, 1,1,2-	µg/L	-	-	< 0.50			
Trichlorofluoromethane	µg/L	-	-	< 0.50			
Carbon tetrachloride	µg/L	-	-	< 0.50			
Chloroethane	µg/L	-	-	< 0.50			
Dichloroethane, 1,1-	µg/L	-	-	< 0.50			
Dichloroethane, 1,2-	µg/L	-	-	< 0.50			
Dichloroethylene, 1,1-	µg/L	-	-	< 0.50			
Dichloroethylene, cis-1,2-	µg/L	-	-	< 0.50			
Dichloroethylene, trans-1,2-	µg/L	-	-	< 0.50			
Dichloromethane	µg/L	-	-	< 1.0			
Dichloropropylene, trans-1,3-	µg/L	-	-	< 0.50			
Tetrachloroethylene	µg/L	-	-	< 0.50			
Trichloroethane, 1,1,1-	µg/L	-	-	< 0.50			
Trichloroethylene	µg/L	-	-	< 0.50			
Vinyl chloride	µg/L	-	-	< 0.40			
Benzene	µg/L	-	-	< 0.50			
Ethylbenzene	µg/L	-	-	< 0.50			
Methyl-tert-butyl ether [MTBE]	µg/L	3400	440	< 0.50			
Styrene	µg/L	-	-	< 0.50			
Toluene	µg/L	-	-	< 0.40			
Xylene, m+p-	µg/L	-	-	< 0.40			
Xylene, o-	µg/L	-	-	< 0.30			
Xylenes, total	µg/L	-	-	< 0.50			
Bromodichloromethane	µg/L	-	-	< 0.50			
Bromoform	µg/L	-	-	< 0.50			
Chloroform	µg/L	-	-	< 0.50			
Dibromochloromethane	µg/L	-	-	< 0.50			
Hydrocarbons							
EPH (C10-C19)	µg/L	-	-	< 250			
EPH (C19-C32)	µg/L	-	-	< 250			
VHw (C6-C10)	µg/L	-	-	< 100			
LEPHw	µg/L	-	-	< 250			
VPHw	µg/L	-	-	< 100			
HEPHw	µg/L	-	-	< 250			
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	µg/L	-	-	< 0.010			
Acenaphthylene	µg/L	-	-	< 0.010			
Acridine	µg/L	-	-	< 0.010			
Anthracene	µg/L	0.1	-	< 0.010			
Benz(a)anthracene	µg/L	0.1	-	< 0.010			
Benzo(a)pyrene	µg/L	-	-	< 0.0050			
Benzo(b+j)fluoranthene	µg/L	-	-	< 0.010			
Benzo(b+j+k)fluoranthene	µg/L	-	-	< 0.015			
Benzo(g,h,i)perylene	µg/L	-	-	< 0.010			
Benzo(k)fluoranthene	µg/L	-	-	< 0.010			
Chrysene	µg/L	-	-	< 0.010			
Dibenz(a,h)anthracene	µg/L	-	-	< 0.0050			
Fluoranthene	µg/L	0.2	-	< 0.010		Guideline is for phototoxic effects	
Fluorene	µg/L	-	-	< 0.010			
Indeno(1,2,3-c,d)pyrene	µg/L	-	-	< 0.010			
Methylnaphthalene, 1-	µg/L	-	-	0.035			
Methylnaphthalene, 2-	µg/L	-	-	0.033			
Naphthalene	µg/L	-	-	< 0.050			
Phenanthrene	µg/L	-	-	< 0.020			
Pyrene	µg/L	0.02	-	< 0.010			
Quinoline	µg/L	-	-	< 0.050		Working guideline status	
Glycols							
Ethylene glycol	mg/L	-	-	< 5.0			
Propylene glycol, 1,2-	mg/L	-	-	< 5.0			
Applied Guideline:		**British Columbia Approved and Working Water Quality Guidelines (NOV 2023) for Freshwater Aquatic Life (FAL) & Marine Aquatic Life (MAL) Short-Term (ST) & Long-Term (LT)**					

[1] BC MOECCS. 2023. BC Water Qualtiy Guidelines for the Protection of Aquatic Life, Wildlife & Agriculture. Accessed from:
wqg_summary_aquaticlife_wildlife_agri.pdf (gov.bc.ca)

[2] BC MOECCS. 2021. BC Working Water Qualtiy Guidelines for the Protection of Aquatic Life, Widlife & Agriculture. Accessed from:
bc_env_working_water_quality_guidelines.pdf (gov.bc.ca)

[3] Note that long-term (**LT**) guidelines apply to averaged data to account for chronic impacts to aquatic life. Ideally, five samples collected at evenly spaced intervals over 30 days is considered to be the minimum number needed to calculate the long-term average of any parameter, though this may vary by parameter and site conditions. Long-term guidelines applied here are for reference only and may not indicate chronic impacts to aquatic life if exceedances occur in the short-term (**ST**).

[4] Background temperature ranges: Dec-Feb: 0.3-8.0C; Mar-Apr: 3.0-10.2C; May-June: 6.8-15.1C; Jul-present: 12.9-18.2C

Reference: AquaTROLL In-Situ Data Logger - Background water quality readings collected from Dec.-present.

For guidelines dependent on other parameters, when hardness, pH or DOC are below the range stated in the guideline, the lowest value in the range is used to calculate the guideline.

Parameters Used to Calculate Guidelines

Analyte	Units	Measurement method	Values WLNG EOP	WLNG EOP
pH (field)	pH units	Field pH taken using handheld meters during sampling used in calculations	7.51	7.51
Temperature (field)	°C	Field temperature taken using handheld meters during sampling used in calculations	8.9	8.9
Turbidity (field)	NTU	Field turbidity taken using handheld meters during sampling used in calculations	2.60	2.60
Hardness (as CaCO3) (total)	mg/L	Laboratory tested total hardness taken at each respective sample site on the day of sampling used in guideline calculations	54.1	54.1
Dissolved Organic Carbon (DOC)	mg/L	Laboratory tested dissolved organic carbon tested at the lab used in guideline calculations	0.72	0.72
Total Alkalinity ($CaCO_3$)	mg/L	Laboratory tested total alkalinity used in calculations	54.1	54.1
Chloride	mg/L	Laboratory tested chloride taken at each respective sample site on the day of sampling used in guideline calculations	12.3	12.3
Total Suspended Solids	mg/L	Laboratory tested total suspended solids tested at the lab used in guideline calculations	< 3.0	< 3.0

Woodfibre Site Sample Lab Documentation

CERTIFICATE OF ANALYSIS

Work Order	:		
Client	:	Laboratory	:
Contact	:	Account Manager	:
Address	:	Address	:
Telephone	:	Telephone	:
Project	:	Date Samples Received	: 07-Feb-2025 17:10
PO	:	Date Analysis Commenced	: 09-Feb-2025
C-O-C number	:	Issue Date	: 19-Feb-2025 09:40
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
		Metals, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Organics, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Inorganics, Edmonton, Alberta
		Inorganics, Burnaby, British Columbia
		Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
°C	degrees celsius
mg/L	milligrams per litre
pH units	pH units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	Description
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Field Tests										
Conductivity, field	----	EF001/VA	0.10	µS/cm		36.000	31.000	170.00	170.00	----
pH, field	----	EF001/VA	0.10	pH units		7.74	7.88	7.51	7.51	----
Temperature, field	----	EF001/VA	0.10	°C		2.10	2.70	8.90	8.90	----
Physical Tests										
Hardness (as CaCO3), dissolved	----	EC100/VA	0.60	mg/L		7.11	13.6	55.1	55.0	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		7.10	9.35	54.1	54.3	----
Solids, total dissolved [TDS]	----	E162/VA	10	mg/L		24	23	93	93	----
Solids, total suspended [TSS]	----	E160/VA	3.0	mg/L		<3.0	<3.0	<3.0	<3.0	----
Alkalinity, total (as CaCO3)	----	E290/VA	2.0	mg/L		4.9	7.7	54.1	54.4	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/VA	0.0050	mg/L		<0.0050	0.0077	0.0187	0.0182	----
Bromide	24959-67-9	E235.Br-L/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	----
Chloride	16887-00-6	E235.Cl/VA	0.50	mg/L		0.78	1.22	12.3	12.3	----
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L		<0.020	0.033	0.199	0.200	----
Nitrate (as N)	14797-55-8	E235.NO3-L/VA	0.0050	mg/L		0.0799	0.0503	0.0162	0.0160	----
Nitrite (as N)	14797-65-0	E235.NO2-L/VA	0.0010	mg/L		<0.0010	<0.0010	0.0014	0.0015	----
Nitrogen, total	7727-37-9	E366/VA	0.030	mg/L		0.121	0.103	0.294	0.287	----
Phosphorus, total	7723-14-0	E372-U/VA	0.0020	mg/L		0.0261	0.0135	0.0038	0.0034	----
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L		3.76	3.18	6.44	6.44	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		1.73	1.70	0.72	0.72	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Total Sulfides										
Sulfide, total (as S)	18496-25-8	E395/VA	0.0015	mg/L		<0.0015	<0.0015	<0.0015	<0.0015	----
Sulfide, un-ionized (as H2S), from total	7783-06-4	EC395/VA	0.0015	mg/L		<0.0015	<0.0015	<0.0015	<0.0015	----
Sulfide, total (as H2S)	7783-06-4	E395/VA	0.0016	mg/L		<0.0016	<0.0016	<0.0016	<0.0016	----
Total Metals										
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L		0.0847	0.134	0.0368	0.0364	----
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L		<0.00010	0.00015	0.00153	0.00150	----
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L		0.00019	0.00015	0.00082	0.00081	----
Barium, total	7440-39-3	E420/VA	0.00010	mg/L		0.00361	0.00332	0.00462	0.00447	----
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	----
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, total	7440-42-8	E420/VA	0.010	mg/L		<0.010	<0.010	0.020	0.020	----
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L		0.0000094	0.0000083	0.0000309	0.0000290	----
Calcium, total	7440-70-2	E420/VA	0.050	mg/L		2.23	3.20	20.1	20.2	----
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L		<0.000010	<0.000010	0.000021	0.000021	----
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Copper, total	7440-50-8	E420/VA	0.00050	mg/L		0.00066	0.00055	0.00056	0.00055	----
Iron, total	7439-89-6	E420/VA	0.010	mg/L		0.034	0.066	<0.010	<0.010	----
Lead, total	7439-92-1	E420/VA	0.000050	mg/L		<0.000050	<0.000050	0.000111	0.000104	----
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L		<0.0010	<0.0010	0.0074	0.0072	----
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L		0.371	0.331	0.947	0.940	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
Client sample ID					WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
Client sampling date / time					07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
					VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
					Result	Result	Result	Result	----
Total Metals									
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L	0.00152	0.00304	0.0154	0.0153	----
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L	0.000366	0.00147	0.0200	0.0201	----
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	----
Potassium, total	7440-09-7	E420/VA	0.050	mg/L	0.225	0.327	2.42	2.38	----
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L	0.00032	0.00057	0.00414	0.00386	----
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L	0.000075	<0.000050	0.000054	0.000130	----
Silicon, total	7440-21-3	E420/VA	0.10	mg/L	3.86	3.98	5.01	4.92	----
Silver, total	7440-22-4	E420/VA	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, total	7440-23-5	E420/VA	0.050	mg/L	1.42	1.60	7.78	7.81	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L	0.0117	0.0114	0.0454	0.0461	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L	1.16	0.81	2.13	2.10	----
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L	<0.000010	<0.000010	0.000016	0.000012	----
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, total	7440-31-5	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L	0.00102	0.00269	<0.00030	<0.00030	----
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L	<0.00010	<0.00010	0.00124	0.00120	----
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L	0.000081	0.000147	0.000683	0.000650	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Total Metals										
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L		<0.0030	<0.0030	0.0088	0.0086	----
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/VA	0.0010	mg/L		0.0599	0.0498	0.0236	0.0255	----
Antimony, dissolved	7440-36-0	E421/VA	0.00010	mg/L		<0.00010	0.00018	0.00139	0.00141	----
Arsenic, dissolved	7440-38-2	E421/VA	0.00010	mg/L		<0.00010	0.00018	0.00072	0.00078	----
Barium, dissolved	7440-39-3	E421/VA	0.00010	mg/L		0.00315	0.00311	0.00431	0.00455	----
Beryllium, dissolved	7440-41-7	E421/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	----
Bismuth, dissolved	7440-69-9	E421/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, dissolved	7440-42-8	E421/VA	0.010	mg/L		<0.010	<0.010	0.022	0.022	----
Cadmium, dissolved	7440-43-9	E421/VA	0.0000050	mg/L		<0.0000050	0.0000079	0.0000251	0.0000260	----
Calcium, dissolved	7440-70-2	E421/VA	0.050	mg/L		2.26	4.84 DTC	20.6	20.5	----
Cesium, dissolved	7440-46-2	E421/VA	0.000010	mg/L		<0.000010	<0.000010	0.000016	0.000017	----
Chromium, dissolved	7440-47-3	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Cobalt, dissolved	7440-48-4	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Copper, dissolved	7440-50-8	E421/VA	0.00020	mg/L		0.00057	0.00043	0.00055	0.00056	----
Iron, dissolved	7439-89-6	E421/VA	0.010	mg/L		0.016	0.012	<0.010	<0.010	----
Lead, dissolved	7439-92-1	E421/VA	0.000050	mg/L		<0.000050	<0.000050	0.000104	0.000103	----
Lithium, dissolved	7439-93-2	E421/VA	0.0010	mg/L		<0.0010	0.0011	0.0073	0.0074	----
Magnesium, dissolved	7439-95-4	E421/VA	0.0050	mg/L		0.357	0.368	0.896	0.933	----
Manganese, dissolved	7439-96-5	E421/VA	0.00010	mg/L		0.00108	0.00259	0.0152	0.0156	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/VA	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Molybdenum, dissolved	7439-98-7	E421/VA	0.000050	mg/L		0.000322	0.00299 DTC	0.0184	0.0183	----
Nickel, dissolved	7440-02-0	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Phosphorus, dissolved	7723-14-0	E421/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	----
Potassium, dissolved	7440-09-7	E421/VA	0.050	mg/L		0.229	0.450 DTC	2.53	2.62	----
Rubidium, dissolved	7440-17-7	E421/VA	0.00020	mg/L		0.00024	0.00075	0.00400	0.00432	----
Selenium, dissolved	7782-49-2	E421/VA	0.000050	mg/L		<0.000050	<0.000050	0.000061	0.000083	----
Silicon, dissolved	7440-21-3	E421/VA	0.050	mg/L		3.48	3.63	4.45	4.60	----
Silver, dissolved	7440-22-4	E421/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/VA	0.050	mg/L		1.48	2.32 DTC	7.82	8.20	----
Strontium, dissolved	7440-24-6	E421/VA	0.00020	mg/L		0.0105	0.0134	0.0428	0.0435	----
Sulfur, dissolved	7704-34-9	E421/VA	0.50	mg/L		0.90	0.85	1.92	1.84	----
Tellurium, dissolved	13494-80-9	E421/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/VA	0.000010	mg/L		<0.000010	<0.000010	0.000014	0.000014	----
Thorium, dissolved	7440-29-1	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/VA	0.00030	mg/L		<0.00030	<0.00030	<0.00030	<0.00030	----
Tungsten, dissolved	7440-33-7	E421/VA	0.00010	mg/L		<0.00010	0.00013	0.00124	0.00125	----
Uranium, dissolved	7440-61-1	E421/VA	0.000010	mg/L		0.000078	0.000159	0.000673	0.000688	----
Vanadium, dissolved	7440-62-2	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Zinc, dissolved	7440-66-6	E421/VA	0.0010	mg/L		0.0017	0.0035	0.0097	0.0104	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
Client sample ID									
Client sampling date / time					07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
					VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
					Result	Result	Result	Result	----
Dissolved Metals									
Zirconium, dissolved	7440-67-7	E421/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Dissolved mercury filtration location	----	EP509/VA	-	-	Field	Field	Field	Field	----
Dissolved metals filtration location	----	EP421/VA	-	-	Field	Field	Field	Field	----
Speciated Metals									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Chromium, trivalent [Cr III], total	16065-83-1	EC535/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Aggregate Organics									
Phenols, total (4AAP)	----	E562/EO	0.0010	mg/L	----	----	<0.0010	----	----
Volatile Organic Compounds									
Chlorobenzene	108-90-7	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Chloromethane	74-87-3	E611C/VA	5.0	µg/L	----	----	<5.0	<5.0	----
Dichlorobenzene, 1,2-	95-50-1	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichlorobenzene, 1,3-	541-73-1	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichlorobenzene, 1,4-	106-46-7	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichloropropane, 1,2-	78-87-5	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/VA	0.75	µg/L	----	----	<0.75	<0.75	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/VA	0.20	µg/L	----	----	<0.20	<0.20	----
Trichloroethane, 1,1,2-	79-00-5	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Trichlorofluoromethane	75-69-4	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Volatile Organic Compounds [Drycleaning]										
Carbon tetrachloride	56-23-5	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Chloroethane	75-00-3	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethane, 1,1-	75-34-3	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethane, 1,2-	107-06-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethylene, 1,1-	75-35-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethylene, cis-1,2-	156-59-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethylene, trans-1,2-	156-60-5	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloromethane	75-09-2	E611C/VA	1.0	µg/L		----	----	<1.0	<1.0	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Tetrachloroethylene	127-18-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Trichloroethane, 1,1,1-	71-55-6	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Trichloroethylene	79-01-6	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Vinyl chloride	75-01-4	E611C/VA	0.40	µg/L		----	----	<0.40	<0.40	----
Volatile Organic Compounds [Fuels]										
Benzene	71-43-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Ethylbenzene	100-41-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Styrene	100-42-5	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Toluene	108-88-3	E611C/VA	0.40	µg/L		----	----	<0.40	<0.40	----
Xylene, m+p-	179601-23-1	E611C/VA	0.40	µg/L		----	----	<0.40	<0.40	----
Xylene, o-	95-47-6	E611C/VA	0.30	µg/L		----	----	<0.30	<0.30	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Volatile Organic Compounds [Fuels]										
Xylenes, total	1330-20-7	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Volatile Organic Compounds [THMs]										
Bromodichloromethane	75-27-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Bromoform	75-25-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Chloroform	67-66-3	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dibromochloromethane	124-48-1	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Hydrocarbons										
EPH (C10-C19)	----	E601A/VA	250	µg/L		----	----	<250	<250	----
EPH (C19-C32)	----	E601A/VA	250	µg/L		----	----	<250	<250	----
VHw (C6-C10)	----	E581.VH+F1/VA	100	µg/L		----	----	<100	<100	----
HEPHw	----	EC600A/VA	250	µg/L		----	----	<250	<250	----
LEPHw	----	EC600A/VA	250	µg/L		----	----	<250	<250	----
VPHw	----	EC580A/VA	100	µg/L		----	----	<100	<100	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/VA	1.0	%		----	----	91.1	90.2	----
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/VA	1.0	%		----	----	96.6	98.0	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611C/VA	1.0	%		----	----	99.6	98.2	----
Difluorobenzene, 1,4-	540-36-3	E611C/VA	1.0	%		----	----	101	100	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthylene	208-96-8	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Acridine	260-94-6	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Anthracene	120-12-7	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benz(a)anthracene	56-55-3	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benzo(a)pyrene	50-32-8	E641A/VA	0.0050	µg/L		----	----	<0.0050	<0.0050	----
Benzo(b+j)fluoranthene	n/a	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benzo(b+j+k)fluoranthene	n/a	E641A/VA	0.015	µg/L		----	----	<0.015	<0.015	----
Benzo(g,h,i)perylene	191-24-2	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benzo(k)fluoranthene	207-08-9	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Chrysene	218-01-9	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Dibenz(a,h)anthracene	53-70-3	E641A/VA	0.0050	µg/L		----	----	<0.0050	<0.0050	----
Fluoranthene	206-44-0	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Fluorene	86-73-7	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Methylnaphthalene, 1-	90-12-0	E641A/VA	0.010	µg/L		----	----	0.035	0.035	----
Methylnaphthalene, 2-	91-57-6	E641A/VA	0.010	µg/L		----	----	0.033	0.034	----
Naphthalene	91-20-3	E641A/VA	0.050	µg/L		----	----	<0.050	<0.050	----
Phenanthrene	85-01-8	E641A/VA	0.020	µg/L		----	----	<0.020	<0.020	----
Pyrene	129-00-0	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Quinoline	91-22-5	E641A/VA	0.050	µg/L		----	----	<0.050	<0.050	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/VA	0.1	%		----	----	71.9	80.4	----
Naphthalene-d8	1146-65-2	E641A/VA	0.1	%		----	----	90.3	94.4	----
Phenanthrene-d10	1517-22-2	E641A/VA	0.1	%		----	----	81.8	85.1	----
Glycols										
Diethylene glycol	111-46-6	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Ethylene glycol	107-21-1	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Propylene glycol, 1,2-	57-55-6	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Triethylene glycol	112-27-6	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Glycols, total (EG+DEG+PG)	----	E680E/VA	10	mg/L		----	----	<10	<10	----
Glycols Surrogates										
Propanediol, 1,3-	504-63-2	E680E/VA	1.0	%		----	----	105	103	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	[redacted]	Page	: 1 of 22
Client		Laboratory	[redacted]
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project		Date Samples Received	: 07-Feb-2025 17:10
PO		Issue Date	: 19-Feb-2025 09:40
C-O-C number	: ----		
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Matrix Spike outliers occur.
- Duplicate outliers occur - please see following pages for full details.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Duplicate (DUP) RPDs								
Total Metals	Anonymous	Anonymous	Selenium, total	7782-49-2	E420	37.4 % DUP-H	20%	Duplicate RPD does not meet the DQO for this test.

Result Qualifiers

Qualifier	Description
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*

Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-MRG2-1875706 002	----	Chloromethane	74-87-3	E611C	142 % LCS-ND	60.0-140%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water** Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Aggregate Organics : Phenols (4AAP) in Water by Colorimetry										
Amber glass total (sulfuric acid) WLNG EOP	E562	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG DS 1	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG EOP	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG EOP Duplicate	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG US 1	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG EOP	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG EOP Duplicate	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG US 1	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG DS 1	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG EOP	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG EOP Duplicate	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG US 1	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG DS 1	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG EOP	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG EOP Duplicate	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG US 1	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG EOP	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG EOP Duplicate	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG US 1	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG EOP	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG EOP Duplicate	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG US 1	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG DS 1	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG EOP	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG EOP Duplicate	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG US 1	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG DS 1	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG EOP	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG EOP Duplicate	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG US 1	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) WLNG DS 1	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG EOP	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG EOP Duplicate	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG US 1	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG DS 1	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP Duplicate	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG US 1	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG EOP	E421	07-Feb-2025	11-Feb-2025	180 days	4 days	✓	12-Feb-2025	180 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG EOP Duplicate	E421	07-Feb-2025	11-Feb-2025	180 days	4 days	✓	12-Feb-2025	180 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG US 1	E421	07-Feb-2025	11-Feb-2025	180 days	4 days	✓	12-Feb-2025	180 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG DS 1	E421	07-Feb-2025	11-Feb-2025	180 days	5 days	✓	12-Feb-2025	180 days	6 days	✓
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG DS 1	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP Duplicate	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG US 1	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Glycols : Glycols (4 analytes) by GC-FID										
Glass vial										
WLNG EOP	E680E	07-Feb-2025	09-Feb-2025	7 days	2 days	✓	10-Feb-2025	40 days	1 days	✓
Glycols : Glycols (4 analytes) by GC-FID										
Glass vial										
WLNG EOP Duplicate	E680E	07-Feb-2025	09-Feb-2025	7 days	2 days	✓	10-Feb-2025	40 days	1 days	✓
Hydrocarbons : BC PHCs - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP	E601A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : BC PHCs - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP Duplicate	E601A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
WLNG EOP	E581.VH+F1	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
WLNG EOP Duplicate	E581.VH+F1	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG DS 1	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG EOP	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG EOP Duplicate	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG US 1	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG DS 1	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG EOP	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Alkalinity Species by Titration										
HDPE WLNG EOP Duplicate	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE WLNG US 1	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG DS 1	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG EOP	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG EOP Duplicate	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG US 1	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG DS 1	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG EOP	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG EOP Duplicate	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TSS by Gravimetry										
HDPE										
WLNG US 1	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP	E641A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP Duplicate	E641A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG DS 1	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG EOP	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG EOP Duplicate	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG US 1	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG DS 1	E508	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG EOP	E508	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG US 1	E508	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG EOP Duplicate	E508	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG DS 1	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG EOP	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG EOP Duplicate	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG US 1	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG DS 1	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG EOP	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG EOP Duplicate	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG US 1	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓
Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
WLNG EOP	E611C	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓
Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
WLNG EOP Duplicate	E611C	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
TSS by Gravimetry	E160	1874110	1	13	7.6	5.0	✓
TDS by Gravimetry	E162	1874105	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1868290	1	10	10.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1868203	1	8	12.5	5.0	✓
Laboratory Control Samples (LCS)							
TSS by Gravimetry	E160	1874110	1	13	7.6	5.0	✓
TDS by Gravimetry	E162	1874105	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1868290	1	10	10.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Control Samples (LCS) - Continued							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
BC PHCs - EPH by GC-FID	E601A	1875692	1	10	10.0	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	1875691	1	15	6.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1868203	1	8	12.5	5.0	✓
Method Blanks (MB)							
TSS by Gravimetry	E160	1874110	1	13	7.6	5.0	✓
TDS by Gravimetry	E162	1874105	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1868290	1	10	10.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
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Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
BC PHCs - EPH by GC-FID	E601A	1875692	1	10	10.0	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	1875691	1	15	6.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1868203	1	8	12.5	5.0	✓

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS)							
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
TSS by Gravimetry	E160 ALS Environmental - Vancouver	Water	APHA 2540 D (mod)	Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, following by drying of the filter at 104 ± 1°C, with gravimetric measurement of the filtered solids. Samples containing very high dissolved solid content (i.e. seawaters, brackish waters) may produce a positive bias by this method. Alternate analysis methods are available for these types of samples.
TDS by Gravimetry	E162 ALS Environmental - Vancouver	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Bromide in Water by IC (Low Level)	E235.Br-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Chloride in Water by IC	E235.Cl ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC	E235.SO4 ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Alkalinity Species by Titration	E290 ALS Environmental - Vancouver	Water	APHA 2320 B (mod)	Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Ammonia by Fluorescence	E298 ALS Environmental - Vancouver	Water	Method Fialab 100, 2018	Ammonia in water is determined by automated continuous flow analysis with membrane diffusion and fluorescence detection, after reaction with OPA (ortho-phthalaldehyde). This method is approved under US EPA 40 CFR Part 136 (May 2021)
Dissolved Organic Carbon by Combustion (Low Level)	E358-L ALS Environmental - Vancouver	Water	APHA 5310 B (mod)	Dissolved Organic Carbon (Non-Purgeable), also known as NPOC (dissolved), is a direct measurement of DOC after a filtered (0.45 micron) sample has been acidified and purged to remove inorganic carbon (IC). Analysis is by high temperature combustion with infrared detection of CO2. NPOC does not include volatile organic species that are purged off with IC. For samples where the majority of DC (dissolved carbon) is comprised of IC (which is common), this method is more accurate and more reliable than the DOC by subtraction method (i.e. DC minus DIC).
Total Nitrogen by Colourimetry	E366 ALS Environmental - Vancouver	Water	Chinchilla Scientific Nitrate Method, 2011	Following digestion, total nitrogen is is determined colourimetrically using a discrete analyzer utilizing the vanadium chloride reduction method. This method of analysis is approved under US EPA 40 CFR Part 136 (May 2021).
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Vancouver	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.
Total Sulfide by Colourimetry (Automated Flow)	E395 ALS Environmental - Vancouver	Water	APHA 4500 -S E-Auto-Colorimetry	Sulfide is determined using the gas dialysis automated methlyene blue colourimetric method. Results expressed "as H2S" if reported represent the maximum possible H2S concentration based on the total sulfide concentration in the sample. The H2S calculation converts Total Sulphide as (S2-) and reports it as Total Sulphide as (H2S)
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Vancouver	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Water by CRC ICPMS	E421 ALS Environmental - Vancouver	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 ALS Environmental - Vancouver	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Dissolved Mercury in Water by CVAAS	E509 ALS Environmental - Vancouver	Water	APHA 3030B/EPA 1631E (mod)	Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Hexavalent Chromium (Cr VI) by IC	E532 ALS Environmental - Vancouver	Water	APHA 3500-Cr C (Ion Chromatography)	Hexavalent Chromium is measured by Ion chromatography-Post column reaction and UV detection. Results are based on an un-filtered, field-preserved sample.
Phenols (4AAP) in Water by Colorimetry	E562 ALS Environmental - Edmonton	Water	EPA 9066	This automated method is based on the distillation of phenol and subsequent reaction of the distillate with alkaline ferricyanide ($K_3Fe(CN)_6$) and 4-amino-antipyrine (4-AAP) to form a red complex which is measured colorimetrically.
VH and F1 by Headspace GC-FID	E581.VH+F1 ALS Environmental - Vancouver	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law. Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
BC PHCs - EPH by GC-FID	E601A ALS Environmental - Vancouver	Water	BC MOE Lab Manual	Sample extracts are analyzed by GC-FID for BC hydrocarbon fractions.
VOCs (BC List) by Headspace GC-MS	E611C ALS Environmental - Vancouver	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law. Total Xylenes is the sum of m,p-Xylene & o-Xylene. Total BTEX is the sum of Benzene, Toluene, Ethylbenzene, & Total Xylenes. Total BTEX+Styrene is the sum of Total BTEX & Styrene. Total Trihalomethanes [THMs] is the sum of Bromodichloromethane, Bromoform, Chloroform, & Dibromochloromethane.
PAHs in Water by Hexane LVI GC-MS	E641A ALS Environmental - Vancouver	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Glycols (4 analytes) by GC-FID	E680E ALS Environmental - Vancouver	Water	EPA 8015D (mod)	Derivatized glycols are analyzed by GC-FID.
Dissolved Hardness (Calculated)	EC100 ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as $CaCO_3$), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations. Hardness from total Ca/Mg is normally comparable to Dissolved Hardness in non-turbid waters.
Un-ionized Total Hydrogen Sulfide (calculated)	EC395 ALS Environmental - Vancouver	Water	APHA 4500 -S H	Un-ionized sulfide is calculated using results from total sulfide analysis, pH, temperature, and ionic strength of the sample. Calculation of un-ionized sulfide using total sulfide concentrations may be biased high due to particulate forms of sulfide measured during total sulfide testing.
Total Trivalent Chromium (Cr III) by Calculation	EC535 ALS Environmental - Vancouver	Water	APHA 3030B/6020A/EPA 7196A (mod)	Chromium (III)-Total is calculated as the difference between the total chromium and the total hexavalent chromium (Cr(VI)) results.The Limit of Reporting for Chromium (III) varies as a function of the test results.
VPH: VH-BTEX-Styrene	EC580A ALS Environmental - Vancouver	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH C6-C10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A ALS Environmental - Vancouver	Water	BC MOE Lab Manual (LEPH and HEPH)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.
Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine	EF001 ALS Environmental - Vancouver	Water	Field Measurement (Client Supplied)	Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3 or Chloramine measurements provided by client and recorded on ALS report may affect the validity of results.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 ALS Environmental - Vancouver	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.
Preparation for Dissolved Organic Carbon for Combustion	EP358 ALS Environmental - Vancouver	Water	APHA 5310 B (mod)	Preparation for Dissolved Organic Carbon
Digestion for Total Nitrogen in water	EP366 ALS Environmental - Vancouver	Water	APHA 4500-P J (mod)	Samples for total nitrogen analysis are digested using a heated persulfate digestion. Nitrogen compounds are converted to nitrate in this digestion.
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Vancouver	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 ALS Environmental - Vancouver	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
Dissolved Mercury Water Filtration	EP509 ALS Environmental - Vancouver	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HCl.
VOCs Preparation for Headspace Analysis	EP581 ALS Environmental - Vancouver	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into a GC-MS-FID.
PHCs and PAHs Hexane Extraction	EP601 ALS Environmental - Vancouver	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.
Glycols Extraction and Derivatization (BC Only)	EP680E ALS Environmental - Vancouver	Water	EPA 8015D (mod)	Aqueous sample is derivatized and extracted with orgaic solvent.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	[redacted]	Page	: 1 of 23
Client		Laboratory	[redacted]
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project		Date Samples Received	: 07-Feb-2025 17:10
PO		Date Analysis Commenced	: 09-Feb-2025
C-O-C number		Issue Date	: 19-Feb-2025 09:40
Sampler			
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
[redacted]		Vancouver Metals, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Organics, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Edmonton Inorganics, Edmonton, Alberta
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Administration, Burnaby, British Columbia
		Vancouver Organics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 1868290)											
KS2500433-001	Anonymous	Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	161	158	1.75%	20%	----
Physical Tests (QC Lot: 1874105)											
VA25A2785-001	WLNG US 1	Solids, total dissolved [TDS]	----	E162	10	mg/L	24	23	1	Diff <2x LOR	----
Physical Tests (QC Lot: 1874110)											
VA25A2785-001	WLNG US 1	Solids, total suspended [TSS]	----	E160	3.0	mg/L	<3.0	<3.0	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868292)											
FJ2500401-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	<0.020	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868293)											
FJ2500401-001	Anonymous	Chloride	16887-00-6	E235.Cl	0.50	mg/L	0.94	0.93	0.01	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868294)											
FJ2500401-001	Anonymous	Bromide	24959-67-9	E235.Br-L	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868295)											
FJ2500401-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868296)											
FJ2500401-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868297)											
FJ2500401-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	<0.30	<0.30	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1869597)											
KS2500430-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.378	0.371	2.02%	20%	----
Anions and Nutrients (QC Lot: 1869598)											
FJ2500390-010	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0085	0.0082	0.0003	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1869601)											
VA25A2776-001	Anonymous	Nitrogen, total	7727-37-9	E366	0.030	mg/L	0.033	0.032	0.001	Diff <2x LOR	----
Organic / Inorganic Carbon (QC Lot: 1869600)											
VA25A2776-001	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	0.50	mg/L	<0.50	<0.50	0	Diff <2x LOR	----
Total Sulfides (QC Lot: 1872369)											
VA25A2559-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 1868863)											
VA25A2771-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.435	0.433	0.378%	20%	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00201	0.00186	7.73%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 1868863) - continued											
VA25A2771-001	Anonymous	Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.0110	0.00987	11.0%	20%	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0256	0.0246	4.25%	20%	----
		Beryllium, total	7440-41-7	E420	0.000020	mg/L	0.000037	0.000040	0.000003	Diff <2x LOR	----
		Bismuth, total	7440-69-9	E420	0.000050	mg/L	0.000407	0.000403	0.000003	Diff <2x LOR	----
		Boron, total	7440-42-8	E420	0.010	mg/L	0.069	0.069	0.0004	Diff <2x LOR	----
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.00791	0.00771	2.57%	20%	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	18.7	19.7	5.32%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.000053	0.000058	0.000006	Diff <2x LOR	----
		Chromium, total	7440-47-3	E420	0.00050	mg/L	0.00397	0.00388	0.00009	Diff <2x LOR	----
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00172	0.00170	1.41%	20%	----
		Copper, total	7440-50-8	E420	0.00050	mg/L	0.0961	0.0930	3.32%	20%	----
		Iron, total	7439-89-6	E420	0.010	mg/L	11.7	10.9	6.86%	20%	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	0.00247	0.00247	0.141%	20%	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	0.0056	0.0057	0.00008	Diff <2x LOR	----
		Magnesium, total	7439-95-4	E420	0.100	mg/L	3.48	3.30	5.40%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.252	0.243	3.71%	20%	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.0172	0.0173	0.529%	20%	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	0.00551	0.00536	2.86%	20%	----
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	513	475	7.58%	20%	----
		Potassium, total	7440-09-7	E420	0.100	mg/L	264	252	4.87%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.0197	0.0190	3.46%	20%	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.00714	0.00489	37.4%	20%	DUP-H
		Silicon, total	7440-21-3	E420	0.10	mg/L	4.30	4.30	0.0719%	20%	----
		Silver, total	7440-22-4	E420	0.000010	mg/L	0.000058	0.000053	0.000005	Diff <2x LOR	----
		Sodium, total	7440-23-5	E420	0.050	mg/L	75.7	71.8	5.30%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.0758	0.0768	1.22%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	52.2	49.0	6.15%	20%	----
		Tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Thallium, total	7440-28-0	E420	0.000010	mg/L	0.000097	0.000094	0.000003	Diff <2x LOR	----
		Thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, total	7440-31-5	E420	0.00010	mg/L	0.00055	0.00053	0.00002	Diff <2x LOR	----
		Titanium, total	7440-32-6	E420	0.00270	mg/L	0.0254	0.0254	0.00010	Diff <2x LOR	----
		Tungsten, total	7440-33-7	E420	0.00010	mg/L	0.00377	0.00383	1.52%	20%	----
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000298	0.000290	2.51%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 1868863) - continued											
VA25A2771-001	Anonymous	Vanadium, total	7440-62-2	E420	0.00050	mg/L	0.00265	0.00258	0.00006	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	0.209	0.203	3.06%	20%	----
		Zirconium, total	7440-67-7	E420	0.00120	mg/L	<0.00120	<0.00120	0	Diff <2x LOR	----
Total Metals (QC Lot: 1870931)											
VA25A2755-002	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Total Metals (QC Lot: 1871193)											
VA25A2751-008	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	0.000413	0.000411	0.510%	20%	----
Dissolved Metals (QC Lot: 1868902)											
VA25A2747-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	0.0348	0.0356	2.48%	20%	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.00019	0.00019	0.000003	Diff <2x LOR	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.0542	0.0545	0.425%	20%	----
		Beryllium, dissolved	7440-41-7	E421	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	----
		Bismuth, dissolved	7440-69-9	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Boron, dissolved	7440-42-8	E421	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	0.000130	0.000142	9.06%	20%	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	116	118	1.02%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	0.000167	0.000169	0.963%	20%	----
		Chromium, dissolved	7440-47-3	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Cobalt, dissolved	7440-48-4	E421	0.00010	mg/L	0.00056	0.00058	0.00002	Diff <2x LOR	----
		Copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00181	0.00183	0.00003	Diff <2x LOR	----
		Iron, dissolved	7439-89-6	E421	0.010	mg/L	0.107	0.110	1.93%	20%	----
		Lead, dissolved	7439-92-1	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Lithium, dissolved	7439-93-2	E421	0.0010	mg/L	0.0019	0.0019	0.00002	Diff <2x LOR	----
		Magnesium, dissolved	7439-95-4	E421	0.0050	mg/L	4.62	4.60	0.448%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.104	0.102	1.91%	20%	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.000844	0.000901	6.50%	20%	----
		Nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.00778	0.00794	2.05%	20%	----
		Phosphorus, dissolved	7723-14-0	E421	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Potassium, dissolved	7440-09-7	E421	0.050	mg/L	11.0	11.0	0.101%	20%	----
		Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	0.0245	0.0247	0.870%	20%	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000604	0.000689	13.3%	20%	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	1.88	1.89	0.504%	20%	----
		Silver, dissolved	7440-22-4	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----

Sub-Matrix: **Water**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Laboratory Duplicate (DUP) Report						
					LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Dissolved Metals (QC Lot: 1868902) - continued											
VA25A2747-001	Anonymous	Sodium, dissolved	7440-23-5	E421	0.050	mg/L	6.74	6.81	1.01%	20%	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	0.167	0.161	3.57%	20%	----
		Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	88.0	89.4	1.61%	20%	----
		Tellurium, dissolved	13494-80-9	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Thallium, dissolved	7440-28-0	E421	0.000010	mg/L	0.000024	0.000024	0.0000007	Diff <2x LOR	----
		Thorium, dissolved	7440-29-1	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, dissolved	7440-31-5	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Titanium, dissolved	7440-32-6	E421	0.00180	mg/L	<0.00180	<0.00180	0	Diff <2x LOR	----
		Tungsten, dissolved	7440-33-7	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.000764	0.000756	0.998%	20%	----
		Vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0112	0.0112	0.477%	20%	----
		Zirconium, dissolved	7440-67-7	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1871726)											
VA25A2755-003	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 1871116)											
KS2500433-001	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
Aggregate Organics (QC Lot: 1871938)											
CG2501496-001	Anonymous	Phenols, total (4AAP)	----	E562	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 1875706)											
FJ2500401-001	Anonymous	Benzene	71-43-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Bromodichloromethane	75-27-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Bromoform	75-25-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Carbon tetrachloride	56-23-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chlorobenzene	108-90-7	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chloroethane	75-00-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chloroform	67-66-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chloromethane	74-87-3	E611C	5.0	µg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Dibromochloromethane	124-48-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichlorobenzene, 1,2-	95-50-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichlorobenzene, 1,3-	541-73-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichlorobenzene, 1,4-	106-46-7	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethane, 1,1-	75-34-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethane, 1,2-	107-06-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Laboratory Duplicate (DUP) Report						
					LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Volatile Organic Compounds (QC Lot: 1875706) - continued											
FJ2500401-001	Anonymous	Dichloroethylene, 1,1-	75-35-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethylene, cis-1,2-	156-59-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethylene, trans-1,2-	156-60-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloromethane	75-09-2	E611C	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		Dichloropropane, 1,2-	78-87-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Ethylbenzene	100-41-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Styrene	100-42-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		Tetrachloroethylene	127-18-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Toluene	108-88-3	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		Trichloroethane, 1,1,1-	71-55-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichloroethane, 1,1,2-	79-00-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichloroethylene	79-01-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichlorofluoromethane	75-69-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Vinyl chloride	75-01-4	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		Xylene, m+p-	179601-23-1	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		Xylene, o-	95-47-6	E611C	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 1875707)											
VA25A2785-003	WLNG EOP	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.0%	30%	----
Glycols (QC Lot: 1868203)											
VA25A2454-001	Anonymous	Diethylene glycol	111-46-6	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Ethylene glycol	107-21-1	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Propylene glycol, 1,2-	57-55-6	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Triethylene glycol	112-27-6	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----

Qualifiers

Qualifier	Description
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 1868290)						
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
Physical Tests (QCLot: 1874105)						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Physical Tests (QCLot: 1874110)						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Anions and Nutrients (QCLot: 1868292)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 1868293)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 1868294)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 1868295)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1868296)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 1868297)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Anions and Nutrients (QCLot: 1869597)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	----
Anions and Nutrients (QCLot: 1869598)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1869601)						
Nitrogen, total	7727-37-9	E366	0.03	mg/L	<0.030	----
Organic / Inorganic Carbon (QCLot: 1869600)						
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	<0.50	----
Total Sulfides (QCLot: 1872369)						
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	----
Total Metals (QCLot: 1868863)						
Aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
Barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1868863) - continued						
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
Zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1870931)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Total Metals (QCLot: 1871193)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1868902)						
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	<0.0010	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	<0.00010	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	<0.00010	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	<0.00010	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	<0.000020	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	<0.000050	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	<0.010	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	<0.0000050	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	<0.050	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	<0.000010	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	<0.00050	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	<0.00010	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	<0.010	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	<0.000050	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	<0.0010	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	<0.0050	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	<0.00010	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	<0.000050	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	<0.00050	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	<0.050	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	<0.050	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	<0.00020	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	<0.000050	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	<0.050	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	<0.000010	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	<0.050	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	<0.00020	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	<0.50	----
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	<0.00020	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	<0.000010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 1868902) - continued						
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	<0.00010	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	<0.00010	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	<0.00030	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	<0.00010	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	<0.000010	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	<0.00050	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	<0.00020	----
Dissolved Metals (QCLot: 1871726)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 1871116)						
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	<0.00050	----
Aggregate Organics (QCLot: 1871938)						
Phenols, total (4AAP)	----	E562	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 1875706)						
Benzene	71-43-2	E611C	0.5	µg/L	<0.50	----
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	<0.50	----
Bromoform	75-25-2	E611C	0.5	µg/L	<0.50	----
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	<0.50	----
Chlorobenzene	108-90-7	E611C	0.5	µg/L	<0.50	----
Chloroethane	75-00-3	E611C	0.5	µg/L	<0.50	----
Chloroform	67-66-3	E611C	0.5	µg/L	<0.50	----
Chloromethane	74-87-3	E611C	5	µg/L	<5.0	----
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	<0.50	----
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	<0.50	----
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	<0.50	----
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	<0.50	----
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	<0.50	----
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	<0.50	----
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	<0.50	----
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	<0.50	----
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	<0.50	----
Dichloromethane	75-09-2	E611C	1	µg/L	<1.0	----
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	<0.50	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 1875706) - continued						
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	<0.50	----
Ethylbenzene	100-41-4	E611C	0.5	µg/L	<0.50	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	<0.50	----
Styrene	100-42-5	E611C	0.5	µg/L	<0.50	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	<0.50	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	<0.20	----
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	<0.50	----
Toluene	108-88-3	E611C	0.4	µg/L	<0.40	----
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	<0.50	----
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	<0.50	----
Trichloroethylene	79-01-6	E611C	0.5	µg/L	<0.50	----
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	<0.50	----
Vinyl chloride	75-01-4	E611C	0.4	µg/L	<0.40	----
Xylene, m+p-	179601-23-1	E611C	0.4	µg/L	<0.40	----
Xylene, o-	95-47-6	E611C	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 1875692)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Hydrocarbons (QCLot: 1875707)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691)						
Acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
Acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
Acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
Anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
Benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	<0.010	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
Chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
Fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
Fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691) - continued						
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
Naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
Phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
Pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
Quinoline	91-22-5	E641A	0.05	µg/L	<0.050	----
Glycols (QCLot: 1868203)						
Diethylene glycol	111-46-6	E680E	5	mg/L	<5.0	----
Ethylene glycol	107-21-1	E680E	5	mg/L	<5.0	----
Propylene glycol, 1,2-	57-55-6	E680E	5	mg/L	<5.0	----
Triethylene glycol	112-27-6	E680E	5	mg/L	<5.0	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 1868290)									
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	500 mg/L	103	85.0	115	----
Physical Tests (QCLot: 1874105)									
Solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	110	85.0	115	----
Physical Tests (QCLot: 1874110)									
Solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	92.2	85.0	115	----
Anions and Nutrients (QCLot: 1868292)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1868293)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1868294)									
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	91.4	85.0	115	----
Anions and Nutrients (QCLot: 1868295)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	99.1	90.0	110	----
Anions and Nutrients (QCLot: 1868296)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1868297)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1869597)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.05 mg/L	95.3	80.0	120	----
Anions and Nutrients (QCLot: 1869598)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	104	85.0	115	----
Anions and Nutrients (QCLot: 1869601)									
Nitrogen, total	7727-37-9	E366	0.03	mg/L	0.5 mg/L	96.4	75.0	125	----
Organic / Inorganic Carbon (QCLot: 1869600)									
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	8.57 mg/L	97.2	80.0	120	----
Total Sulfides (QCLot: 1872369)									
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	0.08 mg/L	104	80.0	120	----
Total Metals (QCLot: 1868863)									

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1868863) - continued									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	102	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	104	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	102	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	99.8	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	96.9	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	99.4	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	95.6	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	97.6	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	96.8	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	102	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	99.3	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	99.5	80.0	120	----
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	98.8	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	96.4	80.0	120	----
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	101	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	99.6	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	100	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	96.8	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	102	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	99.9	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	92.8	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	100	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	101	80.0	120	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	99.7	80.0	120	----
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	111	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	95.2	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	103	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	104	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	84.0	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	109	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	99.0	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	103	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	99.4	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	97.2	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	99.8	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	102	80.0	120	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1868863) - continued									
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	101	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	93.1	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	101	80.0	120	----
Total Metals (QCLot: 1870931)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	101	80.0	120	----
Total Metals (QCLot: 1871193)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	98.8	80.0	120	----
Dissolved Metals (QCLot: 1868902)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	99.0	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	95.1	80.0	120	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	1 mg/L	102	80.0	120	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.25 mg/L	98.0	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	94.8	80.0	120	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	1 mg/L	101	80.0	120	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	1 mg/L	102	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	94.5	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	96.4	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	95.0	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	96.9	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	100	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	98.5	80.0	120	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	1 mg/L	96.5	80.0	120	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.5 mg/L	100.0	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	97.4	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	97.1	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	100	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	94.1	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	98.0	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	98.4	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	106	80.0	120	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	0.1 mg/L	104	80.0	120	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	1 mg/L	95.1	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	94.2	80.0	120	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.1 mg/L	89.4	80.0	120	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	50 mg/L	103	80.0	120	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 1868902) - continued									
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	0.25 mg/L	96.8	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	83.5	80.0	120	----
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	0.1 mg/L	91.4	80.0	120	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	1 mg/L	99.9	80.0	120	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	0.1 mg/L	97.2	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	95.4	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	95.3	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	99.5	80.0	120	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.005 mg/L	102	80.0	120	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.5 mg/L	99.7	80.0	120	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	101	80.0	120	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	0.1 mg/L	92.8	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	99.0	80.0	120	----
Speciated Metals (QCLot: 1871116)									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	0.25 mg/L	108	80.0	120	----
Aggregate Organics (QCLot: 1871938)									
Phenols, total (4AAP)	----	E562	0.001	mg/L	0.02 mg/L	89.2	85.0	115	----
Volatile Organic Compounds (QCLot: 1875706)									
Benzene	71-43-2	E611C	0.5	µg/L	100 µg/L	98.6	70.0	130	----
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	100 µg/L	93.6	70.0	130	----
Bromoform	75-25-2	E611C	0.5	µg/L	100 µg/L	87.5	70.0	130	----
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	100 µg/L	85.9	70.0	130	----
Chlorobenzene	108-90-7	E611C	0.5	µg/L	100 µg/L	100	70.0	130	----
Chloroethane	75-00-3	E611C	0.5	µg/L	100 µg/L	98.5	60.0	140	----
Chloroform	67-66-3	E611C	0.5	µg/L	100 µg/L	94.1	70.0	130	----
Chloromethane	74-87-3	E611C	5	µg/L	100 µg/L	# 142	60.0	140	LCS-ND
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	100 µg/L	96.8	70.0	130	----
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	100 µg/L	96.6	70.0	130	----
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	100 µg/L	93.4	70.0	130	----
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	100 µg/L	93.9	70.0	130	----
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	100 µg/L	86.2	70.0	130	----
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	100 µg/L	80.8	70.0	130	----
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	100 µg/L	96.1	70.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 1875706) - continued									
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	100 µg/L	88.1	70.0	130	----
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	100 µg/L	96.6	70.0	130	----
Dichloromethane	75-09-2	E611C	1	µg/L	100 µg/L	94.1	70.0	130	----
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	100 µg/L	97.8	70.0	130	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	100 µg/L	84.3	70.0	130	----
Ethylbenzene	100-41-4	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Styrene	100-42-5	E611C	0.5	µg/L	100 µg/L	88.1	70.0	130	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	100 µg/L	96.8	70.0	130	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	100 µg/L	90.6	70.0	130	----
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	100 µg/L	94.5	70.0	130	----
Toluene	108-88-3	E611C	0.4	µg/L	100 µg/L	93.1	70.0	130	----
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	100 µg/L	92.0	70.0	130	----
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	100 µg/L	93.6	70.0	130	----
Trichloroethylene	79-01-6	E611C	0.5	µg/L	100 µg/L	104	70.0	130	----
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	100 µg/L	85.2	60.0	140	----
Vinyl chloride	75-01-4	E611C	0.4	µg/L	100 µg/L	139	60.0	140	----
Xylene, m+p-	179601-23-1	E611C	0.4	µg/L	200 µg/L	104	70.0	130	----
Xylene, o-	95-47-6	E611C	0.3	µg/L	100 µg/L	95.8	70.0	130	----
Hydrocarbons (QCLot: 1875692)									
EPH (C10-C19)	----	E601A	250	µg/L	6490 µg/L	100	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3360 µg/L	100	70.0	130	----
Hydrocarbons (QCLot: 1875707)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	89.3	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691)									
Acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	119	60.0	130	----
Acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
Acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
Anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	103	60.0	130	----
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	80.4	60.0	130	----
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	102	60.0	130	----
Benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	0.5 µg/L	99.0	60.0	130	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	124	60.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691) - continued									
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	128	60.0	130	----
Chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	121	60.0	130	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	105	60.0	130	----
Fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
Fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	102	60.0	130	----
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	109	60.0	130	----
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	----
Naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	117	50.0	130	----
Phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	110	60.0	130	----
Pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----
Quinoline	91-22-5	E641A	0.05	µg/L	0.5 µg/L	116	60.0	130	----
Glycols (QCLot: 1868203)									
Diethylene glycol	111-46-6	E680E	5	mg/L	25 mg/L	98.2	70.0	130	----
Ethylene glycol	107-21-1	E680E	5	mg/L	25 mg/L	98.9	70.0	130	----
Propylene glycol, 1,2-	57-55-6	E680E	5	mg/L	25 mg/L	100	70.0	130	----
Triethylene glycol	112-27-6	E680E	5	mg/L	25 mg/L	97.3	70.0	130	----

Qualifiers

Qualifier	Description
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 1868292)										
FJ2500401-002	Anonymous	Fluoride	16984-48-8	E235.F	5.28 mg/L	5 mg/L	106	75.0	125	----
Anions and Nutrients (QCLot: 1868293)										
FJ2500401-002	Anonymous	Chloride	16887-00-6	E235.Cl	522 mg/L	500 mg/L	104	75.0	125	----
Anions and Nutrients (QCLot: 1868294)										
FJ2500401-002	Anonymous	Bromide	24959-67-9	E235.Br-L	2.29 mg/L	2.5 mg/L	91.6	75.0	125	----
Anions and Nutrients (QCLot: 1868295)										
FJ2500401-002	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	12.7 mg/L	12.5 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 1868296)										
FJ2500401-002	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	2.62 mg/L	2.5 mg/L	105	75.0	125	----
Anions and Nutrients (QCLot: 1868297)										
FJ2500401-002	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	518 mg/L	500 mg/L	104	75.0	125	----
Anions and Nutrients (QCLot: 1869597)										
KS2500430-002	Anonymous	Phosphorus, total	7723-14-0	E372-U	ND mg/L	----	ND	70.0	130	----
Anions and Nutrients (QCLot: 1869598)										
KS2500430-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.102 mg/L	0.1 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 1869601)										
VA25A2776-002	Anonymous	Nitrogen, total	7727-37-9	E366	ND mg/L	----	ND	70.0	130	----
Organic / Inorganic Carbon (QCLot: 1869600)										
VA25A2776-002	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	5.14 mg/L	5 mg/L	103	70.0	130	----
Total Sulfides (QCLot: 1872369)										
VA25A2665-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.245 mg/L	0.2 mg/L	123	75.0	125	----
Total Metals (QCLot: 1868863)										
VA25A2785-001	WLNG US 1	Aluminum, total	7429-90-5	E420	0.182 mg/L	0.2 mg/L	91.2	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0188 mg/L	0.02 mg/L	93.9	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0193 mg/L	0.02 mg/L	96.4	70.0	130	----
		Barium, total	7440-39-3	E420	0.0189 mg/L	0.02 mg/L	94.3	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0377 mg/L	0.04 mg/L	94.3	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.0101 mg/L	0.01 mg/L	101	70.0	130	----
		Boron, total	7440-42-8	E420	0.093 mg/L	0.1 mg/L	93.4	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00417 mg/L	0.004 mg/L	104	70.0	130	----
		Calcium, total	7440-70-2	E420	3.72 mg/L	4 mg/L	93.0	70.0	130	----
		Cesium, total	7440-46-2	E420	0.00954 mg/L	0.01 mg/L	95.4	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0374 mg/L	0.04 mg/L	93.6	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 1868863) - continued										
VA25A2785-001	WLNG US 1	Cobalt, total	7440-48-4	E420	0.0193 mg/L	0.02 mg/L	96.4	70.0	130	----
		Copper, total	7440-50-8	E420	0.0190 mg/L	0.02 mg/L	95.3	70.0	130	----
		Iron, total	7439-89-6	E420	1.86 mg/L	2 mg/L	93.0	70.0	130	----
		Lead, total	7439-92-1	E420	0.0191 mg/L	0.02 mg/L	95.4	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0929 mg/L	0.1 mg/L	92.9	70.0	130	----
		Magnesium, total	7439-95-4	E420	0.933 mg/L	1 mg/L	93.3	70.0	130	----
		Manganese, total	7439-96-5	E420	0.0181 mg/L	0.02 mg/L	90.4	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0188 mg/L	0.02 mg/L	94.1	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0385 mg/L	0.04 mg/L	96.2	70.0	130	----
		Phosphorus, total	7723-14-0	E420	8.92 mg/L	10 mg/L	89.2	70.0	130	----
		Potassium, total	7440-09-7	E420	3.75 mg/L	4 mg/L	93.7	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0190 mg/L	0.02 mg/L	95.1	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0386 mg/L	0.04 mg/L	96.6	70.0	130	----
		Silicon, total	7440-21-3	E420	9.50 mg/L	10 mg/L	95.0	70.0	130	----
		Silver, total	7440-22-4	E420	0.00381 mg/L	0.004 mg/L	95.4	70.0	130	----
		Sodium, total	7440-23-5	E420	1.94 mg/L	2 mg/L	97.2	70.0	130	----
		Strontium, total	7440-24-6	E420	0.0190 mg/L	0.02 mg/L	94.9	70.0	130	----
		Sulfur, total	7704-34-9	E420	18.6 mg/L	20 mg/L	92.8	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0395 mg/L	0.04 mg/L	98.9	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00380 mg/L	0.004 mg/L	95.1	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0207 mg/L	0.02 mg/L	103	70.0	130	----
		Tin, total	7440-31-5	E420	0.0186 mg/L	0.02 mg/L	93.3	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0362 mg/L	0.04 mg/L	90.4	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0186 mg/L	0.02 mg/L	92.9	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00394 mg/L	0.004 mg/L	98.6	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0949 mg/L	0.1 mg/L	94.9	70.0	130	----
		Zinc, total	7440-66-6	E420	0.368 mg/L	0.4 mg/L	92.0	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0376 mg/L	0.04 mg/L	94.1	70.0	130	----
Total Metals (QCLot: 1870931)										
VA25A2755-003	Anonymous	Mercury, total	7439-97-6	E508	0.000100 mg/L	0 mg/L	100	70.0	130	----
Total Metals (QCLot: 1871193)										
VA25A2751-007	Anonymous	Mercury, total	7439-97-6	E508	0.0000937 mg/L	0 mg/L	93.7	70.0	130	----
Dissolved Metals (QCLot: 1868902)										
VA25A2747-002	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.378 mg/L	0.4 mg/L	94.5	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0376 mg/L	0.04 mg/L	94.1	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0411 mg/L	0.04 mg/L	103	70.0	130	----
		Barium, dissolved	7440-39-3	E421	ND mg/L	----	ND	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0739 mg/L	0.08 mg/L	92.4	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.0179 mg/L	0.02 mg/L	89.5	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.197 mg/L	0.2 mg/L	98.5	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00741 mg/L	0.008 mg/L	92.6	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	ND mg/L	----	ND	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.0187 mg/L	0.02 mg/L	93.6	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 1868902) - continued										
VA25A2747-002	Anonymous	Chromium, dissolved	7440-47-3	E421	0.0768 mg/L	0.08 mg/L	95.9	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0378 mg/L	0.04 mg/L	94.4	70.0	130	----
		Copper, dissolved	7440-50-8	E421	0.0373 mg/L	0.04 mg/L	93.2	70.0	130	----
		Iron, dissolved	7439-89-6	E421	ND mg/L	----	ND	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0377 mg/L	0.04 mg/L	94.3	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.196 mg/L	0.2 mg/L	98.2	70.0	130	----
		Magnesium, dissolved	7439-95-4	E421	ND mg/L	----	ND	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	ND mg/L	----	ND	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	0.0378 mg/L	0.04 mg/L	94.5	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0746 mg/L	0.08 mg/L	93.2	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	19.8 mg/L	20 mg/L	98.9	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	ND mg/L	----	ND	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0399 mg/L	0.04 mg/L	99.8	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0784 mg/L	0.08 mg/L	98.0	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	17.9 mg/L	20 mg/L	89.4	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00727 mg/L	0.008 mg/L	90.8	70.0	130	----
		Sodium, dissolved	7440-23-5	E421	ND mg/L	----	ND	70.0	130	----
		Strontium, dissolved	7440-24-6	E421	ND mg/L	----	ND	70.0	130	----
		Sulfur, dissolved	7704-34-9	E421	ND mg/L	----	ND	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0719 mg/L	0.08 mg/L	89.9	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00757 mg/L	0.008 mg/L	94.6	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0402 mg/L	0.04 mg/L	100	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0374 mg/L	0.04 mg/L	93.5	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0777 mg/L	0.08 mg/L	97.1	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0388 mg/L	0.04 mg/L	96.9	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00796 mg/L	0.008 mg/L	99.5	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.196 mg/L	0.2 mg/L	98.3	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.772 mg/L	0.8 mg/L	96.5	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0764 mg/L	0.08 mg/L	95.5	70.0	130	----
Dissolved Metals (QCLot: 1871726)										
VA25A2755-004	Anonymous	Mercury, dissolved	7439-97-6	E509	0.000103 mg/L	0 mg/L	103	70.0	130	----
Speciated Metals (QCLot: 1871116)										
KS2500433-002	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.283 mg/L	0.25 mg/L	113	70.0	130	----
Aggregate Organics (QCLot: 1871938)										
CG2501496-001	Anonymous	Phenols, total (4AAP)	----	E562	0.0181 mg/L	0.02 mg/L	90.4	75.0	125	----
Volatile Organic Compounds (QCLot: 1875706)										
VA25A2878-001	Anonymous	Benzene	71-43-2	E611C	86.4 µg/L	100 µg/L	86.4	60.0	140	----
		Bromodichloromethane	75-27-4	E611C	84.7 µg/L	100 µg/L	84.7	60.0	140	----
		Bromoform	75-25-2	E611C	96.0 µg/L	100 µg/L	96.0	60.0	140	----
		Carbon tetrachloride	56-23-5	E611C	76.8 µg/L	100 µg/L	76.8	60.0	140	----
		Chlorobenzene	108-90-7	E611C	96.8 µg/L	100 µg/L	96.8	60.0	140	----
		Chloroethane	75-00-3	E611C	86.6 µg/L	100 µg/L	86.6	50.0	150	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 1875706) - continued										
VA25A2878-001	Anonymous	Chloroform	67-66-3	E611C	84.2 µg/L	100 µg/L	84.2	60.0	140	----
		Chloromethane	74-87-3	E611C	115 µg/L	100 µg/L	115	50.0	150	----
		Dibromochloromethane	124-48-1	E611C	95.1 µg/L	100 µg/L	95.1	60.0	140	----
		Dichlorobenzene, 1,2-	95-50-1	E611C	97.6 µg/L	100 µg/L	97.6	60.0	140	----
		Dichlorobenzene, 1,3-	541-73-1	E611C	94.9 µg/L	100 µg/L	94.9	60.0	140	----
		Dichlorobenzene, 1,4-	106-46-7	E611C	93.8 µg/L	100 µg/L	93.8	60.0	140	----
		Dichloroethane, 1,1-	75-34-3	E611C	82.3 µg/L	100 µg/L	82.3	60.0	140	----
		Dichloroethane, 1,2-	107-06-2	E611C	76.5 µg/L	100 µg/L	76.5	60.0	140	----
		Dichloroethylene, 1,1-	75-35-4	E611C	81.0 µg/L	100 µg/L	81.0	60.0	140	----
		Dichloroethylene, cis-1,2-	156-59-2	E611C	84.2 µg/L	100 µg/L	84.2	60.0	140	----
		Dichloroethylene, trans-1,2-	156-60-5	E611C	86.6 µg/L	100 µg/L	86.6	60.0	140	----
		Dichloromethane	75-09-2	E611C	90.2 µg/L	100 µg/L	90.2	60.0	140	----
		Dichloropropane, 1,2-	78-87-5	E611C	90.1 µg/L	100 µg/L	90.1	60.0	140	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611C	87.5 µg/L	100 µg/L	87.5	60.0	140	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611C	82.8 µg/L	100 µg/L	82.8	60.0	140	----
		Ethylbenzene	100-41-4	E611C	96.4 µg/L	100 µg/L	96.4	60.0	140	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	96.2 µg/L	100 µg/L	96.2	60.0	140	----
		Styrene	100-42-5	E611C	92.4 µg/L	100 µg/L	92.4	60.0	140	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	90.1 µg/L	100 µg/L	90.1	60.0	140	----
		Tetrachloroethylene	127-18-4	E611C	88.7 µg/L	100 µg/L	88.7	60.0	140	----
		Toluene	108-88-3	E611C	84.7 µg/L	100 µg/L	84.7	60.0	140	----
		Trichloroethane, 1,1,1-	71-55-6	E611C	81.8 µg/L	100 µg/L	81.8	60.0	140	----
		Trichloroethane, 1,1,2-	79-00-5	E611C	80.4 µg/L	100 µg/L	80.4	60.0	140	----
		Trichloroethylene	79-01-6	E611C	94.6 µg/L	100 µg/L	94.6	60.0	140	----
		Trichlorofluoromethane	75-69-4	E611C	82.8 µg/L	100 µg/L	82.8	50.0	150	----
		Vinyl chloride	75-01-4	E611C	104 µg/L	100 µg/L	104	50.0	150	----
		Xylene, m+p-	179601-23-1	E611C	199 µg/L	200 µg/L	99.7	60.0	140	----
		Xylene, o-	95-47-6	E611C	96.7 µg/L	100 µg/L	96.7	60.0	140	----
Hydrocarbons (QCLot: 1875707)										
VA25A2785-004	WLNG EOP Duplicate	VHw (C6-C10)	----	E581.VH+F1	4930 µg/L	6310 µg/L	78.2	60.0	140	----

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC Number: 17 -

Page 1 of 2

Report To	Contact and company name below will appear on the final report
Company:	
Contact:	
Phone:	
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	
Contact:	

Report Format / Distribution

Select Report Format: ☑ ☑ EXCEL ☐ EDD (DIGITAL)
Quality Control (QC) Report with Report ☑ YES ☐ NO
☑ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax
Email 2
Email 3
Select Invoice D
Email 1 or Fax
Email 2

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐ | 3 day [P3-25%] ☐ | 2 day [P2-50%] ☐
EMERGENCY: 1 Business day [E1 - 100%] ☐ | Same Day, Weekend or Statutory holiday [E2 - 200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: Feb 18 /2025 hh:mm
For tests that can not be performed according to the service level selected, you will be contacted.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	VA25-TRIT100-001	AFE/Cost Center:	PO#
Job #:	11964	Major/Minor Code:	Routing Code:
PO / AFE:	11964 - Task 20 - Phase 3C-4C	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Total metals + mercury	Dissolved metals + mercury	Total hexavalent chromium	Total trivalent chromium	TSS	TDS	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus)	Total sulfide (low) (as H2S), Unionized Sulfide (low)	Anions scan (Br, Cl, F, NO2, NO3, SO4)	General parameters (alkalinity)	DOC					SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
						F					P	P			F/P							
	WLNG US 1	Feb 7/25	1:25	Water	R	R	R	R	R	R	R	R	R	R	R						N	9
	pH: 7.74 cond: 36 temp: 2.1																					
	WLNG DS 1	Feb 7/25	2:27	Water	R	R	R	R	R	R	R	R	R	R	R						N	9
	pH: 7.88 cond: 31 temp: 2.7																					

Environmental Division
Vancouver
Work Order Reference
VA25A2785
Telephone : +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?
☐ ☑ NO
Are samples for human consumption/ use?
☐ ☑ NO

Special Instructions / Specify Criteria t (el below

Triton project # 11964

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☑ ☐ SIF Observations Yes ☐ No ☐
Ice Packs ☑ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐
Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				3	5		

SHIPMENT RELEASE (client use)

Released by: Time: 5:08

INITIAL SHIPMENT RECEPTION (lab use only)

Received by: Date: Time:

FINAL SHIPMENT RECEPTION (lab use only)

Received by: Date: 5:10 pm

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

SEP 2017 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	[redacted]	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	☑ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:		Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:		☐ Compare Results to Criteria on Report - provide details below if box checked[1]	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
		Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
Street:		Email 1 or Fax [redacted]	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
City/Province:		Email 2	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge.
Postal Code:		Email 3	Additional fees may apply to rush requests on weekends, statutory holidays and for non-routine tests.
Invoice To	Same as Report To ☐ YES ☑ NO		Date and Time Required for all E&P TATs: Feb 18/25 2:30 am/pm
	Copy of Invoice with Report ☐ YES ☑ NO	Select Invoice [redacted]	For all tests with rush TATs requested, please contact your AM to confirm availability.
Company:		Email 1 or Fax	
Contact:		Email 2	

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	VA25-TRIT100-001	AFE/Cost Center:	PO#
Job #:	11964	Major/Minor Code:	Routing Code:
PO / AFE:	11964 - Task 40 - Phase 3C-4C	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact: [redacted]	Sampler:

Analysis Request

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Total metals + mercury	Dissolved metals + mercury	Total hexavalent chromium	Total trivalent chromium	TSS, TDS, T-Alkalinity, Anions scan (Br, Cl, F, NO2, NO3, SO4)	Total sulfide (low) (as H2S), Unionized Sulfide (low)	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus)	VOC/VPH	EPH, PAH, LEPH/HEPH	DOC	Glycols	General parameters (alkalinity)	Phenols	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
						F					P	P	P	P	F/P						
	WLNG EOP	Feb 7/25	1:41	Water	16	R	R	R	R	R	R	R	R	R	R	R	R	R			
	pH: 7.51 cond: 170 temp: 8.9																				
	WLNG EOP Duplicate	Feb 7/25	1:41	Water	16	R	R	R	R	R	R	R	R	R	R	R	R	R			
	pH: 7.51 cond: 170 temp: 8.9																				

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☑ NO	ESDAT EDD to ESdat_CA+tritonenv@ESdatLabSync.net
Are samples for human consumption/ use? ☐ YES ☑ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				3	5		

SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)	
Released by: [redacted]	Time: 5:08	Received by:	Date:	Time:	Rec [redacted]	Time: 5:10 pm

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Woodfibre Site WTP Discharge Field Notes and Logs

FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-2-7-Renkers-AF93D

Project Component:	Tunnel	**Site Name:**	WLNG Treatment Discharge
Inspection Date:	02/07/2025	**Location:**	WLNG
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.669279 -123.249887
Temperature(c):	Low -9 High 0	**Permit:**	PE 110136
Weather Conditions:	Clear	**Ground Conditions:**	Snow

Observations

Time: 13:41:00 **Flow Volume (visual):** N/A

Notes:

Odour Detected?:	No	**Notes:**	
Unusual Colour?	No	**Notes:**	
Unusual Observations?	No	**Notes:**	
Sheen on Water?	No	**Notes:**	

Samples Collected - Parameters

Total Metals + Mercury	Yes	**General Parameters (Alkalinity)**	Yes	**Other Sample:**	
Dissolved Metals + Mercury	Yes	**Total Sulfide, Unionized Sulfide**	Yes		
TSS	Yes	**Anions**	Yes		
TDS	Yes	**Total Trivalent Chromium**	Yes	**QA Samples:**	Yes
Nutrients	Yes	**VOC/VPH**	Yes		
DOC	Yes	**EPH, PAH, LEPH/HEPH**	Yes		
		Trout LC50	No		

Logger Maintenance

Logger Maintenance Performed?	No	**Photo of COC with Lab Signature?**	Yes

Describe Logger Maintenance

Photos

Photo: 1

Location: WLNG EOP

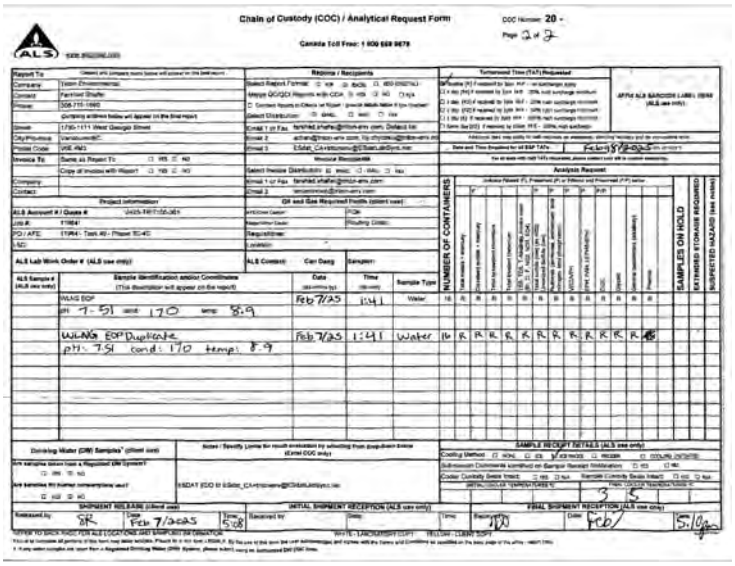
Description: Spigot off

Photo: 2

Location: WLNG EOP

Description: Spigot on

Photos



Chain of Custody (COC) / Analytical Request Form

WLNG EOP
pH: 7.51 cond: 170 temp: 8.9

WLNG EOP Duplicate
pH: 7.51 cond: 170 temp: 8.9

Photo: 3

Location: WLNG EOP

Description: Lab COC

Sign Off

Report Prepared By:	Stephanie Renkers	**Report Reviewed:**	Yes
Report Reviewer:		**Professional(s) of Record:**	
Name:			
Designation:			
Designation Number:			

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Table of Contents:

1. Executive Summary and Field Notes:

The discharged water consistently remained within regulatory guidelines. The key parameters, including temperature, pH, NTU, salinity, conductivity, and oxidation-reduction potential (ORP), were monitored throughout the discharge process and remained within the prescribed limits. No visible sheen observed on top of the WTP tanks and discharged water. All relevant parameters were measured using YSI instruments and WTP probes. The total discharge volume up to February 3 was 60,164 m^3.

Daily Volume Summary:

Table 1: Discharge Volumes Daily Summary

Date	Location	Volume (m3)	Comments
February 3	Woodfibre (WF)	722	None
February 4	WF	693	None
February 5	WF	710	None
February 6	WF	791	None
January 7	WF	994	None
February 8	WF	1661	None
February 9	WF	1675	None
	Total	7,246	None

2. Discharge Parameter Summary:

Table 2: Discharge Parameter Summary

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	1:00:00	7.3	0.62	0	60,164	9.4	119
2/3/2025	1:15:00	7.3	1.07	0	60,176	9.1	118
2/3/2025	1:30:00	7.3	1.05	0	60,192	9.2	118
2/3/2025	1:45:00	7.3	1.01	0	60,208	9.2	117
2/3/2025	2:00:00	7.3	0.98	0	60,223	9.2	115
2/3/2025	2:30:00	7.3	0.52	0	60,227	10.3	117
2/3/2025	3:30:00	7.3	0.56	0	60,236	10.1	117
2/3/2025	3:45:00	7.3	1.10	0	60,252	9	117
2/3/2025	4:00:00	7.3	1.07	0	60,268	9	117
2/3/2025	5:00:00	7.2	0.00	0	60,287	10.6	269
2/3/2025	5:45:00	7.3	1.36	0	60,299	8.7	119
2/3/2025	6:00:00	7.3	1.37	0	60,320	8.5	118
2/3/2025	6:15:00	7.4	1.32	0	60,340	8.6	117
2/3/2025	6:30:00	7.3	0.85	0	60,352	8.6	116
2/3/2025	8:00:00	7.3	1.36	0	60,376	8.4	119
2/3/2025	8:15:00	7.3	1.36	0	60,396	8.5	118
2/3/2025	9:30:00	7.3	0.79	0	60,424	8.6	118
2/3/2025	9:45:00	7.3	1.33	0	60,444	8.4	116
2/3/2025	11:30:00	7.3	0.92	0	60,482	8.3	117
2/3/2025	11:45:00	7.3	1.34	0	60,498	8.3	117
2/3/2025	13:00:00	7.3	1.29	0	60,532	8.4	118

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	13:15:00	7.3	1.26	0	60,552	8.5	118
2/3/2025	14:15:00	7.3	1.29	0	60,563	11.5	119
2/3/2025	14:30:00	7.3	1.30	0	60,578	8.6	118
2/3/2025	14:45:00	7.3	1.25	0	60,598	8.6	119
2/3/2025	15:15:00	7.3	1.31	0	60,611	8.7	117
2/3/2025	16:15:00	7.4	1.31	0	60,639	5.4	116
2/3/2025	16:30:00	7.4	1.27	0	60,658	6.4	116
2/3/2025	17:30:00	7.4	1.27	0	60,670	7.2	118
2/3/2025	17:45:00	7.3	1.25	0	60,689	7.9	117
2/3/2025	18:45:00	7.3	1.33	0	60,700	8.6	119
2/3/2025	19:00:00	7.3	1.34	0	60,720	8.5	118
2/3/2025	19:15:00	7.3	1.29	0	60,740	8.6	117
2/3/2025	20:00:00	7.3	1.34	0	60,757	8.6	117
2/3/2025	20:15:00	7.3	0.00	0	60,770	8.7	117
2/3/2025	21:00:00	7.3	1.30	0	60,776	8.6	118
2/3/2025	21:15:00	7.3	1.36	0	60,796	8.6	117
2/3/2025	22:15:00	7.3	1.36	0	60,824	8.8	119
2/3/2025	22:30:00	7.3	1.35	0	60,843	8.9	118
2/3/2025	23:00:00	7.3	1.35	0	60,853	9.5	119
2/3/2025	23:15:00	7.4	0.82	0	60,871	9.5	119
2/4/2025	1:00:00	7.3	1.31	0	60,897	9.1	119
2/4/2025	2:15:00	7.3	1.30	0	60,924	9.4	119
2/4/2025	2:30:00	7.3	1.28	0	60,940	9.2	117
2/4/2025	3:45:00	7.3	1.30	0	60,970	9.5	119
2/4/2025	4:00:00	7.3	1.30	0	60,990	9.3	118

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/4/2025	4:15:00	7.3	1.32	0	61,010	9.3	118
2/4/2025	5:15:00	7.3	1.27	0	61,024	9.5	121
2/4/2025	5:30:00	7.4	1.30	0	61,039	9.3	118
2/4/2025	6:45:00	7.3	1.30	0	61,069	9	119
2/4/2025	7:45:00	7.3	1.29	0	61,096	9	118
2/4/2025	8:00:00	7.3	1.29	0	61,115	9	117
2/4/2025	9:15:00	7.3	1.22	0	61,129	13.5	261
2/4/2025	9:30:00	7.3	1.24	0	61,148	9	118
2/4/2025	9:45:00	7.3	1.29	0	61,167	9	118
2/4/2025	10:45:00	7.3	1.24	0	61,182	9.1	118
2/4/2025	11:30:00	7.3	1.22	0	61,203	9.2	119
2/4/2025	11:45:00	7.3	1.22	0	61,221	9.2	118
2/4/2025	12:00:00	7.3	1.17	0	61,239	9.2	117
2/4/2025	12:30:00	7.2	0.00	0	61,240	10.3	116
2/4/2025	13:00:00	7.3	1.22	0	61,240	11.9	115
2/4/2025	13:15:00	7.3	1.25	0	61,259	9.1	117
2/4/2025	13:30:00	7.3	1.18	0	61,273	9.4	117
2/4/2025	14:30:00	7.3	1.26	0	61,281	13.1	263
2/4/2025	14:45:00	7.3	1.26	0	61,300	9.3	117
2/4/2025	15:00:00	7.3	1.28	0	61,319	9.3	116
2/4/2025	15:15:00	7.3	0.71	0	61,335	9.8	116
2/4/2025	16:30:00	7.3	1.24	0	61,346	9.5	119
2/4/2025	16:45:00	7.3	1.24	0	61,365	9.5	118
2/4/2025	17:00:00	7.3	1.24	0	61,383	9.5	117
2/4/2025	17:30:00	7.3	0.67	0	61,387	11.8	118

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/4/2025	17:45:00	7.3	1.21	0	61,403	9.5	119
2/4/2025	18:00:00	7.3	1.17	0	61,421	9.6	119
2/4/2025	19:15:00	7.3	1.21	0	61,438	9.6	118
2/4/2025	19:30:00	7.3	1.19	0	61,456	9.3	117
2/4/2025	20:30:00	7.3	1.20	0	61,470	9.5	119
2/4/2025	20:45:00	7.3	1.14	0	61,487	9.4	118
2/4/2025	21:00:00	7.4	1.16	0	61,505	9.3	117
2/4/2025	22:00:00	7.3	1.27	0	61,506	12.8	119
2/4/2025	22:15:00	7.3	1.21	0	61,524	9.3	117
2/4/2025	22:30:00	7.3	1.20	0	61,543	9.1	116
2/4/2025	23:30:00	7.3	0.67	0	61,559	9.9	117
2/4/2025	23:45:00	7.3	1.21	0	61,575	9	117
2/5/2025	0:45:00	7.3	0.00	0	61,592	9.4	117
2/5/2025	1:00:00	7.3	1.19	0	61,607	8.9	116
2/5/2025	1:15:00	7.3	1.22	0	61,625	8.9	117
2/5/2025	2:00:00	7.3	1.13	0	61,636	11.9	117
2/5/2025	2:15:00	7.3	1.20	0	61,650	8.9	116
2/5/2025	2:30:00	7.4	1.21	0	61,668	8.9	116
2/5/2025	3:30:00	7.3	1.19	0	61,682	8.9	117
2/5/2025	3:45:00	7.3	1.18	0	61,699	8.8	117
2/5/2025	4:00:00	7.4	1.13	0	61,717	8.8	117
2/5/2025	5:00:00	7.3	1.15	0	61,736	8.8	116
2/5/2025	5:15:00	7.3	1.16	0	61,749	8.6	116
2/5/2025	6:15:00	7.3	0.61	0	61,765	9.6	117
2/5/2025	6:30:00	7.3	1.15	0	61,780	8.7	117

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/5/2025	7:30:00	7.3	1.11	0	61,802	8.9	117
2/5/2025	7:45:00	7.3	1.15	0	61,818	8.8	117
2/5/2025	8:00:00	7.3	1.14	0	61,835	8.9	117
2/5/2025	9:00:00	7.3	1.02	0	61,853	8.9	117
2/5/2025	9:15:00	7.3	1.20	0	61,865	8.5	116
2/5/2025	10:00:00	7.4	1.22	0.1	61,877	8.9	116
2/5/2025	10:15:00	7.3	1.25	0	61,895	8.6	114
2/5/2025	11:30:00	7.3	0.67	0.1	61,924	8.9	114
2/5/2025	11:45:00	7.3	0.00	0.1	61,931	8.8	114
2/5/2025	12:30:00	7.3	1.21	0.2	61,946	8.7	114
2/5/2025	12:45:00	7.4	1.20	0.3	61,964	8.8	114
2/5/2025	13:00:00	7.4	1.17	0.2	61,982	8.8	114
2/5/2025	14:00:00	7.3	1.14	0	61,992	9	116
2/5/2025	14:15:00	7.3	1.18	0.3	62,010	8.8	114
2/5/2025	15:15:00	7.3	0.67	0	62,024	9.2	115
2/5/2025	15:30:00	7.4	1.21	0.2	62,041	8.9	114
2/5/2025	15:45:00	7.4	1.22	0.3	62,059	8.9	113
2/5/2025	16:45:00	7.3	1.15	0.1	62,079	9.1	114
2/5/2025	17:00:00	7.4	1.20	0.2	62,096	9.1	114
2/5/2025	18:00:00	7.3	1.19	0.1	62,108	9.4	116
2/5/2025	18:15:00	7.3	0.68	0.1	62,124	9.5	114
2/5/2025	18:30:00	7.3	0.00	0.1	62,129	9.5	114
2/5/2025	19:15:00	7.3	1.19	0	62,143	9.3	116
2/5/2025	19:30:00	7.3	1.27	0	62,162	9.2	114
2/5/2025	19:45:00	7.3	0.67	0.2	62,178	9.5	113

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/5/2025	20:45:00	7.3	1.17	0.3	62,201	9	114
2/5/2025	21:00:00	7.3	1.15	0.1	62,219	8.9	114
2/5/2025	22:00:00	7.3	1.24	1.6	62,228	9.2	114
2/5/2025	22:15:00	7.3	1.20	0.3	62,242	9	113
2/5/2025	22:30:00	7.3	1.30	0.3	62,261	9	114
2/5/2025	23:30:00	7.3	1.23	0	62,280	9.1	116
2/5/2025	23:45:00	7.3	1.25	0	62,299	9.1	116
2/6/2025	0:45:00	7.3	1.21	0	62,324	9.2	117
2/6/2025	1:00:00	7.3	1.22	0	62,342	9	116
2/6/2025	1:30:00	7.2	0.00	0	62,357	9.8	116
2/6/2025	2:15:00	7.3	0.72	0	62,360	9.5	118
2/6/2025	2:30:00	7.3	1.22	0	62,375	9.1	118
2/6/2025	3:30:00	7.3	1.24	0	62,398	9.3	118
2/6/2025	3:45:00	7.3	1.26	0	62,417	9.1	118
2/6/2025	4:00:00	7.3	1.20	0	62,435	9	117
2/6/2025	4:30:00	7.2	0.00	0	62,439	10.8	118
2/6/2025	5:15:00	7.3	1.28	0	62,455	9.1	119
2/6/2025	5:30:00	7.3	1.27	0	62,474	9	118
2/6/2025	6:30:00	7.3	1.25	0	62,495	9.2	118
2/6/2025	6:45:00	7.3	1.24	0	62,513	8.9	116
2/6/2025	7:45:00	7.3	1.21	0	62,543	9	118
2/6/2025	8:00:00	7.3	1.22	0	62,561	9	118
2/6/2025	8:30:00	7.2	0.00	0	62,570	10.3	119
2/6/2025	9:15:00	7.3	1.22	0	62,584	8.9	116
2/6/2025	9:30:00	7.3	0.68	0	62,600	9.4	118

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/6/2025	9:45:00	7.3	1.18	0	62,615	9.1	118
2/6/2025	10:45:00	7.3	1.18	0	62,625	10.8	119
2/6/2025	11:15:00	7.2	1.13	0	62,642	10.8	119
2/6/2025	11:30:00	7.3	1.21	0	62,659	9.4	119
2/6/2025	11:45:00	7.3	0.66	0	62,673	9.9	119
2/6/2025	12:30:00	7.2	1.18	0	62,682	10	119
2/6/2025	12:45:00	7.3	1.16	0	62,700	9.5	119
2/6/2025	13:00:00	7.3	0.70	0	62,717	9.6	278
2/6/2025	14:00:00	7.3	1.18	0.4	62,733	9.4	284
2/6/2025	14:15:00	7.3	1.18	0.3	62,751	9.4	292
2/6/2025	15:15:00	7.3	1.17	0.5	62,772	9.3	293
2/6/2025	15:30:00	7.3	0.69	0.7	62,790	9.4	298
2/6/2025	15:45:00	7.3	1.25	0.6	62,805	9.4	300
2/6/2025	16:00:00	7.3	1.24	0.7	62,823	9.4	298
2/6/2025	16:45:00	7.3	1.26	0.7	62,839	9.4	295
2/6/2025	17:00:00	7.3	1.23	0.7	62,857	9.4	291
2/6/2025	17:15:00	7.3	1.25	0.3	62,876	9.5	289
2/6/2025	18:15:00	7.3	1.20	0	62,901	9.8	289
2/6/2025	18:30:00	7.3	1.27	0	62,915	9.8	286
2/6/2025	19:15:00	7.3	1.20	0	62,930	9.9	284
2/6/2025	19:30:00	7.3	1.22	0	62,948	9.9	283
2/6/2025	19:45:00	7.3	0.66	0.1	62,964	10.2	282
2/6/2025	20:00:00	7.3	1.15	0	62,980	9.8	282
2/6/2025	21:00:00	7.3	1.26	0	62,998	9.7	287
2/6/2025	21:15:00	7.3	1.19	0	63,012	9.9	284

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/6/2025	21:30:00	7.3	1.22	0	63,030	9.7	284
2/6/2025	22:15:00	7.3	1.21	0	63,044	9.7	283
2/6/2025	22:30:00	7.3	1.21	0	63,062	9.7	282
2/6/2025	22:45:00	7.3	1.24	0	63,080	9.7	281
2/6/2025	23:45:00	7.3	1.15	0	63,102	9.6	281
2/7/2025	0:00:00	7.3	1.19	0	63,120	9.6	281
2/7/2025	0:15:00	7.3	0.00	0	63,131	9.8	281
2/7/2025	1:00:00	7.3	1.22	0	63,142	9.6	278
2/7/2025	1:15:00	7.3	1.21	0	63,160	9.6	276
2/7/2025	1:30:00	7.3	1.18	0	63,178	9.5	276
2/7/2025	2:15:00	7.3	1.18	0	63,201	9.5	272
2/7/2025	2:30:00	7.3	1.19	0	63,219	9.5	274
2/7/2025	2:45:00	7.3	1.24	0	63,238	9.6	119
2/7/2025	4:00:00	7.3	1.30	0	63,257	9.4	117
2/7/2025	4:15:00	7.3	1.31	0	63,277	9.4	117
2/7/2025	4:30:00	7.3	1.31	0	63,297	9.4	119
2/7/2025	4:45:00	7.3	0.82	0	63,316	9.4	118
2/7/2025	5:30:00	7.3	1.29	0	63,334	9.3	118
2/7/2025	5:45:00	7.3	1.24	0	63,353	9.3	119
2/7/2025	6:00:00	7.3	1.21	0	63,372	9.3	118
2/7/2025	6:45:00	7.2	0.74	0	63,384	9.7	119
2/7/2025	7:00:00	7.3	1.19	0	63,401	9.2	119
2/7/2025	7:15:00	7.3	1.19	0	63,419	9.1	117
2/7/2025	7:30:00	7.3	1.26	0	63,438	9.2	119
2/7/2025	8:15:00	7.3	1.22	0	63,449	9.5	119

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/7/2025	8:45:00	7.3	1.24	1	63,462	9.5	119
2/7/2025	9:00:00	7.3	0.72	0	63,478	9.4	117
2/7/2025	9:15:00	7.3	1.27	0	63,495	9.2	119
2/7/2025	10:00:00	7.3	1.20	0	63,507	9.2	117
2/7/2025	10:15:00	7.3	1.28	0	63,525	9.2	117
2/7/2025	10:30:00	7.3	1.21	0	63,544	9.3	118
2/7/2025	11:30:00	7.3	1.20	0	63,574	9.5	274
2/7/2025	11:45:00	7.3	1.22	0	63,588	9.7	274
2/7/2025	12:30:00	7.3	1.18	0	63,609	9.9	277
2/7/2025	12:45:00	7.3	1.21	0	63,627	10	278
2/7/2025	13:00:00	7.3	1.21	0	63,645	10.1	278
2/7/2025	13:30:00	7.2	1.15	0	63,649	11	274
2/7/2025	13:45:00	7.3	1.18	0	63,667	10.2	278
2/7/2025	14:30:00	7.2	1.20	0	63,681	11	276
2/7/2025	14:45:00	7.3	1.20	0	63,699	10.5	278
2/7/2025	15:00:00	7.3	1.18	0	63,716	10.6	278
2/7/2025	15:15:00	7.3	1.20	0	63,734	10.7	281
2/7/2025	16:00:00	7.3	1.18	0	63,745	10.8	278
2/7/2025	16:15:00	7.2	1.12	0	63,758	11.1	282
2/7/2025	16:30:00	7.2	1.22	0	63,775	10.8	281
2/7/2025	17:15:00	7.2	1.17	0	63,790	11.2	282
2/7/2025	17:30:00	7.2	1.21	0	63,808	10.9	281
2/7/2025	17:45:00	7.2	1.19	0	63,826	10.8	281
2/7/2025	18:45:00	7.2	1.20	0	63,856	10.9	278
2/7/2025	19:00:00	7.2	1.18	0	63,874	10.9	277

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/7/2025	19:15:00	7.2	1.19	0	63,891	10.9	276
2/7/2025	19:30:00	7.2	1.14	0	63,908	11	276
2/7/2025	20:15:00	7.2	1.10	0	63,930	11.1	276
2/7/2025	20:30:00	7.2	1.15	0	63,947	10.6	276
2/7/2025	20:45:00	7.2	1.15	0	63,964	10.7	277
2/7/2025	21:00:00	7.2	1.13	0	63,982	10.8	281
2/7/2025	21:15:00	7.2	1.14	0	63,999	10.8	282
2/7/2025	21:30:00	7.2	1.15	0	64,016	10.7	282
2/7/2025	21:45:00	7.2	0.00	0	64,024	10.8	284
2/7/2025	22:00:00	7.2	1.20	0	64,029	10.6	282
2/7/2025	22:15:00	7.2	1.15	0	64,046	10.6	284
2/7/2025	22:30:00	7.2	1.14	0	64,059	10.9	282
2/7/2025	23:15:00	7.2	1.15	0.4	64,084	10.1	281
2/7/2025	23:30:00	7.2	1.15	0.3	64,097	10.1	279
2/7/2025	23:45:00	7.2	1.17	0	64,114	10.2	281
2/8/2025	0:00:00	7.2	1.13	0	64,132	10.4	280
2/8/2025	0:15:00	7.2	1.16	0	64,149	10.5	282
2/8/2025	0:30:00	7.2	1.12	0	64,166	10.5	281
2/8/2025	0:45:00	7.2	1.12	0	64,183	10.6	279
2/8/2025	1:00:00	7.2	1.09	0.3	64,200	10.8	284
2/8/2025	1:15:00	7.3	1.10	0.4	64,217	11	287
2/8/2025	1:30:00	7.3	1.12	0	64,233	11.3	289
2/8/2025	1:45:00	7.3	1.16	0	64,246	11.3	286
2/8/2025	2:00:00	7.3	1.11	0	64,263	11.2	282
2/8/2025	2:15:00	7.3	1.19	0	64,281	11.1	283

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	2:30:00	7.3	1.44	0	64,302	11	281
2/8/2025	2:45:00	7.3	1.43	0	64,324	11	282
2/8/2025	3:00:00	7.2	1.40	0	64,341	12.1	282
2/8/2025	3:15:00	7.2	1.55	0	64,364	10.8	276
2/8/2025	3:30:00	7.2	1.53	0.1	64,387	10.6	273
2/8/2025	3:45:00	7.2	1.33	0.8	64,398	10.4	273
2/8/2025	4:00:00	7.1	0.00	0.3	64,398	10.6	273
2/8/2025	4:15:00	7.2	1.58	0.2	64,404	10.3	271
2/8/2025	4:30:00	7.2	1.53	0	64,428	10.2	272
2/8/2025	4:45:00	7.2	1.56	0	64,451	10.2	272
2/8/2025	5:00:00	7.2	1.07	0	64,474	10.2	274
2/8/2025	5:15:00	7.2	1.53	0	64,494	10.4	271
2/8/2025	5:30:00	7.2	1.50	0	64,517	10.5	271
2/8/2025	5:45:00	7.2	1.58	0	64,540	10.5	119
2/8/2025	6:00:00	7.2	1.54	0	64,562	10.4	271
2/8/2025	6:15:00	7.2	1.48	0	64,585	10.4	271
2/8/2025	6:30:00	7.2	1.53	0	64,607	10.4	271
2/8/2025	6:45:00	7.2	1.53	0.1	64,626	10.3	270
2/8/2025	7:00:00	7.2	1.57	0.3	64,649	10.1	270
2/8/2025	7:15:00	7.1	0.00	0.2	64,657	10.2	273
2/8/2025	7:30:00	7.1	0.00	0.4	64,657	10.5	274
2/8/2025	7:45:00	7.2	0.00	0.3	64,665	9.9	274
2/8/2025	8:00:00	7.2	1.48	0.7	64,669	9.9	270
2/8/2025	8:15:00	7.2	1.55	0.3	64,692	9.7	276
2/8/2025	8:30:00	7.2	1.41	0.4	64,714	9.8	275

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	8:45:00	7.1	0.00	0.4	64,717	10.9	277
2/8/2025	9:00:00	7.2	0.72	0.5	64,722	10	276
2/8/2025	9:15:00	7.1	0.00	0.2	64,728	10	277
2/8/2025	9:30:00	7.2	1.15	0.3	64,738	9.8	280
2/8/2025	9:45:00	7.2	1.49	0.4	64,757	9.9	286
2/8/2025	10:00:00	7.2	1.51	0.4	64,780	10.2	290
2/8/2025	10:15:00	7.3	1.48	0.7	64,802	10.5	297
2/8/2025	10:30:00	7.3	1.50	0.7	64,824	10.6	301
2/8/2025	10:45:00	7.3	1.44	0.5	64,846	10.6	302
2/8/2025	11:00:00	7.3	1.00	0.3	64,866	10.8	296
2/8/2025	11:15:00	7.2	1.46	0.2	64,877	10.7	289
2/8/2025	11:30:00	7.2	1.44	0	64,899	10.6	286
2/8/2025	11:45:00	7.2	1.62	0.2	64,921	10.6	285
2/8/2025	12:00:00	7.1	1.56	0	64,945	11.6	286
2/8/2025	12:15:00	7.1	1.55	0	64,969	12.6	284
2/8/2025	12:30:00	7.1	0.00	0	64,978	13.9	286
2/8/2025	12:45:00	7.2	1.65	0	64,993	10.8	281
2/8/2025	13:30:00	7.2	1.59	0.2	65,033	10.6	276
2/8/2025	13:45:00	7.1	1.21	0.3	65,055	11	274
2/8/2025	14:00:00	7.2	1.72	0.5	65,079	10.4	274
2/8/2025	14:15:00	7.1	1.71	0.6	65,104	10.4	274
2/8/2025	14:30:00	7.1	1.73	0.7	65,130	10.3	274
2/8/2025	14:45:00	7.1	1.67	0.6	65,155	10.3	275
2/8/2025	15:00:00	7.1	1.64	0.7	65,179	10.4	273
2/8/2025	15:15:00	7.1	1.62	0.6	65,203	10.4	273

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	15:30:00	7.1	1.06	0.7	65,222	10.9	273
2/8/2025	15:45:00	7.1	1.51	0.6	65,245	11	275
2/8/2025	16:00:00	7	1.46	0.6	65,267	11.4	274
2/8/2025	16:15:00	7	1.49	0.4	65,289	11.9	272
2/8/2025	16:30:00	7	1.41	0.4	65,311	12.4	272
2/8/2025	17:00:00	7.2	1.48	0.1	65,326	10.5	275
2/8/2025	17:30:00	7.2	1.44	0.1	65,352	10.2	273
2/8/2025	17:45:00	7.1	1.49	3.3	65,354	11.2	275
2/8/2025	18:00:00	7.1	1.47	0.3	65,377	10.4	274
2/8/2025	18:15:00	7	1.39	0.3	65,394	11.6	273
2/8/2025	18:30:00	7.1	1.29	0.2	65,414	11.3	271
2/8/2025	18:45:00	7.1	1.36	0.2	65,428	11.4	270
2/8/2025	19:00:00	7.1	1.32	0.2	65,448	11.3	274
2/8/2025	19:15:00	7	1.16	0	65,466	11.9	271
2/8/2025	19:30:00	7	0.94	0	65,482	12.7	272
2/8/2025	19:45:00	7.2	1.82	0	65,505	10.3	271
2/8/2025	20:00:00	7.2	1.75	0	65,532	10.2	271
2/8/2025	20:15:00	7.1	1.30	0	65,557	10.2	272
2/8/2025	20:45:00	7.1	1.67	0	65,577	10.2	271
2/8/2025	21:00:00	7.2	1.59	0	65,601	10.1	118
2/8/2025	21:15:00	7.1	1.60	0	65,625	10.2	117
2/8/2025	21:30:00	7.2	1.00	0	65,646	10.4	117
2/8/2025	22:00:00	7.1	1.32	0	65,660	10.1	268
2/8/2025	22:15:00	7.1	0.77	0.3	65,680	10.4	271
2/8/2025	22:30:00	7.1	1.16	0.2	65,694	10	275

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	22:45:00	7.1	1.09	0.3	65,711	10.1	277
2/8/2025	23:00:00	7.1	1.07	0.4	65,727	10.2	277
2/8/2025	23:15:00	7.1	1.66	0.2	65,747	10	278
2/8/2025	23:30:00	7.1	1.63	0	65,772	10.1	276
2/8/2025	23:45:00	7.1	1.16	0.1	65,793	10	274
2/9/2025	0:00:00	7.1	1.64	0	65,817	10.1	278
2/9/2025	0:15:00	7.1	1.66	0	65,842	10.3	275
2/9/2025	0:30:00	7.1	1.60	0.1	65,867	10.3	275
2/9/2025	0:45:00	7.1	1.33	0	65,889	10.4	275
2/9/2025	1:00:00	7	0.67	0	65,905	11	276
2/9/2025	1:15:00	7	0.00	0	65,908	11.3	274
2/9/2025	1:30:00	7	0.00	0.2	65,918	10.3	273
2/9/2025	1:45:00	7.1	1.77	0.4	65,933	10.1	272
2/9/2025	2:00:00	7.1	0.88	0.3	65,953	10.2	273
2/9/2025	2:15:00	7.1	1.17	0.4	65,971	10.1	272
2/9/2025	2:30:00	7	0.97	0.2	65,987	10.4	273
2/9/2025	2:45:00	7	0.61	0.3	65,999	11.8	273
2/9/2025	3:00:00	7.1	1.77	0.4	66,020	9.9	271
2/9/2025	3:15:00	7.1	1.78	0.2	66,046	9.9	272
2/9/2025	3:30:00	7.1	1.72	0.3	66,072	9.9	271
2/9/2025	3:45:00	7.1	1.64	0.3	66,097	9.9	271
2/9/2025	4:00:00	7.1	1.32	0.4	66,120	10	271
2/9/2025	4:15:00	7	0.35	0.1	66,132	10.8	272
2/9/2025	5:00:00	7.1	1.94	0.1	66,167	9.8	273
2/9/2025	5:15:00	7.1	1.87	0.3	66,196	9.8	271

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	5:30:00	7.1	1.81	0.1	66,224	9.8	272
2/9/2025	5:45:00	7.1	1.75	0	66,252	9.9	117
2/9/2025	6:00:00	7.1	0.00	0	66,270	10	271
2/9/2025	6:15:00	7	0.00	0	66,270	10.8	272
2/9/2025	6:30:00	7.1	0.93	0	66,287	10.6	273
2/9/2025	6:45:00	7.1	1.29	0.2	66,305	10	274
2/9/2025	7:00:00	7.1	1.82	0.2	66,327	9.7	276
2/9/2025	7:15:00	7.1	1.76	0	66,354	9.9	116
2/9/2025	7:30:00	7.1	0.00	0	66,373	10.1	274
2/9/2025	7:45:00	7	0.00	0	66,373	10.8	272
2/9/2025	8:00:00	7.1	1.69	0	66,399	9.8	116
2/9/2025	8:15:00	7.1	1.57	0	66,423	10	117
2/9/2025	8:30:00	7.1	1.01	0	66,443	10.4	273
2/9/2025	8:45:00	7	0.00	0	66,447	10.9	269
2/9/2025	9:00:00	7	0.00	0	66,449	10.5	271
2/9/2025	9:15:00	7.1	1.88	0.5	66,466	10.4	269
2/9/2025	9:30:00	7.1	1.81	0.5	66,493	9.9	269
2/9/2025	9:45:00	7	1.72	0.4	66,520	9.8	274
2/9/2025	10:00:00	7	0.00	0.5	66,522	10.1	273
2/9/2025	10:15:00	6.9	0.00	0.5	66,522	10.4	276
2/9/2025	10:30:00	7	1.55	0.5	66,532	9.8	277
2/9/2025	10:45:00	6.9	0.53	0.5	66,547	10	279
2/9/2025	11:00:00	6.9	0.81	0.6	66,561	10.7	278
2/9/2025	11:15:00	6.9	0.00	0.5	66,566	10.9	279
2/9/2025	11:30:00	6.9	1.93	0.4	66,581	9.8	284

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	11:45:00	7	1.86	0.6	66,609	9.7	280
2/9/2025	12:00:00	6.9	0.00	0.3	66,622	9.8	282
2/9/2025	12:15:00	6.9	0.00	0.6	66,629	9.8	284
2/9/2025	12:30:00	6.9	1.74	0.6	66,649	9.7	280
2/9/2025	12:45:00	7	1.77	0.8	66,676	9.4	280
2/9/2025	13:00:00	7	1.43	0.7	66,698	9.1	281
2/9/2025	13:15:00	6.9	1.72	0.6	66,722	9.7	280
2/9/2025	13:30:00	6.9	1.63	0.6	66,747	10	283
2/9/2025	13:45:00	6.9	0.51	0.6	66,765	9.8	282
2/9/2025	14:00:00	7	1.17	0.7	66,781	9.8	282
2/9/2025	14:15:00	7	1.75	1.8	66,795	9.9	280
2/9/2025	14:30:00	7	1.83	0.6	66,822	9	277
2/9/2025	14:45:00	7	1.70	0.5	66,849	9.2	277
2/9/2025	15:00:00	7	1.71	0.4	66,875	9.4	277
2/9/2025	15:15:00	7	1.70	0.6	66,896	9.8	276
2/9/2025	15:30:00	7	1.57	0.5	66,921	9.9	275
2/9/2025	15:45:00	6.9	0.58	0.5	66,943	10.2	277
2/9/2025	16:00:00	6.9	0.00	0.5	66,943	10.4	275
2/9/2025	16:15:00	6.9	0.00	0.6	66,944	10.9	276
2/9/2025	16:30:00	7	1.75	0.7	66,960	9.8	271
2/9/2025	16:45:00	7	1.81	0.6	66,987	10	274
2/9/2025	17:00:00	6.9	1.84	0.7	67,013	10.3	277
2/9/2025	17:15:00	6.9	1.69	0.7	67,040	10.6	276
2/9/2025	17:30:00	6.9	1.48	0.8	67,064	10.9	276
2/9/2025	17:45:00	6.9	0.00	2.4	67,077	11.2	274

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	18:00:00	6.9	0.00	0.7	67,077	11.3	275
2/9/2025	18:15:00	7	1.41	1	67,089	10	273
2/9/2025	18:30:00	7	1.81	0.9	67,115	9.8	273
2/9/2025	18:45:00	6.9	1.85	0.8	67,142	10.1	278
2/9/2025	19:00:00	6.9	1.63	0.8	67,169	10.9	272
2/9/2025	19:15:00	6.9	0.93	0.6	67,191	11.2	272
2/9/2025	19:30:00	6.9	0.20	0.2	67,196	11.6	271
2/9/2025	19:45:00	7	1.80	2.5	67,207	11.7	269
2/9/2025	20:00:00	7.1	1.68	0	67,233	10.1	267
2/9/2025	20:15:00	7.1	1.73	0.3	67,259	9.8	268
2/9/2025	20:30:00	7.1	1.68	0.4	67,284	9.7	268
2/9/2025	20:45:00	7	1.11	0.5	67,306	9.7	268
2/9/2025	21:00:00	7	0.79	0.5	67,317	9.7	269
2/9/2025	21:15:00	7	0.00	0.5	67,317	10.4	271
2/9/2025	21:30:00	7.1	1.77	1.6	67,334	9.5	273
2/9/2025	21:45:00	7.1	1.74	0.7	67,360	9.4	110
2/9/2025	22:00:00	7.1	1.60	1	67,385	9.4	109
2/9/2025	22:15:00	7.1	1.65	1.4	67,409	9.4	108
2/9/2025	22:30:00	7.1	0.00	0.8	67,419	9.4	271
2/9/2025	22:45:00	7	0.43	0.9	67,429	9.3	271
2/9/2025	23:00:00	7	1.94	2.1	67,439	9.3	271
2/9/2025	23:15:00	7.1	1.91	0.8	67,468	9.3	271
2/9/2025	23:45:00	7	1.89	0.7	67,492	9.4	114

Table 3. In-Situ Parameters

Date	Time	Temperature °C	DO mg/L	Conductivity SPC-uS/cm	SAL-ppt	pH	ORP (mV)	NTU
02/3/2025	03:51:08PM	8.7	11.26	141.5	0.07	7.53	141.2	1.04
02/4/2025	08:30:51PM	11.2	10.81	140.8	0.07	7.71	140.1	0.61
02/5/2025	05:50:20PM	11.3	11.63	130.2	0.06	7.43	197.9	0.50
02/6/2025	11:09:24AM	10.8	11.34	149.7	0.07	7.48	144.7	0.29
02/7/2025	05:23:19PM	12.2	10.66	165.3	0.08	7.51	146.0	0.59
02/8/2025	08:39:45AM	10.0	11.28	153.4	0.07	7.44	145.3	0.40
02/9/2025	09:23:15AM	9.4	12.89	146.1	0.07	7.43	148.8	0.65

3. Calibration Log:

Table 4. Calibration Log

Date	Unit	pH	Conductivity/Temp.	Salinity	NTU
2/5/2025	YSI	✓	✓	✓	✓
2/5/2025	WTP	✓	N/A	N/A	✓

APPENDIX A: WTP Log

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	0:00:00	7.3	0.00	0	60,160	Closed	9.1	117
2/3/2025	0:15:00	7.3	0.00	0	60,160	Closed	9.9	117
2/3/2025	0:30:00	7.2	0.00	0	60,160	Closed	10.7	267
2/3/2025	0:45:00	7.2	0.00	0	60,160	Closed	11.6	267
2/3/2025	1:00:00	7.3	0.62	0	60,164	Open	9.4	119
2/3/2025	1:15:00	7.3	1.07	0	60,176	Open	9.1	118
2/3/2025	1:30:00	7.3	1.05	0	60,192	Open	9.2	118
2/3/2025	1:45:00	7.3	1.01	0	60,208	Open	9.2	117
2/3/2025	2:00:00	7.3	0.98	0	60,223	Open	9.2	115
2/3/2025	2:15:00	7.2	0.00	0	60,225	Closed	9.6	116
2/3/2025	2:30:00	7.3	0.52	0	60,227	Open	10.3	117
2/3/2025	2:45:00	7.2	0.00	0	60,230	Closed	10	117
2/3/2025	3:00:00	7.2	0.57	0	60,230	Closed	11	269
2/3/2025	3:15:00	7.2	0.00	0	60,232	Closed	9.6	117
2/3/2025	3:30:00	7.3	0.56	0	60,236	Open	10.1	117
2/3/2025	3:45:00	7.3	1.10	0	60,252	Open	9	117
2/3/2025	4:00:00	7.3	1.07	0	60,268	Open	9	117
2/3/2025	4:15:00	7.3	0.00	0	60,287	Closed	8.7	114
2/3/2025	4:30:00	7.3	0.00	0	60,287	Closed	9	116
2/3/2025	4:45:00	7.2	0.00	0	60,287	Closed	9.7	269
2/3/2025	5:00:00	7.2	0.00	0	60,287	Open	10.6	269
2/3/2025	5:15:00	7.3	0.00	0	60,295	Closed	8.8	117

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	5:30:00	7.2	0.00	0	60,295	Closed	9.3	118
2/3/2025	5:45:00	7.3	1.36	0	60,299	Open	8.7	119
2/3/2025	6:00:00	7.3	1.37	0	60,320	Open	8.5	118
2/3/2025	6:15:00	7.4	1.32	0	60,340	Open	8.6	117
2/3/2025	6:30:00	7.3	0.85	0	60,352	Open	8.6	116
2/3/2025	6:45:00	7.3	0.00	0	60,362	Closed	8.6	117
2/3/2025	7:00:00	7.3	0.00	0	60,362	Closed	9.4	116
2/3/2025	7:15:00	7.2	0.00	0	60,362	Closed	10.3	266
2/3/2025	7:30:00	7.2	0.00	0	60,362	Closed	11.2	266
2/3/2025	7:45:00	7.2	0.00	0	60,362	Closed	12.1	267
2/3/2025	8:00:00	7.3	1.36	0	60,376	Open	8.4	119
2/3/2025	8:15:00	7.3	1.36	0	60,396	Open	8.5	118
2/3/2025	8:30:00	7.4	0.79	0	60,416	Closed	8.5	118
2/3/2025	8:45:00	7.3	0.00	0	60,416	Closed	9.2	117
2/3/2025	9:00:00	7.2	0.00	0	60,416	Closed	10.4	268
2/3/2025	9:15:00	7.2	0.00	0	60,416	Closed	11.8	268
2/3/2025	9:30:00	7.3	0.79	0	60,424	Open	8.6	118
2/3/2025	9:45:00	7.3	1.33	0	60,444	Open	8.4	116
2/3/2025	10:00:00	7.4	0.00	0	60,463	Closed	8.5	116
2/3/2025	10:15:00	7.3	0.00	0	60,463	Closed	9	116
2/3/2025	10:30:00	7.2	0.00	0	60,463	Closed	9.6	113
2/3/2025	10:45:00	7.2	0.00	0	60,463	Closed	10	266
2/3/2025	11:00:00	7.2	0.00	0	60,463	Closed	10.5	263
2/3/2025	11:15:00	7.2	0.00	0	60,463	Closed	11.2	264

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	11:30:00	7.3	0.92	0	60,482	Open	8.3	117
2/3/2025	11:45:00	7.3	1.34	0	60,498	Open	8.3	117
2/3/2025	12:00:00	7.4	0.00	0	60,515	Closed	8.4	117
2/3/2025	12:15:00	7.3	0.00	0	60,515	Closed	9.2	117
2/3/2025	12:30:00	7.2	0.00	0	60,515	Closed	10.3	117
2/3/2025	12:45:00	7.2	0.00	0	60,515	Closed	12.1	259
2/3/2025	13:00:00	7.3	1.29	0	60,532	Open	8.4	118
2/3/2025	13:15:00	7.3	1.26	0	60,552	Open	8.5	118
2/3/2025	13:30:00	7.3	0.00	0	60,562	Closed	8.9	117
2/3/2025	13:45:00	7.2	0.00	0	60,562	Closed	11	266
2/3/2025	14:00:00	7.2	0.00	0	60,562	Closed	11.9	263
2/3/2025	14:15:00	7.3	1.29	0	60,563	Open	11.5	119
2/3/2025	14:30:00	7.3	1.30	0	60,578	Open	8.6	118
2/3/2025	14:45:00	7.3	1.25	0	60,598	Open	8.6	119
2/3/2025	15:00:00	7.3	0.00	0	60,606	Closed	9	118
2/3/2025	15:15:00	7.3	1.31	0	60,611	Open	8.7	117
2/3/2025	15:30:00	7.3	0.00	0	60,621	Closed	7.9	118
2/3/2025	15:45:00	7.3	0.00	0	60,621	Closed	9.5	117
2/3/2025	16:00:00	7.2	0.00	0	60,621	Closed	10.6	264
2/3/2025	16:15:00	7.4	1.31	0	60,639	Open	5.4	116
2/3/2025	16:30:00	7.4	1.27	0	60,658	Open	6.4	116
2/3/2025	16:45:00	7.3	0.00	0	60,660	Closed	7.4	116
2/3/2025	17:00:00	7.3	0.00	0	60,660	Closed	8.6	117
2/3/2025	17:15:00	7.2	0.00	0	60,660	Closed	9.9	118

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	17:30:00	7.4	1.27	0	60,670	Open	7.2	118
2/3/2025	17:45:00	7.3	1.25	0	60,689	Open	7.9	117
2/3/2025	18:00:00	7.3	0.00	0	60,697	Closed	8.4	117
2/3/2025	18:15:00	7.2	0.00	0	60,697	Closed	9.4	117
2/3/2025	18:30:00	7.2	0.00	0	60,697	Closed	10.5	268
2/3/2025	18:45:00	7.3	1.33	0	60,700	Open	8.6	119
2/3/2025	19:00:00	7.3	1.34	0	60,720	Open	8.5	118
2/3/2025	19:15:00	7.3	1.29	0	60,740	Open	8.6	117
2/3/2025	19:30:00	7.3	0.00	0	60,740	Closed	9.4	119
2/3/2025	19:45:00	7.2	0.00	0	60,740	Closed	10.4	116
2/3/2025	20:00:00	7.3	1.34	0	60,757	Open	8.6	117
2/3/2025	20:15:00	7.3	0.00	0	60,770	Open	8.7	117
2/3/2025	20:30:00	7.3	0.00	0	60,770	Closed	9.4	117
2/3/2025	20:45:00	7.2	0.00	0	60,770	Closed	10.2	117
2/3/2025	21:00:00	7.3	1.30	0	60,776	Open	8.6	118
2/3/2025	21:15:00	7.3	1.36	0	60,796	Open	8.6	117
2/3/2025	21:30:00	7.4	0.00	0	60,813	Closed	8.7	118
2/3/2025	21:45:00	7.3	0.00	0	60,813	Closed	9.9	119
2/3/2025	22:00:00	7.2	0.00	0	60,813	Closed	11.3	119
2/3/2025	22:15:00	7.3	1.36	0	60,824	Open	8.8	119
2/3/2025	22:30:00	7.3	1.35	0	60,843	Open	8.9	118
2/3/2025	22:45:00	7.3	0.00	0	60,850	Closed	9.5	119
2/3/2025	23:00:00	7.3	1.35	0	60,853	Open	9.5	119
2/3/2025	23:15:00	7.4	0.82	0	60,871	Open	9.5	119

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/3/2025	23:30:00	7.3	0.00	0	60,882	Closed	9.3	119
2/3/2025	23:45:00	7.3	0.00	0	60,882	Closed	11.7	119
2/4/2025	0:00:00	7.2	0.00	0	60,882	Closed	12.7	259
2/4/2025	0:15:00	7.2	0.00	0	60,882	Closed	14.1	259
2/4/2025	0:30:00	7.2	0.00	0	60,882	Closed	15	258
2/4/2025	0:45:00	7.1	0.00	0	60,882	Closed	16	258
2/4/2025	1:00:00	7.3	1.31	0	60,897	Open	9.1	119
2/4/2025	1:15:00	7.4	0.00	0	60,916	Closed	9.3	119
2/4/2025	1:30:00	7.3	0.00	0	60,916	Closed	10.3	119
2/4/2025	1:45:00	7.2	0.00	0	60,916	Closed	11.9	119
2/4/2025	2:00:00	7.2	0.00	0	60,916	Closed	13.3	263
2/4/2025	2:15:00	7.3	1.30	0	60,924	Open	9.4	119
2/4/2025	2:30:00	7.3	1.28	0	60,940	Open	9.2	117
2/4/2025	2:45:00	7.3	0.00	0	60,959	Closed	9.2	116
2/4/2025	3:00:00	7.3	0.00	0	60,959	Closed	10.1	116
2/4/2025	3:15:00	7.2	0.00	0	60,959	Closed	11.4	117
2/4/2025	3:30:00	7.2	0.00	0	60,959	Closed	12.8	261
2/4/2025	3:45:00	7.3	1.30	0	60,970	Open	9.5	119
2/4/2025	4:00:00	7.3	1.30	0	60,990	Open	9.3	118
2/4/2025	4:15:00	7.3	1.32	0	61,010	Open	9.3	118
2/4/2025	4:30:00	7.3	0.00	0	61,013	Closed	10.1	119
2/4/2025	4:45:00	7.2	0.00	0	61,013	Closed	11.8	119
2/4/2025	5:00:00	7.2	0.00	0	61,013	Closed	13.4	262
2/4/2025	5:15:00	7.3	1.27	0	61,024	Open	9.5	121

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/4/2025	5:30:00	7.4	1.30	0	61,039	Open	9.3	118
2/4/2025	5:45:00	7.3	0.00	0	61,056	Closed	9.1	116
2/4/2025	6:00:00	7.3	0.00	0	61,056	Closed	9.9	118
2/4/2025	6:15:00	7.2	0.00	0	61,056	Closed	11.2	266
2/4/2025	6:30:00	7.2	0.00	0	61,056	Closed	12.1	266
2/4/2025	6:45:00	7.3	1.30	0	61,069	Open	9	119
2/4/2025	7:00:00	7.3	0.00	0	61,086	Closed	8.9	115
2/4/2025	7:15:00	7.3	0.00	0	61,086	Closed	9.5	116
2/4/2025	7:30:00	7.2	0.00	0	61,086	Closed	10.6	117
2/4/2025	7:45:00	7.3	1.29	0	61,096	Open	9	118
2/4/2025	8:00:00	7.3	1.29	0	61,115	Open	9	117
2/4/2025	8:15:00	7.3	0.00	0	61,129	Closed	9.1	117
2/4/2025	8:30:00	7.3	0.00	0	61,129	Closed	10	118
2/4/2025	8:45:00	7.2	0.00	0	61,129	Closed	11.2	118
2/4/2025	9:00:00	7.2	0.00	0	61,129	Closed	12.2	263
2/4/2025	9:15:00	7.3	1.22	0	61,129	Open	13.5	261
2/4/2025	9:30:00	7.3	1.24	0	61,148	Open	9	118
2/4/2025	9:45:00	7.3	1.29	0	61,167	Open	9	118
2/4/2025	10:00:00	7.3	0.00	0	61,168	Closed	9.7	118
2/4/2025	10:15:00	7.2	0.00	0	61,168	Closed	10.9	118
2/4/2025	10:30:00	7.2	0.00	0	61,168	Closed	12.1	263
2/4/2025	10:45:00	7.3	1.24	0	61,182	Open	9.1	118
2/4/2025	11:00:00	7.3	0.00	0	61,194	Closed	9.3	118
2/4/2025	11:15:00	7.2	0.00	0	61,194	Closed	10.3	119

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/4/2025	11:30:00	7.3	1.22	0	61,203	Open	9.2	119
2/4/2025	11:45:00	7.3	1.22	0	61,221	Open	9.2	118
2/4/2025	12:00:00	7.3	1.17	0	61,239	Open	9.2	117
2/4/2025	12:15:00	7.2	0.00	0	61,240	Closed	9.6	117
2/4/2025	12:30:00	7.2	0.00	0	61,240	Open	10.3	116
2/4/2025	12:45:00	7.2	0.00	0	61,240	Closed	11	263
2/4/2025	13:00:00	7.3	1.22	0	61,240	Open	11.9	115
2/4/2025	13:15:00	7.3	1.25	0	61,259	Open	9.1	117
2/4/2025	13:30:00	7.3	1.18	0	61,273	Open	9.4	117
2/4/2025	13:45:00	7.3	0.00	0	61,281	Closed	9.5	117
2/4/2025	14:00:00	7.2	0.00	0	61,281	Closed	10.6	118
2/4/2025	14:15:00	7.2	0.00	0	61,281	Closed	11.7	264
2/4/2025	14:30:00	7.3	1.26	0	61,281	Open	13.1	263
2/4/2025	14:45:00	7.3	1.26	0	61,300	Open	9.3	117
2/4/2025	15:00:00	7.3	1.28	0	61,319	Open	9.3	116
2/4/2025	15:15:00	7.3	0.71	0	61,335	Open	9.8	116
2/4/2025	15:30:00	7.2	0.00	0	61,338	Closed	9.7	116
2/4/2025	15:45:00	7.2	0.00	0	61,338	Closed	10.6	117
2/4/2025	16:00:00	7.1	0.00	0	61,338	Closed	11.5	264
2/4/2025	16:15:00	7.1	0.00	0	61,338	Closed	12.5	263
2/4/2025	16:30:00	7.3	1.24	0	61,346	Open	9.5	119
2/4/2025	16:45:00	7.3	1.24	0	61,365	Open	9.5	118
2/4/2025	17:00:00	7.3	1.24	0	61,383	Open	9.5	117
2/4/2025	17:15:00	7.3	0.00	0	61,387	Closed	10	118

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/4/2025	17:30:00	7.3	0.67	0	61,387	Open	11.8	118
2/4/2025	17:45:00	7.3	1.21	0	61,403	Open	9.5	119
2/4/2025	18:00:00	7.3	1.17	0	61,421	Open	9.6	119
2/4/2025	18:15:00	7.3	0.00	0	61,427	Closed	10.3	119
2/4/2025	18:30:00	7.2	0.00	0	61,427	Closed	12.1	119
2/4/2025	18:45:00	7.2	0.00	0	61,427	Closed	13.9	258
2/4/2025	19:00:00	7.1	0.00	0	61,427	Closed	15.3	256
2/4/2025	19:15:00	7.3	1.21	0	61,438	Open	9.6	118
2/4/2025	19:30:00	7.3	1.19	0	61,456	Open	9.3	117
2/4/2025	19:45:00	7.3	0.00	0	61,464	Closed	9.5	117
2/4/2025	20:00:00	7.2	0.00	0	61,464	Closed	10.7	117
2/4/2025	20:15:00	7.2	0.00	0	61,464	Closed	11.9	118
2/4/2025	20:30:00	7.3	1.20	0	61,470	Open	9.5	119
2/4/2025	20:45:00	7.3	1.14	0	61,487	Open	9.4	118
2/4/2025	21:00:00	7.4	1.16	0	61,505	Open	9.3	117
2/4/2025	21:15:00	7.3	0.00	0	61,505	Closed	9.4	117
2/4/2025	21:30:00	7.2	0.00	0	61,505	Closed	10.2	116
2/4/2025	21:45:00	7.2	0.00	0	61,505	Closed	11.4	116
2/4/2025	22:00:00	7.3	1.27	0	61,506	Open	12.8	119
2/4/2025	22:15:00	7.3	1.21	0	61,524	Open	9.3	117
2/4/2025	22:30:00	7.3	1.20	0	61,543	Open	9.1	116
2/4/2025	22:45:00	7.3	0.00	0	61,556	Closed	9.3	116
2/4/2025	23:00:00	7.2	0.00	0	61,556	Closed	10.4	117
2/4/2025	23:15:00	7.2	0.00	0	61,556	Closed	11.7	266

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/4/2025	23:30:00	7.3	0.67	0	61,559	Open	9.9	117
2/4/2025	23:45:00	7.3	1.21	0	61,575	Open	9	117
2/5/2025	0:00:00	7.3	0.00	0	61,589	Closed	9.1	117
2/5/2025	0:15:00	7.3	0.00	0	61,589	Closed	10.4	118
2/5/2025	0:30:00	7.2	0.00	0	61,589	Closed	12	266
2/5/2025	0:45:00	7.3	0.00	0	61,592	Open	9.4	117
2/5/2025	1:00:00	7.3	1.19	0	61,607	Open	8.9	116
2/5/2025	1:15:00	7.3	1.22	0	61,625	Open	8.9	117
2/5/2025	1:30:00	7.3	0.00	0	61,636	Closed	9.1	116
2/5/2025	1:45:00	7.2	0.00	0	61,636	Closed	10.3	117
2/5/2025	2:00:00	7.3	1.13	0	61,636	Open	11.9	117
2/5/2025	2:15:00	7.3	1.20	0	61,650	Open	8.9	116
2/5/2025	2:30:00	7.4	1.21	0	61,668	Open	8.9	116
2/5/2025	2:45:00	7.3	0.00	0	61,673	Closed	9.3	116
2/5/2025	3:00:00	7.2	0.00	0	61,673	Closed	10.5	116
2/5/2025	3:15:00	7.2	0.00	0	61,673	Closed	11.6	117
2/5/2025	3:30:00	7.3	1.19	0	61,682	Open	8.9	117
2/5/2025	3:45:00	7.3	1.18	0	61,699	Open	8.8	117
2/5/2025	4:00:00	7.4	1.13	0	61,717	Open	8.8	117
2/5/2025	4:15:00	7.3	0.00	0	61,728	Closed	9	116
2/5/2025	4:30:00	7.2	0.00	0	61,728	Closed	10.2	117
2/5/2025	4:45:00	7.2	0.00	0	61,728	Closed	11.5	117
2/5/2025	5:00:00	7.3	1.15	0	61,736	Open	8.8	116
2/5/2025	5:15:00	7.3	1.16	0	61,749	Open	8.6	116

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/5/2025	5:30:00	7.3	0.00	0	61,761	Closed	8.8	116
2/5/2025	5:45:00	7.2	0.00	0	61,761	Closed	10	117
2/5/2025	6:00:00	7.2	0.00	0	61,761	Closed	11.4	117
2/5/2025	6:15:00	7.3	0.61	0	61,765	Open	9.6	117
2/5/2025	6:30:00	7.3	1.15	0	61,780	Open	8.7	117
2/5/2025	6:45:00	7.3	0.00	0	61,794	Closed	8.8	117
2/5/2025	7:00:00	7.2	0.00	0	61,794	Closed	9.7	116
2/5/2025	7:15:00	7.2	0.00	0	61,794	Closed	11.1	117
2/5/2025	7:30:00	7.3	1.11	0	61,802	Open	8.9	117
2/5/2025	7:45:00	7.3	1.15	0	61,818	Open	8.8	117
2/5/2025	8:00:00	7.3	1.14	0	61,835	Open	8.9	117
2/5/2025	8:15:00	7.3	0.00	0	61,844	Closed	9.2	118
2/5/2025	8:30:00	7.2	0.00	0	61,844	Closed	11.1	264
2/5/2025	8:45:00	7.2	0.00	0	61,844	Closed	12.7	263
2/5/2025	9:00:00	7.3	1.02	0	61,853	Open	8.9	117
2/5/2025	9:15:00	7.3	1.20	0	61,865	Open	8.5	116
2/5/2025	9:30:00	7.6	0.00	0	61,872	Closed	10.9	116
2/5/2025	9:45:00	7.4	0.00	11.4	61,872	Closed	14.2	116
2/5/2025	10:00:00	7.4	1.22	0.1	61,877	Open	8.9	116
2/5/2025	10:15:00	7.3	1.25	0	61,895	Open	8.6	114
2/5/2025	10:30:00	7.4	0.00	0.2	61,911	Closed	8.6	114
2/5/2025	10:45:00	7.3	0.00	0.1	61,911	Closed	9.3	114
2/5/2025	11:00:00	7.2	0.00	0.1	61,911	Closed	10.2	114
2/5/2025	11:15:00	7.1	0.00	0.1	61,911	Closed	11.1	117

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/5/2025	11:30:00	7.3	0.67	0.1	61,924	Open	8.9	114
2/5/2025	11:45:00	7.3	0.00	0.1	61,931	Open	8.8	114
2/5/2025	12:00:00	7.2	0.00	0.2	61,931	Closed	9.6	114
2/5/2025	12:15:00	7.2	0.00	0.2	61,931	Closed	10.4	114
2/5/2025	12:30:00	7.3	1.21	0.2	61,946	Open	8.7	114
2/5/2025	12:45:00	7.4	1.20	0.3	61,964	Open	8.8	114
2/5/2025	13:00:00	7.4	1.17	0.2	61,982	Open	8.8	114
2/5/2025	13:15:00	7.3	0.00	0.2	61,986	Closed	9.3	114
2/5/2025	13:30:00	7.2	0.00	0.2	61,986	Closed	10.2	115
2/5/2025	13:45:00	7.2	0.00	0.1	61,986	Closed	11	116
2/5/2025	14:00:00	7.3	1.14	0	61,992	Open	9	116
2/5/2025	14:15:00	7.3	1.18	0.3	62,010	Open	8.8	114
2/5/2025	14:30:00	7.3	0.00	0.1	62,016	Closed	9.1	114
2/5/2025	14:45:00	7.2	0.00	0	62,016	Closed	9.9	114
2/5/2025	15:00:00	7.2	0.00	0	62,016	Closed	10.8	116
2/5/2025	15:15:00	7.3	0.67	0	62,024	Open	9.2	115
2/5/2025	15:30:00	7.4	1.21	0.2	62,041	Open	8.9	114
2/5/2025	15:45:00	7.4	1.22	0.3	62,059	Open	8.9	113
2/5/2025	16:00:00	7.3	0.00	0.1	62,063	Closed	9.3	114
2/5/2025	16:15:00	7.2	0.00	0	62,063	Closed	10.2	114
2/5/2025	16:30:00	7.2	0.00	0.1	62,063	Closed	11	114
2/5/2025	16:45:00	7.3	1.15	0.1	62,079	Open	9.1	114
2/5/2025	17:00:00	7.4	1.20	0.2	62,096	Open	9.1	114
2/5/2025	17:15:00	7.3	0.00	0	62,104	Closed	9.4	114

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/5/2025	17:30:00	7.2	0.00	0	62,104	Closed	10.3	116
2/5/2025	17:45:00	7.2	0.00	0.1	62,104	Closed	11.1	116
2/5/2025	18:00:00	7.3	1.19	0.1	62,108	Open	9.4	116
2/5/2025	18:15:00	7.3	0.68	0.1	62,124	Open	9.5	114
2/5/2025	18:30:00	7.3	0.00	0.1	62,129	Open	9.5	114
2/5/2025	18:45:00	7.2	0.00	0.1	62,129	Closed	10.3	115
2/5/2025	19:00:00	7.2	0.00	0.1	62,129	Closed	11.2	116
2/5/2025	19:15:00	7.3	1.19	0	62,143	Open	9.3	116
2/5/2025	19:30:00	7.3	1.27	0	62,162	Open	9.2	114
2/5/2025	19:45:00	7.3	0.67	0.2	62,178	Open	9.5	113
2/5/2025	20:00:00	7.3	0.00	0.4	62,183	Closed	9.3	113
2/5/2025	20:15:00	7.2	0.00	0.3	62,183	Closed	9.8	113
2/5/2025	20:30:00	7.1	1.15	0.2	62,183	Closed	10.5	114
2/5/2025	20:45:00	7.3	1.17	0.3	62,201	Open	9	114
2/5/2025	21:00:00	7.3	1.15	0.1	62,219	Open	8.9	114
2/5/2025	21:15:00	7.3	0.00	0.2	62,224	Closed	9.3	114
2/5/2025	21:30:00	7.2	0.00	0.1	62,224	Closed	10	114
2/5/2025	21:45:00	7.1	0.00	0.3	62,224	Closed	10.7	114
2/5/2025	22:00:00	7.3	1.24	1.6	62,228	Open	9.2	114
2/5/2025	22:15:00	7.3	1.20	0.3	62,242	Open	9	113
2/5/2025	22:30:00	7.3	1.30	0.3	62,261	Open	9	114
2/5/2025	22:45:00	7.2	0.00	0.1	62,262	Closed	9.5	114
2/5/2025	23:00:00	7.2	0.00	0.2	62,262	Closed	10	114
2/5/2025	23:15:00	7.2	1.20	6.5	62,262	Closed	11.2	264

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/5/2025	23:30:00	7.3	1.23	0	62,280	Open	9.1	116
2/5/2025	23:45:00	7.3	1.25	0	62,299	Open	9.1	116
2/6/2025	0:00:00	7.3	0.00	0	62,311	Closed	9.3	116
2/6/2025	0:15:00	7.2	0.00	0	62,311	Closed	10	118
2/6/2025	0:30:00	7.1	0.00	0	62,311	Closed	11.1	266
2/6/2025	0:45:00	7.3	1.21	0	62,324	Open	9.2	117
2/6/2025	1:00:00	7.3	1.22	0	62,342	Open	9	116
2/6/2025	1:15:00	7.3	0.00	0	62,357	Closed	9.1	118
2/6/2025	1:30:00	7.2	0.00	0	62,357	Open	9.8	116
2/6/2025	1:45:00	7.2	0.00	0	62,357	Closed	10.7	118
2/6/2025	2:00:00	7.1	0.00	0	62,357	Closed	11.7	266
2/6/2025	2:15:00	7.3	0.72	0	62,360	Open	9.5	118
2/6/2025	2:30:00	7.3	1.22	0	62,375	Open	9.1	118
2/6/2025	2:45:00	7.4	0.00	0	62,392	Closed	9.1	118
2/6/2025	3:15:00	7.2	0.00	0	62,392	Closed	14.7	258
2/6/2025	3:30:00	7.3	1.24	0	62,398	Open	9.3	118
2/6/2025	3:45:00	7.3	1.26	0	62,417	Open	9.1	118
2/6/2025	4:00:00	7.3	1.20	0	62,435	Open	9	117
2/6/2025	4:15:00	7.3	0.00	0	62,439	Closed	9.7	118
2/6/2025	4:30:00	7.2	0.00	0	62,439	Open	10.8	118
2/6/2025	4:45:00	7.1	0.00	0	62,439	Closed	12	119
2/6/2025	5:00:00	7.1	0.00	0	62,439	Closed	13.1	256
2/6/2025	5:15:00	7.3	1.28	0	62,455	Open	9.1	119
2/6/2025	5:30:00	7.3	1.27	0	62,474	Open	9	118

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/6/2025	5:45:00	7.3	0.00	0	62,487	Closed	9.2	118
2/6/2025	6:00:00	7.2	0.00	0	62,487	Closed	10	117
2/6/2025	6:15:00	7.2	0.00	0	62,487	Closed	11	118
2/6/2025	6:30:00	7.3	1.25	0	62,495	Open	9.2	118
2/6/2025	6:45:00	7.3	1.24	0	62,513	Open	8.9	116
2/6/2025	7:00:00	7.3	0.00	0.2	62,528	Closed	8.8	115
2/6/2025	7:15:00	7.2	0.00	0	62,528	Closed	9.5	117
2/6/2025	7:30:00	7.2	0.00	0	62,528	Closed	10.6	118
2/6/2025	7:45:00	7.3	1.21	0	62,543	Open	9	118
2/6/2025	8:00:00	7.3	1.22	0	62,561	Open	9	118
2/6/2025	8:15:00	7.3	0.00	0	62,570	Closed	9.3	118
2/6/2025	8:30:00	7.2	0.00	0	62,570	Open	10.3	119
2/6/2025	8:45:00	7.2	0.00	0	62,570	Closed	11.3	116
2/6/2025	9:00:00	7.1	0.00	0	62,570	Closed	11.8	116
2/6/2025	9:15:00	7.3	1.22	0	62,584	Open	8.9	116
2/6/2025	9:30:00	7.3	0.68	0	62,600	Open	9.4	118
2/6/2025	9:45:00	7.3	1.18	0	62,615	Open	9.1	118
2/6/2025	10:00:00	7.3	0.00	0	62,624	Closed	9.5	118
2/6/2025	10:15:00	7.2	0.00	0	62,624	Closed	10.6	269
2/6/2025	10:30:00	7.1	0.00	0	62,624	Closed	11.7	265
2/6/2025	10:45:00	7.3	1.18	0	62,625	Open	10.8	119
2/6/2025	11:00:00	7.3	0.00	0	62,640	Closed	9.4	119
2/6/2025	11:15:00	7.2	1.13	0	62,642	Open	10.8	119
2/6/2025	11:30:00	7.3	1.21	0	62,659	Open	9.4	119

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/6/2025	11:45:00	7.3	0.66	0	62,673	Open	9.9	119
2/6/2025	12:00:00	7.2	0.00	0	62,680	Closed	9.8	118
2/6/2025	12:15:00	7.2	0.00	0	62,680	Closed	11	269
2/6/2025	12:30:00	7.2	1.18	0	62,682	Open	10	119
2/6/2025	12:45:00	7.3	1.16	0	62,700	Open	9.5	119
2/6/2025	13:00:00	7.3	0.70	0	62,717	Open	9.6	278
2/6/2025	13:15:00	7.2	0.00	0	62,720	Closed	10.8	279
2/6/2025	13:30:00	7.1	0.00	0	62,720	Closed	12	278
2/6/2025	13:45:00	7.1	0.00	0	62,720	Closed	14.6	284
2/6/2025	14:00:00	7.3	1.18	0.4	62,733	Open	9.4	284
2/6/2025	14:15:00	7.3	1.18	0.3	62,751	Open	9.4	292
2/6/2025	14:30:00	7.3	0.00	0.4	62,765	Closed	9.5	296
2/6/2025	14:45:00	7.2	0.00	0.3	62,765	Closed	10	297
2/6/2025	15:00:00	7.1	0.00	0.7	62,765	Closed	10.5	297
2/6/2025	15:15:00	7.3	1.17	0.5	62,772	Open	9.3	293
2/6/2025	15:30:00	7.3	0.69	0.7	62,790	Open	9.4	298
2/6/2025	15:45:00	7.3	1.25	0.6	62,805	Open	9.4	300
2/6/2025	16:00:00	7.3	1.24	0.7	62,823	Open	9.4	298
2/6/2025	16:15:00	7.2	0.00	0.7	62,831	Closed	9.5	297
2/6/2025	16:30:00	7.2	0.00	0.7	62,831	Closed	10	297
2/6/2025	16:45:00	7.3	1.26	0.7	62,839	Open	9.4	295
2/6/2025	17:00:00	7.3	1.23	0.7	62,857	Open	9.4	291
2/6/2025	17:15:00	7.3	1.25	0.3	62,876	Open	9.5	289
2/6/2025	17:30:00	7.3	0.00	0.2	62,891	Closed	9.7	287

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/6/2025	17:45:00	7.2	0.00	0.1	62,891	Closed	10.5	287
2/6/2025	18:00:00	7.1	0.00	0	62,891	Closed	11.3	287
2/6/2025	18:15:00	7.3	1.20	0	62,901	Open	9.8	289
2/6/2025	18:30:00	7.3	1.27	0	62,915	Open	9.8	286
2/6/2025	18:45:00	7.2	0.00	0	62,919	Closed	10.4	288
2/6/2025	19:00:00	7.1	0.00	0	62,919	Closed	11.7	289
2/6/2025	19:15:00	7.3	1.20	0	62,930	Open	9.9	284
2/6/2025	19:30:00	7.3	1.22	0	62,948	Open	9.9	283
2/6/2025	19:45:00	7.3	0.66	0.1	62,964	Open	10.2	282
2/6/2025	20:00:00	7.3	1.15	0	62,980	Open	9.8	282
2/6/2025	20:15:00	7.2	0.00	0.1	62,982	Closed	10.2	285
2/6/2025	20:30:00	7.1	0.00	0.1	62,982	Closed	10.7	282
2/6/2025	20:45:00	7.1	0.00	0	62,982	Closed	11.4	282
2/6/2025	21:00:00	7.3	1.26	0	62,998	Open	9.7	287
2/6/2025	21:15:00	7.3	1.19	0	63,012	Open	9.9	284
2/6/2025	21:30:00	7.3	1.22	0	63,030	Open	9.7	284
2/6/2025	21:45:00	7.2	0.00	0	63,033	Closed	10.2	286
2/6/2025	22:00:00	7.1	0.00	0	63,033	Closed	11.1	284
2/6/2025	22:15:00	7.3	1.21	0	63,044	Open	9.7	283
2/6/2025	22:30:00	7.3	1.21	0	63,062	Open	9.7	282
2/6/2025	22:45:00	7.3	1.24	0	63,080	Open	9.7	281
2/6/2025	23:00:00	7.3	0.00	0	63,088	Closed	10	283
2/6/2025	23:15:00	7.2	0.00	0	63,088	Closed	11	282
2/6/2025	23:30:00	7.2	1.19	11.2	63,088	Closed	12	283

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/6/2025	23:45:00	7.3	1.15	0	63,102	Open	9.6	281
2/7/2025	0:00:00	7.3	1.19	0	63,120	Open	9.6	281
2/7/2025	0:15:00	7.3	0.00	0	63,131	Open	9.8	281
2/7/2025	0:30:00	7.2	0.00	0	63,131	Closed	10.8	278
2/7/2025	0:45:00	7.1	0.00	0	63,131	Closed	12	278
2/7/2025	1:00:00	7.3	1.22	0	63,142	Open	9.6	278
2/7/2025	1:15:00	7.3	1.21	0	63,160	Open	9.6	276
2/7/2025	1:30:00	7.3	1.18	0	63,178	Open	9.5	276
2/7/2025	1:45:00	7.3	0.00	0	63,190	Closed	9.7	276
2/7/2025	2:00:00	7.2	0.00	0	63,190	Closed	10.5	274
2/7/2025	2:15:00	7.3	1.18	0	63,201	Open	9.5	272
2/7/2025	2:30:00	7.3	1.19	0	63,219	Open	9.5	274
2/7/2025	2:45:00	7.3	1.24	0	63,238	Open	9.6	119
2/7/2025	3:00:00	7.2	0.00	0	63,241	Closed	10.2	274
2/7/2025	3:15:00	7.1	0.00	0	63,241	Closed	11.2	273
2/7/2025	3:30:00	7.1	0.00	0	63,241	Closed	12.3	271
2/7/2025	3:45:00	7.1	0.00	0	63,241	Closed	13.1	271
2/7/2025	4:00:00	7.3	1.30	0	63,257	Open	9.4	117
2/7/2025	4:15:00	7.3	1.31	0	63,277	Open	9.4	117
2/7/2025	4:30:00	7.3	1.31	0	63,297	Open	9.4	119
2/7/2025	4:45:00	7.3	0.82	0	63,316	Open	9.4	118
2/7/2025	5:00:00	7.2	0.00	0	63,322	Closed	9.8	119
2/7/2025	5:15:00	7.2	0.00	0	63,322	Closed	10.6	268
2/7/2025	5:30:00	7.3	1.29	0	63,334	Open	9.3	118

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/7/2025	5:45:00	7.3	1.24	0	63,353	Open	9.3	119
2/7/2025	6:00:00	7.3	1.21	0	63,372	Open	9.3	118
2/7/2025	6:15:00	7.2	0.00	0	63,380	Closed	9.7	119
2/7/2025	6:30:00	7.1	0.00	0	63,380	Closed	11.1	271
2/7/2025	6:45:00	7.2	0.74	0	63,384	Open	9.7	119
2/7/2025	7:00:00	7.3	1.19	0	63,401	Open	9.2	119
2/7/2025	7:15:00	7.3	1.19	0	63,419	Open	9.1	117
2/7/2025	7:30:00	7.3	1.26	0	63,438	Open	9.2	119
2/7/2025	7:45:00	7.2	0.00	0	63,446	Closed	9.6	119
2/7/2025	8:00:00	7.1	0.00	0	63,446	Closed	10.7	268
2/7/2025	8:15:00	7.3	1.22	0	63,449	Open	9.5	119
2/7/2025	8:30:00	7.3	0.00	0	63,459	Closed	9.4	119
2/7/2025	8:45:00	7.3	1.24	1	63,462	Open	9.5	119
2/7/2025	9:00:00	7.3	0.72	0	63,478	Open	9.4	117
2/7/2025	9:15:00	7.3	1.27	0	63,495	Open	9.2	119
2/7/2025	9:30:00	7.2	0.00	0	63,499	Closed	9.8	119
2/7/2025	9:45:00	7.1	0.00	0	63,499	Closed	11.1	268
2/7/2025	10:00:00	7.3	1.20	0	63,507	Open	9.2	117
2/7/2025	10:15:00	7.3	1.28	0	63,525	Open	9.2	117
2/7/2025	10:30:00	7.3	1.21	0	63,544	Open	9.3	118
2/7/2025	10:45:00	7.3	0.00	0	63,560	Closed	9.5	119
2/7/2025	11:00:00	7.2	0.00	0	63,560	Closed	10.4	274
2/7/2025	11:15:00	7.1	0.00	0	63,560	Closed	11.7	273
2/7/2025	11:30:00	7.3	1.20	0	63,574	Open	9.5	274

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/7/2025	11:45:00	7.3	1.22	0	63,588	Open	9.7	274
2/7/2025	12:00:00	7.3	0.00	0	63,600	Closed	9.9	276
2/7/2025	12:15:00	7.2	0.00	0	63,600	Closed	11	274
2/7/2025	12:30:00	7.3	1.18	0	63,609	Open	9.9	277
2/7/2025	12:45:00	7.3	1.21	0	63,627	Open	10	278
2/7/2025	13:00:00	7.3	1.21	0	63,645	Open	10.1	278
2/7/2025	13:15:00	7.2	0.00	0	63,647	Closed	10.8	279
2/7/2025	13:30:00	7.2	1.15	0	63,649	Open	11	274
2/7/2025	13:45:00	7.3	1.18	0	63,667	Open	10.2	278
2/7/2025	14:00:00	7.2	0.00	0	63,678	Closed	11.8	279
2/7/2025	14:15:00	7.2	0.00	0	63,678	Closed	12.3	279
2/7/2025	14:30:00	7.2	1.20	0	63,681	Open	11	276
2/7/2025	14:45:00	7.3	1.20	0	63,699	Open	10.5	278
2/7/2025	15:00:00	7.3	1.18	0	63,716	Open	10.6	278
2/7/2025	15:15:00	7.3	1.20	0	63,734	Open	10.7	281
2/7/2025	15:30:00	7.2	0.00	0	63,738	Closed	11.2	283
2/7/2025	15:45:00	7.1	0.00	0	63,738	Closed	12.3	281
2/7/2025	16:00:00	7.3	1.18	0	63,745	Open	10.8	278
2/7/2025	16:15:00	7.2	1.12	0	63,758	Open	11.1	282
2/7/2025	16:30:00	7.2	1.22	0	63,775	Open	10.8	281
2/7/2025	16:45:00	7.2	0.00	0	63,787	Closed	11.1	284
2/7/2025	17:00:00	7.1	0.00	0	63,787	Closed	12.2	283
2/7/2025	17:15:00	7.2	1.17	0	63,790	Open	11.2	282
2/7/2025	17:30:00	7.2	1.21	0	63,808	Open	10.9	281

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/7/2025	17:45:00	7.2	1.19	0	63,826	Open	10.8	281
2/7/2025	18:00:00	7.2	0.00	0	63,843	Closed	10.9	279
2/7/2025	18:15:00	7.1	0.00	0	63,843	Closed	11.8	281
2/7/2025	18:30:00	7	0.00	0	63,843	Closed	13	278
2/7/2025	18:45:00	7.2	1.20	0	63,856	Open	10.9	278
2/7/2025	19:00:00	7.2	1.18	0	63,874	Open	10.9	277
2/7/2025	19:15:00	7.2	1.19	0	63,891	Open	10.9	276
2/7/2025	19:30:00	7.2	1.14	0	63,908	Open	11	276
2/7/2025	19:45:00	7.2	0.00	0	63,919	Closed	11	271
2/7/2025	20:00:00	7.1	0.00	0	63,919	Closed	11.6	272
2/7/2025	20:15:00	7.2	1.10	0	63,930	Open	11.1	276
2/7/2025	20:30:00	7.2	1.15	0	63,947	Open	10.6	276
2/7/2025	20:45:00	7.2	1.15	0	63,964	Open	10.7	277
2/7/2025	21:00:00	7.2	1.13	0	63,982	Open	10.8	281
2/7/2025	21:15:00	7.2	1.14	0	63,999	Open	10.8	282
2/7/2025	21:30:00	7.2	1.15	0	64,016	Open	10.7	282
2/7/2025	21:45:00	7.2	0.00	0	64,024	Open	10.8	284
2/7/2025	22:00:00	7.2	1.20	0	64,029	Open	10.6	282
2/7/2025	22:15:00	7.2	1.15	0	64,046	Open	10.6	284
2/7/2025	22:30:00	7.2	1.14	0	64,059	Open	10.9	282
2/7/2025	22:45:00	7.2	0.00	0.2	64,072	Closed	10.3	283
2/7/2025	23:00:00	7.1	0.00	0.3	64,072	Closed	10.6	281
2/7/2025	23:15:00	7.2	1.15	0.4	64,084	Open	10.1	281
2/7/2025	23:30:00	7.2	1.15	0.3	64,097	Open	10.1	279

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/7/2025	23:45:00	7.2	1.17	0	64,114	Open	10.2	281
2/8/2025	0:00:00	7.2	1.13	0	64,132	Open	10.4	280
2/8/2025	0:15:00	7.2	1.16	0	64,149	Open	10.5	282
2/8/2025	0:30:00	7.2	1.12	0	64,166	Open	10.5	281
2/8/2025	0:45:00	7.2	1.12	0	64,183	Open	10.6	279
2/8/2025	1:00:00	7.2	1.09	0.3	64,200	Open	10.8	284
2/8/2025	1:15:00	7.3	1.10	0.4	64,217	Open	11	287
2/8/2025	1:30:00	7.3	1.12	0	64,233	Open	11.3	289
2/8/2025	1:45:00	7.3	1.16	0	64,246	Open	11.3	286
2/8/2025	2:00:00	7.3	1.11	0	64,263	Open	11.2	282
2/8/2025	2:15:00	7.3	1.19	0	64,281	Open	11.1	283
2/8/2025	2:30:00	7.3	1.44	0	64,302	Open	11	281
2/8/2025	2:45:00	7.3	1.43	0	64,324	Open	11	282
2/8/2025	3:00:00	7.2	1.40	0	64,341	Open	12.1	282
2/8/2025	3:15:00	7.2	1.55	0	64,364	Open	10.8	276
2/8/2025	3:30:00	7.2	1.53	0.1	64,387	Open	10.6	273
2/8/2025	3:45:00	7.2	1.33	0.8	64,398	Open	10.4	273
2/8/2025	4:00:00	7.1	0.00	0.3	64,398	Open	10.6	273
2/8/2025	4:15:00	7.2	1.58	0.2	64,404	Open	10.3	271
2/8/2025	4:30:00	7.2	1.53	0	64,428	Open	10.2	272
2/8/2025	4:45:00	7.2	1.56	0	64,451	Open	10.2	272
2/8/2025	5:00:00	7.2	1.07	0	64,474	Open	10.2	274
2/8/2025	5:15:00	7.2	1.53	0	64,494	Open	10.4	271
2/8/2025	5:30:00	7.2	1.50	0	64,517	Open	10.5	271

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	5:45:00	7.2	1.58	0	64,540	Open	10.5	119
2/8/2025	6:00:00	7.2	1.54	0	64,562	Open	10.4	271
2/8/2025	6:15:00	7.2	1.48	0	64,585	Open	10.4	271
2/8/2025	6:30:00	7.2	1.53	0	64,607	Open	10.4	271
2/8/2025	6:45:00	7.2	1.53	0.1	64,626	Open	10.3	270
2/8/2025	7:00:00	7.2	1.57	0.3	64,649	Open	10.1	270
2/8/2025	7:15:00	7.1	0.00	0.2	64,657	Open	10.2	273
2/8/2025	7:30:00	7.1	0.00	0.4	64,657	Open	10.5	274
2/8/2025	7:45:00	7.2	0.00	0.3	64,665	Open	9.9	274
2/8/2025	8:00:00	7.2	1.48	0.7	64,669	Open	9.9	270
2/8/2025	8:15:00	7.2	1.55	0.3	64,692	Open	9.7	276
2/8/2025	8:30:00	7.2	1.41	0.4	64,714	Open	9.8	275
2/8/2025	8:45:00	7.1	0.00	0.4	64,717	Open	10.9	277
2/8/2025	9:00:00	7.2	0.72	0.5	64,722	Open	10	276
2/8/2025	9:15:00	7.1	0.00	0.2	64,728	Open	10	277
2/8/2025	9:30:00	7.2	1.15	0.3	64,738	Open	9.8	280
2/8/2025	9:45:00	7.2	1.49	0.4	64,757	Open	9.9	286
2/8/2025	10:00:00	7.2	1.51	0.4	64,780	Open	10.2	290
2/8/2025	10:15:00	7.3	1.48	0.7	64,802	Open	10.5	297
2/8/2025	10:30:00	7.3	1.50	0.7	64,824	Open	10.6	301
2/8/2025	10:45:00	7.3	1.44	0.5	64,846	Open	10.6	302
2/8/2025	11:00:00	7.3	1.00	0.3	64,866	Open	10.8	296
2/8/2025	11:15:00	7.2	1.46	0.2	64,877	Open	10.7	289
2/8/2025	11:30:00	7.2	1.44	0	64,899	Open	10.6	286

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	11:45:00	7.2	1.62	0.2	64,921	Open	10.6	285
2/8/2025	12:00:00	7.1	1.56	0	64,945	Open	11.6	286
2/8/2025	12:15:00	7.1	1.55	0	64,969	Open	12.6	284
2/8/2025	12:30:00	7.1	0.00	0	64,978	Open	13.9	286
2/8/2025	12:45:00	7.2	1.65	0	64,993	Open	10.8	281
2/8/2025	13:00:00	7.2	0.00	0	65,013	Closed	10.8	279
2/8/2025	13:15:00	7.1	0.00	0	65,013	Closed	11.6	281
2/8/2025	13:30:00	7.2	1.59	0.2	65,033	Open	10.6	276
2/8/2025	13:45:00	7.1	1.21	0.3	65,055	Open	11	274
2/8/2025	14:00:00	7.2	1.72	0.5	65,079	Open	10.4	274
2/8/2025	14:15:00	7.1	1.71	0.6	65,104	Open	10.4	274
2/8/2025	14:30:00	7.1	1.73	0.7	65,130	Open	10.3	274
2/8/2025	14:45:00	7.1	1.67	0.6	65,155	Open	10.3	275
2/8/2025	15:00:00	7.1	1.64	0.7	65,179	Open	10.4	273
2/8/2025	15:15:00	7.1	1.62	0.6	65,203	Open	10.4	273
2/8/2025	15:30:00	7.1	1.06	0.7	65,222	Open	10.9	273
2/8/2025	15:45:00	7.1	1.51	0.6	65,245	Open	11	275
2/8/2025	16:00:00	7	1.46	0.6	65,267	Open	11.4	274
2/8/2025	16:15:00	7	1.49	0.4	65,289	Open	11.9	272
2/8/2025	16:30:00	7	1.41	0.4	65,311	Open	12.4	272
2/8/2025	16:45:00	7	0.00	0.1	65,316	Closed	12.9	270
2/8/2025	17:00:00	7.2	1.48	0.1	65,326	Open	10.5	275
2/8/2025	17:15:00	7.1	0.00	0.4	65,335	Closed	10.6	276
2/8/2025	17:30:00	7.2	1.44	0.1	65,352	Open	10.2	273

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	17:45:00	7.1	1.49	3.3	65,354	Open	11.2	275
2/8/2025	18:00:00	7.1	1.47	0.3	65,377	Open	10.4	274
2/8/2025	18:15:00	7	1.39	0.3	65,394	Open	11.6	273
2/8/2025	18:30:00	7.1	1.29	0.2	65,414	Open	11.3	271
2/8/2025	18:45:00	7.1	1.36	0.2	65,428	Open	11.4	270
2/8/2025	19:00:00	7.1	1.32	0.2	65,448	Open	11.3	274
2/8/2025	19:15:00	7	1.16	0	65,466	Open	11.9	271
2/8/2025	19:30:00	7	0.94	0	65,482	Open	12.7	272
2/8/2025	19:45:00	7.2	1.82	0	65,505	Open	10.3	271
2/8/2025	20:00:00	7.2	1.75	0	65,532	Open	10.2	271
2/8/2025	20:15:00	7.1	1.30	0	65,557	Open	10.2	272
2/8/2025	20:30:00	7.1	0.00	0	65,571	Closed	10.2	273
2/8/2025	20:45:00	7.1	1.67	0	65,577	Open	10.2	271
2/8/2025	21:00:00	7.2	1.59	0	65,601	Open	10.1	118
2/8/2025	21:15:00	7.1	1.60	0	65,625	Open	10.2	117
2/8/2025	21:30:00	7.2	1.00	0	65,646	Open	10.4	117
2/8/2025	21:45:00	7.1	0.00	0	65,650	Closed	11.4	271
2/8/2025	22:00:00	7.1	1.32	0	65,660	Open	10.1	268
2/8/2025	22:15:00	7.1	0.77	0.3	65,680	Open	10.4	271
2/8/2025	22:30:00	7.1	1.16	0.2	65,694	Open	10	275
2/8/2025	22:45:00	7.1	1.09	0.3	65,711	Open	10.1	277
2/8/2025	23:00:00	7.1	1.07	0.4	65,727	Open	10.2	277
2/8/2025	23:15:00	7.1	1.66	0.2	65,747	Open	10	278
2/8/2025	23:30:00	7.1	1.63	0	65,772	Open	10.1	276

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/8/2025	23:45:00	7.1	1.16	0.1	65,793	Open	10	274
2/9/2025	0:00:00	7.1	1.64	0	65,817	Open	10.1	278
2/9/2025	0:15:00	7.1	1.66	0	65,842	Open	10.3	275
2/9/2025	0:30:00	7.1	1.60	0.1	65,867	Open	10.3	275
2/9/2025	0:45:00	7.1	1.33	0	65,889	Open	10.4	275
2/9/2025	1:00:00	7	0.67	0	65,905	Open	11	276
2/9/2025	1:15:00	7	0.00	0	65,908	Open	11.3	274
2/9/2025	1:30:00	7	0.00	0.2	65,918	Open	10.3	273
2/9/2025	1:45:00	7.1	1.77	0.4	65,933	Open	10.1	272
2/9/2025	2:00:00	7.1	0.88	0.3	65,953	Open	10.2	273
2/9/2025	2:15:00	7.1	1.17	0.4	65,971	Open	10.1	272
2/9/2025	2:30:00	7	0.97	0.2	65,987	Open	10.4	273
2/9/2025	2:45:00	7	0.61	0.3	65,999	Open	11.8	273
2/9/2025	3:00:00	7.1	1.77	0.4	66,020	Open	9.9	271
2/9/2025	3:15:00	7.1	1.78	0.2	66,046	Open	9.9	272
2/9/2025	3:30:00	7.1	1.72	0.3	66,072	Open	9.9	271
2/9/2025	3:45:00	7.1	1.64	0.3	66,097	Open	9.9	271
2/9/2025	4:00:00	7.1	1.32	0.4	66,120	Open	10	271
2/9/2025	4:15:00	7	0.35	0.1	66,132	Open	10.8	272
2/9/2025	4:30:00	7.1	0.00	0.3	66,145	Closed	10	271
2/9/2025	4:45:00	7	0.00	0.4	66,145	Closed	10.2	272
2/9/2025	5:00:00	7.1	1.94	0.1	66,167	Open	9.8	273
2/9/2025	5:15:00	7.1	1.87	0.3	66,196	Open	9.8	271
2/9/2025	5:30:00	7.1	1.81	0.1	66,224	Open	9.8	272

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	5:45:00	7.1	1.75	0	66,252	Open	9.9	117
2/9/2025	6:00:00	7.1	0.00	0	66,270	Open	10	271
2/9/2025	6:15:00	7	0.00	0	66,270	Open	10.8	272
2/9/2025	6:30:00	7.1	0.93	0	66,287	Open	10.6	273
2/9/2025	6:45:00	7.1	1.29	0.2	66,305	Open	10	274
2/9/2025	7:00:00	7.1	1.82	0.2	66,327	Open	9.7	276
2/9/2025	7:15:00	7.1	1.76	0	66,354	Open	9.9	116
2/9/2025	7:30:00	7.1	0.00	0	66,373	Open	10.1	274
2/9/2025	7:45:00	7	0.00	0	66,373	Open	10.8	272
2/9/2025	8:00:00	7.1	1.69	0	66,399	Open	9.8	116
2/9/2025	8:15:00	7.1	1.57	0	66,423	Open	10	117
2/9/2025	8:30:00	7.1	1.01	0	66,443	Open	10.4	273
2/9/2025	8:45:00	7	0.00	0	66,447	Open	10.9	269
2/9/2025	9:00:00	7	0.00	0	66,449	Open	10.5	271
2/9/2025	9:15:00	7.1	1.88	0.5	66,466	Open	10.4	269
2/9/2025	9:30:00	7.1	1.81	0.5	66,493	Open	9.9	269
2/9/2025	9:45:00	7	1.72	0.4	66,520	Open	9.8	274
2/9/2025	10:00:00	7	0.00	0.5	66,522	Open	10.1	273
2/9/2025	10:15:00	6.9	0.00	0.5	66,522	Open	10.4	276
2/9/2025	10:30:00	7	1.55	0.5	66,532	Open	9.8	277
2/9/2025	10:45:00	6.9	0.53	0.5	66,547	Open	10	279
2/9/2025	11:00:00	6.9	0.81	0.6	66,561	Open	10.7	278
2/9/2025	11:15:00	6.9	0.00	0.5	66,566	Open	10.9	279
2/9/2025	11:30:00	6.9	1.93	0.4	66,581	Open	9.8	284

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	11:45:00	7	1.86	0.6	66,609	Open	9.7	280
2/9/2025	12:00:00	6.9	0.00	0.3	66,622	Open	9.8	282
2/9/2025	12:15:00	6.9	0.00	0.6	66,629	Open	9.8	284
2/9/2025	12:30:00	6.9	1.74	0.6	66,649	Open	9.7	280
2/9/2025	12:45:00	7	1.77	0.8	66,676	Open	9.4	280
2/9/2025	13:00:00	7	1.43	0.7	66,698	Open	9.1	281
2/9/2025	13:15:00	6.9	1.72	0.6	66,722	Open	9.7	280
2/9/2025	13:30:00	6.9	1.63	0.6	66,747	Open	10	283
2/9/2025	13:45:00	6.9	0.51	0.6	66,765	Open	9.8	282
2/9/2025	14:00:00	7	1.17	0.7	66,781	Open	9.8	282
2/9/2025	14:15:00	7	1.75	1.8	66,795	Open	9.9	280
2/9/2025	14:30:00	7	1.83	0.6	66,822	Open	9	277
2/9/2025	14:45:00	7	1.70	0.5	66,849	Open	9.2	277
2/9/2025	15:00:00	7	1.71	0.4	66,875	Open	9.4	277
2/9/2025	15:15:00	7	1.70	0.6	66,896	Open	9.8	276
2/9/2025	15:30:00	7	1.57	0.5	66,921	Open	9.9	275
2/9/2025	15:45:00	6.9	0.58	0.5	66,943	Open	10.2	277
2/9/2025	16:00:00	6.9	0.00	0.5	66,943	Open	10.4	275
2/9/2025	16:15:00	6.9	0.00	0.6	66,944	Open	10.9	276
2/9/2025	16:30:00	7	1.75	0.7	66,960	Open	9.8	271
2/9/2025	16:45:00	7	1.81	0.6	66,987	Open	10	274
2/9/2025	17:00:00	6.9	1.84	0.7	67,013	Open	10.3	277
2/9/2025	17:15:00	6.9	1.69	0.7	67,040	Open	10.6	276
2/9/2025	17:30:00	6.9	1.48	0.8	67,064	Open	10.9	276

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**February 3, 2025 to February 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **February 19, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	17:45:00	6.9	0.00	2.4	67,077	Open	11.2	274
2/9/2025	18:00:00	6.9	0.00	0.7	67,077	Open	11.3	275
2/9/2025	18:15:00	7	1.41	1	67,089	Open	10	273
2/9/2025	18:30:00	7	1.81	0.9	67,115	Open	9.8	273
2/9/2025	18:45:00	6.9	1.85	0.8	67,142	Open	10.1	278
2/9/2025	19:00:00	6.9	1.63	0.8	67,169	Open	10.9	272
2/9/2025	19:15:00	6.9	0.93	0.6	67,191	Open	11.2	272
2/9/2025	19:30:00	6.9	0.20	0.2	67,196	Open	11.6	271
2/9/2025	19:45:00	7	1.80	2.5	67,207	Open	11.7	269
2/9/2025	20:00:00	7.1	1.68	0	67,233	Open	10.1	267
2/9/2025	20:15:00	7.1	1.73	0.3	67,259	Open	9.8	268
2/9/2025	20:30:00	7.1	1.68	0.4	67,284	Open	9.7	268
2/9/2025	20:45:00	7	1.11	0.5	67,306	Open	9.7	268
2/9/2025	21:00:00	7	0.79	0.5	67,317	Open	9.7	269
2/9/2025	21:15:00	7	0.00	0.5	67,317	Open	10.4	271
2/9/2025	21:30:00	7.1	1.77	1.6	67,334	Open	9.5	273
2/9/2025	21:45:00	7.1	1.74	0.7	67,360	Open	9.4	110
2/9/2025	22:00:00	7.1	1.60	1	67,385	Open	9.4	109
2/9/2025	22:15:00	7.1	1.65	1.4	67,409	Open	9.4	108
2/9/2025	22:30:00	7.1	0.00	0.8	67,419	Open	9.4	271
2/9/2025	22:45:00	7	0.43	0.9	67,429	Open	9.3	271
2/9/2025	23:00:00	7	1.94	2.1	67,439	Open	9.3	271
2/9/2025	23:15:00	7.1	1.91	0.8	67,468	Open	9.3	271
2/9/2025	23:30:00	6.9	0.00	4.5	67,470	Closed	8	112

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
2/9/2025	23:45:00	7	1.89	0.7	67,492	Open	9.4	114

Appendix C Photos:

Photo 1: No visible sheen observed in the WTP water, February 3

Photo 2: No visible sheen observed in the WTP water, February 4

Photo 3: No visible sheen observed in the WTP water, February 5

Photo 4: No visible sheen observed in the WTP water, February 7

Photo 5: No visible sheen observed in the WTP water, February 8

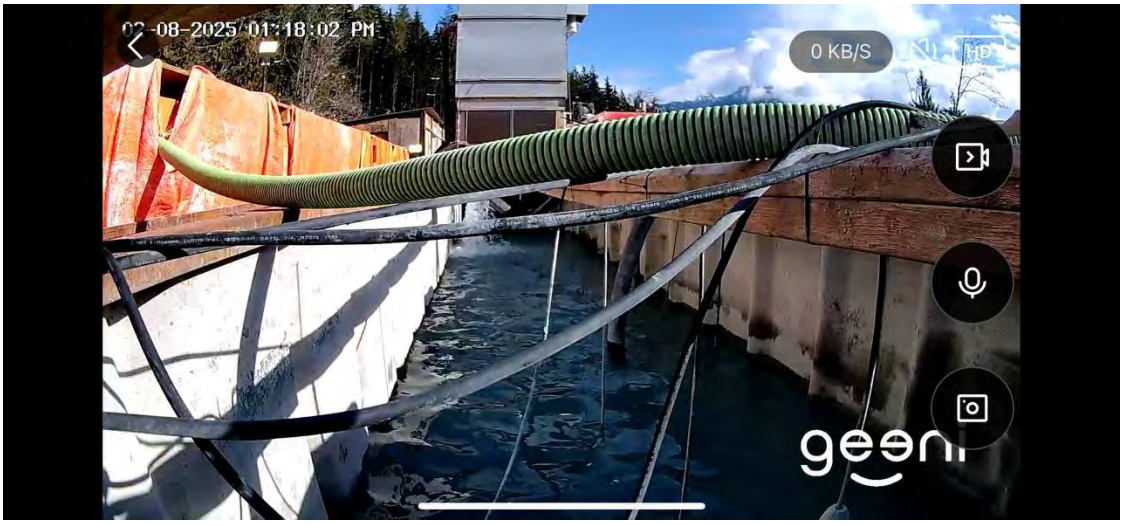



Photo 6: No visible sheen observed in the WTP water, February 9


Appendix D: Woodfibre Site Receiving Environment Documentation

Woodfibre Site Receiving Environment Sample Analysis

TRITON Environmental Consultants	Sample ID	Reviewed and signed off by:	COLLEGE OF APPLIED BIOLOGISTS Farshad Shafiei RPBio 3781 CAB		Farshad Shafiei Ph.D., R.P.Bio.	EAS US1 (Upstream)	EAS DS 1 (Downstream)	Sample or value notes	BCWQ FAL - Short Term	BCWQ FAL - Long Term	BCWQ MAL - Short Term	BCWQ MAL - Long Term
	LAB ID					VA25A2785-001	VA25A2785-002					
	Date Sampled					07-Feb-2025	07-Feb-2025					
	Time Sampled					13:25	14:27					
Analyte	**Units**	**FAL-ST [1,2]**	**FAL-LT [1,2]**	**MAL-ST [1]**	**MAL-LT [1,2]**	Water	Water					
						N/A	N/A		Guideline notes			
In Situ Parameters												
pH (field)	pH units	6.5-9.0	6.5-9.0	7.0-8.7	7.0-8.7	7.74	7.88		If natural pH < 6.5, no statisticaly significant decrease from background. No restriction in increase except in areas with unique flora or fauna. Unrestricted change permitted within range of 6.5 to 9.0. If natural pH > 9.0, no statistically significant increase from background. Refer to BC Water Quality Guidelines for more information.		Unrestricted change within this range (for protection of mollusc embryo development).	
Temperature (field)	°C	Short-term daily temperature guideline is 19°C for streams with unknown fish distribution Max +/- from BKG 1°C [4]	-	Short-term daily temperature guideline is 19°C for streams with unknown fish distribution Max +/- from BKG 1°C [4]	-	2.1	2.7		Guideline is species-dependent. Short-term daily temperature guideline is 19°C for streams with unknown fish distribution. Refer to footnote 4 for background temperature range for East Creek. Refer to BC Water Quality Guidelines for more information Hourly rate of change not to exceed 1°C. Calculation: US value +/- 1 = guideline range		Guideline for marine waters are based on natural ambient conditions. Max and min. 1°C change from natural condition. Natural temperature cycle characteristic of the site should not be altered in amplitude or frequency by human activities. Max rate of any human-induced temperature change not to exceed 0.5°C hourly. treams with unknown fish distribution. Refer to footnote 4 for background temperature range for East Creek. Calculation: US value +/- 1 = guideline range	
Conductivity (field)	µS/cm	-	-	-	-	36	31					
Turbidity (field)	NTU	Varies with background, see note Guideline = 8.0	Varies with background, see note Guideline = 3.40 5-week discrete sampling average = 1.97 (DS)	Varies with background, see note Guideline = 8.0	Varies with background, see note Guideline = 3.40 5-week discrete sampling average = 1.97 (DS)	0	1.21		Change from background of 8 NTU at any one time for a duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 8 = DS guideline Change from background of 5 NTU at any time when background is 8 - 50 NTU during high flows or in turbid waters. Calculation: US value + 5 = DS guideline Change from background of 10% when background is > 50 NTU at any time during high flows or in turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 2 NTU at any one time for 30 days in clear flows. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.	Change from background of 8 NTU at any one time for a duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 8 = DS guideline Change from background of 5 NTU at any time when background is 8 - 50 NTU during high flows or in turbid waters. Calculation: US value + 5 = DS guideline Change from background of 10% when background is > 50 NTU at any time during high flows or in turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 2 NTU at any one time for 30 days in clear flows. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.
Dissolved Oxygen (field)	mg/L	Varies with life stage, see note	Varies with life stage, see note	Varies with life stage, see note	Varies with life stage, see note	12.83	12.15		Buried embryo/alevin minimum 9 mg/L, all other life stages 5 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 11 mg/L, all other life stages 8 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 9 mg/L, all other life stages 5 mg/L. Refer to BC Water Quality Guidelines for more information.	Buried embryo/alevin minimum 11 mg/L, all other life stages 8 mg/L. Refer to BC Water Quality Guidelines for more information.
General Parameters												
Hardness (as $CaCO_3$) (total)	mg/L	-	-	-	-	7.1	9.35					
Total Dissolved Solids	mg/L	-	-	-	-	24	23					
Total Suspended Solids	mg/L	Varies with background, see note Guideline = 28	Varies with background, see note Guideline = 8.00 5-week discrete sampling average = 3.0 (DS)	Varies with background, see note Guideline = 28	Varies with background, see note Guideline = 8.00 5-week discrete sampling average = 3.0 (DS)	< 3.0	< 3.0		Change from background of 25 mg/L at any one time for duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 25 = DS guideline Change from background of 10 mg/L at any one time when background 25-100 mg/L during high flows or turbid waters. Calculation: US value + 10 = DS guideline Change from background of 10% when background is > 100 mg/L at any time during high flows or turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 5 mg/L @ one time for a druation of 30 days in clear flow. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.	Change from background of 25 mg/L at any one time for duration of 24 h in all waters during clear flows or in clear waters. Calculation: US value + 25 = DS guideline Change from background of 10 mg/L at any one time when background 25-100 mg/L during high flows or turbid waters. Calculation: US value + 10 = DS guideline Change from background of 10% when background is > 100 mg/L at any time during high flows or turbid waters. Calculation: US value + (US value*0.1) = DS guideline	Change from background of 5 mg/L @ one time for a druation of 30 days in clear flow. Note that a rolling average of US values over a 30-day period is required to properly calculate this guideline. Guideline calculated in this spreadsheet using US concentration at the time of sampling.
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	1.73	1.7			Long-term (30-day) median within 20% of background median [3]		
Total Alkalinity ($CaCO_3$)	mg/L	-	Categorical	-	-	4.9	7.7			Guideline is for alkalinity (as CaCO3) and categorizes the sensitivity of a water body to acid inputs. Alkalinity < 10 mg/L is considered highly sensitive to acid inputs; 10 - 20 mg/L is considered moderately sensitive to acid inputs; > 20 mg/L is considered low sensitivity.		
Total Sulfide (as S)	mg/L	-	-	-	-	< 0.0015	< 0.0015					
Total Sulfide (un-ionized as H_2S)	mg/L	-	0.002	-	-	< 0.0015	< 0.0015			Working guideline		
Total Sulfide (as H_2S)	mg/L	-	-	-	-	< 0.0016	< 0.0016					
Anions and Nutrients												
Ammonia	mg/L ammonia-N	Varies with pH and temperature. See note. Guideline = 10.5	Varies with pH and temperature. See note. Guideline = 1.97	Varies with pH and temperature. See note. Guideline = 44	Varies with pH, temperature and salinity. See note. Guideline = 7.2	< 0.0050	0.0077		Guideline for ammonia as N and is pH and temperature dependent. Refer to Table 27D in BC WQG for guideline values.	Guideline for ammonia as N and is pH and temperature dependent. Refer to Table 27C in BC WQG for guideline values.	Guideline for ammonia as N. Guideline is pH, temperature and salinity dependent. Refer to Table 27F in BC WQG for guideline values.	Guideline for ammonia as N. Guideline is pH, temperature and salinity dependent. Refer to Table 27E in BC WQG for guideline values.
Bromide	mg/L	-	-	-	-	< 0.050	< 0.050					
Chloride	mg/L	600	150	> 110% of background	< 90% of background	0.78	1.22				Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.	Human activities should not cause the chloride of marine and estuarine waters to fluctuate by more than 10% of the natural chloride expected at that time and depth.
Fluoride	mg/L	Varies with hardness Guideline = 0.271	-	1.5	-	< 0.020	0.033		Guideline has interim status. Guideline is calculated with the following equation: Guideline = [-51.73 + 92.57 log10 (hardness)] * 0.01			
Nitrate (as N)	mg/L	32.8	3	-	3.7	0.0799	0.0503					
Nitrite (as N)	mg/L	Varies with chloride. Table 27B, see note. Guideline = 0.06	Varies with chloride. Table 27B, see note. Guideline = 0.02	-	-	< 0.0010	< 0.0010		Varies with chloride. Refer to Table 27B in BC WQG for guideline values.	Varies with chloride. Refer to Table 27B in BC WQG for guideline values.		
Total Nitrogen	mg/L	-	-	-	-	0.121	0.103					
Total Phosphorous	mg/L	-	0.005 to 0.015	-	-	0.0261	0.0135			Guideline is for lakes, refer to BCWQ guideline for nutrients and algae for more information. Guideline does not apply to site.		
Sulfate (as SO_4)	mg/L	-	Varies with hardness. See note. Guideline = 128	-	-	3.76	3.18			Guidelines for hardness ranges below: Hardness 0 - 30: 128 Hardness 31 - 75: 218 Hardness 76 - 180: 309 Hardness 181 - 250: 429		
Total Metals												
Aluminum (Al)-Total	mg/L	-	Varies with pH, DOC, hardness Guideline = 0.112 5-week field average = 0.080 (US), 0.105 (DS)	-	-	0.0847	0.134			Guideline varies with pH, hardness and Dissolved Organic Carbon (DOC). Guideline is calculated with the following equation: Guideline = (EXP((0.645 * LN(DOC)) + (2.255 * LN(hardness)) + (1.995 * pH) + (-0.284 * (LN(hardness) * pH))-9.898)/3/1000) If hardness or DOC is below the hardness range, the minimum hardness or DOC will be applied in the calculation.		
Antimony (Sb)-Total	mg/L	0.25	0.074	-	-	< 0.00010	0.00015					
Arsenic (As)-Total	mg/L	-	0.005	-	0.0125	0.00019	0.00015					Interim guideline status
Barium (Ba)-Total	mg/L	-	1	-	-	0.00361	0.00332			Working guideline status		
Beryllium (Be)-Total	mg/L	-	0.00013	-	0.100	< 0.000100	< 0.000100			Working guideline status		Working guideline status
Bismuth (Bi)-Total	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Boron (B)-Total	mg/L	-	1.2	-	1.2	< 0.010	0.011					
Cadmium (Cd)-Total	mg/L	-	-	-	0.00012	0.0000094	0.0000083					Working guideline status
Calcium (Ca)-Total	mg/L	-	-	-	-	2.23	3.2					
Cesium (Cs)-Total	mg/L	-	-	-	-	<0.000010	0.000019					
Chromium (Cr) - Total	mg/L	-	-	-	-	< 0.00050	< 0.00050					
Chromium (Cr(III))-Total	mg/L	-	0.0089	-	0.056	< 0.00050	< 0.00050			Working guideline status		Working guideline status
Chromium (Cr(VI))-Total	mg/L	-	0.0025	-	0.0015	< 0.00050	< 0.00050			Working guideline status		Working guideline status
Cobalt (Co)-Total	mg/L	0.11	0.004	-	-	< 0.00010	< 0.00010					
Copper (Cu)-Total	mg/L	-	-	0.003	0.003 5-week field averages = 0.000602 (US), 0.000516 (DS)	< 0.00066	0.00055					
Iron (Fe)-Total	mg/L	1	-	-	-	0.034	0.066					
Lead (Pb)-Total	mg/L	-	-	0.14	0.002 5-week field averages = 0.00005 (US), 0.000053 (DS)	< 0.00005	0.000050		Guideline varies with hardness, refer to BC Water Quality Guidelines for more information. Guideline is 0.003 where hardness ≤8mg/L. Guideline uses equation EXP[1.273*on(hardness)-1.460] where hardness is 8-360 mg/L. Lowest value for guideline is 0.003 mg/L.	Guideline varies with hardness, refer to BC Water Quality Guidelines for more information. Guideline equation EXP[1.273*on(hardness)-4.704] applies to samples with hardness 8-360 mg/L.		
Lithium (Li)-Total	mg/L	-	-	-	-	< 0.0010	< 0.0010					
Magnesium (Mg)-Total	mg/L	-	-	-	-	0.371	0.331					
Manganese (Mn)-Total	mg/L	Varies with hardness Guideline = 0.82	Varies with hardness Guideline = 0.77	-	-	0.00152	0.00304		Guideline varies with hardness. The guideline is calculated using the following equation: Guideline = (0.0044 * hardness + 0.605) Guideline applies to samples with hardness 25-259 mg/L. Lowest value for guideline is 0.77 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.	Guideline varies with hardness, refer to BC Water Quality Guidelines for more information. The guideline is calculated using the following formula: Guideline = (0.01102 * hardness + 0.54) Guideline applies to samples with hardness 37-450 mg/L. Lowest value for guideline is 0.81 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.		
Mercury (Hg)-Total	mg/L	-	Varies with methyl mercury Guideline = N/A	-	-	< 0.0000050	< 0.0000050			When MeHg ≤ 0.5% of total Hg, guideline is equal to 0.02 mg/L Guideline = 0.1/[MeHg/totalHg]. When MeHg ≤ 0.5% of total Hg, guideline is equal to 0.02 mg/L		
Molybdenum (Mo)-Total	mg/L	46	7.6	-	-	0.000366	0.00147					
Nickel (Ni)-Total	mg/L	-	-	-	0.0083	< 0.00050	< 0.00050			Working guideline status. Guideline varies with hardness. Refer to BC Water Quality Guidelines for more information. Hardness 0 ≤ 60: 0.025 Hardness > 60 ≤ 180: Guideline = (EXP((0.76 * (LN(hardness)) + 1.06))/1000) Hardness ≥ 180: 0.15		Working guideline status
Potassium (K)-Total	mg/L	-	-	-	-	0.225	0.327					
Rubidium (Rb)-Total	mg/L	-	-	-	-	0.00032	0.00057					
Selenium (Se)-Total	mg/L	-	0.002	-	0.002	< 0.000075	< 0.000050			Guideline for freshwater aquatic life (water column). Alert concentration is 0.001 mg/L, with separate guidelines for sediment, invertebrate and fish tissue. Refer to BC Water Quality Guidelines for more information on guideliens and sampling guidance.		Guideline for marine aquatic life (water column). Alert concentration is 0.001 mg/L, with separate guideliens for sediment, invertebrate and fish tissue. Refer to BC Water Quality Guidelines for more information on guideliens and sampling guidance.
Silicon (Si)-Total	mg/L	-	-	-	-	3.86	3.98					
Silver (Ag)-Total	mg/L	Varies with hardness, see note Guideline = 0.0001	Varies with hardness, see note Guideline = 0.00005	0.003	0.0015	< 0.000010	< 0.000010		Varies with hardness Guideline ranges: Hardness ≤ 100: 0.0001 Hardness > 100: 0.003	Varies with hardness Guideline ranges: Hardness ≤ 100: 0.00005 Hardness > 100: 0.0015		Guideline applies to open coast and estuaries. Guideline is applicable to the EGP site.
Sodium (Na)-Total	mg/L	-	-	-	-	1.42	1.6					
Strontium (Sr)-Total	mg/L	-	-	-	-	0.0117	0.0114					
Sulfur (S)-Total	mg/L	-	-	-	-	1.16	0.81					
Tellurium (Te)-Total	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Thallium (Tl)-Total	mg/L	-	0.00003 5-week field average = <0.000010 (US), <0.000010 (DS)	-	-	< 0.000010	< 0.000010			30-day average, site-specific objective for the lower Columbia River, BC. Guideline is for reference only and does not apply to the EGP site.		
Thorium (Th)-Total	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Tin (Sn)-Total	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Titanium (Ti)-Total	mg/L	-	-	-	-	0.00102	0.00269					
Tungsten (W)-Total	mg/L	-	-	-	-	< 0.00010	0.00019					
Uranium (U)-Total	mg/L	0.0165	0.0075	-	-	0.000081	0.000147			Working guideline status		
Vanadium (V)-Total	mg/L	-	0.06	-	0.005	< 0.00050	< 0.00050					Working guideline status
Zinc (Zn)-Total	mg/L	-	-	0.055	0.010 5-week field average = 0.0032 (US), 0.0036 (DS)	< 0.0030	< 0.0030					
Zirconium (Zr)-Total	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Dissolved Metals												
Aluminum (Al)-Dissolved	mg/L	-	-	-	-	0.0599	0.0498					
Antimony (Sb)-Dissolved	mg/L	-	-	-	-	< 0.00010	0.00018					
Arsenic (As)-Dissolved	mg/L	-	-	-	-	< 0.00010	0.00018					
Barium (Ba)-Dissolved	mg/L	-	-	-	-	0.00315	0.00311					
Beryllium (Be)-Dissolved	mg/L	-	-	-	-	< 0.000100	< 0.000100					
Bismuth (Bi)-Dissolved	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Boron (B)-Dissolved	mg/L	-	-	-	-	< 0.010	0.01					
Cadmium (Cd)-Dissolved	mg/L	Varies with hardness, see note Guideline = 0.000039	Varies with hardness, see note Guideline = 0.000026	-	-	< 0.0000050	0.0000079		Guideline is hardness dependent. Guideline is appilcable to water hardness between 7.0 and 455 mg/L. Guideline is calculated with the following formula: Guideline = (EXP(1.03 * (LN(hardness)) - 5.274)/1000) Lowest value for guideline is 0.000018 mg/L. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.	Guideline is hardness dependent. Guideline is applicable to hardness between 3.4 and 285 mg/L. Guideline is calculated with the following formula: Guideline = (EXP(0.736 * (LN(hardness)) - 4.943)/1000) Lowest value for guiedeline is 0.00004. If hardness is below the hardness range, the minimum hardness will be applied in the calculation.		
Calcium (Ca)-Dissolved	mg/L	-	Categorical, see note	-	-	2.26	4.84			Guideline categorizes the sensitivity of a water body to acid inputs (i.e. buffering capacity). Standard is 4 mg/L dissolved Ca for the most sensitive waterbodies,5 - 8 mg/L for waterbodies with moderate sensitivity to acid inputs. Waterbodies with dissolved calcium > 8mg/L are considered to have low sensitivity to acid inputs.		
Cesium (Cs)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Chromium (Cr)-Dissolved	mg/L	-	-	-	-	< 0.00050	< 0.00050					
Cobalt (Co)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Copper (Cu)-Dissolved	mg/L	Guideline varies with other parameters, see note Guideline = 0.0031	Guideline varies with other parameters, see note Guideline = 0.0005 5-week field average = 0.00053 (US), 0.00037 (DS)	-	-	0.00057	0.00043		Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date	Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date		
Iron (Fe)-Dissolved	mg/L	0.35	-	-	-	0.016	0.012					
Lead (Pb)-Dissolved	mg/L	-	Guideline varies with DOC and hardness Guideline: 0.00150 5-week field average = <0.000050 (US), <0.000050 (DS)	-	-	< 0.000050	< 0.000050			Guideline varies with DOC and hardness, refer to BC Water Quality Guidelines for more information. Guideline uses equation (EXP((0.514*LN(DOC))+(0.214*(LN(Hardness)))+0.4354))/2/1000 where DOC range is 0.5-31.5 mg/L and hardness range is 4.7-511 mg/L.		
Lithium (Li)-Dissolved	mg/L	-	-	-	-	< 0.0010	0.0011					
Magnesium (Mg)-Dissolved	mg/L	-	-	-	-	0.357	0.368					
Manganese (Mn)-Dissolved	mg/L	-	-	-	-	0.00108	0.00259					
Mercury (Hg)-Dissolved	mg/L	-	-	-	-	< 0.0000050	< 0.0000050					
Molybdenum (Mo)-Dissolved	mg/L	-	-	-	-	0.000322	0.00299					
Nickel (Ni)-Dissolved	mg/L	Guideline varies with pH, temperature, DOC, and hardness Guideline: 0.0187	Guideline varies with pH, temperature, DOC, and hardness Guideline: 0.00134 5-week field average = 0.00134 < 0.0005 (US), < 0.0005 (DS)	-	-	< 0.00050	< 0.00050		Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date	Guideline varies with other parameters and is calculated using BC BLM software. Simplified model: Temperature, pH, DOC and hardness Detailed model: Temperature, pH, DOC, humic acid content, total calcium, total magnesium, total sodium, total potassium, sulphate, chloride, and alkalinity Guideline calculated using values for parameters above taken at the specific site on each sampling date		
Phosphorus (P)-Dissolved	mg/L	-	-	-	-	< 0.050	< 0.050					
Potassium (K)-Dissolved	mg/L	-	-	-	-	0.229	0.45					
Rubidium (Rb)-Dissolved	mg/L	-	-	-	-	0.00024	0.00075					
Selenium (Se)-Dissolved	mg/L	-	-	-	-	< 0.00005	< 0.00005					
Silicon (Si)-Dissolved	mg/L	-	-	-	-	3.48	3.63					
Silver (Ag)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Sodium (Na)-Dissolved	mg/L	-	-	-	-	1.48	2.32					
Strontium (Sr)-Dissolved	mg/L	-	-	-	-	0.0105	0.0134					
Sulfur (S)-Dissolved	mg/L	-	-	-	-	0.9	0.85					
Tellurium (Te)-Dissolved	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Thallium (Tl)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Thorium (Th)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Tin (Sn)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Titanium (Ti)-Dissolved	mg/L	-	-	-	-	< 0.00030	< 0.00030					
Tungsten (W)-Dissolved	mg/L	-	-	-	-	< 0.00010	0.00013					
Uranium (U)-Dissolved	mg/L	-	-	-	-	0.000078	0.000159					
Vanadium (V)-Dissolved	mg/L	-	-	-	-	< 0.00050	< 0.00050					
Zinc (Zn)-Dissolved	mg/L	Varies with DOC and hardness Guideline = 0.009	Varies with pH, DOC, hardness Guideline = 0.0026 5-week field average = 0.0023 (US), 0.0039 (DS)	-	-	0.0017	0.0035		Guideline varies with DOC and hardness. Guideline is calculated using the following formula: Guideline = (EXP((0.833 * (LN(hardness))) + (0.24 * (LN(DOC))) + 0.526)/2/1000) If hardness or DOC is below the hardness or DOC range, the minimum hardness or DOC will be applied in the calculation.	Guideline varies with pH, hardness and Dissolved Organic Carbon (DOC). Guideline is calculated using the following formula: Guideline = (EXP((0.974 * (LN(hardness))) - (0.815 * pH) + (0.398 * (LN(DOC))) + 4.625)/2/1000) Guideline only applies to water with pH between 6.5 and 8.13, DOC between 0.3 and 22.9 mg/L, anmd hardness between 23.4 and 399 mg/L. If hardness or DOC is below the hardness or DOC range, the minimum hardness or DOC will be applied in the calculation.		
Zirconium (Zr)-Dissolved	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Applied Guideline:		**British Columbia Approved and Working Water Quality Guidelines (NOV 2023) for Freshwater Aquatic Life (FAL) & Marine Aquatic Life (MAL) Short-Term (ST) & Long-Term (LT)**										

[1]BC MOECCS. 2023. BC Water Qualtiy Guidelines for the Protection of Aquatic Life, Wildlife & Agriculture. Accessed from: wqg_summary_aquaticlife_wildlife_agri.pdf (gov.bc.ca)

[2]BC MOECCS. 2021. BC Working Water Qualtiy Guidelines for the Protection of Aquatic Life, Widlife & Agriculture. Accessed from: bc_env_working_water_quality_guidelines.pdf (gov.bc.ca)

[3]Note that long-term guidelines apply to averaged data to account for chronic impacts to aquatic life. Ideally, five samples collected at evenly spaced intervals over 30 days is considered to be the minimum number needed to calculate the long-term average of any parameter, though this may vary by parameter and site conditions. Long-term guidelines applied here are for reference only and may not indicate chronic impacts to aquatic life if exceedances occur in the short term.

[4]Background temperature ranges: Dec-Feb: 0.3-8.0C; Mar-Apr: 3.0-10.2C; May-June: 6.8-15.1C; Jul-present: 12.9-18.2C
Reference: AquaTROLL In-Situ Data Logger - Background water quality readings collected from Dec.-present.
For guidelines dependent on other parameters, when hardness, pH or DOC are below the range stated in the guideline, the lowest value in the range is used to calculate the guideline.

Parameters Used to Calculate Guidelines

Analyte	Units	Measurement method	Values	
			EAS US1 (Upstream)	**EAS DS 1 (Downstream)**
pH (field)	pH units	Field pH taken using handheld meters during sampling used in calculations	7.74	7.88
Temperature (field)	°C	Field temperature taken using handheld meters during sampling used in calculations	2.1	2.7
Turbidity (field)	NTU	Field turbidity taken using handheld meters during sampling used in calculations	0.00	1.21
Hardness (as CaCO3) (total)	mg/L	Laboratory tested total hardness taken at each respective sample site on the day of sampling used in guideline calculations	7.1	9.35
Dissolved Organic Carbon (DOC)	mg/L	Laboratory tested dissolved organic carbon tested at the lab used in guideline calculations	1.73	1.7
Total Alkalinity ($CaCO_3$)	mg/L	Laboratory tested total alkalinity used in calculations	4.9	7.7
Chloride	mg/L	Laboratory tested chloride taken at each respective sample site on the day of sampling used in guideline calculations	0.78	1.22

Woodfibre Site Receiving Environment Lab Documentation

CERTIFICATE OF ANALYSIS

Work Order	:		
Client	:	Laboratory	:
Contact	:	Account Manager	:
Address	:	Address	:
Telephone	:	Telephone	:
Project	:	Date Samples Received	: 07-Feb-2025 17:10
PO	:	Date Analysis Commenced	: 09-Feb-2025
C-O-C number	:	Issue Date	: 19-Feb-2025 09:40
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
		Metals, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Organics, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Metals, Burnaby, British Columbia
		Inorganics, Edmonton, Alberta
		Inorganics, Burnaby, British Columbia
		Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
°C	degrees celsius
mg/L	milligrams per litre
pH units	pH units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	Description
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Field Tests										
Conductivity, field	----	EF001/VA	0.10	µS/cm		36.000	31.000	170.00	170.00	----
pH, field	----	EF001/VA	0.10	pH units		7.74	7.88	7.51	7.51	----
Temperature, field	----	EF001/VA	0.10	°C		2.10	2.70	8.90	8.90	----
Physical Tests										
Hardness (as CaCO3), dissolved	----	EC100/VA	0.60	mg/L		7.11	13.6	55.1	55.0	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		7.10	9.35	54.1	54.3	----
Solids, total dissolved [TDS]	----	E162/VA	10	mg/L		24	23	93	93	----
Solids, total suspended [TSS]	----	E160/VA	3.0	mg/L		<3.0	<3.0	<3.0	<3.0	----
Alkalinity, total (as CaCO3)	----	E290/VA	2.0	mg/L		4.9	7.7	54.1	54.4	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/VA	0.0050	mg/L		<0.0050	0.0077	0.0187	0.0182	----
Bromide	24959-67-9	E235.Br-L/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	----
Chloride	16887-00-6	E235.Cl/VA	0.50	mg/L		0.78	1.22	12.3	12.3	----
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L		<0.020	0.033	0.199	0.200	----
Nitrate (as N)	14797-55-8	E235.NO3-L/VA	0.0050	mg/L		0.0799	0.0503	0.0162	0.0160	----
Nitrite (as N)	14797-65-0	E235.NO2-L/VA	0.0010	mg/L		<0.0010	<0.0010	0.0014	0.0015	----
Nitrogen, total	7727-37-9	E366/VA	0.030	mg/L		0.121	0.103	0.294	0.287	----
Phosphorus, total	7723-14-0	E372-U/VA	0.0020	mg/L		0.0261	0.0135	0.0038	0.0034	----
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L		3.76	3.18	6.44	6.44	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		1.73	1.70	0.72	0.72	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Total Sulfides										
Sulfide, total (as S)	18496-25-8	E395/VA	0.0015	mg/L		<0.0015	<0.0015	<0.0015	<0.0015	----
Sulfide, un-ionized (as H2S), from total	7783-06-4	EC395/VA	0.0015	mg/L		<0.0015	<0.0015	<0.0015	<0.0015	----
Sulfide, total (as H2S)	7783-06-4	E395/VA	0.0016	mg/L		<0.0016	<0.0016	<0.0016	<0.0016	----
Total Metals										
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L		0.0847	0.134	0.0368	0.0364	----
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L		<0.00010	0.00015	0.00153	0.00150	----
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L		0.00019	0.00015	0.00082	0.00081	----
Barium, total	7440-39-3	E420/VA	0.00010	mg/L		0.00361	0.00332	0.00462	0.00447	----
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	----
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, total	7440-42-8	E420/VA	0.010	mg/L		<0.010	<0.010	0.020	0.020	----
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L		0.0000094	0.0000083	0.0000309	0.0000290	----
Calcium, total	7440-70-2	E420/VA	0.050	mg/L		2.23	3.20	20.1	20.2	----
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L		<0.000010	<0.000010	0.000021	0.000021	----
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Copper, total	7440-50-8	E420/VA	0.00050	mg/L		0.00066	0.00055	0.00056	0.00055	----
Iron, total	7439-89-6	E420/VA	0.010	mg/L		0.034	0.066	<0.010	<0.010	----
Lead, total	7439-92-1	E420/VA	0.000050	mg/L		<0.000050	<0.000050	0.000111	0.000104	----
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L		<0.0010	<0.0010	0.0074	0.0072	----
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L		0.371	0.331	0.947	0.940	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
Client sample ID					WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
Client sampling date / time					07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
					VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
					Result	Result	Result	Result	----
Total Metals									
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L	0.00152	0.00304	0.0154	0.0153	----
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L	0.000366	0.00147	0.0200	0.0201	----
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L	<0.050	<0.050	<0.050	<0.050	----
Potassium, total	7440-09-7	E420/VA	0.050	mg/L	0.225	0.327	2.42	2.38	----
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L	0.00032	0.00057	0.00414	0.00386	----
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L	0.000075	<0.000050	0.000054	0.000130	----
Silicon, total	7440-21-3	E420/VA	0.10	mg/L	3.86	3.98	5.01	4.92	----
Silver, total	7440-22-4	E420/VA	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, total	7440-23-5	E420/VA	0.050	mg/L	1.42	1.60	7.78	7.81	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L	0.0117	0.0114	0.0454	0.0461	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L	1.16	0.81	2.13	2.10	----
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L	<0.000010	<0.000010	0.000016	0.000012	----
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, total	7440-31-5	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L	0.00102	0.00269	<0.00030	<0.00030	----
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L	<0.00010	<0.00010	0.00124	0.00120	----
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L	0.000081	0.000147	0.000683	0.000650	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Total Metals										
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L		<0.0030	<0.0030	0.0088	0.0086	----
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/VA	0.0010	mg/L		0.0599	0.0498	0.0236	0.0255	----
Antimony, dissolved	7440-36-0	E421/VA	0.00010	mg/L		<0.00010	0.00018	0.00139	0.00141	----
Arsenic, dissolved	7440-38-2	E421/VA	0.00010	mg/L		<0.00010	0.00018	0.00072	0.00078	----
Barium, dissolved	7440-39-3	E421/VA	0.00010	mg/L		0.00315	0.00311	0.00431	0.00455	----
Beryllium, dissolved	7440-41-7	E421/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	----
Bismuth, dissolved	7440-69-9	E421/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	----
Boron, dissolved	7440-42-8	E421/VA	0.010	mg/L		<0.010	<0.010	0.022	0.022	----
Cadmium, dissolved	7440-43-9	E421/VA	0.0000050	mg/L		<0.0000050	0.0000079	0.0000251	0.0000260	----
Calcium, dissolved	7440-70-2	E421/VA	0.050	mg/L		2.26	4.84 DTC	20.6	20.5	----
Cesium, dissolved	7440-46-2	E421/VA	0.000010	mg/L		<0.000010	<0.000010	0.000016	0.000017	----
Chromium, dissolved	7440-47-3	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Cobalt, dissolved	7440-48-4	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Copper, dissolved	7440-50-8	E421/VA	0.00020	mg/L		0.00057	0.00043	0.00055	0.00056	----
Iron, dissolved	7439-89-6	E421/VA	0.010	mg/L		0.016	0.012	<0.010	<0.010	----
Lead, dissolved	7439-92-1	E421/VA	0.000050	mg/L		<0.000050	<0.000050	0.000104	0.000103	----
Lithium, dissolved	7439-93-2	E421/VA	0.0010	mg/L		<0.0010	0.0011	0.0073	0.0074	----
Magnesium, dissolved	7439-95-4	E421/VA	0.0050	mg/L		0.357	0.368	0.896	0.933	----
Manganese, dissolved	7439-96-5	E421/VA	0.00010	mg/L		0.00108	0.00259	0.0152	0.0156	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/VA	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
Molybdenum, dissolved	7439-98-7	E421/VA	0.000050	mg/L		0.000322	0.00299 DTC	0.0184	0.0183	----
Nickel, dissolved	7440-02-0	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Phosphorus, dissolved	7723-14-0	E421/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	----
Potassium, dissolved	7440-09-7	E421/VA	0.050	mg/L		0.229	0.450 DTC	2.53	2.62	----
Rubidium, dissolved	7440-17-7	E421/VA	0.00020	mg/L		0.00024	0.00075	0.00400	0.00432	----
Selenium, dissolved	7782-49-2	E421/VA	0.000050	mg/L		<0.000050	<0.000050	0.000061	0.000083	----
Silicon, dissolved	7440-21-3	E421/VA	0.050	mg/L		3.48	3.63	4.45	4.60	----
Silver, dissolved	7440-22-4	E421/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	----
Sodium, dissolved	7440-23-5	E421/VA	0.050	mg/L		1.48	2.32 DTC	7.82	8.20	----
Strontium, dissolved	7440-24-6	E421/VA	0.00020	mg/L		0.0105	0.0134	0.0428	0.0435	----
Sulfur, dissolved	7704-34-9	E421/VA	0.50	mg/L		0.90	0.85	1.92	1.84	----
Tellurium, dissolved	13494-80-9	E421/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	----
Thallium, dissolved	7440-28-0	E421/VA	0.000010	mg/L		<0.000010	<0.000010	0.000014	0.000014	----
Thorium, dissolved	7440-29-1	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Tin, dissolved	7440-31-5	E421/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	----
Titanium, dissolved	7440-32-6	E421/VA	0.00030	mg/L		<0.00030	<0.00030	<0.00030	<0.00030	----
Tungsten, dissolved	7440-33-7	E421/VA	0.00010	mg/L		<0.00010	0.00013	0.00124	0.00125	----
Uranium, dissolved	7440-61-1	E421/VA	0.000010	mg/L		0.000078	0.000159	0.000673	0.000688	----
Vanadium, dissolved	7440-62-2	E421/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Zinc, dissolved	7440-66-6	E421/VA	0.0010	mg/L		0.0017	0.0035	0.0097	0.0104	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
Client sample ID									
Client sampling date / time					07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
					VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
					Result	Result	Result	Result	----
Dissolved Metals									
Zirconium, dissolved	7440-67-7	E421/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	----
Dissolved mercury filtration location	----	EP509/VA	-	-	Field	Field	Field	Field	----
Dissolved metals filtration location	----	EP421/VA	-	-	Field	Field	Field	Field	----
Speciated Metals									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Chromium, trivalent [Cr III], total	16065-83-1	EC535/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	----
Aggregate Organics									
Phenols, total (4AAP)	----	E562/EO	0.0010	mg/L	----	----	<0.0010	----	----
Volatile Organic Compounds									
Chlorobenzene	108-90-7	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Chloromethane	74-87-3	E611C/VA	5.0	µg/L	----	----	<5.0	<5.0	----
Dichlorobenzene, 1,2-	95-50-1	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichlorobenzene, 1,3-	541-73-1	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichlorobenzene, 1,4-	106-46-7	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichloropropane, 1,2-	78-87-5	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/VA	0.75	µg/L	----	----	<0.75	<0.75	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/VA	0.20	µg/L	----	----	<0.20	<0.20	----
Trichloroethane, 1,1,2-	79-00-5	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----
Trichlorofluoromethane	75-69-4	E611C/VA	0.50	µg/L	----	----	<0.50	<0.50	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Volatile Organic Compounds [Drycleaning]										
Carbon tetrachloride	56-23-5	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Chloroethane	75-00-3	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethane, 1,1-	75-34-3	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethane, 1,2-	107-06-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethylene, 1,1-	75-35-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethylene, cis-1,2-	156-59-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloroethylene, trans-1,2-	156-60-5	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dichloromethane	75-09-2	E611C/VA	1.0	µg/L		----	----	<1.0	<1.0	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Tetrachloroethylene	127-18-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Trichloroethane, 1,1,1-	71-55-6	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Trichloroethylene	79-01-6	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Vinyl chloride	75-01-4	E611C/VA	0.40	µg/L		----	----	<0.40	<0.40	----
Volatile Organic Compounds [Fuels]										
Benzene	71-43-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Ethylbenzene	100-41-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Styrene	100-42-5	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Toluene	108-88-3	E611C/VA	0.40	µg/L		----	----	<0.40	<0.40	----
Xylene, m+p-	179601-23-1	E611C/VA	0.40	µg/L		----	----	<0.40	<0.40	----
Xylene, o-	95-47-6	E611C/VA	0.30	µg/L		----	----	<0.30	<0.30	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Volatile Organic Compounds [Fuels]										
Xylenes, total	1330-20-7	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Volatile Organic Compounds [THMs]										
Bromodichloromethane	75-27-4	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Bromoform	75-25-2	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Chloroform	67-66-3	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Dibromochloromethane	124-48-1	E611C/VA	0.50	µg/L		----	----	<0.50	<0.50	----
Hydrocarbons										
EPH (C10-C19)	----	E601A/VA	250	µg/L		----	----	<250	<250	----
EPH (C19-C32)	----	E601A/VA	250	µg/L		----	----	<250	<250	----
VHw (C6-C10)	----	E581.VH+F1/VA	100	µg/L		----	----	<100	<100	----
HEPHw	----	EC600A/VA	250	µg/L		----	----	<250	<250	----
LEPHw	----	EC600A/VA	250	µg/L		----	----	<250	<250	----
VPHw	----	EC580A/VA	100	µg/L		----	----	<100	<100	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/VA	1.0	%		----	----	91.1	90.2	----
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/VA	1.0	%		----	----	96.6	98.0	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611C/VA	1.0	%		----	----	99.6	98.2	----
Difluorobenzene, 1,4-	540-36-3	E611C/VA	1.0	%		----	----	101	100	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthylene	208-96-8	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Acridine	260-94-6	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Anthracene	120-12-7	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benz(a)anthracene	56-55-3	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benzo(a)pyrene	50-32-8	E641A/VA	0.0050	µg/L		----	----	<0.0050	<0.0050	----
Benzo(b+j)fluoranthene	n/a	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benzo(b+j+k)fluoranthene	n/a	E641A/VA	0.015	µg/L		----	----	<0.015	<0.015	----
Benzo(g,h,i)perylene	191-24-2	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Benzo(k)fluoranthene	207-08-9	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Chrysene	218-01-9	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Dibenz(a,h)anthracene	53-70-3	E641A/VA	0.0050	µg/L		----	----	<0.0050	<0.0050	----
Fluoranthene	206-44-0	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Fluorene	86-73-7	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Methylnaphthalene, 1-	90-12-0	E641A/VA	0.010	µg/L		----	----	0.035	0.035	----
Methylnaphthalene, 2-	91-57-6	E641A/VA	0.010	µg/L		----	----	0.033	0.034	----
Naphthalene	91-20-3	E641A/VA	0.050	µg/L		----	----	<0.050	<0.050	----
Phenanthrene	85-01-8	E641A/VA	0.020	µg/L		----	----	<0.020	<0.020	----
Pyrene	129-00-0	E641A/VA	0.010	µg/L		----	----	<0.010	<0.010	----
Quinoline	91-22-5	E641A/VA	0.050	µg/L		----	----	<0.050	<0.050	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	WLNG EOP	WLNG EOP Duplicate	----
					Client sampling date / time	07-Feb-2025 13:25	07-Feb-2025 14:27	07-Feb-2025 13:41	07-Feb-2025 13:41	----
						VA25A2785-001	VA25A2785-002	VA25A2785-003	VA25A2785-004	----
						Result	Result	Result	Result	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/VA	0.1	%		----	----	71.9	80.4	----
Naphthalene-d8	1146-65-2	E641A/VA	0.1	%		----	----	90.3	94.4	----
Phenanthrene-d10	1517-22-2	E641A/VA	0.1	%		----	----	81.8	85.1	----
Glycols										
Diethylene glycol	111-46-6	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Ethylene glycol	107-21-1	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Propylene glycol, 1,2-	57-55-6	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Triethylene glycol	112-27-6	E680E/VA	5.0	mg/L		----	----	<5.0	<5.0	----
Glycols, total (EG+DEG+PG)	----	E680E/VA	10	mg/L		----	----	<10	<10	----
Glycols Surrogates										
Propanediol, 1,3-	504-63-2	E680E/VA	1.0	%		----	----	105	103	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	[redacted]	Page	: 1 of 22
Client		Laboratory	[redacted]
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project		Date Samples Received	: 07-Feb-2025 17:10
PO		Issue Date	: 19-Feb-2025 09:40
C-O-C number	: ----		
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Matrix Spike outliers occur.
- Duplicate outliers occur - please see following pages for full details.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Duplicate (DUP) RPDs								
Total Metals	Anonymous	Anonymous	Selenium, total	7782-49-2	E420	37.4 % DUP-H	20%	Duplicate RPD does not meet the DQO for this test.

Result Qualifiers

Qualifier	Description
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*

Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-MRG2-1875706 002	----	Chloromethane	74-87-3	E611C	142 % LCS-ND	60.0-140%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water** Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Aggregate Organics : Phenols (4AAP) in Water by Colorimetry										
Amber glass total (sulfuric acid) WLNG EOP	E562	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG DS 1	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG EOP	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG EOP Duplicate	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG US 1	E298	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG EOP	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG EOP Duplicate	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG US 1	E235.Br-L	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG DS 1	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG EOP	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG EOP Duplicate	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG US 1	E235.Cl	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG DS 1	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG EOP	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG EOP Duplicate	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG US 1	E235.F	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG EOP	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG EOP Duplicate	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE WLNG US 1	E235.NO3-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG EOP	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG EOP Duplicate	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE WLNG US 1	E235.NO2-L	07-Feb-2025	09-Feb-2025	3 days	2 days	✓	09-Feb-2025	3 days	2 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG DS 1	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG EOP	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG EOP Duplicate	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE WLNG US 1	E235.SO4	07-Feb-2025	09-Feb-2025	28 days	2 days	✓	09-Feb-2025	28 days	2 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG DS 1	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG EOP	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG EOP Duplicate	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) WLNG US 1	E366	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) WLNG DS 1	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG EOP	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG EOP Duplicate	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG US 1	E372-U	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG DS 1	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP Duplicate	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG US 1	E509	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG EOP	E421	07-Feb-2025	11-Feb-2025	180 days	4 days	✓	12-Feb-2025	180 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG EOP Duplicate	E421	07-Feb-2025	11-Feb-2025	180 days	4 days	✓	12-Feb-2025	180 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG US 1	E421	07-Feb-2025	11-Feb-2025	180 days	4 days	✓	12-Feb-2025	180 days	5 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG DS 1	E421	07-Feb-2025	11-Feb-2025	180 days	5 days	✓	12-Feb-2025	180 days	6 days	✓
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG DS 1	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG EOP Duplicate	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial dissolved (hydrochloric acid)										
WLNG US 1	EF001	07-Feb-2025	----	----	----		12-Feb-2025	----	5 days	
Glycols : Glycols (4 analytes) by GC-FID										
Glass vial										
WLNG EOP	E680E	07-Feb-2025	09-Feb-2025	7 days	2 days	✓	10-Feb-2025	40 days	1 days	✓
Glycols : Glycols (4 analytes) by GC-FID										
Glass vial										
WLNG EOP Duplicate	E680E	07-Feb-2025	09-Feb-2025	7 days	2 days	✓	10-Feb-2025	40 days	1 days	✓
Hydrocarbons : BC PHCs - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP	E601A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : BC PHCs - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP Duplicate	E601A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
WLNG EOP	E581.VH+F1	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
WLNG EOP Duplicate	E581.VH+F1	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG DS 1	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG EOP	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG EOP Duplicate	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG US 1	E358-L	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG DS 1	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG EOP	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Alkalinity Species by Titration										
HDPE WLNG EOP Duplicate	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE WLNG US 1	E290	07-Feb-2025	09-Feb-2025	14 days	2 days	✓	10-Feb-2025	14 days	3 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG DS 1	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG EOP	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG EOP Duplicate	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG US 1	E162	07-Feb-2025	----	----	----		13-Feb-2025	7 days	6 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG DS 1	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG EOP	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG EOP Duplicate	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TSS by Gravimetry										
HDPE										
WLNG US 1	E160	07-Feb-2025	----	----	----		14-Feb-2025	7 days	6 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP	E641A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP Duplicate	E641A	07-Feb-2025	15-Feb-2025	14 days	8 days	✓	15-Feb-2025	40 days	0 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG DS 1	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG EOP	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG EOP Duplicate	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG US 1	E532	07-Feb-2025	----	----	----		11-Feb-2025	28 days	4 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG DS 1	E508	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG EOP	E508	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG US 1	E508	07-Feb-2025	11-Feb-2025	28 days	4 days	✓	11-Feb-2025	28 days	4 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG EOP Duplicate	E508	07-Feb-2025	12-Feb-2025	28 days	5 days	✓	12-Feb-2025	28 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG DS 1	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG EOP	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG EOP Duplicate	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG US 1	E420	07-Feb-2025	10-Feb-2025	180 days	3 days	✓	12-Feb-2025	180 days	5 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG DS 1	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG EOP	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG EOP Duplicate	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG US 1	E395	07-Feb-2025	----	----	----		12-Feb-2025	7 days	5 days	✓
Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
WLNG EOP	E611C	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓
Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
WLNG EOP Duplicate	E611C	07-Feb-2025	14-Feb-2025	14 days	7 days	✓	15-Feb-2025	14 days	8 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
TSS by Gravimetry	E160	1874110	1	13	7.6	5.0	✓
TDS by Gravimetry	E162	1874105	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1868290	1	10	10.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1868203	1	8	12.5	5.0	✓
Laboratory Control Samples (LCS)							
TSS by Gravimetry	E160	1874110	1	13	7.6	5.0	✓
TDS by Gravimetry	E162	1874105	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1868290	1	10	10.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Control Samples (LCS) - Continued							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
BC PHCs - EPH by GC-FID	E601A	1875692	1	10	10.0	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	1875691	1	15	6.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1868203	1	8	12.5	5.0	✓
Method Blanks (MB)							
TSS by Gravimetry	E160	1874110	1	13	7.6	5.0	✓
TDS by Gravimetry	E162	1874105	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1868290	1	10	10.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
BC PHCs - EPH by GC-FID	E601A	1875692	1	10	10.0	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	1875691	1	15	6.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1868203	1	8	12.5	5.0	✓

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS)							
Bromide in Water by IC (Low Level)	E235.Br-L	1868294	1	10	10.0	5.0	✓
Chloride in Water by IC	E235.Cl	1868293	1	10	10.0	5.0	✓
Fluoride in Water by IC	E235.F	1868292	1	10	10.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1868296	1	10	10.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1868295	1	13	7.6	5.0	✓
Sulfate in Water by IC	E235.SO4	1868297	1	20	5.0	5.0	✓
Ammonia by Fluorescence	E298	1869598	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1869600	1	6	16.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1869601	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1869597	1	19	5.2	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1872369	1	14	7.1	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1868863	1	20	5.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1868902	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1870931	2	38	5.2	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1871726	1	6	16.6	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1871116	1	13	7.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1871938	1	19	5.2	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1875707	1	9	11.1	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1875706	1	6	16.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
TSS by Gravimetry	E160 ALS Environmental - Vancouver	Water	APHA 2540 D (mod)	Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, following by drying of the filter at 104 ± 1°C, with gravimetric measurement of the filtered solids. Samples containing very high dissolved solid content (i.e. seawaters, brackish waters) may produce a positive bias by this method. Alternate analysis methods are available for these types of samples.
TDS by Gravimetry	E162 ALS Environmental - Vancouver	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Bromide in Water by IC (Low Level)	E235.Br-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Chloride in Water by IC	E235.Cl ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC	E235.SO4 ALS Environmental - Vancouver	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Alkalinity Species by Titration	E290 ALS Environmental - Vancouver	Water	APHA 2320 B (mod)	Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Ammonia by Fluorescence	E298 ALS Environmental - Vancouver	Water	Method Fialab 100, 2018	Ammonia in water is determined by automated continuous flow analysis with membrane diffusion and fluorescence detection, after reaction with OPA (ortho-phthalaldehyde). This method is approved under US EPA 40 CFR Part 136 (May 2021)
Dissolved Organic Carbon by Combustion (Low Level)	E358-L ALS Environmental - Vancouver	Water	APHA 5310 B (mod)	Dissolved Organic Carbon (Non-Purgeable), also known as NPOC (dissolved), is a direct measurement of DOC after a filtered (0.45 micron) sample has been acidified and purged to remove inorganic carbon (IC). Analysis is by high temperature combustion with infrared detection of CO2. NPOC does not include volatile organic species that are purged off with IC. For samples where the majority of DC (dissolved carbon) is comprised of IC (which is common), this method is more accurate and more reliable than the DOC by subtraction method (i.e. DC minus DIC).
Total Nitrogen by Colourimetry	E366 ALS Environmental - Vancouver	Water	Chinchilla Scientific Nitrate Method, 2011	Following digestion, total nitrogen is is determined colourimetrically using a discrete analyzer utilizing the vanadium chloride reduction method. This method of analysis is approved under US EPA 40 CFR Part 136 (May 2021).
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Vancouver	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.
Total Sulfide by Colourimetry (Automated Flow)	E395 ALS Environmental - Vancouver	Water	APHA 4500 -S E-Auto-Colorimetry	Sulfide is determined using the gas dialysis automated methlyene blue colourimetric method. Results expressed "as H2S" if reported represent the maximum possible H2S concentration based on the total sulfide concentration in the sample. The H2S calculation converts Total Sulphide as (S2-) and reports it as Total Sulphide as (H2S)
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Vancouver	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Dissolved Metals in Water by CRC ICPMS	E421 ALS Environmental - Vancouver	Water	APHA 3030B/EPA 6020B (mod)	Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 ALS Environmental - Vancouver	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Dissolved Mercury in Water by CVAAS	E509 ALS Environmental - Vancouver	Water	APHA 3030B/EPA 1631E (mod)	Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Hexavalent Chromium (Cr VI) by IC	E532 ALS Environmental - Vancouver	Water	APHA 3500-Cr C (Ion Chromatography)	Hexavalent Chromium is measured by Ion chromatography-Post column reaction and UV detection. Results are based on an un-filtered, field-preserved sample.
Phenols (4AAP) in Water by Colorimetry	E562 ALS Environmental - Edmonton	Water	EPA 9066	This automated method is based on the distillation of phenol and subsequent reaction of the distillate with alkaline ferricyanide ($K_3Fe(CN)_6$) and 4-amino-antipyrine (4-AAP) to form a red complex which is measured colorimetrically.
VH and F1 by Headspace GC-FID	E581.VH+F1 ALS Environmental - Vancouver	Water	BC MOE Lab Manual / CCME PHC in Soil - Tier 1 (mod)	Volatile Hydrocarbons (VH and F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law. Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
BC PHCs - EPH by GC-FID	E601A ALS Environmental - Vancouver	Water	BC MOE Lab Manual	Sample extracts are analyzed by GC-FID for BC hydrocarbon fractions.
VOCs (BC List) by Headspace GC-MS	E611C ALS Environmental - Vancouver	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law. Total Xylenes is the sum of m,p-Xylene & o-Xylene. Total BTEX is the sum of Benzene, Toluene, Ethylbenzene, & Total Xylenes. Total BTEX+Styrene is the sum of Total BTEX & Styrene. Total Trihalomethanes [THMs] is the sum of Bromodichloromethane, Bromoform, Chloroform, & Dibromochloromethane.
PAHs in Water by Hexane LVI GC-MS	E641A ALS Environmental - Vancouver	Water	EPA 8270E (mod)	Polycyclic Aromatic Hydrocarbons (PAHs) are analyzed by large volume injection (LVI) GC-MS.
Glycols (4 analytes) by GC-FID	E680E ALS Environmental - Vancouver	Water	EPA 8015D (mod)	Derivatized glycols are analyzed by GC-FID.
Dissolved Hardness (Calculated)	EC100 ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as $CaCO_3$), dissolved" is calculated from the sum of dissolved Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations. Hardness from total Ca/Mg is normally comparable to Dissolved Hardness in non-turbid waters.
Un-ionized Total Hydrogen Sulfide (calculated)	EC395 ALS Environmental - Vancouver	Water	APHA 4500 -S H	Un-ionized sulfide is calculated using results from total sulfide analysis, pH, temperature, and ionic strength of the sample. Calculation of un-ionized sulfide using total sulfide concentrations may be biased high due to particulate forms of sulfide measured during total sulfide testing.
Total Trivalent Chromium (Cr III) by Calculation	EC535 ALS Environmental - Vancouver	Water	APHA 3030B/6020A/EPA 7196A (mod)	Chromium (III)-Total is calculated as the difference between the total chromium and the total hexavalent chromium (Cr(VI)) results.The Limit of Reporting for Chromium (III) varies as a function of the test results.
VPH: VH-BTEX-Styrene	EC580A ALS Environmental - Vancouver	Water	BC MOE Lab Manual (VPH in Water and Solids) (mod)	Volatile Petroleum Hydrocarbons (VPH) is calculated as follows: VPHw = Volatile Hydrocarbons (VH C6-C10) minus benzene, toluene, ethylbenzene, xylenes (BTEX) and styrene.
LEPH and HEPH: EPH-PAH	EC600A ALS Environmental - Vancouver	Water	BC MOE Lab Manual (LEPH and HEPH)	Light Extractable Petroleum Hydrocarbons (LEPH) and Heavy Extractable Petroleum Hydrocarbons (HEPH) are calculated as follows: LEPH = Extractable Petroleum Hydrocarbons (EPH10-19) minus Acenaphthene, Acridine, Anthracene, Fluorene, Naphthalene and Phenanthrene; HEPH = Extractable Petroleum Hydrocarbons (EPH19-32) minus Benz(a)anthracene, Benzo(a)pyrene, Fluoranthene, and Pyrene.
Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine	EF001 ALS Environmental - Vancouver	Water	Field Measurement (Client Supplied)	Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3 or Chloramine measurements provided by client and recorded on ALS report may affect the validity of results.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 ALS Environmental - Vancouver	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.
Preparation for Dissolved Organic Carbon for Combustion	EP358 ALS Environmental - Vancouver	Water	APHA 5310 B (mod)	Preparation for Dissolved Organic Carbon
Digestion for Total Nitrogen in water	EP366 ALS Environmental - Vancouver	Water	APHA 4500-P J (mod)	Samples for total nitrogen analysis are digested using a heated persulfate digestion. Nitrogen compounds are converted to nitrate in this digestion.
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Vancouver	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dissolved Metals Water Filtration	EP421 ALS Environmental - Vancouver	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HNO3.
Dissolved Mercury Water Filtration	EP509 ALS Environmental - Vancouver	Water	APHA 3030B	Water samples are filtered (0.45 um), and preserved with HCl.
VOCs Preparation for Headspace Analysis	EP581 ALS Environmental - Vancouver	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into a GC-MS-FID.
PHCs and PAHs Hexane Extraction	EP601 ALS Environmental - Vancouver	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.
Glycols Extraction and Derivatization (BC Only)	EP680E ALS Environmental - Vancouver	Water	EPA 8015D (mod)	Aqueous sample is derivatized and extracted with orgaic solvent.

ALS Canada Ltd.

QUALITY CONTROL REPORT

Work Order	[redacted]	Page	: 1 of 23
Client		Laboratory	[redacted]
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project		Date Samples Received	: 07-Feb-2025 17:10
PO		Date Analysis Commenced	: 09-Feb-2025
C-O-C number		Issue Date	: 19-Feb-2025 09:40
Sampler			
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 4		
No. of samples analysed	: 4		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
[redacted]		Vancouver Metals, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Organics, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Edmonton Inorganics, Edmonton, Alberta
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Administration, Burnaby, British Columbia
		Vancouver Organics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 1868290)											
KS2500433-001	Anonymous	Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	161	158	1.75%	20%	----
Physical Tests (QC Lot: 1874105)											
VA25A2785-001	WLNG US 1	Solids, total dissolved [TDS]	----	E162	10	mg/L	24	23	1	Diff <2x LOR	----
Physical Tests (QC Lot: 1874110)											
VA25A2785-001	WLNG US 1	Solids, total suspended [TSS]	----	E160	3.0	mg/L	<3.0	<3.0	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868292)											
FJ2500401-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	<0.020	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868293)											
FJ2500401-001	Anonymous	Chloride	16887-00-6	E235.Cl	0.50	mg/L	0.94	0.93	0.01	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868294)											
FJ2500401-001	Anonymous	Bromide	24959-67-9	E235.Br-L	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868295)											
FJ2500401-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868296)											
FJ2500401-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1868297)											
FJ2500401-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	<0.30	<0.30	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1869597)											
KS2500430-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.378	0.371	2.02%	20%	----
Anions and Nutrients (QC Lot: 1869598)											
FJ2500390-010	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0085	0.0082	0.0003	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1869601)											
VA25A2776-001	Anonymous	Nitrogen, total	7727-37-9	E366	0.030	mg/L	0.033	0.032	0.001	Diff <2x LOR	----
Organic / Inorganic Carbon (QC Lot: 1869600)											
VA25A2776-001	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	0.50	mg/L	<0.50	<0.50	0	Diff <2x LOR	----
Total Sulfides (QC Lot: 1872369)											
VA25A2559-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 1868863)											
VA25A2771-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.435	0.433	0.378%	20%	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00201	0.00186	7.73%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 1868863) - continued											
VA25A2771-001	Anonymous	Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.0110	0.00987	11.0%	20%	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0256	0.0246	4.25%	20%	----
		Beryllium, total	7440-41-7	E420	0.000020	mg/L	0.000037	0.000040	0.000003	Diff <2x LOR	----
		Bismuth, total	7440-69-9	E420	0.000050	mg/L	0.000407	0.000403	0.000003	Diff <2x LOR	----
		Boron, total	7440-42-8	E420	0.010	mg/L	0.069	0.069	0.0004	Diff <2x LOR	----
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.00791	0.00771	2.57%	20%	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	18.7	19.7	5.32%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.000053	0.000058	0.000006	Diff <2x LOR	----
		Chromium, total	7440-47-3	E420	0.00050	mg/L	0.00397	0.00388	0.00009	Diff <2x LOR	----
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00172	0.00170	1.41%	20%	----
		Copper, total	7440-50-8	E420	0.00050	mg/L	0.0961	0.0930	3.32%	20%	----
		Iron, total	7439-89-6	E420	0.010	mg/L	11.7	10.9	6.86%	20%	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	0.00247	0.00247	0.141%	20%	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	0.0056	0.0057	0.00008	Diff <2x LOR	----
		Magnesium, total	7439-95-4	E420	0.100	mg/L	3.48	3.30	5.40%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.252	0.243	3.71%	20%	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.0172	0.0173	0.529%	20%	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	0.00551	0.00536	2.86%	20%	----
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	513	475	7.58%	20%	----
		Potassium, total	7440-09-7	E420	0.100	mg/L	264	252	4.87%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.0197	0.0190	3.46%	20%	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.00714	0.00489	37.4%	20%	DUP-H
		Silicon, total	7440-21-3	E420	0.10	mg/L	4.30	4.30	0.0719%	20%	----
		Silver, total	7440-22-4	E420	0.000010	mg/L	0.000058	0.000053	0.000005	Diff <2x LOR	----
		Sodium, total	7440-23-5	E420	0.050	mg/L	75.7	71.8	5.30%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.0758	0.0768	1.22%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	52.2	49.0	6.15%	20%	----
		Tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Thallium, total	7440-28-0	E420	0.000010	mg/L	0.000097	0.000094	0.000003	Diff <2x LOR	----
		Thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, total	7440-31-5	E420	0.00010	mg/L	0.00055	0.00053	0.00002	Diff <2x LOR	----
		Titanium, total	7440-32-6	E420	0.00270	mg/L	0.0254	0.0254	0.00010	Diff <2x LOR	----
		Tungsten, total	7440-33-7	E420	0.00010	mg/L	0.00377	0.00383	1.52%	20%	----
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000298	0.000290	2.51%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 1868863) - continued											
VA25A2771-001	Anonymous	Vanadium, total	7440-62-2	E420	0.00050	mg/L	0.00265	0.00258	0.00006	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	0.209	0.203	3.06%	20%	----
		Zirconium, total	7440-67-7	E420	0.00120	mg/L	<0.00120	<0.00120	0	Diff <2x LOR	----
Total Metals (QC Lot: 1870931)											
VA25A2755-002	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Total Metals (QC Lot: 1871193)											
VA25A2751-008	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	0.000413	0.000411	0.510%	20%	----
Dissolved Metals (QC Lot: 1868902)											
VA25A2747-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	0.0348	0.0356	2.48%	20%	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.00019	0.00019	0.000003	Diff <2x LOR	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.0542	0.0545	0.425%	20%	----
		Beryllium, dissolved	7440-41-7	E421	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	----
		Bismuth, dissolved	7440-69-9	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Boron, dissolved	7440-42-8	E421	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	0.000130	0.000142	9.06%	20%	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	116	118	1.02%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	0.000167	0.000169	0.963%	20%	----
		Chromium, dissolved	7440-47-3	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Cobalt, dissolved	7440-48-4	E421	0.00010	mg/L	0.00056	0.00058	0.00002	Diff <2x LOR	----
		Copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00181	0.00183	0.00003	Diff <2x LOR	----
		Iron, dissolved	7439-89-6	E421	0.010	mg/L	0.107	0.110	1.93%	20%	----
		Lead, dissolved	7439-92-1	E421	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Lithium, dissolved	7439-93-2	E421	0.0010	mg/L	0.0019	0.0019	0.00002	Diff <2x LOR	----
		Magnesium, dissolved	7439-95-4	E421	0.0050	mg/L	4.62	4.60	0.448%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.104	0.102	1.91%	20%	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.000844	0.000901	6.50%	20%	----
		Nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.00778	0.00794	2.05%	20%	----
		Phosphorus, dissolved	7723-14-0	E421	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Potassium, dissolved	7440-09-7	E421	0.050	mg/L	11.0	11.0	0.101%	20%	----
		Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	0.0245	0.0247	0.870%	20%	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000604	0.000689	13.3%	20%	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	1.88	1.89	0.504%	20%	----
		Silver, dissolved	7440-22-4	E421	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----

Sub-Matrix: **Water**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Laboratory Duplicate (DUP) Report						
					LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Dissolved Metals (QC Lot: 1868902) - continued											
VA25A2747-001	Anonymous	Sodium, dissolved	7440-23-5	E421	0.050	mg/L	6.74	6.81	1.01%	20%	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	0.167	0.161	3.57%	20%	----
		Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	88.0	89.4	1.61%	20%	----
		Tellurium, dissolved	13494-80-9	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Thallium, dissolved	7440-28-0	E421	0.000010	mg/L	0.000024	0.000024	0.0000007	Diff <2x LOR	----
		Thorium, dissolved	7440-29-1	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, dissolved	7440-31-5	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Titanium, dissolved	7440-32-6	E421	0.00180	mg/L	<0.00180	<0.00180	0	Diff <2x LOR	----
		Tungsten, dissolved	7440-33-7	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.000764	0.000756	0.998%	20%	----
		Vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0112	0.0112	0.477%	20%	----
		Zirconium, dissolved	7440-67-7	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1871726)											
VA25A2755-003	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 1871116)											
KS2500433-001	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
Aggregate Organics (QC Lot: 1871938)											
CG2501496-001	Anonymous	Phenols, total (4AAP)	----	E562	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 1875706)											
FJ2500401-001	Anonymous	Benzene	71-43-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Bromodichloromethane	75-27-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Bromoform	75-25-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Carbon tetrachloride	56-23-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chlorobenzene	108-90-7	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chloroethane	75-00-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chloroform	67-66-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Chloromethane	74-87-3	E611C	5.0	µg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Dibromochloromethane	124-48-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichlorobenzene, 1,2-	95-50-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichlorobenzene, 1,3-	541-73-1	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichlorobenzene, 1,4-	106-46-7	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethane, 1,1-	75-34-3	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethane, 1,2-	107-06-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Laboratory Duplicate (DUP) Report						
					LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Volatile Organic Compounds (QC Lot: 1875706) - continued											
FJ2500401-001	Anonymous	Dichloroethylene, 1,1-	75-35-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethylene, cis-1,2-	156-59-2	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloroethylene, trans-1,2-	156-60-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloromethane	75-09-2	E611C	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		Dichloropropane, 1,2-	78-87-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Ethylbenzene	100-41-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Styrene	100-42-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		Tetrachloroethylene	127-18-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Toluene	108-88-3	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		Trichloroethane, 1,1,1-	71-55-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichloroethane, 1,1,2-	79-00-5	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichloroethylene	79-01-6	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Trichlorofluoromethane	75-69-4	E611C	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		Vinyl chloride	75-01-4	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		Xylene, m+p-	179601-23-1	E611C	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		Xylene, o-	95-47-6	E611C	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 1875707)											
VA25A2785-003	WLNG EOP	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.0%	30%	----
Glycols (QC Lot: 1868203)											
VA25A2454-001	Anonymous	Diethylene glycol	111-46-6	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Ethylene glycol	107-21-1	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Propylene glycol, 1,2-	57-55-6	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----
		Triethylene glycol	112-27-6	E680E	5.0	mg/L	<5.0	<5.0	0	Diff <2x LOR	----

Qualifiers

Qualifier	Description
DUP-H	*Duplicate results outside ALS DQO, due to sample heterogeneity.*

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 1868290)						
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
Physical Tests (QCLot: 1874105)						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Physical Tests (QCLot: 1874110)						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Anions and Nutrients (QCLot: 1868292)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 1868293)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 1868294)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 1868295)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1868296)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 1868297)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Anions and Nutrients (QCLot: 1869597)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	----
Anions and Nutrients (QCLot: 1869598)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1869601)						
Nitrogen, total	7727-37-9	E366	0.03	mg/L	<0.030	----
Organic / Inorganic Carbon (QCLot: 1869600)						
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	<0.50	----
Total Sulfides (QCLot: 1872369)						
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	----
Total Metals (QCLot: 1868863)						
Aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
Barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1868863) - continued						
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
Zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1870931)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Total Metals (QCLot: 1871193)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1868902)						
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	<0.0010	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	<0.00010	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	<0.00010	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	<0.00010	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	<0.000020	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	<0.000050	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	<0.010	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	<0.0000050	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	<0.050	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	<0.000010	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	<0.00050	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	<0.00010	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	<0.00020	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	<0.010	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	<0.000050	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	<0.0010	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	<0.0050	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	<0.00010	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	<0.000050	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	<0.00050	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	<0.050	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	<0.050	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	<0.00020	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	<0.000050	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	<0.050	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	<0.000010	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	<0.050	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	<0.00020	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	<0.50	----
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	<0.00020	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	<0.000010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 1868902) - continued						
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	<0.00010	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	<0.00010	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	<0.00030	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	<0.00010	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	<0.000010	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	<0.00050	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	<0.0010	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	<0.00020	----
Dissolved Metals (QCLot: 1871726)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 1871116)						
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	<0.00050	----
Aggregate Organics (QCLot: 1871938)						
Phenols, total (4AAP)	----	E562	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 1875706)						
Benzene	71-43-2	E611C	0.5	µg/L	<0.50	----
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	<0.50	----
Bromoform	75-25-2	E611C	0.5	µg/L	<0.50	----
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	<0.50	----
Chlorobenzene	108-90-7	E611C	0.5	µg/L	<0.50	----
Chloroethane	75-00-3	E611C	0.5	µg/L	<0.50	----
Chloroform	67-66-3	E611C	0.5	µg/L	<0.50	----
Chloromethane	74-87-3	E611C	5	µg/L	<5.0	----
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	<0.50	----
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	<0.50	----
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	<0.50	----
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	<0.50	----
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	<0.50	----
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	<0.50	----
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	<0.50	----
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	<0.50	----
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	<0.50	----
Dichloromethane	75-09-2	E611C	1	µg/L	<1.0	----
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	<0.50	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 1875706) - continued						
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	<0.50	----
Ethylbenzene	100-41-4	E611C	0.5	µg/L	<0.50	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	<0.50	----
Styrene	100-42-5	E611C	0.5	µg/L	<0.50	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	<0.50	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	<0.20	----
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	<0.50	----
Toluene	108-88-3	E611C	0.4	µg/L	<0.40	----
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	<0.50	----
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	<0.50	----
Trichloroethylene	79-01-6	E611C	0.5	µg/L	<0.50	----
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	<0.50	----
Vinyl chloride	75-01-4	E611C	0.4	µg/L	<0.40	----
Xylene, m+p-	179601-23-1	E611C	0.4	µg/L	<0.40	----
Xylene, o-	95-47-6	E611C	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 1875692)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Hydrocarbons (QCLot: 1875707)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691)						
Acenaphthene	83-32-9	E641A	0.01	µg/L	<0.010	----
Acenaphthylene	208-96-8	E641A	0.01	µg/L	<0.010	----
Acridine	260-94-6	E641A	0.01	µg/L	<0.010	----
Anthracene	120-12-7	E641A	0.01	µg/L	<0.010	----
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	<0.010	----
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	<0.0050	----
Benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	<0.010	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	<0.010	----
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	<0.010	----
Chrysene	218-01-9	E641A	0.01	µg/L	<0.010	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	<0.0050	----
Fluoranthene	206-44-0	E641A	0.01	µg/L	<0.010	----
Fluorene	86-73-7	E641A	0.01	µg/L	<0.010	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691) - continued						
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----
Naphthalene	91-20-3	E641A	0.05	µg/L	<0.050	----
Phenanthrene	85-01-8	E641A	0.02	µg/L	<0.020	----
Pyrene	129-00-0	E641A	0.01	µg/L	<0.010	----
Quinoline	91-22-5	E641A	0.05	µg/L	<0.050	----
Glycols (QCLot: 1868203)						
Diethylene glycol	111-46-6	E680E	5	mg/L	<5.0	----
Ethylene glycol	107-21-1	E680E	5	mg/L	<5.0	----
Propylene glycol, 1,2-	57-55-6	E680E	5	mg/L	<5.0	----
Triethylene glycol	112-27-6	E680E	5	mg/L	<5.0	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 1868290)									
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	500 mg/L	103	85.0	115	----
Physical Tests (QCLot: 1874105)									
Solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	110	85.0	115	----
Physical Tests (QCLot: 1874110)									
Solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	92.2	85.0	115	----
Anions and Nutrients (QCLot: 1868292)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1868293)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1868294)									
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	91.4	85.0	115	----
Anions and Nutrients (QCLot: 1868295)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	99.1	90.0	110	----
Anions and Nutrients (QCLot: 1868296)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1868297)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	102	90.0	110	----
Anions and Nutrients (QCLot: 1869597)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.05 mg/L	95.3	80.0	120	----
Anions and Nutrients (QCLot: 1869598)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	104	85.0	115	----
Anions and Nutrients (QCLot: 1869601)									
Nitrogen, total	7727-37-9	E366	0.03	mg/L	0.5 mg/L	96.4	75.0	125	----
Organic / Inorganic Carbon (QCLot: 1869600)									
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	8.57 mg/L	97.2	80.0	120	----
Total Sulfides (QCLot: 1872369)									
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	0.08 mg/L	104	80.0	120	----
Total Metals (QCLot: 1868863)									

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1868863) - continued									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	102	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	104	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	102	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	99.8	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	96.9	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	99.4	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	95.6	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	97.6	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	96.8	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	102	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	99.3	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	99.5	80.0	120	----
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	98.8	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	96.4	80.0	120	----
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	101	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	99.6	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	100	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	96.8	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	102	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	99.9	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	92.8	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	100	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	101	80.0	120	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	99.7	80.0	120	----
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	111	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	95.2	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	103	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	104	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	84.0	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	109	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	99.0	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	103	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	99.4	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	97.2	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	99.8	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	102	80.0	120	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1868863) - continued									
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	101	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	93.1	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	101	80.0	120	----
Total Metals (QCLot: 1870931)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	101	80.0	120	----
Total Metals (QCLot: 1871193)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	98.8	80.0	120	----
Dissolved Metals (QCLot: 1868902)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	99.0	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	95.1	80.0	120	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	1 mg/L	102	80.0	120	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.25 mg/L	98.0	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	94.8	80.0	120	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	1 mg/L	101	80.0	120	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	1 mg/L	102	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	94.5	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	96.4	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	95.0	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	96.9	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	100	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	98.5	80.0	120	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	1 mg/L	96.5	80.0	120	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.5 mg/L	100.0	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	97.4	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	97.1	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	100	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	94.1	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	98.0	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	98.4	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	106	80.0	120	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	0.1 mg/L	104	80.0	120	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	1 mg/L	95.1	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	94.2	80.0	120	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.1 mg/L	89.4	80.0	120	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	50 mg/L	103	80.0	120	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Dissolved Metals (QCLot: 1868902) - continued									
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	0.25 mg/L	96.8	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	83.5	80.0	120	----
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	0.1 mg/L	91.4	80.0	120	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	1 mg/L	99.9	80.0	120	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	0.1 mg/L	97.2	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	95.4	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	95.3	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	99.5	80.0	120	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.005 mg/L	102	80.0	120	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.5 mg/L	99.7	80.0	120	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	101	80.0	120	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	0.1 mg/L	92.8	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	99.0	80.0	120	----
Speciated Metals (QCLot: 1871116)									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	0.25 mg/L	108	80.0	120	----
Aggregate Organics (QCLot: 1871938)									
Phenols, total (4AAP)	----	E562	0.001	mg/L	0.02 mg/L	89.2	85.0	115	----
Volatile Organic Compounds (QCLot: 1875706)									
Benzene	71-43-2	E611C	0.5	µg/L	100 µg/L	98.6	70.0	130	----
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	100 µg/L	93.6	70.0	130	----
Bromoform	75-25-2	E611C	0.5	µg/L	100 µg/L	87.5	70.0	130	----
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	100 µg/L	85.9	70.0	130	----
Chlorobenzene	108-90-7	E611C	0.5	µg/L	100 µg/L	100	70.0	130	----
Chloroethane	75-00-3	E611C	0.5	µg/L	100 µg/L	98.5	60.0	140	----
Chloroform	67-66-3	E611C	0.5	µg/L	100 µg/L	94.1	70.0	130	----
Chloromethane	74-87-3	E611C	5	µg/L	100 µg/L	# 142	60.0	140	LCS-ND
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	100 µg/L	96.8	70.0	130	----
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	100 µg/L	96.6	70.0	130	----
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	100 µg/L	93.4	70.0	130	----
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	100 µg/L	93.9	70.0	130	----
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	100 µg/L	86.2	70.0	130	----
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	100 µg/L	80.8	70.0	130	----
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	100 µg/L	96.1	70.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 1875706) - continued									
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	100 µg/L	88.1	70.0	130	----
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	100 µg/L	96.6	70.0	130	----
Dichloromethane	75-09-2	E611C	1	µg/L	100 µg/L	94.1	70.0	130	----
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	100 µg/L	97.8	70.0	130	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	100 µg/L	84.3	70.0	130	----
Ethylbenzene	100-41-4	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Styrene	100-42-5	E611C	0.5	µg/L	100 µg/L	88.1	70.0	130	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	100 µg/L	96.8	70.0	130	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	100 µg/L	90.6	70.0	130	----
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	100 µg/L	94.5	70.0	130	----
Toluene	108-88-3	E611C	0.4	µg/L	100 µg/L	93.1	70.0	130	----
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	100 µg/L	92.0	70.0	130	----
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	100 µg/L	93.6	70.0	130	----
Trichloroethylene	79-01-6	E611C	0.5	µg/L	100 µg/L	104	70.0	130	----
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	100 µg/L	85.2	60.0	140	----
Vinyl chloride	75-01-4	E611C	0.4	µg/L	100 µg/L	139	60.0	140	----
Xylene, m+p-	179601-23-1	E611C	0.4	µg/L	200 µg/L	104	70.0	130	----
Xylene, o-	95-47-6	E611C	0.3	µg/L	100 µg/L	95.8	70.0	130	----
Hydrocarbons (QCLot: 1875692)									
EPH (C10-C19)	----	E601A	250	µg/L	6490 µg/L	100	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	3360 µg/L	100	70.0	130	----
Hydrocarbons (QCLot: 1875707)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	89.3	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691)									
Acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	119	60.0	130	----
Acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
Acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	104	60.0	130	----
Anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	103	60.0	130	----
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	80.4	60.0	130	----
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	102	60.0	130	----
Benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	0.5 µg/L	99.0	60.0	130	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	124	60.0	130	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 1875691) - continued									
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	128	60.0	130	----
Chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	121	60.0	130	----
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	105	60.0	130	----
Fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
Fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	102	60.0	130	----
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	109	60.0	130	----
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	118	60.0	130	----
Naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	117	50.0	130	----
Phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	110	60.0	130	----
Pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	113	60.0	130	----
Quinoline	91-22-5	E641A	0.05	µg/L	0.5 µg/L	116	60.0	130	----
Glycols (QCLot: 1868203)									
Diethylene glycol	111-46-6	E680E	5	mg/L	25 mg/L	98.2	70.0	130	----
Ethylene glycol	107-21-1	E680E	5	mg/L	25 mg/L	98.9	70.0	130	----
Propylene glycol, 1,2-	57-55-6	E680E	5	mg/L	25 mg/L	100	70.0	130	----
Triethylene glycol	112-27-6	E680E	5	mg/L	25 mg/L	97.3	70.0	130	----

Qualifiers

Qualifier	Description
LCS-ND	*Lab Control Sample recovery was slightly outside ALS DQO. Reported non-detect results for associated samples were unaffected.*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 1868292)										
FJ2500401-002	Anonymous	Fluoride	16984-48-8	E235.F	5.28 mg/L	5 mg/L	106	75.0	125	----
Anions and Nutrients (QCLot: 1868293)										
FJ2500401-002	Anonymous	Chloride	16887-00-6	E235.Cl	522 mg/L	500 mg/L	104	75.0	125	----
Anions and Nutrients (QCLot: 1868294)										
FJ2500401-002	Anonymous	Bromide	24959-67-9	E235.Br-L	2.29 mg/L	2.5 mg/L	91.6	75.0	125	----
Anions and Nutrients (QCLot: 1868295)										
FJ2500401-002	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	12.7 mg/L	12.5 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 1868296)										
FJ2500401-002	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	2.62 mg/L	2.5 mg/L	105	75.0	125	----
Anions and Nutrients (QCLot: 1868297)										
FJ2500401-002	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	518 mg/L	500 mg/L	104	75.0	125	----
Anions and Nutrients (QCLot: 1869597)										
KS2500430-002	Anonymous	Phosphorus, total	7723-14-0	E372-U	ND mg/L	----	ND	70.0	130	----
Anions and Nutrients (QCLot: 1869598)										
KS2500430-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.102 mg/L	0.1 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 1869601)										
VA25A2776-002	Anonymous	Nitrogen, total	7727-37-9	E366	ND mg/L	----	ND	70.0	130	----
Organic / Inorganic Carbon (QCLot: 1869600)										
VA25A2776-002	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	5.14 mg/L	5 mg/L	103	70.0	130	----
Total Sulfides (QCLot: 1872369)										
VA25A2665-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.245 mg/L	0.2 mg/L	123	75.0	125	----
Total Metals (QCLot: 1868863)										
VA25A2785-001	WLNG US 1	Aluminum, total	7429-90-5	E420	0.182 mg/L	0.2 mg/L	91.2	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0188 mg/L	0.02 mg/L	93.9	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0193 mg/L	0.02 mg/L	96.4	70.0	130	----
		Barium, total	7440-39-3	E420	0.0189 mg/L	0.02 mg/L	94.3	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0377 mg/L	0.04 mg/L	94.3	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.0101 mg/L	0.01 mg/L	101	70.0	130	----
		Boron, total	7440-42-8	E420	0.093 mg/L	0.1 mg/L	93.4	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00417 mg/L	0.004 mg/L	104	70.0	130	----
		Calcium, total	7440-70-2	E420	3.72 mg/L	4 mg/L	93.0	70.0	130	----
		Cesium, total	7440-46-2	E420	0.00954 mg/L	0.01 mg/L	95.4	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0374 mg/L	0.04 mg/L	93.6	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 1868863) - continued										
VA25A2785-001	WLNG US 1	Cobalt, total	7440-48-4	E420	0.0193 mg/L	0.02 mg/L	96.4	70.0	130	----
		Copper, total	7440-50-8	E420	0.0190 mg/L	0.02 mg/L	95.3	70.0	130	----
		Iron, total	7439-89-6	E420	1.86 mg/L	2 mg/L	93.0	70.0	130	----
		Lead, total	7439-92-1	E420	0.0191 mg/L	0.02 mg/L	95.4	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0929 mg/L	0.1 mg/L	92.9	70.0	130	----
		Magnesium, total	7439-95-4	E420	0.933 mg/L	1 mg/L	93.3	70.0	130	----
		Manganese, total	7439-96-5	E420	0.0181 mg/L	0.02 mg/L	90.4	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0188 mg/L	0.02 mg/L	94.1	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0385 mg/L	0.04 mg/L	96.2	70.0	130	----
		Phosphorus, total	7723-14-0	E420	8.92 mg/L	10 mg/L	89.2	70.0	130	----
		Potassium, total	7440-09-7	E420	3.75 mg/L	4 mg/L	93.7	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0190 mg/L	0.02 mg/L	95.1	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0386 mg/L	0.04 mg/L	96.6	70.0	130	----
		Silicon, total	7440-21-3	E420	9.50 mg/L	10 mg/L	95.0	70.0	130	----
		Silver, total	7440-22-4	E420	0.00381 mg/L	0.004 mg/L	95.4	70.0	130	----
		Sodium, total	7440-23-5	E420	1.94 mg/L	2 mg/L	97.2	70.0	130	----
		Strontium, total	7440-24-6	E420	0.0190 mg/L	0.02 mg/L	94.9	70.0	130	----
		Sulfur, total	7704-34-9	E420	18.6 mg/L	20 mg/L	92.8	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0395 mg/L	0.04 mg/L	98.9	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00380 mg/L	0.004 mg/L	95.1	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0207 mg/L	0.02 mg/L	103	70.0	130	----
		Tin, total	7440-31-5	E420	0.0186 mg/L	0.02 mg/L	93.3	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0362 mg/L	0.04 mg/L	90.4	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0186 mg/L	0.02 mg/L	92.9	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00394 mg/L	0.004 mg/L	98.6	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0949 mg/L	0.1 mg/L	94.9	70.0	130	----
		Zinc, total	7440-66-6	E420	0.368 mg/L	0.4 mg/L	92.0	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0376 mg/L	0.04 mg/L	94.1	70.0	130	----
Total Metals (QCLot: 1870931)										
VA25A2755-003	Anonymous	Mercury, total	7439-97-6	E508	0.000100 mg/L	0 mg/L	100	70.0	130	----
Total Metals (QCLot: 1871193)										
VA25A2751-007	Anonymous	Mercury, total	7439-97-6	E508	0.0000937 mg/L	0 mg/L	93.7	70.0	130	----
Dissolved Metals (QCLot: 1868902)										
VA25A2747-002	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.378 mg/L	0.4 mg/L	94.5	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0376 mg/L	0.04 mg/L	94.1	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0411 mg/L	0.04 mg/L	103	70.0	130	----
		Barium, dissolved	7440-39-3	E421	ND mg/L	----	ND	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0739 mg/L	0.08 mg/L	92.4	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.0179 mg/L	0.02 mg/L	89.5	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.197 mg/L	0.2 mg/L	98.5	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00741 mg/L	0.008 mg/L	92.6	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	ND mg/L	----	ND	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.0187 mg/L	0.02 mg/L	93.6	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Dissolved Metals (QCLot: 1868902) - continued										
VA25A2747-002	Anonymous	Chromium, dissolved	7440-47-3	E421	0.0768 mg/L	0.08 mg/L	95.9	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0378 mg/L	0.04 mg/L	94.4	70.0	130	----
		Copper, dissolved	7440-50-8	E421	0.0373 mg/L	0.04 mg/L	93.2	70.0	130	----
		Iron, dissolved	7439-89-6	E421	ND mg/L	----	ND	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0377 mg/L	0.04 mg/L	94.3	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.196 mg/L	0.2 mg/L	98.2	70.0	130	----
		Magnesium, dissolved	7439-95-4	E421	ND mg/L	----	ND	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	ND mg/L	----	ND	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	0.0378 mg/L	0.04 mg/L	94.5	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0746 mg/L	0.08 mg/L	93.2	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	19.8 mg/L	20 mg/L	98.9	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	ND mg/L	----	ND	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0399 mg/L	0.04 mg/L	99.8	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0784 mg/L	0.08 mg/L	98.0	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	17.9 mg/L	20 mg/L	89.4	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00727 mg/L	0.008 mg/L	90.8	70.0	130	----
		Sodium, dissolved	7440-23-5	E421	ND mg/L	----	ND	70.0	130	----
		Strontium, dissolved	7440-24-6	E421	ND mg/L	----	ND	70.0	130	----
		Sulfur, dissolved	7704-34-9	E421	ND mg/L	----	ND	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0719 mg/L	0.08 mg/L	89.9	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00757 mg/L	0.008 mg/L	94.6	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0402 mg/L	0.04 mg/L	100	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0374 mg/L	0.04 mg/L	93.5	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0777 mg/L	0.08 mg/L	97.1	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0388 mg/L	0.04 mg/L	96.9	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00796 mg/L	0.008 mg/L	99.5	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.196 mg/L	0.2 mg/L	98.3	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.772 mg/L	0.8 mg/L	96.5	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0764 mg/L	0.08 mg/L	95.5	70.0	130	----
Dissolved Metals (QCLot: 1871726)										
VA25A2755-004	Anonymous	Mercury, dissolved	7439-97-6	E509	0.000103 mg/L	0 mg/L	103	70.0	130	----
Speciated Metals (QCLot: 1871116)										
KS2500433-002	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.283 mg/L	0.25 mg/L	113	70.0	130	----
Aggregate Organics (QCLot: 1871938)										
CG2501496-001	Anonymous	Phenols, total (4AAP)	----	E562	0.0181 mg/L	0.02 mg/L	90.4	75.0	125	----
Volatile Organic Compounds (QCLot: 1875706)										
VA25A2878-001	Anonymous	Benzene	71-43-2	E611C	86.4 µg/L	100 µg/L	86.4	60.0	140	----
		Bromodichloromethane	75-27-4	E611C	84.7 µg/L	100 µg/L	84.7	60.0	140	----
		Bromoform	75-25-2	E611C	96.0 µg/L	100 µg/L	96.0	60.0	140	----
		Carbon tetrachloride	56-23-5	E611C	76.8 µg/L	100 µg/L	76.8	60.0	140	----
		Chlorobenzene	108-90-7	E611C	96.8 µg/L	100 µg/L	96.8	60.0	140	----
		Chloroethane	75-00-3	E611C	86.6 µg/L	100 µg/L	86.6	50.0	150	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 1875706) - continued										
VA25A2878-001	Anonymous	Chloroform	67-66-3	E611C	84.2 µg/L	100 µg/L	84.2	60.0	140	----
		Chloromethane	74-87-3	E611C	115 µg/L	100 µg/L	115	50.0	150	----
		Dibromochloromethane	124-48-1	E611C	95.1 µg/L	100 µg/L	95.1	60.0	140	----
		Dichlorobenzene, 1,2-	95-50-1	E611C	97.6 µg/L	100 µg/L	97.6	60.0	140	----
		Dichlorobenzene, 1,3-	541-73-1	E611C	94.9 µg/L	100 µg/L	94.9	60.0	140	----
		Dichlorobenzene, 1,4-	106-46-7	E611C	93.8 µg/L	100 µg/L	93.8	60.0	140	----
		Dichloroethane, 1,1-	75-34-3	E611C	82.3 µg/L	100 µg/L	82.3	60.0	140	----
		Dichloroethane, 1,2-	107-06-2	E611C	76.5 µg/L	100 µg/L	76.5	60.0	140	----
		Dichloroethylene, 1,1-	75-35-4	E611C	81.0 µg/L	100 µg/L	81.0	60.0	140	----
		Dichloroethylene, cis-1,2-	156-59-2	E611C	84.2 µg/L	100 µg/L	84.2	60.0	140	----
		Dichloroethylene, trans-1,2-	156-60-5	E611C	86.6 µg/L	100 µg/L	86.6	60.0	140	----
		Dichloromethane	75-09-2	E611C	90.2 µg/L	100 µg/L	90.2	60.0	140	----
		Dichloropropane, 1,2-	78-87-5	E611C	90.1 µg/L	100 µg/L	90.1	60.0	140	----
		Dichloropropylene, cis-1,3-	10061-01-5	E611C	87.5 µg/L	100 µg/L	87.5	60.0	140	----
		Dichloropropylene, trans-1,3-	10061-02-6	E611C	82.8 µg/L	100 µg/L	82.8	60.0	140	----
		Ethylbenzene	100-41-4	E611C	96.4 µg/L	100 µg/L	96.4	60.0	140	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	96.2 µg/L	100 µg/L	96.2	60.0	140	----
		Styrene	100-42-5	E611C	92.4 µg/L	100 µg/L	92.4	60.0	140	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	90.1 µg/L	100 µg/L	90.1	60.0	140	----
		Tetrachloroethylene	127-18-4	E611C	88.7 µg/L	100 µg/L	88.7	60.0	140	----
		Toluene	108-88-3	E611C	84.7 µg/L	100 µg/L	84.7	60.0	140	----
		Trichloroethane, 1,1,1-	71-55-6	E611C	81.8 µg/L	100 µg/L	81.8	60.0	140	----
		Trichloroethane, 1,1,2-	79-00-5	E611C	80.4 µg/L	100 µg/L	80.4	60.0	140	----
		Trichloroethylene	79-01-6	E611C	94.6 µg/L	100 µg/L	94.6	60.0	140	----
		Trichlorofluoromethane	75-69-4	E611C	82.8 µg/L	100 µg/L	82.8	50.0	150	----
		Vinyl chloride	75-01-4	E611C	104 µg/L	100 µg/L	104	50.0	150	----
		Xylene, m+p-	179601-23-1	E611C	199 µg/L	200 µg/L	99.7	60.0	140	----
		Xylene, o-	95-47-6	E611C	96.7 µg/L	100 µg/L	96.7	60.0	140	----
Hydrocarbons (QCLot: 1875707)										
VA25A2785-004	WLNG EOP Duplicate	VHw (C6-C10)	----	E581.VH+F1	4930 µg/L	6310 µg/L	78.2	60.0	140	----

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC Number: 17 -

Page 1 of 2

Report To	Contact and company name below will appear on the final report
Company:	
Contact:	
Phone:	
Street:	
City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☑ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	
Contact:	

Report Format / Distribution

Select Report Format: ☑ ☑ EXCEL ☐ EDD (DIGITAL)
Quality Control (QC) Report with Report ☑ YES ☐ NO
☑ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax
Email 2
Email 3
Select Invoice D
Email 1 or Fax
Email 2

Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)

Regular [R] ☑ Standard TAT if received by 3 pm - business days - no surcharges apply

PRIORITY (Business Days): 4 day [P4-20%] ☐ | 3 day [P3-25%] ☐ | 2 day [P2-50%] ☐
EMERGENCY: 1 Business day [E1 - 100%] ☐ | Same Day, Weekend or Statutory holiday [E2 - 200% (Laboratory opening fees may apply)] ☐

Date and Time Required for all E&P TATs: Feb 18 /2025 hh:mm
For tests that can not be performed according to the service level selected, you will be contacted.

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	VA25-TRIT100-001	AFE/Cost Center:	PO#
Job #:	11964	Major/Minor Code:	Routing Code:
PO / AFE:	11964 - Task 20 - Phase 3C-4C	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (lab use only):		ALS Contact:	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Total metals + mercury	Dissolved metals + mercury	Total hexavalent chromium	Total trivalent chromium	TSS	TDS	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus)	Total sulfide (low) (as H2S), Unionized Sulfide (low)	Anions scan (Br, Cl, F, NO2, NO3, SO4)	General parameters (alkalinity)	DOC					SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
						F					P	P			F/P							
	WLNG US 1	Feb 7/25	1:25	Water	R	R	R	R	R	R	R	R	R	R	R						N	9
	pH: 7.74 cond: 36 temp: 2.1																					
	WLNG DS 1	Feb 7/25	2:27	Water	R	R	R	R	R	R	R	R	R	R	R						N	9
	pH: 7.88 cond: 31 temp: 2.7																					

Environmental Division
Vancouver
Work Order Reference
VA25A2785
Telephone : +1 604 253 4188

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System?
☐ ☑ NO
Are samples for human consumption/ use?
☐ ☑ NO

Special Instructions / Specify Criteria t (el below

Triton project # 11964

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☑ ☐ SIF Observations Yes ☐ No ☐
Ice Packs ☑ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐
Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				3	5		

SHIPMENT RELEASE (client use)

Released by: Time: 5:08

INITIAL SHIPMENT RECEPTION (lab use only)

Received by: Date: Time:

FINAL SHIPMENT RECEPTION (lab use only)

Received by: Date: 5:10 pm

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

SEP 2017 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	[redacted]	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	☑ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:		Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:		☐ Compare Results to Criteria on Report - provide details below if box checked[1]	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
		Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
Street:		Email 1 or Fax [redacted]	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
City/Province:		Email 2	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge.
Postal Code:		Email 3	Additional fees may apply to rush requests on weekends, statutory holidays and for non-routine tests.
Invoice To	Same as Report To ☐ YES ☑ NO		Date and Time Required for all E&P TATs: Feb 18/25 2:30 am/pm
	Copy of Invoice with Report ☐ YES ☑ NO	Select Invoice [redacted]	For all tests with rush TATs requested, please contact your AM to confirm availability.
Company:		Email 1 or Fax	
Contact:		Email 2	

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	VA25-TRIT100-001	AFE/Cost Center:	PO#
Job #:	11964	Major/Minor Code:	Routing Code:
PO / AFE:	11964 - Task 40 - Phase 3C-4C	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):		ALS Contact: [redacted]	Sampler:

Analysis Request

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Total metals + mercury	Dissolved metals + mercury	Total hexavalent chromium	Total trivalent chromium	TSS, TDS, T-Alkalinity, Anions scan (Br, Cl, F, NO2, NO3, SO4)	Total sulfide (low) (as H2S), Unionized Sulfide (low)	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus)	VOC/VPH	EPH, PAH, LEPH/HEPH	DOC	Glycols	General parameters (alkalinity)	Phenols	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
						F					P	P	P	P	F/P						
	WLNG EOP	Feb 7/25	1:41	Water	16	R	R	R	R	R	R	R	R	R	R	R	R	R			
	pH: 7.51 cond: 170 temp: 8.9																				
	WLNG EOP Duplicate	Feb 7/25	1:41	Water	16	R	R	R	R	R	R	R	R	R	R	R	R	R			
	pH: 7.51 cond: 170 temp: 8.9																				

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☑ NO	ESDAT EDD to ESdat_CA+tritonenv@ESdatLabSync.net
Are samples for human consumption/ use? ☐ YES ☑ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED

Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO

Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				3	5		

SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)	
Released by: [redacted]	Time: 5:08	Received by:	Date:	Time:	Rec [redacted]	Time: 5:10 pm

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Woodfibre Site Receiving Environment Field Notes and Logs

FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-2-7-Renkers-1DCEE

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Downstream of Discharge
Inspection Date:	02/07/2025	**Location:**	WLNG
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.669072 -123.248255
Temperature(c):	Low -9 High 0	**Permit:**	PE 110136
Weather Conditions:	Clear	**Ground Conditions:**	Snow

Observations

Time: 14:27:00 **Flow Volume (visual):** low

Notes:

Odour Detected?:	No	**Notes:**	
Unusual Colour?	No	**Notes:**	
Unusual Observations?	No	**Notes:**	
Sheen on Water?	No	**Notes:**	

Samples Collected - Parameters

Total Metals + Mercury	Yes	**General Parameters (Alkalinity)**	Yes	**Other Sample:**	
Dissolved Metals + Mercury	Yes	**Total Sulfide, Unionized Sulfide**	Yes		
TSS	Yes	**Anions**	Yes		
TDS	Yes	**Total Trivalent Chromium**	Yes	**QA Samples:**	No
Nutrients	Yes	**VOC/VPH**	No		
DOC	Yes	**EPH, PAH, LEPH/HEPH**	No		
		Trout LC50	No		

Logger Maintenance

Logger Maintenance Performed?	No	**Photo of COC with Lab Signature?**	Yes

Describe Logger Maintenance

Photos

Photo: 1

Location: WLNG DS

Description: Upstream view

Photo: 2

Location: WLNG DS

Description: Across view

Photos

Photo: 3

Location: WLNG DS

Description: Downstream view

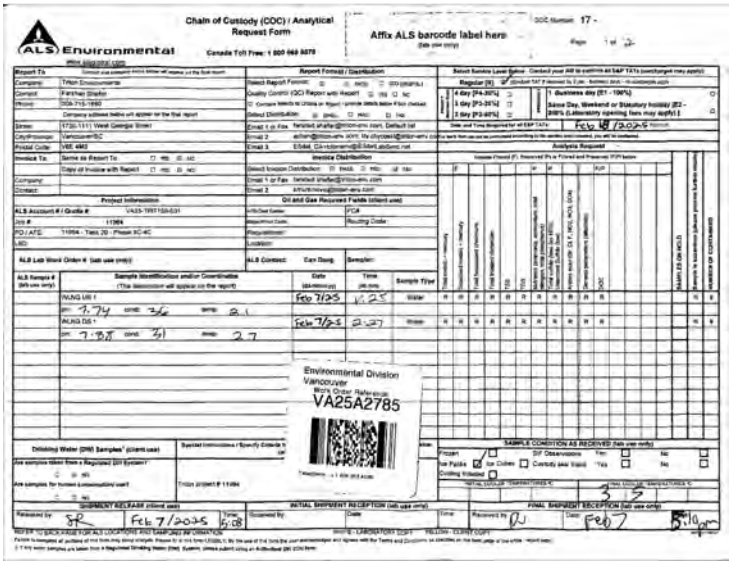


Photo: 4

Location: WLNG DS

Description: Lab COC

Sign Off

Report Prepared By:	Stephanie Renkers	**Report Reviewed:**	Yes
Report Reviewer:		**Professional(s) of Record:**	
Name:			
Designation:			
Designation Number:			

FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-2-7-Renkers-D65DF

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Upstream of Discharge
Inspection Date:	02/07/2025	**Location:**	WLNG
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.669455 -123.25087
Temperature(c):	Low -9 High 0	**Permit:**	PE 110136
Weather Conditions:	Clear	**Ground Conditions:**	Snow

Observations

Time: 13:25:00 **Flow Volume (visual):** low

Notes:

Odour Detected?:	No	**Notes:**	
Unusual Colour?	No	**Notes:**	
Unusual Observations?	No	**Notes:**	
Sheen on Water?	No	**Notes:**	

Samples Collected - Parameters

Total Metals + Mercury	Yes	**General Parameters (Alkalinity)**	Yes	**Other Sample:**	
Dissolved Metals + Mercury	Yes	**Total Sulfide, Unionized Sulfide**	Yes		
TSS	Yes	**Anions**	Yes		
TDS	Yes	**Total Trivalent Chromium**	Yes	**QA Samples:**	No
Nutrients	Yes	**VOC/VPH**	No		
DOC	Yes	**EPH, PAH, LEPH/HEPH**	No		
		Trout LC50	No		

Logger Maintenance

Logger Maintenance Performed?	Yes	**Photo of COC with Lab Signature?**	Yes

Describe Logger Maintenance

Changed out the batteries for the US Vulink

Photos

Photo: 1

Location: WLNG US

Description: Upstream view

Photo: 2

Location: WLNG US

Description: Across view

Photos

Photo: 3

Location: WLNG US

Description: Downstream view

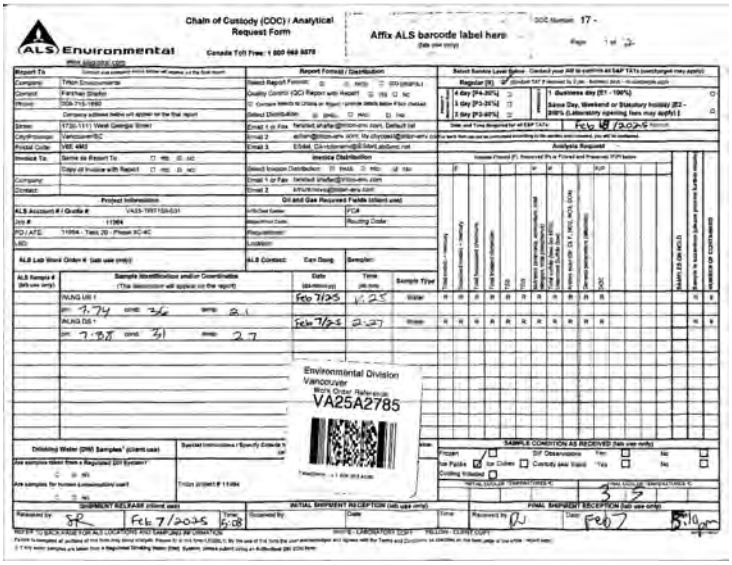


Photo: 4

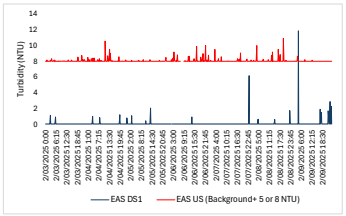
Location: WLNG US

Description: Lab COC

Sign Off

Report Prepared By:	Stephanie Renkers	**Report Reviewed:**	Yes
Report Reviewer:		**Professional(s) of Record:**	
Name:			
Designation:			
Designation Number:			

Woodfibre Plant site East Creek (WC 309-R2)	EAS DS1						EAS US1 (Background)							
Date	Temperature (c)	Specific Conductivity (µS/cm)	Salinity PSU	pH	Dissolved Oxygen (mg/L)	Turbidity (NTU)	Date	Temperature (c)	Specific Conductivity (µS/cm)	Salinity PSU	pH	Dissolved Oxygen (mg/L)	Turbidity (NTU)	EAS US (Background+ 5 or 8 NTU)
2/03/2025 0:00	4.6	80.8	0.0	7.4	11.9	0.0	2/03/2025 0:00	2.4	18.9	0.0	7.1	12.3	0.0	8.0
2/03/2025 0:15	4.1	63.6	0.0	7.4	12.0	0.0	2/03/2025 0:15	2.4	21.0	0.0	6.9	12.3	0.0	8.0
2/03/2025 0:30	2.7	27.4	0.0	6.9	12.5	0.0	2/03/2025 0:30	2.4	21.1	0.0	7.0	12.2	0.0	8.0
2/03/2025 0:45	2.5	26.4	0.0	6.8	12.6	0.0	2/03/2025 0:45	2.4	21.0	0.0	6.9	12.3	0.1	8.1
2/03/2025 1:00	2.4	26.0	0.0	6.8	12.6	0.0	2/03/2025 1:00	2.4	21.1	0.0	7.0	12.3	0.0	8.0
2/03/2025 1:15	3.2	57.6	0.0	6.9	12.4	0.0	2/03/2025 1:15	2.4	21.0	0.0	7.1	12.3	0.0	8.0
2/03/2025 1:30	4.3	80.0	0.0	7.4	12.0	0.0	2/03/2025 1:30	2.3	21.1	0.0	7.1	12.3	0.0	8.0
2/03/2025 1:45	4.5	83.6	0.0	7.4	11.9	0.0	2/03/2025 1:45	2.3	21.0	0.0	7.1	12.3	0.0	8.0
2/03/2025 2:00	4.6	83.6	0.0	7.4	11.9	0.0	2/03/2025 2:00	2.3	21.1	0.0	7.1	12.3	0.0	8.0
2/03/2025 2:15	2.6	28.6	0.0	7.0	12.6	0.0	2/03/2025 2:15	2.2	20.7	0.0	7.1	12.3	0.0	8.0
2/03/2025 2:30	2.3	26.5	0.0	6.9	12.7	0.0	2/03/2025 2:30	2.2	19.0	0.0	7.1	12.3	0.0	8.0
2/03/2025 2:45	2.2	25.4	0.0	6.8	12.7	1.1	2/03/2025 2:45	2.2	21.1	0.0	7.1	12.4	0.1	8.1
2/03/2025 3:00	2.2	29.7	0.0	6.8	12.7	0.0	2/03/2025 3:00	2.2	19.3	0.0	7.1	12.3	0.0	8.0
2/03/2025 3:15	4.0	81.4	0.0	7.3	12.1	0.0	2/03/2025 3:15	2.1	21.1	0.0	7.1	12.4	0.1	8.1
2/03/2025 3:30	4.4	83.9	0.0	7.4	12.0	0.0	2/03/2025 3:30	2.1	18.9	0.0	7.0	12.4	0.3	8.3
2/03/2025 3:45	4.4	83.5	0.0	7.4	12.0	0.0	2/03/2025 3:45	2.0	21.1	0.0	7.0	12.4	0.0	8.0
2/03/2025 4:00	4.3	82.8	0.0	7.5	12.0	0.0	2/03/2025 4:00	1.9	20.7	0.0	7.1	12.4	0.0	8.0
2/03/2025 4:15	2.5	30.5	0.0	7.2	12.6	0.0	2/03/2025 4:15	1.9	19.0	0.0	7.1	12.5	0.0	8.0
2/03/2025 4:30	2.1	27.1	0.0	6.9	12.8	0.0	2/03/2025 4:30	1.9	21.0	0.0	7.0	12.5	0.0	8.0
2/03/2025 4:45	2.4	33.5	0.0	7.2	12.6	0.0	2/03/2025 4:45	1.9	21.0	0.0	7.0	12.5	0.0	8.0
2/03/2025 5:00	1.9	26.7	0.0	6.9	12.8	0.0	2/03/2025 5:00	1.6	20.9	0.0	7.0	12.5	0.2	8.2
2/03/2025 5:15	1.9	28.6	0.0	7.0	12.8	0.0	2/03/2025 5:15	1.7	19.1	0.0	7.1	12.5	0.0	8.0
2/03/2025 5:30	2.8	61.2	0.0	6.9	12.6	0.0	2/03/2025 5:30	1.7	21.1	0.0	7.0	12.5	0.1	8.1
2/03/2025 5:45	3.9	84.8	0.0	7.4	12.1	0.9	2/03/2025 5:45	1.7	21.1	0.0	7.1	12.5	0.0	8.0
2/03/2025 6:00	4.1	85.5	0.0	7.5	12.1	0.0	2/03/2025 6:00		19.1	0.0	7.1	12.5	0.0	8.0
2/03/2025 6:15	4.4	92.8	0.0	7.5	12.0	0.0	2/03/2025 6:15	1.7	21.2	0.0	7.1	12.5	0.0	8.0
2/03/2025 6:30	2.2	29.7	0.0	7.1	12.7	0.0	2/03/2025 6:30	1.7	21.1	0.0	7.1	12.6	0.0	8.0
2/03/2025 6:45	1.8	27.2	0.0	6.8	12.9	0.0	2/03/2025 6:45	1.7	21.1	0.0	7.1	12.5	0.0	8.0
2/03/2025 7:00	1.7	26.6	0.0	6.8	12.9	0.0	2/03/2025 7:00	1.6	19.1	0.0	7.1	12.5	0.0	8.0
2/03/2025 7:15	3.1	74.7	0.0	7.1	12.5	0.0	2/03/2025 7:15	1.6	21.1	0.0	7.1	12.6	0.0	8.0
2/03/2025 7:30	1.8	28.0	0.0	7.0	12.9	0.0	2/03/2025 7:30	1.6	21.2	0.0	7.1	12.6	0.0	8.0
2/03/2025 7:45	1.6	28.4	0.0	6.8	13.0	0.0	2/03/2025 7:45	1.5	20.9	0.0	7.0	12.6	0.0	8.0
2/03/2025 8:00	4.1	92.6	0.0	7.4	12.1	0.0	2/03/2025 8:00	1.5	21.2	0.0	7.0	12.6	0.0	8.0
2/03/2025 8:15	4.2	92.8	0.0	7.5	12.0	0.0	2/03/2025 8:15	1.5	21.2	0.0	7.1	12.6	0.0	8.0
2/03/2025 8:30	3.0	49.2	0.0	7.4	12.4	0.0	2/03/2025 8:30	1.5	21.2	0.0	7.1	12.6	0.0	8.0
2/03/2025 8:45	3.4	67.8	0.0	7.4	12.2	0.0	2/03/2025 8:45	1.4	20.7	0.0	7.1	12.6	0.0	8.0
2/03/2025 9:00	1.7	28.3	0.0	7.0	12.9	0.0	2/03/2025 9:00	1.4	20.0	0.0	7.0	12.7	0.0	8.0
2/03/2025 9:15	1.5	27.2	0.0	6.9	13.0	0.0	2/03/2025 9:15	1.4	20.8	0.0	7.1	12.7	0.0	8.0
2/03/2025 9:30	1.4	26.8	0.0	6.9	13.0	0.0	2/03/2025 9:30	1.3	21.2	0.0	7.1	12.7	0.0	8.0
2/03/2025 9:45	1.3	26.7	0.0	6.8	13.1	0.0	2/03/2025 9:45	1.3	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 10:00	3.5	92.6	0.0	7.3	12.3	0.0	2/03/2025 10:00	1.3	21.2	0.0	7.1	12.7	0.0	8.0
2/03/2025 10:15	4.0	94.0	0.0	7.4	12.1	0.0	2/03/2025 10:15	1.3	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 10:30	4.1	94.3	0.0	7.5	12.1	0.0	2/03/2025 10:30	1.2	21.2	0.0	7.1	12.7	0.0	8.0
2/03/2025 10:45	1.8	30.6	0.0	7.2	12.8	0.0	2/03/2025 10:45	1.2	21.0	0.0	7.1	12.7	0.0	8.0
2/03/2025 11:00	1.4	27.6	0.0	6.9	13.0	0.0	2/03/2025 11:00	1.1	21.1	0.0	7.1	12.8	0.0	8.0
2/03/2025 11:15	1.2	27.4	0.0	6.9	13.1	0.0	2/03/2025 11:15	1.2	21.1	0.0	7.1	12.8	0.0	8.0
2/03/2025 11:30	2.7	74.6	0.0	7.0	12.6	0.0	2/03/2025 11:30	1.2	21.2	0.0	7.1	12.8	0.0	8.0
2/03/2025 11:45	3.9	93.5	0.0	7.4	12.2	0.0	2/03/2025 11:45	1.2	21.1	0.0	7.1	12.8	0.0	8.0
2/03/2025 12:00	4.1	93.4	0.0	7.5	12.1	0.0	2/03/2025 12:00	1.1	21.1	0.0	7.1	12.8	0.0	8.0
2/03/2025 12:15	1.7	30.3	0.0	7.0	12.9	0.0	2/03/2025 12:15	1.2	21.1	0.0	7.1	12.8	0.0	8.0
2/03/2025 12:30	1.3	27.3	0.0	6.9	13.1	0.0	2/03/2025 12:30	1.2	21.2	0.0	7.1	12.8	0.0	8.0
2/03/2025 12:45	1.2	26.9	0.0	6.8	13.1	0.0	2/03/2025 12:45	1.3	21.0	0.0	7.1	12.8	0.0	8.0
2/03/2025 13:00	1.2	26.8	0.0	6.9	13.1	0.0	2/03/2025 13:00	1.2	19.0	0.0	7.1	12.8	0.0	8.0
2/03/2025 13:15	1.2	26.3	0.0	6.8	13.1	0.0	2/03/2025 13:15	0.9	21.0	0.0	7.0	12.9	0.2	8.2
2/03/2025 13:30	3.8	92.1	0.0	7.4	12.2	0.0	2/03/2025 13:30	0.9	20.9	0.0	7.1	12.8	0.0	8.0
2/03/2025 13:45	3.8	90.4	0.0	7.4	12.2	0.0	2/03/2025 13:45	1.1	19.0	0.0	7.1	12.8	0.0	8.0
2/03/2025 14:00	4.0	91.5	0.0	7.5	12.1	0.0	2/03/2025 14:00	1.2	21.0	0.0	7.0	12.8	0.0	8.0
2/03/2025 14:15	1.7	29.8	0.0	7.1	12.9	0.0	2/03/2025 14:15	1.2	21.1	0.0	7.1	12.8	0.0	8.0
2/03/2025 14:30	1.4	27.3	0.0	6.9	13.0	0.0	2/03/2025 14:30	1.3	19.8	0.0	7.1	12.7	0.0	8.0
2/03/2025 14:45	1.3	26.9	0.0	6.8	13.0	0.0	2/03/2025 14:45	1.3	21.0	0.0	7.0	12.7	0.0	8.0
2/03/2025 15:00	3.7	90.9	0.0	7.4	12.2	0.0	2/03/2025 15:00	1.3	21.0	0.0	7.1	12.7	0.0	8.0
2/03/2025 15:15	4.1	92.5	0.0	7.5	12.1	0.0	2/03/2025 15:15	1.4	19.1	0.0	7.1	12.7	0.1	8.1
2/03/2025 15:30	3.2	54.6	0.0	7.4	12.3	0.0	2/03/2025 15:30	1.4	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 15:45	1.7	27.8	0.0	7.0	12.9	0.0	2/03/2025 15:45	1.4	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 16:00	1.4	27.2	0.0	6.9	13.0	0.0	2/03/2025 16:00	1.4	21.3	0.0	7.1	12.7	0.0	8.0
2/03/2025 16:15	1.3	26.8	0.0	6.8	13.0	0.0	2/03/2025 16:15	1.3	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 16:30	3.7	90.3	0.0	7.3	12.2	0.0	2/03/2025 16:30	1.3	21.2	0.0	7.1	12.7	0.0	8.0
2/03/2025 16:45	4.1	93.1	0.0	7.4	12.1	0.0	2/03/2025 16:45	1.3	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 17:00	2.7	45.9	0.0	7.4	12.4	0.0	2/03/2025 17:00	1.3	20.9	0.0	7.1	12.7	0.0	8.0
2/03/2025 17:15	2.6	63.0	0.0	7.2	12.5	0.0	2/03/2025 17:15	1.3	19.3	0.0	7.1	12.7	0.0	8.0
2/03/2025 17:30	2.8	53.9	0.0	7.4	12.3	0.0	2/03/2025 17:30	1.3	21.2	0.0	7.0	12.7	0.0	8.0
2/03/2025 17:45	1.5	28.5	0.0	6.9	13.0	0.0	2/03/2025 17:45	1.3	21.1	0.0	7.0	12.7	0.0	8.0
2/03/2025 18:00	1.3	27.1	0.0	6.9	13.0	0.0	2/03/2025 18:00		19.6	0.0	7.1	12.7	0.0	8.0
2/03/2025 18:15	2.5	92.1	0.0	7.4	12.6	0.0	2/03/2025 18:15	1.3	21.0	0.0	7.0	12.7	0.0	8.0
2/03/2025 18:30	2.9	94.4	0.0	7.5	12.5	0.0	2/03/2025 18:30	1.3	21.2	0.0	7.1	12.7	0.0	8.0
2/03/2025 18:45	1.7	32.4	0.0	7.2	12.8	0.0	2/03/2025 18:45	1.3	21.1	0.0	7.0	12.6	0.0	8.0
2/03/2025 19:00	1.3	28.0	0.0	6.9	13.0	0.0	2/03/2025 19:00	1.3	21.0	0.0	7.0	12.6	0.5	8.5
2/03/2025 19:15	1.2	27.2	0.0	6.8	13.0	0.0	2/03/2025 19:15	1.3	21.1	0.0	7.1	12.6	0.0	8.0
2/03/2025 19:30	2.6	88.5	0.0	7.2	12.6	0.0	2/03/2025 19:30	1.3	20.9	0.0	7.1	12.7	0.0	8.0
2/03/2025 19:45	3.6	89.3	0.0	7.4	12.2	0.0	2/03/2025 19:45	1.3	20.0	0.0	7.0	12.6	0.0	8.0
2/03/2025 20:00	3.0	70.2	0.0	7.4	12.3	0.0	2/03/2025 20:00	1.3	20.9	0.0	7.1	12.7	0.0	8.0
2/03/2025 20:15	1.4	28.3	0.0	6.9	13.0	0.0	2/03/2025 20:15	1.3	21.2	0.0	7.1	12.7	0.0	8.0
2/03/2025 20:30	1.2	27.3	0.0	6.9	13.0	0.0	2/03/2025 20:30	1.3	21.0	0.0	7.1	12.7	0.0	8.0
2/03/2025 20:45	1.2	27.0	0.0	6.8	13.1	0.0	2/03/2025 20:45	1.2	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 21:00	3.9	95.0	0.0	7.4	12.1	0.0	2/03/2025 21:00	1.2	21.1	0.0	7.1	12.7	0.1	8.1
2/03/2025 21:15	4.1	95.6	0.0	7.5	12.1	0.0	2/03/2025 21:15	1.2	19.3	0.0	7.1	12.6	0.7	8.7
2/03/2025 21:30	1.9	31.9	0.0	7.2	12.8	0.0	2/03/2025 21:30	1.2	21.0	0.0	7.0	12.7	0.0	8.0
2/03/2025 21:45	1.3	28.1	0.0	6.9	13.0	0.0	2/03/2025 21:45	1.2	20.9	0.0	7.1	12.6	0.0	8.0
2/03/2025 22:00	3.9	94.1	0.0	7.4	12.1	0.0	2/03/2025 22:00	1.2	21.1	0.0	7.1	12.7	0.2	8.2
2/03/2025 22:15	3.7	84.2	0.0	7.4	12.2	0.0	2/03/2025 22:15	1.2	20.9	0.0	7.1	12.7	0.0	8.0
2/03/2025 22:30	1.7	30.4	0.0	7.1	12.9	0.0	2/03/2025 22:30	1.2	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 22:45	1.3	27.7	0.0	6.9	13.0	0.0	2/03/2025 22:45	1.2	21.0	0.0	7.1	12.7	0.2	8.2
2/03/2025 23:00	1.8	53.7	0.0	6.8	13.1	0.0	2/03/2025 23:00	1.2	21.1	0.0	7.1	12.7	0.0	8.0
2/03/2025 23:15	4.1	94.7	0.0	7.5	12.1	0.0	2/03/2025 23:15	1.2	20.8	0.0	7.1	12.7	0.0	8.0
2/03/2025 23:30	4.2	94.9	0.0	7.5	12.0	0.0	2/03/2025 23:30	1.2	19.6	0.0	7.0	12.7	0.0	8.0
2/03/2025 23:45	1.7	29.5	0.0	7.0	12.9	0.0	2/03/2025 23:45	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 0:00	1.3	27.6	0.0	6.9	13.0	0.0	2/04/2025 0:00	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 0:15	3.5	90.9	0.0	7.2	12.3	0.0	2/04/2025 0:15	1.2	21.1	0.0	7.1	12.7	0.0	8.0
2/04/2025 0:30	4.2	94.7	0.0	7.5	12.0	0.0	2/04/2025 0:30	1.2	21.0	0.0	7.1	12.7	0.0	8.0
2/04/2025 0:45	2.5	40.4	0.0	7.3	12.5	0.0	2/04/2025 0:45	1.2	19.6	0.0	7.1	12.7	0.5	8.5
2/04/2025 1:00	1.4	28.5	0.0	6.9	13.0	0.0	2/04/2025 1:00	1.2	21.3	0.0	7.1	12.7	0.0	8.0
2/04/2025 1:15	4.1	93.8	0.0	7.5	12.0	0.0	2/04/2025 1:15	1.2	18.6	0.0	7.1	12.7	0.0	8.0
2/04/2025 1:30	3.4	65.7	0.0	7.5	12.1	0.0	2/04/2025 1:30	1.2	21.0	0.0	7.0	12.7	0.2	8.2
2/04/2025 1:45	1.5	29.7	0.0	7.0	12.9	0.0	2/04/2025 1:45	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 2:00	1.2	27.7	0.0	6.9	13.0	0.0	2/04/2025 2:00	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 2:15	1.1	27.2	0.0	6.8	13.1	0.0	2/04/2025 2:15	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 2:30	1.1	26.9	0.0	6.8	13.1	0.0	2/04/2025 2:30	1.2	21.0	0.0	6.9	12.7	0.0	8.0
2/04/2025 2:45	1.0	26.7	0.0	6.8	13.1	0.0	2/04/2025 2:45	1.2	19.7	0.0	7.1	12.7	0.3	8.3
2/04/2025 3:00	3.6	93.5	0.0	7.3	12.2	0.0	2/04/2025 3:00	1.2	20.9	0.0	7.0	12.7	0.0	8.0
2/04/2025 3:15	4.3	96.0	0.0	7.5	12.0	0.0	2/04/2025 3:15	1.2	20.6	0.0	7.0	12.7	0.0	8.0
2/04/2025 3:30	1.8	31.6	0.0	7.2	12.8	1.0	2/04/2025 3:30	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 3:45	1.3	27.7	0.0	6.9	13.0	0.0	2/04/2025 3:45	1.2	20.9	0.0	7.1	12.7	0.4	8.4
2/04/2025 4:00	1.1	27.1	0.0	6.9	13.1	0.0	2/04/2025 4:00	1.2	19.3	0.0	7.0	12.7	0.0	8.0
2/04/2025 4:15	2.7	80.1	0.0	6.9	12.8	0.0	2/04/2025 4:15	1.1	20.9	0.0	7.0	12.7	0.0	8.0
2/04/2025 4:30	4.1	95.6	0.0	7.4	12.0	0.0	2/04/2025 4:30	1.1	20.8	0.0	7.1	12.7	0.4	8.4
2/04/2025 4:45	4.5	97.0	0.0	7.5	11.9	0.0	2/04/2025 4:45	1.1	21.0	0.0	7.1	12.7	0.0	8.0
2/04/2025 5:00	1.8	31.3	0.0	7.2	12.8	0.0	2/04/2025 5:00	1.1	20.8	0.0	7.1	12.7	0.0	8.0
2/04/2025 5:15	1.3	28.1	0.0	6.9	13.0	0.0	2/04/2025 5:15	1.1	18.9	0.0	7.0	12.7	0.0	8.0
2/04/2025 5:30	1.1	27.1	0.0	6.9	13.1	0.0	2/04/2025 5:30	1.2	21.1	0.0	7.0	12.7	0.0	8.0
2/04/2025 5:45	3.2	79.9	0.0	7.2	12.4	0.0	2/04/2025 5:45	1.2	18.9	0.0	7.1	12.7	0.0	8.0
2/04/2025 6:00	4.4	97.2	0.0	7.5	12.0	0.0	2/04/2025 6:00	1.2	20.8	0.0	7.0	12.7	0.0	8.0
2/04/2025 6:15	4.5	97.9	0.0	7.5	11.9	0.0	2/04/2025 6:15	1.1	19.6	0.0	7.0	12.7	0.0	8.0
2/04/2025 6:30	2.2	35.3	0.0	7.3	12.6	0.0	2/04/2025 6:30	1.1	21.0	0.0	7.1	12.7	0.2	8.2
2/04/2025 6:45	1.4	28.5	0.0	6.9	13.0	0.0	2/04/2025 6:45	1.1	20.8	0.0	7.0	12.7	0.0	8.0
2/04/2025 7:00	1.2	27.3	0.0	6.9	13.1	0.0	2/04/2025 7:00	1.1	19.5	0.0	7.1	12.7	0.0	8.0
2/04/2025 7:15	3.5	93.8	0.0	7.1	12.3	0.0	2/04/2025 7:15	1.1	20.7	0.0	7.1	12.7	0.0	8.0
2/04/2025 7:30	3.7	83.4	0.0	7.4	12.2	0.0	2/04/2025 7:30	1.1	19.1	0.0	7.1	12.7	0.3	8.3
2/04/2025 7:45	4.3	98.3	0.0	7.5	12.0	0.8	2/04/2025 7:45	1.1	20.7	0.0	7.0	12.7	0.0	8.0
2/04/2025 8:00	1.7	30.4	0.0	7.1	12.9	0.0	2/04/2025 8:00	1.0	20.9	0.0	7.0	12.7	0.0	8.0
2/04/2025 8:15	1.2	27.9	0.0	6.9	13.1	0.0	2/04/2025 8:15	1.0	20.8	0.0	7.0	12.8	0.0	8.0
2/04/2025 8:30	1.0	27.1	0.0	6.8	13.1	0.0	2/04/2025 8:30	1.0	20.6	0.0	7.0	12.8	0.1	8.1
2/04/2025 8:45	3.4	85.9	0.0	7.3	12.4	0.0	2/04/2025 8:45	1.0	19.3	0.0	7.1	12.8	0.0	8.0
2/04/2025 9:00	4.3	97.4	0.0	7.5	12.0	0.0	2/04/2025 9:00	1.0	20.6	0.0	7.0	12.8	0.0	8.0
2/04/2025 9:15	1.6	30.4	0.0	7.0	12.9	0.0	2/04/2025 9:15	1.0	20.5	0.0	7.1	12.8	0.0	8.0
2/04/2025 9:30	1.2	27.5	0.0	6.9	13.1	0.0	2/04/2025 9:30	1.0	19.2	0.0	7.0	12.8	0.0	8.0
2/04/2025 9:45	3.2	91.1	0.0	7.1	12.5	0.0	2/04/2025 9:45	1.0	20.8	0.0	7.0	12.8	0.0	8.0
2/04/2025 10:00	4.3	97.2	0.0	7.5	12.0		2/04/2025 10:00	1.0	20.6	0.0	7.0	12.8	0.0	8.0
2/04/2025 10:15	2.5	66.4	0.0	6.9	12.9	0.0	2/04/2025 10:15	1.0	20.7	0.0	7.0	12.8	0.0	8.0
2/04/2025 10:30	4.5	96.4	0.0	7.4	12.0	0.0	2/04/2025 10:30	1.0	20.7	0.0	7.1	12.8	0.0	8.0
2/04/2025 10:45	4.7	96.3	0.0	7.5	11.9	0.0	2/04/2025 10:45	1.1	20.5	0.0	7.0	12.8	0.0	8.0
2/04/2025 11:00	2.5	34.4	0.0	7.2	12.6	0.0	2/04/2025 11:00	1.1	19.0	0.0	7.0	12.8	2.6	10.6
2/04/2025 11:15	1.7	28.2	0.0	6.9	12.9	0.0	2/04/2025 11:15	1.1	20.5	0.0	7.0	12.8	0.0	8.0



2/04/2025 11:30	1.6	27.1	0.0	6.8	12.9	0.0	2/04/2025 11:30	1.2	20.3	0.0	7.1	12.8	0.0	8.0
2/04/2025 11:45	1.6	26.6	0.0	6.8	12.9	0.0	2/04/2025 11:45	1.2	19.0	0.0	7.1	12.8	0.0	8.0
2/04/2025 12:00	4.5	96.0	0.0	7.4	12.0	0.0	2/04/2025 12:00	1.2	20.5	0.0	7.0	12.8	0.0	8.0
2/04/2025 12:15	4.5	86.7	0.0	7.5	11.9	0.0	2/04/2025 12:15	1.1	20.6	0.0	7.1	12.8	0.0	8.0
2/04/2025 12:30	3.7	56.4	0.0	7.5	12.1	0.0	2/04/2025 12:30	1.2	20.4	0.0	7.0	12.8	0.7	8.7
2/04/2025 12:45	2.0	28.6	0.0	7.0	12.8	0.0	2/04/2025 12:45	1.2	18.5	0.0	7.1	12.8	0.0	8.0
2/04/2025 13:00	1.7	27.0	0.0	6.8	12.9	0.0	2/04/2025 13:00	1.3	20.2	0.0	7.1	12.8	0.0	8.0
2/04/2025 13:15	1.7	26.6	0.0	6.9	12.9	0.0	2/04/2025 13:15	1.3	18.6	0.0	7.1	12.8	0.0	8.0
2/04/2025 13:30	4.6	96.4	0.0	7.4	11.9	0.0	2/04/2025 13:30	1.4	20.5	0.0	7.1	12.8	1.5	9.5
2/04/2025 13:45	5.0	93.0	0.0	7.5	11.8	0.0	2/04/2025 13:45	1.4	20.4	0.0	7.1	12.7	0.0	8.0
2/04/2025 14:00	5.0	96.1	0.0	7.5	11.7	0.0	2/04/2025 14:00	1.4	18.1	0.0	7.1	12.8	1.0	9.0
2/04/2025 14:15	3.0	38.3	0.0	7.3	12.4	0.0	2/04/2025 14:15	1.4	18.4	0.0	7.0	12.7	0.0	8.0
2/04/2025 14:30	2.0	28.0	0.0	6.9	12.8	0.0	2/04/2025 14:30	1.4	20.3	0.0	7.1	12.7	0.0	8.0
2/04/2025 14:45	1.8	27.3	0.0	6.9	12.8	0.0	2/04/2025 14:45	1.5	18.8	0.0	7.1	12.7	0.0	8.0
2/04/2025 15:00	1.7	26.6	0.0	6.8	12.9	0.0	2/04/2025 15:00	1.5	20.2	0.0	7.0	12.7	0.1	8.1
2/04/2025 15:15	4.3	92.1	0.0	7.5	12.0	0.0	2/04/2025 15:15	1.5	19.9	0.0	7.1	12.7	0.0	8.0
2/04/2025 15:30	1.6	29.9	0.0	7.0	12.9	0.0	2/04/2025 15:30	1.5	18.3	0.0	7.1	12.7	0.0	8.0
2/04/2025 15:45	1.2	26.8	0.0	6.9	13.1	0.0	2/04/2025 15:45	1.5	20.2	0.0	7.0	12.7	0.0	8.0
2/04/2025 16:00	1.1	27.0	0.0	6.8	13.2	0.0	2/04/2025 16:00	1.6	20.1	0.0	7.1	12.6	0.0	8.0
2/04/2025 16:15	1.7	26.7	0.0	6.8	12.9	0.0	2/04/2025 16:15	1.6	19.0	0.0	7.1	12.6	0.0	8.0
2/04/2025 16:30	1.7	26.6	0.0	6.9	12.9	0.0	2/04/2025 16:30	1.6	20.1	0.0	7.1	12.6	0.0	8.0
2/04/2025 16:45	4.6	96.9	0.0	7.4	11.9	0.0	2/04/2025 16:45	1.6	20.3	0.0	7.1	12.6	0.0	8.0
2/04/2025 17:00	5.0	97.4	0.0	7.5	11.8	0.0	2/04/2025 17:00	1.7	20.2	0.0	7.1	12.6	0.0	8.0
2/04/2025 17:15	4.8	86.6	0.0	7.5	11.8	0.0	2/04/2025 17:15	1.7	20.3	0.0	7.1	12.6	0.0	8.0
2/04/2025 17:30	2.8	36.0	0.0	7.3	12.4	0.0	2/04/2025 17:30	1.7	20.2	0.0	7.1	12.6	0.0	8.0
2/04/2025 17:45	2.0	28.0	0.0	6.9	12.8	0.0	2/04/2025 17:45	1.7	20.2	0.0	7.1	12.6	0.0	8.0
2/04/2025 18:00	1.8	27.0	0.0	6.9	12.8	0.0	2/04/2025 18:00	1.7	20.2	0.0	7.1	12.6	0.0	8.0
2/04/2025 18:15	1.7	25.8	0.0	6.8	12.9	0.0	2/04/2025 18:15	1.7	18.7	0.0	7.1	12.6	0.0	8.0
2/04/2025 18:30	3.5	84.5	0.0	6.9	12.4	0.0	2/04/2025 18:30	1.7	20.2	0.0	7.0	12.5	0.0	8.0
2/04/2025 18:45	4.8	93.3	0.0	7.4	11.8	0.0	2/04/2025 18:45	1.7	20.1	0.0	7.0	12.5	0.0	8.0
2/04/2025 19:00	5.0	96.9	0.0	7.5	11.7	0.0	2/04/2025 19:00	1.6	20.3	0.0	7.1	12.5	0.5	8.5
2/04/2025 19:15	2.8	35.7	0.0	7.4	12.4	0.0	2/04/2025 19:15	1.6	20.2	0.0	7.1	12.5	0.0	8.0
2/04/2025 19:30	1.8	28.0	0.0	7.0	12.8	1.2	2/04/2025 19:30	1.6	20.3	0.0	7.1	12.5	0.0	8.0
2/04/2025 19:45	4.6	92.8	0.0	7.4	11.9	0.0	2/04/2025 19:45	1.5	20.0	0.0	7.0	12.6	0.0	8.0
2/04/2025 20:00	4.9	96.0	0.0	7.5	11.8	0.0	2/04/2025 20:00	1.5	20.3	0.0	7.1	12.6	0.0	8.0
2/04/2025 20:15	3.0	41.3	0.0	7.3	12.3	0.0	2/04/2025 20:15	1.5	20.0	0.0	7.0	12.6	0.0	8.0
2/04/2025 20:30	1.8	28.4	0.0	7.0	12.8	0.0	2/04/2025 20:30	1.4	18.8	0.0	7.0	12.6	0.0	8.0
2/04/2025 20:45	1.5	27.5	0.0	6.9	12.9	0.0	2/04/2025 20:45	1.4	20.3	0.0	7.0	12.6	0.0	8.0
2/04/2025 21:00	1.4	26.9	0.0	6.9	13.0	0.0	2/04/2025 21:00	1.3	20.1	0.0	7.1	12.6	0.0	8.0
2/04/2025 21:15	3.8	92.4	0.0	7.1	12.2	0.0	2/04/2025 21:15	1.3	18.2	0.0	7.0	12.6	0.0	8.0
2/04/2025 21:30	4.6	95.8	0.0	7.5	11.9	0.0	2/04/2025 21:30	1.3	20.4	0.0	7.0	12.7	0.0	8.0
2/04/2025 21:45	3.4	55.1	0.0	7.4	12.2	0.0	2/04/2025 21:45	1.2	18.2	0.0	7.0	12.6	0.0	8.0
2/04/2025 22:00	1.6	28.6	0.0	7.0	12.9	0.0	2/04/2025 22:00	1.2	20.2	0.0	7.1	12.7	0.0	8.0
2/04/2025 22:15	1.3	27.4	0.0	6.9	13.0	0.0	2/04/2025 22:15	1.2	18.3	0.0	7.0	12.7	0.0	8.0
2/04/2025 22:30	1.5	49.1	0.0	6.9	13.1	0.0	2/04/2025 22:30	1.2	20.2	0.0	7.0	12.7	0.0	8.0
2/04/2025 22:45	4.3	95.4	0.0	7.4	12.0	0.0	2/04/2025 22:45	1.1	20.3	0.0	7.0	12.7	0.0	8.0
2/04/2025 23:00	4.5	96.3	0.0	7.5	11.9	0.0	2/04/2025 23:00	1.1	18.3	0.0	7.0	12.7	0.1	8.1
2/04/2025 23:15	2.1	32.9	0.0	7.2	12.7	0.0	2/04/2025 23:15	1.1	20.2	0.0	6.9	12.7	0.0	8.0
2/04/2025 23:30	1.3	28.0	0.0	7.0	13.0	0.0	2/04/2025 23:30	1.0	20.3	0.0	7.1	12.7	0.0	8.0
2/04/2025 23:45	1.1	26.1	0.0	6.8	13.1	0.8	2/04/2025 23:45	1.0	18.3	0.0	7.0	12.7	0.0	8.0
2/05/2025 0:00	1.0	26.8	0.0	6.9	13.1	0.0	2/05/2025 0:00	1.0	20.0	0.0	7.1	12.7	0.0	8.0
2/05/2025 0:15	4.2	95.4	0.0	7.3	12.0	0.0	2/05/2025 0:15	1.0	20.2	0.0	7.0	12.7	0.0	8.0
2/05/2025 0:30	4.4	99.8	0.0	7.5	11.9	0.0	2/05/2025 0:30	0.9	20.2	0.0	7.1	12.8	0.0	8.0
2/05/2025 0:45	4.4	92.0	0.0	7.5	11.9	0.0	2/05/2025 0:45	0.9	18.1	0.0	7.0	12.8	0.0	8.0
2/05/2025 1:00	1.6	30.3	0.0	7.1	12.9	0.0	2/05/2025 1:00	0.9	20.1	0.0	7.1	12.8	0.0	8.0
2/05/2025 1:15	1.1	27.8	0.0	6.8	13.1	0.0	2/05/2025 1:15	0.9	18.1	0.0	7.0	12.8	0.0	8.0
2/05/2025 1:30	1.4	47.3	0.0	6.8	13.1	0.0	2/05/2025 1:30	0.8	20.1	0.0	7.0	12.8	0.0	8.0
2/05/2025 1:45	4.0	98.9	0.0	7.4	12.1	0.0	2/05/2025 1:45	0.8	19.9	0.0	7.0	12.8	0.0	8.0
2/05/2025 2:00	4.2	97.4	0.0	7.5	12.0	0.0	2/05/2025 2:00	0.8	18.1	0.0	7.1	12.8	0.0	8.0
2/05/2025 2:15	1.5	30.7	0.0	7.2	12.9	0.0	2/05/2025 2:15	0.8	20.1	0.0	7.0	12.8	0.0	8.0
2/05/2025 2:30	1.0	28.2	0.0	7.0	13.1	1.1	2/05/2025 2:30	0.8	20.2	0.0	7.0	12.8	0.1	8.1
2/05/2025 2:45	2.4	76.2	0.0	7.0	12.8	0.0	2/05/2025 2:45	0.8	20.1	0.0	7.1	12.8	0.0	8.0
2/05/2025 3:00	3.8	98.4	0.0	7.4	12.1	0.0	2/05/2025 3:00	0.7	19.9	0.0	7.0	12.8	0.0	8.0
2/05/2025 3:15	4.2	99.1	0.0	7.5	12.0	0.0	2/05/2025 3:15	0.7	18.0	0.0	7.0	12.8	0.0	8.0
2/05/2025 3:30	3.8	83.6	0.0	7.5	12.0	0.0	2/05/2025 3:30	0.7	19.9	0.0	7.0	12.8	0.0	8.0
2/05/2025 3:45	1.4	29.7	0.0	7.2	12.9	0.0	2/05/2025 3:45	0.7	19.8	0.0	7.0	12.8	0.0	8.0
2/05/2025 4:00	0.9	28.6	0.0	7.0	13.1	0.0	2/05/2025 4:00	0.7	18.7	0.0	7.0	12.8	0.0	8.0
2/05/2025 4:15	3.4	91.7	0.0	7.3	12.3	0.0	2/05/2025 4:15	0.7	19.9	0.0	6.9	12.9	0.0	8.0
2/05/2025 4:30	4.1	98.6	0.0	7.5	12.0	0.0	2/05/2025 4:30	0.6	19.8	0.0	7.0	12.9	0.0	8.0
2/05/2025 4:45	2.5	48.6	0.0	7.4	12.4	0.0	2/05/2025 4:45	0.6	19.9	0.0	7.1	12.9	0.0	8.0
2/05/2025 5:00	1.1	28.9	0.0	7.1	13.1	0.0	2/05/2025 5:00	0.6	19.8	0.0	7.0	12.9	0.0	8.0
2/05/2025 5:15	0.8	28.2	0.0	7.0	13.2	0.0	2/05/2025 5:15	0.6	18.5	0.0	7.0	12.9	0.0	8.0
2/05/2025 5:30	2.3	71.5	0.0	7.1	13.0	0.0	2/05/2025 5:30	0.6	17.3	0.0	7.1	12.9	0.0	8.0
2/05/2025 5:45	4.0	98.6	0.0	7.4	12.1	0.0	2/05/2025 5:45	0.6	19.7	0.0	7.0	12.9	0.0	8.0
2/05/2025 6:00	4.1	99.3	0.0	7.5	12.0	0.0	2/05/2025 6:00	0.6	19.6	0.0	7.0	12.9	0.0	8.0
2/05/2025 6:15	3.8	89.0	0.0	7.5	12.0	0.0	2/05/2025 6:15	0.6	17.6	0.0	7.0	12.9	0.0	8.0
2/05/2025 6:30	1.4	31.2	0.0	7.3	12.9	0.0	2/05/2025 6:30	0.6	19.6	0.0	7.0	12.9	0.1	8.1
2/05/2025 6:45	0.9	28.4	0.0	7.0	13.2	0.0	2/05/2025 6:45	0.6	19.7	0.0	7.0	12.9	0.0	8.0
2/05/2025 7:00	2.4	75.8	0.0	7.0	12.9	0.0	2/05/2025 7:00	0.6	19.5	0.0	7.0	12.9	0.0	8.0
2/05/2025 7:15	3.4	91.3	0.0	7.4	12.3	0.0	2/05/2025 7:15	0.6	19.6	0.0	7.0	12.9	0.0	8.0
2/05/2025 7:30	3.8	92.7	0.0	7.5	12.1	0.0	2/05/2025 7:30	0.6	19.4	0.0	7.0	12.9	0.0	8.0
2/05/2025 7:45	1.3	32.4	0.0	7.3	12.9	0.0	2/05/2025 7:45	0.6	17.7	0.0	7.0	12.9	0.0	8.0
2/05/2025 8:00	0.8	28.6	0.0	7.1	13.2	0.0	2/05/2025 8:00	0.6	19.5	0.0	7.0	12.9	0.0	8.0
2/05/2025 8:15	1.3	44.9	0.0	7.1	13.0	0.0	2/05/2025 8:15	0.6	17.6	0.0	7.0	12.9	0.0	8.0
2/05/2025 8:30	3.6	98.1	0.0	7.4	12.2	0.0	2/05/2025 8:30	0.5	19.5	0.0	7.0	12.9	0.0	8.0
2/05/2025 8:45	4.0	99.6	0.0	7.5	12.1	0.0	2/05/2025 8:45	0.5	19.1	0.0	7.0	12.9	0.0	8.0
2/05/2025 9:00	1.4	33.9	0.0	7.3	12.9	0.0	2/05/2025 9:00	0.5	17.5	0.0	7.0	12.9	0.0	8.0
2/05/2025 9:15	0.8	28.5	0.0	7.1	13.2	0.0	2/05/2025 9:15	0.5	19.3	0.0	7.0	12.9	0.2	8.2
2/05/2025 9:30	2.3	81.1	0.0	7.0	13.0	0.0	2/05/2025 9:30	0.5	19.2	0.0	7.1	12.9	0.0	8.0
2/05/2025 9:45	3.8	98.5	0.0	7.4	12.1	0.0	2/05/2025 9:45	0.5	17.3	0.0	7.0	13.0	0.0	8.0
2/05/2025 10:00	4.0	98.3	0.0	7.5	12.1	0.0	2/05/2025 10:00	0.5	19.2	0.0	7.0	12.9	0.0	8.0
2/05/2025 10:15	3.5	80.1	0.0	7.5	12.1	0.0	2/05/2025 10:15	0.5	19.3	0.0	7.0	13.0	0.0	8.0
2/05/2025 10:30	1.2	30.9	0.0	7.3	13.0	0.0	2/05/2025 10:30	0.5	17.2	0.0	7.1	13.0	0.0	8.0
2/05/2025 10:45	0.7	27.2	0.0	7.0	13.2	0.4	2/05/2025 10:45	0.5	19.3	0.0	7.0	13.0	0.0	8.0
2/05/2025 11:00	2.6	86.6	0.0	7.1	12.7	0.0	2/05/2025 11:00	0.6	17.2	0.0	7.1	13.0	0.0	8.0
2/05/2025 11:15	3.4	88.3	0.0	7.3	12.4	0.0	2/05/2025 11:15	0.7	19.0	0.0	7.1	13.0	0.0	8.0
2/05/2025 11:30	2.7	57.0	0.0	7.4	12.3	0.0	2/05/2025 11:30	0.7	17.2	0.0	7.1	13.0	0.0	8.0
2/05/2025 11:45	1.1	27.5	0.0	7.0	13.1	0.0	2/05/2025 11:45	0.6	19.1	0.0	7.0	13.0	0.0	8.0
2/05/2025 12:00	1.2	44.4	0.0	6.9	13.3	0.0	2/05/2025 12:00	0.7	19.2	0.0	7.1	13.0	0.0	8.0
2/05/2025 12:15	4.1	96.2	0.0	7.5	12.1	0.0	2/05/2025 12:15	0.7	19.0	0.0	7.1	13.0	0.0	8.0
2/05/2025 12:30	4.3	99.9	0.0	7.5	12.0	0.0	2/05/2025 12:30	0.7	19.0	0.0	7.0	13.0	0.0	8.0
2/05/2025 12:45	1.8	33.7	0.0	7.2	12.8	0.0	2/05/2025 12:45	0.7	19.1	0.0	7.1	13.0	0.0	8.0
2/05/2025 13:00	1.1	28.2	0.0	7.1	13.1	0.0	2/05/2025 13:00	0.8	19.2	0.0	7.1	12.9	0.0	8.0
2/05/2025 13:15	1.0	27.0	0.0	6.9	13.2	0.0	2/05/2025 13:15	0.8	19.0	0.0	7.0	12.9	0.2	8.2
2/05/2025 13:30	3.7	91.6	0.0	7.4	12.2	2.1	2/05/2025 13:30	0.9	17.9	0.0	7.0	12.9	0.0	8.0
2/05/2025 13:45	3.4	66.0	0.0	7.5	12.2	0.0	2/05/2025 13:45	0.9	18.9	0.0	7.1	12.9	0.0	8.0
2/05/2025 14:00	1.4	29.1	0.0	7.2	13.0	0.0	2/05/2025 14:00	0.9	19.1	0.0	7.0	12.9	0.0	8.0
2/05/2025 14:15	1.1	27.2	0.0	7.0	13.1	0.0	2/05/2025 14:15	0.9	18.9	0.0	7.1	12.9	0.0	8.0
2/05/2025 14:30	4.0	98.4	0.0	7.3	12.2	0.0	2/05/2025 14:30	0.9	19.1	0.0	7.1	12.9	0.0	8.0
2/05/2025 14:45	4.5	99.4	0.0	7.5	12.0	0.0	2/05/2025 14:45	0.9	18.7	0.0	7.1	12.9	0.0	8.0
2/05/2025 15:00	4.7	99.2	0.0	7.5	11.9	0.0	2/05/2025 15:00	0.9	18.9	0.0	7.1	12.9	0.0	8.0
2/05/2025 15:15	3.0	46.7	0.0	7.5	12.3	0.0	2/05/2025 15:15	0.9	18.7	0.0	7.1	12.9	0.0	8.0
2/05/2025 15:30	1.6	28.6	0.0	7.2	13.0	0.0	2/05/2025 15:30	1.0	18.8	0.0	7.0	12.9	0.0	8.0
2/05/2025 15:45	1.3	27.3	0.0	7.0	13.1	0.0	2/05/2025 15:45	1.0	18.8	0.0	7.1	12.9	0.0	8.0
2/05/2025 16:00	2.0	54.3	0.0	6.9	13.1	0.0	2/05/2025 16:00	1.1	17.1	0.0	7.0	12.8	0.0	8.0
2/05/2025 16:15	4.5	97.9	0.0	7.5	12.0	0.0	2/05/2025 16:15	1.1	18.8	0.0	7.0	12.8	0.0	8.0
2/05/2025 16:30	3.5	56.5	0.0	7.5	12.2	0.0	2/05/2025 16:30	1.2	18.7	0.0	7.1	12.8	0.0	8.0
2/05/2025 16:45	1.6	29.5	0.0	7.1	12.9	0.0	2/05/2025 16:45	1.2	18.9	0.0	7.1	12.8	0.0	8.0
2/05/2025 17:00	1.4	27.0	0.0	7.0	13.0	0.0	2/05/2025 17:00	1.2	18.7	0.0	7.1	12.8	0.0	8.0
2/05/2025 17:15	3.5	84.3	0.0	7.3	12.3	0.0	2/05/2025 17:15	1.2	17.5	0.0	7.1	12.8	0.0	8.0
2/05/2025 17:30	4.6	98.1	0.0	7.5	12.0	0.0	2/05/2025 17:30	1.3	18.4	0.0	7.1	12.8	0.0	8.0
2/05/2025 17:45	4.9	98.7	0.0	7.5	11.9	0.0	2/05/2025 17:45	1.3	18.8	0.0	7.1	12.8	0.0	8.0
2/05/2025 18:00	3.3	45.5	0.0	7.5	12.3	0.0	2/05/2025 18:00	1.3	18.5	0.0	7.1	12.7	0.0	8.0
2/05/2025 18:15	1.8	29.1	0.0	7.1	12.8	0.0	2/05/2025 18:15	1.3	18.7	0.0	7.1	12.7	0.0	8.0
2/05/2025 18:30	1.5	26.8	0.0	7.0	13.0	0.0	2/05/2025 18:30	1.3	18.6	0.0	7.0	12.7	0.0	8.0
2/05/2025 18:45	4.4	97.2	0.0	7.4	12.0	0.0	2/05/2025 18:45	1.3	18.7	0.0	7.0	12.7	0.1	8.1
2/05/2025 19:00	4.8	98.2	0.0	7.5	11.8	0.0	2/05/2025 19:00	1.3	18.5	0.0	7.0	12.7	0.0	8.0
2/05/2025 19:15	4.0	66.6	0.0	7.5	11.9	0.0	2/05/2025 19:15	1.3	18.7	0.0	7.0	12.7	0.0	8.0
2/05/2025 19:30	1.8	29.3	0.0	7.2	12.8	0.0	2/05/2025 19:30	1.2	18.4	0.0	7.0	12.7	0.0	8.0
2/05/2025 19:45	1.4	27.4	0.0	7.0	13.0	0.0	2/05/2025 19:45	1.2	16.8	0.0	7.0	12.7	0.0	8.0
2/05/2025 20:00	1.4	32.7	0.0	6.9	13.1	0.0	2/05/2025 20:00	1.2	18.6	0.0	6.9	12.7	0.0	8.0
2/05/2025 20:15	4.5	94.7	0.0	7.5	11.9	0.0	2/05/2025 20:15	1.2	18.5	0.0	7.0	12.7	0.0	8.0
2/05/2025 20:30	3.1	53.5	0.0	7.5	12.3	0.0	2/05/2025 20:30	1.2	17.5	0.0	7.0	12.7	0.0	8.0
2/05/2025 20:45	1.6	29.2	0.0	7.1	12.9	0.0	2/05/2025 20:45	1.2	18.5	0.0	7.0	12.7	0.0	8.0
2/05/2025 21:00	1.3	26.6	0.0	7.0	13.1	0.0	2/05/2025 21:00	1.2	18.6	0.0	7.0	12.7	0.0	8.0
2/05/2025 21:15	4.2	98.5	0.0	7.3	12.1	0.0	2/05/2025 21:15	1.1	18.5	0.0	7.0	12.7	0.0	8.0
2/05/2025 21:30	4.8	101.6	0.0	7.5	11.9	0.0	2/05/2025 21:30	1.1	18.6	0.0	7.0	12.7	0.0	8.0
2/05/2025 21:45	4.9	101.2	0.0	7.5	11.8	0.0	2/05/2025 21:45	1.1	18.4	0.0	7.0	12.7	0.0	8.0
2/05/2025 22:00	3.6	62.0	0.0	7.5	12.1	0.0	2/05/2025 22:00	1.1	16.8	0.0	7.0	12.8	0.0	8.0
2/05/2025 22:15	1.7	29.0	0.0	7.2	12.9	0.0	2/05/2025 22:15	1.1	18.3	0.0	6.9	12.8	0.0	8.0
2/05/2025 22:30	1.3	27.4	0.0	7.0	13.0	0.0	2/05/2025 22:30	1.1	18.4	0.0	7.0	12.8	0.5	8.5
2/05/2025 22:45	4.4	101.4	0.0	7.4	12.0	0.0	2/05/2025 22:45	1.1	18.5	0.0	7.0	12.8	0.1	8.1
2/05/2025 23:00	4.8	101.9	0.0	7.5	11.9	0.0	2/05/2025 23:00	1.0	18.4	0.0	7.0	12.8	0.0	8.0
2/05/2025 23:15	3.1	49.0	0.0	7.5	12.3	0.0	2/05/2025 23:15	1.0	16.7	0.0	7.0	12.8	0.0	8.0
2/05/2025 23:30	1.6	28.3	0.0	7.2	13.0	0.0	2/05/2025 23:30	1.0	18.3	0.0	7.0	12.8	0.0	8.0
2/05/2025 23:45	1.3	27.3	0.0	7.0	13.1	0.0	2/05/2025 23:45	1.0	16.5	0.0	7.0	12.8	0.0	8.0
2/06/2025 0:00	1.8	51.6	0.0	7.0	12.9	0.0	2/06/2025 0:00	1.0	18.3	0.0	6.9	12.8	0.0	8.0
2/06/2025 0:15	4.0	87.9	0.0	7.4	12.1	0.0	2/06/2025 0:15	1.0	18.1	0.0	7.0	12.8	0.0	8.0

2/06/2025 0:30	4.8	104.2	0.0	7.5	11.9	0.0	2/06/2025 0:30	1.0	18.4	0.0	7.0	12.8	0.0	8.0
2/06/2025 0:45	2.4	40.5	0.0	7.4	12.6	0.0	2/06/2025 0:45	1.1	18.2	0.0	7.0	12.8	0.0	8.0
2/06/2025 1:00	1.5	27.8	0.0	7.1	13.0	0.0	2/06/2025 1:00	1.1	16.6	0.0	7.0	12.8	0.0	8.0
2/06/2025 1:15	1.2	27.0	0.0	6.9	13.1	0.0	2/06/2025 1:15	1.1	18.3	0.0	6.9	12.8	0.0	8.0
2/06/2025 1:30	4.5	103.9	0.0	7.4	12.0	0.0	2/06/2025 1:30	1.1	18.1	0.0	7.0	12.8	0.0	8.0
2/06/2025 1:45	4.9	104.8	0.0	7.5	11.9	0.0	2/06/2025 1:45	1.1	16.5	0.0	7.0	12.8	0.2	8.2
2/06/2025 2:00	4.6	90.7	0.0	7.5	11.9		2/06/2025 2:00	1.0	18.2	0.0	7.0	12.8	0.0	8.0
2/06/2025 2:15	2.0	31.2	0.0	7.2	12.8	0.0	2/06/2025 2:15	1.0	18.2	0.0	7.0	12.8	0.0	8.0
2/06/2025 2:30	1.4	29.3	0.0	7.1	13.0	0.0	2/06/2025 2:30	1.0	16.9	0.0	7.0	12.8	0.0	8.0
2/06/2025 2:45	3.9	91.3	0.0	7.4	12.2	0.0	2/06/2025 2:45	1.0	18.2	0.0	6.9	12.8	0.4	8.4
2/06/2025 3:00	4.8	104.4	0.0	7.5	11.9	0.0	2/06/2025 3:00	1.0	18.2	0.0	7.0	12.8	0.0	8.0
2/06/2025 3:15	4.9	104.2	0.0	7.5	11.9	0.0	2/06/2025 3:15	1.0	18.3	0.0	7.0	12.8	1.2	9.2
2/06/2025 3:30	2.1	32.8	0.0	7.3	12.7	0.0	2/06/2025 3:30	1.0	18.2	0.0	7.0	12.8	0.4	8.4
2/06/2025 3:45	1.4	28.6	0.0	7.1	13.0	0.0	2/06/2025 3:45	1.0	16.3	0.0	7.0	12.8	0.0	8.0
2/06/2025 4:00	1.1	26.9	0.0	7.0	13.1	0.0	2/06/2025 4:00	1.0	18.1	0.0	7.0	12.8	0.0	8.0
2/06/2025 4:15	1.0	26.3	0.0	6.9	13.2	0.0	2/06/2025 4:15	1.0	17.2	0.0	7.0	12.8	0.0	8.0
2/06/2025 4:30	4.2	99.7	0.0	7.4	12.1	0.0	2/06/2025 4:30	0.9	18.1	0.0	7.0	12.8	0.0	8.0
2/06/2025 4:45	4.7	102.3	0.0	7.5	11.9	0.0	2/06/2025 4:45	0.9	18.1	0.0	7.0	12.9	0.1	8.1
2/06/2025 5:00	2.2	35.4	0.0	7.4	12.6	0.0	2/06/2025 5:00	0.9	18.2	0.0	7.0	12.9	0.0	8.0
2/06/2025 5:15	1.2	27.9	0.0	7.1	13.1	0.0	2/06/2025 5:15	0.9	18.1	0.0	6.9	12.9	0.8	8.8
2/06/2025 5:30	1.8	62.5	0.0	6.9	13.2	0.0	2/06/2025 5:30	0.8	16.9	0.0	7.0	12.9	0.0	8.0
2/06/2025 5:45	4.5	100.2	0.0	7.4	12.0	0.0	2/06/2025 5:45	0.8	18.0	0.0	6.9	12.9	0.0	8.0
2/06/2025 6:00	4.7	100.0	0.0	7.5	11.9	0.0	2/06/2025 6:00	0.8	17.9	0.0	7.0	12.9	0.0	8.0
2/06/2025 6:15	2.8	45.8	0.0	7.4	12.4	0.0	2/06/2025 6:15	0.8	16.1	0.0	7.0	12.9	0.0	8.0
2/06/2025 6:30	1.4	28.7	0.0	7.1	13.1	0.0	2/06/2025 6:30	0.7	17.8	0.0	6.9	12.9	0.0	8.0
2/06/2025 6:45	1.0	27.5	0.0	7.0	13.2	0.0	2/06/2025 6:45	0.7	17.9	0.0	7.0	12.9	0.0	8.0
2/06/2025 7:00	0.8	26.5	0.0	7.0	13.3	0.0	2/06/2025 7:00	0.7	18.0	0.0	7.0	12.9	0.0	8.0
2/06/2025 7:15	4.0	98.0	0.0	7.3	12.2	0.0	2/06/2025 7:15							
2/06/2025 7:30	4.6	99.7	0.0	7.5	12.0	0.0	2/06/2025 7:30							
2/06/2025 7:45	4.5	93.4	0.0	7.5	11.9	0.0	2/06/2025 7:45							
2/06/2025 8:00	1.9	32.8	0.0	7.3	12.8	0.0	2/06/2025 8:00							
2/06/2025 8:15	1.1	27.5	0.0	7.0	13.2	0.0	2/06/2025 8:15							
2/06/2025 8:30	3.1	81.5	0.0	7.2	12.5	0.0	2/06/2025 8:30							
2/06/2025 8:45	4.5	98.5	0.0	7.5	12.0	0.0	2/06/2025 8:45							
2/06/2025 9:00	4.7	99.1	0.0	7.5	11.9	0.0	2/06/2025 9:00	0.7	17.8	0.0	7.0	12.9	0.0	8.0
2/06/2025 9:15	2.0	33.1	0.0	7.3	12.7	0.0	2/06/2025 9:15	0.7	16.0	0.0	7.0	12.9	0.0	8.0
2/06/2025 9:30	1.2	28.0	0.0	7.1	13.1	0.0	2/06/2025 9:30	0.7	17.8	0.0	7.0	13.0	0.0	8.0
2/06/2025 9:45	4.0	97.5	0.0	7.4	12.2	0.0	2/06/2025 9:45	0.7	17.9	0.0	7.0	12.9	0.1	8.1
2/06/2025 10:00	4.6	98.8	0.0	7.5	12.0	0.0	2/06/2025 10:00	0.8	17.6	0.0	7.0	12.9	0.0	8.0
2/06/2025 10:15	4.1	79.7	0.0	7.5	12.0	0.0	2/06/2025 10:15	0.8	16.7	0.0	7.0	12.9	0.0	8.0
2/06/2025 10:30	1.6	30.7	0.0	7.3	12.9	0.0	2/06/2025 10:30	0.8	17.6	0.0	7.0	13.0	0.0	8.0
2/06/2025 10:45	1.1	27.6	0.0	7.1	13.2	0.0	2/06/2025 10:45	0.8	17.5	0.0	7.0	13.0	0.0	8.0
2/06/2025 11:00	0.9	26.2	0.0	7.1	13.3	0.0	2/06/2025 11:00	0.8	15.9	0.0	7.0	13.0	0.0	8.0
2/06/2025 11:15	3.9	96.8	0.0	7.3	12.3	0.0	2/06/2025 11:15	0.8	17.6	0.0	6.9	13.0	0.0	8.0
2/06/2025 11:30	4.5	100.4	0.0	7.5	12.0	0.0	2/06/2025 11:30	0.8	17.5	0.0	7.0	13.0	0.0	8.0
2/06/2025 11:45	4.6	103.1	0.0	7.5	12.0	0.0	2/06/2025 11:45	0.8	17.6	0.0	7.0	13.0	0.6	8.6
2/06/2025 12:00	4.1	80.4	0.0	7.5	12.0	0.0	2/06/2025 12:00	0.9	17.3	0.0	7.0	13.0	0.0	8.0
2/06/2025 12:15	1.6	28.9	0.0	7.3	13.0	0.0	2/06/2025 12:15	0.9	15.9	0.0	7.0	13.0	0.7	8.7
2/06/2025 12:30	1.2	27.5	0.0	7.1	13.1	0.0	2/06/2025 12:30	0.9	17.5	0.0	7.0	12.9	0.0	8.0
2/06/2025 12:45	1.1	26.5	0.0	7.0	13.2	0.0	2/06/2025 12:45	1.0	16.3	0.0	7.0	12.9	0.0	8.0
2/06/2025 13:00	4.5	108.2	0.0	7.4	12.1	0.0	2/06/2025 13:00	1.0	17.6	0.0	7.0	13.0	0.0	8.0
2/06/2025 13:15	2.2	35.5	0.0	7.3	12.7	0.0	2/06/2025 13:15	1.0	17.6	0.0	7.0	12.9	0.0	8.0
2/06/2025 13:30	4.6	109.4	0.1	7.5	12.0	0.0	2/06/2025 13:30	1.1	17.3	0.0	7.0	12.9	0.0	8.0
2/06/2025 13:45	4.6	99.7	0.0	7.5	12.0	0.9	2/06/2025 13:45	1.1	17.6	0.0	7.0	12.9	0.0	8.0
2/06/2025 14:00	3.9	71.8	0.0	7.5	12.0	0.0	2/06/2025 14:00	1.2	17.5	0.0	7.0	12.9	0.0	8.0
2/06/2025 14:15	2.0	30.7	0.0	7.2	12.8	0.0	2/06/2025 14:15	1.2	17.6	0.0	7.0	12.9	0.0	8.0
2/06/2025 14:30	1.5	27.8	0.0	7.2	13.0	0.0	2/06/2025 14:30	1.3	17.4	0.0	7.0	12.9	0.0	8.0
2/06/2025 14:45	4.8	110.2	0.1	7.5	11.9	0.0	2/06/2025 14:45	1.3	16.5	0.0	7.1	12.8	0.0	8.0
2/06/2025 15:00	5.2	114.7	0.1	7.5	11.8	0.0	2/06/2025 15:00	1.4	17.5	0.0	7.0	12.8	0.3	8.3
2/06/2025 15:15	3.8	62.1	0.0	7.5	12.1	0.0	2/06/2025 15:15	1.4	17.5	0.0	7.0	12.8	0.0	8.0
2/06/2025 15:30	2.1	29.4	0.0	7.2	12.8	0.0	2/06/2025 15:30	1.5	17.6	0.0	7.0	12.8	0.0	8.0
2/06/2025 15:45	1.8	27.3	0.0	7.1	12.9	0.0	2/06/2025 15:45	1.5	17.4	0.0	7.1	12.7	0.0	8.0
2/06/2025 16:00	4.5	118.0	0.1	7.3	12.1	0.0	2/06/2025 16:00	1.5	16.4	0.0	7.0	12.7	0.0	8.0
2/06/2025 16:15	5.3	127.5	0.1	7.5	11.8	0.0	2/06/2025 16:15	1.5	17.5	0.0	6.9	12.7	0.0	8.0
2/06/2025 16:30	5.5	129.8	0.1	7.5	11.7	0.0	2/06/2025 16:30	1.6	17.5	0.0	7.1	12.7	1.9	9.9
2/06/2025 16:45	2.8	36.9	0.0	7.3	12.5	0.0	2/06/2025 16:45	1.6	17.7	0.0	7.0	12.7	0.0	8.0
2/06/2025 17:00	2.1	29.0	0.0	7.2	12.8	0.0	2/06/2025 17:00	1.6	17.5	0.0	7.0	12.7	0.0	8.0
2/06/2025 17:15	3.6	100.6	0.0	7.0	12.6	0.0	2/06/2025 17:15	1.6	17.7	0.0	7.0	12.7	0.0	8.0
2/06/2025 17:30	5.4	132.9	0.1	7.5	11.7	0.0	2/06/2025 17:30	1.6	17.6	0.0	7.0	12.7	0.0	8.0
2/06/2025 17:45	5.4	130.2	0.1	7.5	11.7	0.0	2/06/2025 17:45	1.6	17.7	0.0	7.1	12.7	0.0	8.0
2/06/2025 18:00	5.6	133.7	0.1	7.6	11.6	0.0	2/06/2025 18:00	1.6	17.4	0.0	7.0	12.7	0.0	8.0
2/06/2025 18:15	5.0	100.2	0.0	7.6	11.6	0.0	2/06/2025 18:15	1.6	16.0	0.0	7.0	12.6	0.0	8.0
2/06/2025 18:30	2.6	33.0	0.0	7.3	12.6	0.0	2/06/2025 18:30	1.6	17.7	0.0	7.0	12.7	0.0	8.0
2/06/2025 18:45	3.6	94.1	0.0	7.1	12.5	0.0	2/06/2025 18:45	1.6	17.4	0.0	7.0	12.7	0.0	8.0
2/06/2025 19:00	5.5	126.1	0.1	7.5	11.7	0.0	2/06/2025 19:00	1.6	17.7	0.0	7.0	12.6	0.5	8.5
2/06/2025 19:15	5.7	125.1	0.1	7.5	11.6	0.0	2/06/2025 19:15	1.5	17.6	0.0	7.0	12.6	0.0	8.0
2/06/2025 19:30	5.7	124.7	0.1	7.5	11.6	0.0	2/06/2025 19:30	1.5	17.7	0.0	7.0	12.6	0.2	8.2
2/06/2025 19:45	3.1	41.3	0.0	7.4	12.4	0.0	2/06/2025 19:45	1.5	17.4	0.0	7.0	12.6	0.0	8.0
2/06/2025 20:00	2.0	30.2	0.0	7.1	12.8	0.0	2/06/2025 20:00	1.5	17.7	0.0	7.0	12.7	0.0	8.0
2/06/2025 20:15	4.2	115.3	0.1	7.2	12.2	0.0	2/06/2025 20:15	1.4	17.4	0.0	7.0	12.7	1.0	9.0
2/06/2025 20:30	4.9	114.2	0.1	7.5	11.9	0.0	2/06/2025 20:30	1.4	17.7	0.0	7.0	12.7	0.0	8.0
2/06/2025 20:45	3.6	56.9	0.0	7.5	12.1	0.0	2/06/2025 20:45	1.4	17.3	0.0	7.0	12.6	0.1	8.1
2/06/2025 21:00	2.0	30.6	0.0	7.3	12.8	0.0	2/06/2025 21:00	1.4	15.8	0.0	7.0	12.7	0.0	8.0
2/06/2025 21:15	4.4	117.5	0.1	7.3	12.1	0.0	2/06/2025 21:15	1.4	17.5	0.0	7.0	12.7	0.0	8.0
2/06/2025 21:30	5.5	121.5	0.1	7.5	11.7	0.0	2/06/2025 21:30	1.3	16.6	0.0	7.0	12.7	0.0	8.0
2/06/2025 21:45	5.6	120.5	0.1	7.6	11.6	0.0	2/06/2025 21:45	1.3	17.7	0.0	7.1	12.7	2.0	10.0
2/06/2025 22:00	5.5	121.2	0.1	7.5	11.7	0.0	2/06/2025 22:00	1.3	17.6	0.0	7.0	12.7	0.0	8.0
2/06/2025 22:15	3.5	49.9	0.0	7.5	12.2	0.0	2/06/2025 22:15	1.3	17.4	0.0	7.0	12.7	0.0	8.0
2/06/2025 22:30	2.0	30.8	0.0	7.3	12.8	0.0	2/06/2025 22:30	1.2	17.7	0.0	7.0	12.7	0.0	8.0
2/06/2025 22:45	1.6	28.4	0.0	7.1	13.0	0.0	2/06/2025 22:45	1.2	17.5	0.0	7.0	12.7	0.2	8.2
2/06/2025 23:00	4.8	121.8	0.1	7.4	11.9	0.0	2/06/2025 23:00	1.2	17.6	0.0	7.0	12.7	0.0	8.0
2/06/2025 23:15	4.9	110.4	0.1	7.5	11.8	0.0	2/06/2025 23:15	1.2	17.2	0.0	7.0	12.7	0.0	8.0
2/06/2025 23:30	5.4	123.8	0.1	7.5	11.7	0.0	2/06/2025 23:30	1.1	16.5	0.0	7.0	12.7	0.8	8.8
2/06/2025 23:45	3.4	50.7	0.0	7.5	12.2	0.0	2/06/2025 23:45	1.1	17.7	0.0	7.0	12.8	0.0	8.0
2/07/2025 0:00	1.9	30.7	0.0	7.3	12.8	0.0	2/07/2025 0:00	1.1	17.5	0.0	6.9	12.8	0.0	8.0
2/07/2025 0:15	4.3	119.5	0.1	7.3	12.1	0.0	2/07/2025 0:15	1.1	17.6	0.0	7.0	12.8	0.0	8.0
2/07/2025 0:30	5.3	121.1	0.1	7.5	11.7	0.0	2/07/2025 0:30	1.1	17.5	0.0	7.0	12.8	0.0	8.0
2/07/2025 0:45	5.4	120.7	0.1	7.6	11.7	0.0	2/07/2025 0:45	1.0	16.4	0.0	7.0	12.8	0.1	8.1
2/07/2025 1:00	4.7	87.3	0.0	7.6	11.8	0.0	2/07/2025 1:00	1.0	15.2	0.0	7.0	12.8	0.0	8.0
2/07/2025 1:15	2.1	32.8	0.0	7.3	12.7	0.0	2/07/2025 1:15	1.0	17.5	0.0	7.0	12.8	0.0	8.0
2/07/2025 1:30	1.5	29.0	0.0	7.2	13.0	0.0	2/07/2025 1:30	1.0	17.5	0.0	7.0	12.8	0.0	8.0
2/07/2025 1:45	4.4	111.5	0.1	7.4	12.1	0.0	2/07/2025 1:45	1.0	17.6	0.0	7.0	12.8	0.0	8.0
2/07/2025 2:00	5.2	118.7	0.1	7.5	11.8	0.0	2/07/2025 2:00	0.9	17.3	0.0	7.0	12.8	0.0	8.0
2/07/2025 2:15	4.8	104.0	0.0	7.6	11.7	0.0	2/07/2025 2:15	0.9	16.3	0.0	7.0	12.8	0.0	8.0
2/07/2025 2:30	2.2	35.1	0.0	7.4	12.6	0.0	2/07/2025 2:30	0.9	17.4	0.0	6.9	12.8	0.0	8.0
2/07/2025 2:45	1.4	29.6	0.0	7.2	13.0	0.0	2/07/2025 2:45	0.9	17.3	0.0	6.9	12.8	0.0	8.0
2/07/2025 3:00	4.1	112.8	0.1	7.3	12.2	0.0	2/07/2025 3:00	0.9	17.4	0.0	7.0	12.8	0.0	8.0
2/07/2025 3:15	5.1	116.3	0.1	7.5	11.8	0.0	2/07/2025 3:15	0.9	17.3	0.0	7.0	12.9	1.5	9.5
2/07/2025 3:30	5.2	116.6	0.1	7.6	11.7	0.0	2/07/2025 3:30	0.8	17.4	0.0	7.0	12.9	0.0	8.0
2/07/2025 3:45	5.0	107.4	0.0	7.6	11.7	0.0	2/07/2025 3:45	0.8	17.2	0.0	7.0	12.8	0.0	8.0
2/07/2025 4:00	2.2	34.9	0.0	7.4	12.7	0.0	2/07/2025 4:00	0.8	17.3	0.0	7.0	12.9	0.0	8.0
2/07/2025 4:15	3.9	97.8	0.0	7.4	12.2	0.0	2/07/2025 4:15	0.8	17.1	0.0	7.0	12.8	0.0	8.0
2/07/2025 4:30	5.1	114.7	0.1	7.5	11.8	0.0	2/07/2025 4:30	0.8	17.2	0.0	6.9	12.9	0.0	8.0
2/07/2025 4:45	5.3	114.4	0.1	7.6	11.7	0.0	2/07/2025 4:45	0.8	17.1	0.0	7.0	12.9	0.0	8.0
2/07/2025 5:00	3.5	54.6	0.0	7.6	12.1	0.0	2/07/2025 5:00	0.8	17.3	0.0	7.0	12.9	0.0	8.0
2/07/2025 5:15	1.7	30.8	0.0	7.3	12.9	0.0	2/07/2025 5:15	0.8	17.1	0.0	7.0	12.9	0.3	8.3
2/07/2025 5:30	1.2	28.0	0.0	7.2	13.1	0.0	2/07/2025 5:30	0.8	16.2	0.0	7.0	12.9	0.0	8.0
2/07/2025 5:45	1.0	27.6	0.0	7.1	13.2	0.0	2/07/2025 5:45	0.7	17.0	0.0	7.0	12.9	0.0	8.0
2/07/2025 6:00	4.5	110.6	0.1	7.4	12.0	0.0	2/07/2025 6:00	0.7	17.1	0.0	7.0	12.9	0.0	8.0
2/07/2025 6:15	5.2	112.0	0.1	7.5	11.8	0.0	2/07/2025 6:15	0.7	16.9	0.0	7.0	12.9	0.0	8.0
2/07/2025 6:30	5.3	111.7	0.1	7.5	11.7	0.0	2/07/2025 6:30	0.7	17.1	0.0	7.0	12.9	0.0	8.0
2/07/2025 6:45	5.3	111.6	0.1	7.5	11.7	0.0	2/07/2025 6:45	0.7	16.9	0.0	7.0	12.9	0.0	8.0
2/07/2025 7:00	4.2	77.5	0.0	7.5	11.9	0.0	2/07/2025 7:00	0.7	15.9	0.0	7.0	12.9	0.5	8.5
2/07/2025 7:15	1.7	31.2	0.0	7.3	12.9	0.0	2/07/2025 7:15	0.6	17.0	0.0	7.0	12.9	0.0	8.0
2/07/2025 7:30	4.2	103.7	0.0	7.3	12.1	0.0	2/07/2025 7:30	0.6	16.9	0.0	7.0	12.9	0.0	8.0
2/07/2025 7:45	5.0	111.0	0.1	7.5	11.8	0.0	2/07/2025 7:45	0.6	15.9	0.0	7.0	13.0	0.0	8.0
2/07/2025 8:00	5.2	112.1	0.1	7.5	11.7	0.0	2/07/2025 8:00	0.6	14.7	0.0	7.1	13.0	0.0	8.0
2/07/2025 8:15	4.3	79.9	0.0	7.6	11.9	0.0	2/07/2025 8:15	0.6	16.8	0.0	7.0	13.0	0.0	8.0
2/07/2025 8:30	1.9	33.2	0.0	7.4	12.8	0.0	2/07/2025 8:30	0.6	16.9	0.0	7.0	13.0	0.0	8.0
2/07/2025 8:45	1.7	52.2	0.0	7.0	13.1	0.0	2/07/2025 8:45	0.6	16.8	0.0	7.0	13.0	0.0	8.0
2/07/2025 9:00	4.7	110.5	0.1	7.5	11.9	0.0	2/07/2025 9:00	0.5	16.8	0.0	7.0	13.0	0.0	8.0
2/07/2025 9:15	5.0	111.5	0.1	7.5	11.8	0.0	2/07/2025 9:15	0.5	15.0	0.0	6.9	13.0	0.0	8.0
2/07/2025 9:30	5.1	111.9	0.1	7.5	11.8	0.0	2/07/2025 9:30	0.5	15.1	0.0	7.0	13.0	0.0	8.0
2/07/2025 9:45	4.2	82.5	0.0	7.6	11.9	0.0	2/07/2025 9:45	0.5	16.7	0.0	6.9	13.0	0.0	8.0
2/07/2025 10:00	1.7	31.8	0.0	7.4	12.9	0.0	2/07/2025 10:00	0.5	16.6	0.0	7.0	13.0	0.0	8.0
2/07/2025 10:15	1.0	28.2	0.0	7.1	13.2	0.0	2/07/2025 10:15	0.5	16.5	0.0	7.0	13.0	0.0	8.0
2/07/2025 10:30	4.0	91.5	0.0	7.5	12.0	0.0	2/07/2025 10:30	0.5	15.0	0.0	7.0	13.0	0.0	8.0
2/07/2025 10:45	1.6	32.7	0.0	7.4	13.0	0.0	2/07/2025 10:45	0.6	16.5	0.0	6.9	13.1	0.0	8.0
2/07/2025 11:00	4.6	106.5	0.0	7.5	11.9	0.0	2/07/2025 11:00	0.6	16.4	0.0	7.0	13.1	0.0	8.0
2/07/2025 11:15	4.9	109.0	0.0	7.5	11.9	0.0	2/07/2025 11:15	0.7	15.2	0.0	7.0	13.0	0.0	8.0
2/07/2025 11:30	3.5	61.7	0.0	7.6	12.1	0.0	2/07/2025 11:30	0.8	16.6	0.0	7.0	13.1	0.0	8.0
2/07/2025 11:45	1.7	30.4	0.0	7.3	12.9	0.0	2/07/2025 11:45	0.8	14.8	0.0	7.0	13.0	0.0	8.0
2/07/2025 12:00	3.1	91.8	0.0	7.1	12.7	0.0	2/07/2025 12:00	0.9	16.5	0.0	6.9	13.0	0.0	8.0
2/07/2025 12:15	5.0	111.8	0.1	7.5	11.8	0.0	2/07/2025 12:15	0.9	16.7	0.0	7.0	13.0	0.0	8.0
2/07/2025 12:30	5.3	113.6	0.1	7.5	11.8	0.0	2/07/2025 12:30	1.0	16.6	0.0	6.9	13.0	0.0	8.0
2/07/2025 12:45	5.4	115.2	0.1	7.5	11.7	0.0	2/07/2025 12:45	1.1	16.6	0.0	7.0	12.9	0.0	8.0
2/07/2025 13:00	3.0	40.2	0.0	7.5	12.5	0.0	2/07/2025 13:00	1.1	16.6	0.0	7.0	12.9	0.0	8.0
2/07/2025 13:15	1.9	29.7	0.0	7.2	12.9	0.0	2/07/2025 13:15	1.2	15.1	0.0	7.0	12.9	0.0	8.0

2/07/2025 13:30	4.8	113.3	0.1	7.4	12.0	0.0	2/07/2025 13:30	1.2	16.5	0.0	6.9	12.9	0.0	8.0
2/07/2025 13:45	4.8	99.3	0.0	7.5	11.9	0.0	2/07/2025 13:45	1.2	16.5	0.0	7.0	12.9	0.0	8.0
2/07/2025 14:00	5.4	113.1	0.1	7.6	11.7	0.0	2/07/2025 14:00	1.3	16.7	0.0	7.0	12.9	0.0	8.0
2/07/2025 14:15	2.7	34.4	0.0	7.3	12.5	0.0	2/07/2025 14:15	1.3	16.7	0.0	7.0	12.8	0.0	8.0
2/07/2025 14:30	4.2	100.7	0.0	7.2	12.3	0.0	2/07/2025 14:30	1.4	16.6	0.0	7.0	12.8	0.0	8.0
2/07/2025 14:45	5.7	119.4	0.1	7.5	11.6	0.0	2/07/2025 14:45	1.5	16.9	0.0	7.0	12.8	0.0	8.0
2/07/2025 15:00	5.9	120.3	0.1	7.6	11.6	0.0	2/07/2025 15:00	1.5	16.8	0.0	7.0	12.8	0.0	8.0
2/07/2025 15:15	4.1	57.2	0.0	7.5	12.0	0.0	2/07/2025 15:15	1.5	16.9	0.0	7.0	12.8	0.0	8.0
2/07/2025 15:30	2.5	29.7	0.0	7.3	12.7	0.0	2/07/2025 15:30	1.5	16.8	0.0	7.0	12.8	0.0	8.0
2/07/2025 15:45	5.7	118.1	0.1	7.5	11.7	0.0	2/07/2025 15:45	1.6	15.2	0.0	7.0	12.8	0.0	8.0
2/07/2025 16:00	5.5	104.1	0.0	7.6	11.7	0.0	2/07/2025 16:00	1.5	16.9	0.0	7.0	12.8	0.0	8.0
2/07/2025 16:15	3.2	36.3	0.0	7.4	12.4	0.0	2/07/2025 16:15	1.5	16.9	0.0	7.0	12.8	0.0	8.0
2/07/2025 16:30	2.3	28.8	0.0	7.2	12.8	0.0	2/07/2025 16:30	1.5	16.2	0.0	7.0	12.8	0.3	8.3
2/07/2025 16:45	5.8	116.9	0.1	7.5	11.6	0.0	2/07/2025 16:45	1.5	17.0	0.0	7.0	12.8	0.0	8.0
2/07/2025 17:00	6.1	119.0	0.1	7.6	11.5	0.0	2/07/2025 17:00	1.5	17.0	0.0	7.0	12.8	0.0	8.0
2/07/2025 17:15	6.2	119.4	0.1	7.6	11.5	0.0	2/07/2025 17:15	1.6	17.0	0.0	7.0	12.7	0.2	8.2
2/07/2025 17:30	4.4	59.3	0.0	7.5	11.9	0.0	2/07/2025 17:30	1.5	16.2	0.0	7.0	12.7	0.0	8.0
2/07/2025 17:45	2.6	31.0	0.0	7.2	12.6	0.0	2/07/2025 17:45	1.5	17.4	0.0	7.0	12.8	0.3	8.3
2/07/2025 18:00	3.8	89.4	0.0	7.1	12.5	0.0	2/07/2025 18:00	1.5	17.3	0.0	7.0	12.7	0.0	8.0
2/07/2025 18:15	5.3	103.8	0.0	7.5	11.8	0.0	2/07/2025 18:15	1.5	17.4	0.0	7.0	12.7	1.0	9.0
2/07/2025 18:30	6.2	122.6	0.1	7.5	11.5	0.0	2/07/2025 18:30	1.5	17.1	0.0	7.0	12.7	0.0	8.0
2/07/2025 18:45	6.0	110.2	0.1	7.6	11.5	0.0	2/07/2025 18:45	1.5	15.6	0.0	7.0	12.7	0.0	8.0
2/07/2025 19:00	3.0	35.4	0.0	7.4	12.5	0.0	2/07/2025 19:00	1.5	17.2	0.0	7.0	12.7	0.0	8.0
2/07/2025 19:15	2.1	29.2	0.0	7.2	12.8	0.0	2/07/2025 19:15	1.5	15.6	0.0	7.0	12.7	0.0	8.0
2/07/2025 19:30	6.0	122.9	0.1	7.5	11.6	0.0	2/07/2025 19:30	1.5	17.4	0.0	6.9	12.7	0.0	8.0
2/07/2025 19:45	6.2	122.6	0.1	7.5	11.5	0.0	2/07/2025 19:45	1.5	17.3	0.0	7.0	12.7	0.0	8.0
2/07/2025 20:00	6.3	121.6	0.1	7.5	11.5	0.0	2/07/2025 20:00	1.5	15.6	0.0	7.0	12.7	0.0	8.0
2/07/2025 20:15	3.5	43.1	0.0	7.5	12.2	0.0	2/07/2025 20:15	1.5	17.2	0.0	6.9	12.7	0.0	8.0
2/07/2025 20:30	2.3	30.7	0.0	7.2	12.8	0.0	2/07/2025 20:30	1.5	17.1	0.0	7.0	12.7	0.0	8.0
2/07/2025 20:45	5.3	117.3	0.1	7.4	11.8	0.0	2/07/2025 20:45	1.5	17.2	0.0	7.0	12.7	0.0	8.0
2/07/2025 21:00	6.2	117.8	0.1	7.5	11.5	0.0	2/07/2025 21:00	1.6	16.9	0.0	7.0	12.7	0.0	8.0
2/07/2025 21:15	6.3	116.7	0.1	7.5	11.5	0.0	2/07/2025 21:15	1.6	17.2	0.0	7.0	12.7	0.0	8.0
2/07/2025 21:30	6.3	115.5	0.1	7.5	11.5	0.0	2/07/2025 21:30	1.6	16.7	0.0	7.0	12.7	0.0	8.0
2/07/2025 21:45	5.9	101.4	0.0	7.5	11.5	0.0	2/07/2025 21:45	1.6	15.9	0.0	7.0	12.7	0.1	8.1
2/07/2025 22:00	3.2	35.8	0.0	7.4	12.4	0.0	2/07/2025 22:00	1.6	17.0	0.0	6.9	12.7	0.3	8.3
2/07/2025 22:15	5.0	95.8	0.0	7.4	11.9	0.0	2/07/2025 22:15	1.6	17.1	0.0	7.0	12.7	0.0	8.0
2/07/2025 22:30	6.2	116.6	0.1	7.5	11.5	0.0	2/07/2025 22:30	1.6	17.0	0.0	7.0	12.7	0.0	8.0
2/07/2025 22:45	6.3	118.5	0.1	7.5	11.5	0.0	2/07/2025 22:45	1.7	16.9	0.0	7.0	12.7	0.0	8.0
2/07/2025 23:00	6.3	120.1	0.1	7.5	11.5	0.0	2/07/2025 23:00	1.7	16.9	0.0	7.0	12.7	0.0	8.0
2/07/2025 23:15	6.4	121.2	0.1	7.5	11.5	6.1	2/07/2025 23:15	1.6	16.8	0.0	7.0	12.7	0.0	8.0
2/07/2025 23:30	6.3	122.1	0.1	7.6	11.5	0.0	2/07/2025 23:30	1.6	16.9	0.0	7.0	12.7	0.0	8.0
2/07/2025 23:45	5.7	100.7	0.0	7.6	11.6	0.0	2/07/2025 23:45	1.7	16.6	0.0	7.0	12.7	0.0	8.0
2/08/2025 0:00	2.8	35.7	0.0	7.3	12.6	0.0	2/08/2025 0:00	1.7	16.8	0.0	7.0	12.7	0.0	8.0
2/08/2025 0:15	6.1	123.5	0.1	7.5	11.6	0.0	2/08/2025 0:15	1.7	16.7	0.0	7.0	12.7	0.0	8.0
2/08/2025 0:30	5.6	105.8	0.0	7.5	11.7	0.0	2/08/2025 0:30	1.7	16.7	0.0	7.0	12.7	0.2	8.2
2/08/2025 0:45	6.0	117.3	0.1	7.6	11.5	0.0	2/08/2025 0:45	1.7	16.6	0.0	7.0	12.7	0.0	8.0
2/08/2025 1:00	3.1	37.2	0.0	7.4	12.5	0.0	2/08/2025 1:00	1.7	15.1	0.0	7.0	12.7	0.0	8.0
2/08/2025 1:15	5.4	119.7	0.1	7.4	11.9	0.0	2/08/2025 1:15	1.7	16.6	0.0	6.9	12.7	0.0	8.0
2/08/2025 1:30	5.6	112.9	0.1	7.5	11.8	0.0	2/08/2025 1:30	1.7	16.5	0.0	7.0	12.7	0.0	8.0
2/08/2025 1:45	6.2	120.9	0.1	7.5	11.5	0.0	2/08/2025 1:45	1.7	15.7	0.0	7.0	12.7	0.0	8.0
2/08/2025 2:00	6.3	120.6	0.1	7.5	11.5	0.0	2/08/2025 2:00	1.7	16.6	0.0	6.9	12.7	0.1	8.1
2/08/2025 2:15	6.3	120.3	0.1	7.6	11.5	0.0	2/08/2025 2:15	1.7	16.5	0.0	7.0	12.7	0.0	8.0
2/08/2025 2:30	6.3	120.3	0.1	7.6	11.5	0.0	2/08/2025 2:30	1.7	15.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 2:45	6.4	120.8	0.1	7.6	11.5	0.0	2/08/2025 2:45	1.7	16.5	0.0	6.9	12.7	0.0	8.0
2/08/2025 3:00	6.4	122.8	0.1	7.6	11.5	0.0	2/08/2025 3:00	1.7	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 3:15	6.5	125.8	0.1	7.6	11.4	0.0	2/08/2025 3:15	1.7	16.6	0.0	7.0	12.7	0.0	8.0
2/08/2025 3:30	6.6	127.5	0.1	7.6	11.4	0.0	2/08/2025 3:30	1.7	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 3:45	6.1	116.2	0.1	7.5	11.6	0.0	2/08/2025 3:45	1.7	16.5	0.0	7.0	12.7	2.0	10.0
2/08/2025 4:00	6.7	125.7	0.1	7.6	11.4	0.0	2/08/2025 4:00	1.7	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 4:15	6.8	126.1	0.1	7.6	11.3	0.0	2/08/2025 4:15	1.7	14.9	0.0	7.0	12.7	0.0	8.0
2/08/2025 4:30	7.0	129.8	0.1	7.6	11.3	0.6	2/08/2025 4:30	1.7	16.4	0.0	6.9	12.7	0.0	8.0
2/08/2025 4:45	7.1	130.0	0.1	7.6	11.3	0.0	2/08/2025 4:45	1.7	16.2	0.0	7.0	12.7	0.0	8.0
2/08/2025 5:00	6.6	117.3	0.1	7.6	11.4	0.0	2/08/2025 5:00	1.7	16.5	0.0	7.0	12.7	0.0	8.0
2/08/2025 5:15	7.1	127.8	0.1	7.6	11.3	0.0	2/08/2025 5:15	1.6	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 5:30	7.1	125.5	0.1	7.6	11.3	0.0	2/08/2025 5:30	1.6	15.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 5:45	5.9	112.2	0.1	7.4	11.8	0.0	2/08/2025 5:45	1.6	16.4	0.0	6.9	12.7	0.0	8.0
2/08/2025 6:00	4.2	54.7	0.0	7.6	12.0	0.0	2/08/2025 6:00	1.6	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 6:15	3.2		0.0	7.2	12.6	0.0	2/08/2025 6:15	1.6	15.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 6:30	6.6			7.6	11.4	0.0	2/08/2025 6:30	1.6	16.3	0.0	6.9	12.7	0.0	8.0
2/08/2025 6:45	6.7		0.1	7.6	11.4	0.0	2/08/2025 6:45	1.7	16.5	0.0	7.0	12.7	0.0	8.0
2/08/2025 7:00	6.8		0.1	7.6	11.4	0.0	2/08/2025 7:00	1.6	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 7:15	6.7		0.1	7.6	11.4	0.0	2/08/2025 7:15	1.6	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 7:30	6.8		0.1	7.6	11.3	0.0	2/08/2025 7:30	1.7	16.5	0.0	6.9	12.7	0.2	8.2
2/08/2025 7:45	6.9			7.6	11.4	0.0	2/08/2025 7:45	1.7	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 8:00	6.8			7.6	11.4	0.0	2/08/2025 8:00	1.7	16.5	0.0	7.0	12.7	0.0	8.0
2/08/2025 8:15	6.8			7.6	11.4	0.0	2/08/2025 8:15	1.7	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 8:30	6.8			7.6	11.4	0.0	2/08/2025 8:30	1.7	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 8:45	6.4			7.6	11.5	0.0	2/08/2025 8:45	1.7	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 9:00	6.8			7.6	11.4	0.0	2/08/2025 9:00	1.7	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 9:15	5.6			7.6	11.6	0.0	2/08/2025 9:15	1.7	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 9:30	3.1	36.8	0.0	7.4	12.5	0.0	2/08/2025 9:30	1.7	16.4	0.0	7.0	12.7	0.0	8.0
2/08/2025 9:45	5.3			7.5	11.8	0.0	2/08/2025 9:45	1.7	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 10:00	2.8		0.0	7.3	12.6	0.0	2/08/2025 10:00	1.7	15.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 10:15	6.2		0.1	7.5	11.6	0.0	2/08/2025 10:15	1.7	16.2	0.0	7.0	12.7	0.0	8.0
2/08/2025 10:30	6.5			7.6	11.5	0.0	2/08/2025 10:30	1.7	14.8	0.0	7.0	12.7	0.2	8.2
2/08/2025 10:45	4.7		0.0	7.5	11.9	0.0	2/08/2025 10:45	1.7	16.2	0.0	6.9	12.7	0.0	8.0
2/08/2025 11:00	3.6			7.2	12.6	0.0	2/08/2025 11:00	1.7	16.2	0.0	7.0	12.8	0.0	8.0
2/08/2025 11:15	5.1	100.5	0.0	7.5	11.8	0.0	2/08/2025 11:15	1.8	15.2	0.0	7.0	12.7	0.0	8.0
2/08/2025 11:30	5.3	112.9	0.1	7.4	12.0	0.0	2/08/2025 11:30	1.8	16.1	0.0	6.9	12.7	0.0	8.0
2/08/2025 11:45	6.3	128.9	0.1	7.5	11.6	0.0	2/08/2025 11:45	1.8	16.0	0.0	7.0	12.7	0.0	8.0
2/08/2025 12:00	6.7		0.1	7.6	11.4	0.0	2/08/2025 12:00	1.8	14.9	0.0	7.0	12.7	0.0	8.0
2/08/2025 12:15	7.4	134.7	0.1	7.6	11.2	0.0	2/08/2025 12:15	1.8	16.1	0.0	6.9	12.7	0.0	8.0
2/08/2025 12:30	6.8	103.4	0.0	7.6	11.3	0.0	2/08/2025 12:30	1.9	15.9	0.0	7.0	12.7	0.7	8.7
2/08/2025 12:45	6.4	127.1	0.1	7.4	11.6	0.0	2/08/2025 12:45	1.9	16.2	0.0	7.0	12.7	0.0	8.0
2/08/2025 13:00	7.3	131.6	0.1	7.6	11.3	0.0	2/08/2025 13:00	2.0	16.1	0.0	7.1	12.7	1.2	9.2
2/08/2025 13:15	4.6	45.9	0.0	7.5	12.0	0.0	2/08/2025 13:15	2.1	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 13:30	6.8	127.1	0.1	7.5	11.4	0.0	2/08/2025 13:30	2.2	16.1	0.0	7.0	12.7	0.0	8.0
2/08/2025 13:45	7.1	121.1	0.1	7.6	11.3	0.0	2/08/2025 13:45	2.2	16.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 14:00	7.3	126.7	0.1	7.6	11.3	0.0	2/08/2025 14:00	2.3	16.0	0.0	7.1	12.6	0.0	8.0
2/08/2025 14:15	7.4	127.3	0.1	7.6	11.2	0.6	2/08/2025 14:15	2.3	16.3	0.0	7.0	12.6	0.0	8.0
2/08/2025 14:30	7.3	126.7	0.1	7.6	11.2	0.0	2/08/2025 14:30	2.1	16.3	0.0	7.0	12.6	0.0	8.0
2/08/2025 14:45	7.3	125.8	0.1	7.6	11.2	0.0	2/08/2025 14:45	2.1	16.5	0.0	7.0	12.6	0.0	8.0
2/08/2025 15:00	7.3	124.6	0.1	7.6	11.3	0.0	2/08/2025 15:00	2.2	16.4	0.0	7.1	12.6	0.0	8.0
2/08/2025 15:15	7.2	123.6	0.1	7.6	11.3	0.0	2/08/2025 15:15	2.2	16.6	0.0	7.0	12.6	0.0	8.0
2/08/2025 15:30	6.8	112.4	0.1	7.5	11.4	0.0	2/08/2025 15:30	2.3	16.4	0.0	7.0	12.6	0.0	8.0
2/08/2025 15:45	7.0	120.6	0.1	7.6	11.3	0.0	2/08/2025 15:45	2.2	16.8	0.0	7.0	12.6	0.0	8.0
2/08/2025 16:00	7.0	120.0	0.1	7.6	11.3	0.0	2/08/2025 16:00	2.2	16.9	0.0	7.0	12.6	0.0	8.0
2/08/2025 16:15	6.9	120.6	0.1	7.6	11.4	0.0	2/08/2025 16:15	2.2	16.1	0.0	7.0	12.6	0.0	8.0
2/08/2025 16:30	6.9	121.2	0.1	7.6	11.4	0.0	2/08/2025 16:30	2.3	17.6	0.0	7.0	12.6	1.5	9.5
2/08/2025 16:45	5.6	74.5	0.0	7.6	11.6	0.0	2/08/2025 16:45	2.3	18.2	0.0	7.1	12.6	0.0	8.0
2/08/2025 17:00	4.4	87.8	0.0	7.2	12.4	0.0	2/08/2025 17:00	2.2	18.4	0.0	7.1	12.6	0.0	8.0
2/08/2025 17:15	6.0	98.3	0.0	7.6	11.5	0.0	2/08/2025 17:15	2.2	18.3	0.0	7.1	12.6	0.0	8.0
2/08/2025 17:30	6.1	119.3	0.1	7.4	11.6	0.0	2/08/2025 17:30	2.2	17.5	0.0	7.0	12.6	0.9	8.9
2/08/2025 17:45	4.6	52.2	0.0	7.5	11.9	0.0	2/08/2025 17:45	2.1	18.5	0.0	7.1	12.6	0.0	8.0
2/08/2025 18:00	6.5	120.2	0.1	7.5	11.5	0.0	2/08/2025 18:00	2.1	18.6	0.0	7.0	12.6	0.0	8.0
2/08/2025 18:15	6.2	108.3	0.0	7.5	11.6	0.0	2/08/2025 18:15	2.1	18.6	0.0	7.0	12.6	0.0	8.0
2/08/2025 18:30	6.5	118.1	0.1	7.5	11.5	0.0	2/08/2025 18:30	2.0	18.6	0.0	7.1	12.6	0.0	8.0
2/08/2025 18:45	6.4	112.5	0.1	7.5	11.5	0.0	2/08/2025 18:45	2.0	18.5	0.0	7.1	12.6	0.0	8.0
2/08/2025 19:00	6.3	114.7	0.1	7.5	11.6	0.0	2/08/2025 19:00	2.0	18.6	0.0	7.0	12.6	0.0	8.0
2/08/2025 19:15	6.5	116.4	0.1	7.5	11.5	0.0	2/08/2025 19:15	2.0	18.3	0.0	7.1	12.6	0.0	8.0
2/08/2025 19:30	6.3	112.2	0.1	7.5	11.5	0.0	2/08/2025 19:30	2.0	18.4	0.0	7.0	12.6	2.9	10.9
2/08/2025 19:45	6.8	128.0	0.1	7.6	11.4	0.0	2/08/2025 19:45	2.0	18.3	0.0	7.0	12.6	0.0	8.0
2/08/2025 20:00	7.0	127.4	0.1	7.6	11.4	0.0	2/08/2025 20:00	1.9	18.0	0.0	6.9	12.7	0.0	8.0
2/08/2025 20:15	6.9	126.8	0.1	7.6	11.4	0.0	2/08/2025 20:15	1.9	18.0	0.0	7.0	12.7	0.0	8.0
2/08/2025 20:30	6.7	120.5	0.1	7.5	11.4	0.0	2/08/2025 20:30	1.9	17.7	0.0	7.1	12.7	0.0	8.0
2/08/2025 20:45	4.0	46.0	0.0	7.5	12.2	0.0	2/08/2025 20:45	1.9	16.5	0.0	7.0	12.7	0.0	8.0
2/08/2025 21:00	6.6	122.1	0.1	7.5	11.5	0.0	2/08/2025 21:00	1.9	17.4	0.0	7.0	12.7	0.1	8.1
2/08/2025 21:15	6.7	121.5	0.1	7.6	11.4	0.0	2/08/2025 21:15	1.9	17.6	0.0	7.0	12.7	0.0	8.0
2/08/2025 21:30	6.7	120.6	0.1	7.6	11.5	0.0	2/08/2025 21:30	1.9	15.8	0.0	7.0	12.7	0.0	8.0
2/08/2025 21:45	5.5	79.7	0.0	7.5	11.6	0.0	2/08/2025 21:45	1.9	17.3	0.0	6.9	12.7	0.0	8.0
2/08/2025 22:00	4.3	85.0	0.0	7.2	12.4	0.0	2/08/2025 22:00	1.9	17.1	0.0	7.0	12.6	0.0	8.0
2/08/2025 22:15	6.4	119.6	0.1	7.5	11.5	0.0	2/08/2025 22:15	1.9	17.3	0.0	7.0	12.7	0.0	8.0
2/08/2025 22:30	5.9	107.3	0.0	7.5	11.7	0.0	2/08/2025 22:30	1.9	17.0	0.0	7.0	12.7	0.0	8.0
2/08/2025 22:45	6.3	117.6	0.1	7.5	11.6	0.0	2/08/2025 22:45	1.9	17.2	0.0	7.0	12.7	0.0	8.0
2/08/2025 23:00	6.3	117.1	0.1	7.5	11.6	0.0	2/08/2025 23:00	1.9	16.9	0.0	7.0	12.7	0.0	8.0
2/08/2025 23:15	6.6	128.9	0.1	7.5	11.5	1.7	2/08/2025 23:15	1.8	17.0	0.0	7.0	12.7	0.0	8.0
2/08/2025 23:30	7.0	130.5	0.1	7.5	11.4	0.0	2/08/2025 23:30	1.8	16.8	0.0	7.0	12.7	0.0	8.0
2/08/2025 23:45	6.7	120.5	0.1	7.5	11.5	0.0	2/08/2025 23:45	1.8	16.9	0.0	7.0	12.7	0.0	8.0
2/09/2025 0:00	7.0	129.9	0.1	7.5	11.4	0.0	2/09/2025 0:00	1.8	16.7	0.0	7.0	12.7	0.0	8.0
2/09/2025 0:15	7.1	129.2	0.1	7.5	11.4	0.0	2/09/2025 0:15	1.8	16.7	0.0	7.0	12.7	0.0	8.0
2/09/2025 0:30	7.0	127.7	0.1	7.5	11.4	0.0	2/09/2025 0:30	1.8	16.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 0:45	6.9	124.6	0.1	7.5	11.4	0.0	2/09/2025 0:45	1.8	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 1:00	6.4	113.5	0.1	7.5	11.5	0.0	2/09/2025 1:00	1.8	16.3	0.0	7.0	12.7	0.0	8.0
2/09/2025 1:15	5.5	85.2	0.0	7.5	11.7	0.0	2/09/2025 1:15	1.8	16.5	0.0	7.0	12.7	0.0	8.0
2/09/2025 1:30	5.9	108.2	0.0	7.4	11.6	0.0	2/09/2025 1:30	1.9	16.4	0.0	7.0	12.7	0.0	8.0
2/09/2025 1:45	6.0	121.5	0.1	7.3	11.8	0.0	2/09/2025 1:45	1.9	16.4	0.0	7.0	12.7	0.0	8.0
2/09/2025 2:00	6.4	113.9	0.1	7.5	11.5	0.0	2/09/2025 2:00	1.9	16.3	0.0	7.0	12.7	0.0	8.0
2/09/2025 2:15	6.4	116.0	0.1	7.5	11.6	0.0	2/09/2025 2:15	1.9	16.4	0.0	7.0	12.7	0.0	8.0

2/09/2025 2:30	6.3	112.0	0.1	7.5	11.6	0.0	2/09/2025 2:30	1.9	16.1	0.0	7.0	12.7	0.0	8.0
2/09/2025 2:45	5.9	102.4	0.0	7.5	11.7	0.0	2/09/2025 2:45	1.8	16.3	0.0	7.0	12.7	0.0	8.0
2/09/2025 3:00	6.6	125.0	0.1	7.5	11.5	0.0	2/09/2025 3:00	1.8	16.2	0.0	6.9	12.7	0.0	8.0
2/09/2025 3:15	6.9	126.2	0.1	7.6	11.4	0.0	2/09/2025 3:15	1.8	16.3	0.0	7.0	12.7	0.0	8.0
2/09/2025 3:30	7.0	126.0	0.1	7.6	11.4	0.0	2/09/2025 3:30	1.8	16.1	0.0	7.0	12.7	0.0	8.0
2/09/2025 3:45	6.9	124.5	0.1	7.6	11.4	0.0	2/09/2025 3:45	1.8	16.2	0.0	7.0	12.7	0.6	8.6
2/09/2025 4:00	6.8	120.5	0.1	7.5	11.5	0.0	2/09/2025 4:00	1.8	16.1	0.0	7.0	12.7	0.1	8.1
2/09/2025 4:15	6.2	108.2	0.0	7.5	11.6	11.9	2/09/2025 4:15	1.8	16.2	0.0	6.9	12.7	0.0	8.0
2/09/2025 4:30	6.5	123.7	0.1	7.5	11.6	0.0	2/09/2025 4:30	1.8	15.9	0.0	7.0	12.7	0.0	8.0
2/09/2025 4:45	3.9	44.3	0.0	7.5	12.3	0.0	2/09/2025 4:45	1.8	16.1	0.0	7.0	12.7	0.0	8.0
2/09/2025 5:00	6.3	126.9	0.1	7.5	11.6	0.0	2/09/2025 5:00	1.8	15.8	0.0	7.0	12.7	0.0	8.0
2/09/2025 5:15	6.9	128.8	0.1	7.6	11.5	0.0	2/09/2025 5:15	1.8	16.1	0.0	6.9	12.7	0.0	8.0
2/09/2025 5:30	6.9	128.6	0.1	7.6	11.4	0.0	2/09/2025 5:30	1.7	15.8	0.0	7.0	12.8	0.0	8.0
2/09/2025 5:45	6.9	127.7	0.1	7.6	11.4	0.0	2/09/2025 5:45	1.7	16.0	0.0	7.0	12.8	0.0	8.0
2/09/2025 6:00	6.8	125.2	0.1	7.6	11.4	0.0	2/09/2025 6:00	1.7	16.1	0.0	7.0	12.8	0.0	8.0
2/09/2025 6:15	3.9	46.9	0.0	7.5	12.3	0.0	2/09/2025 6:15	1.7	16.0	0.0	7.0	12.8	0.0	8.0
2/09/2025 6:30	6.0	119.0	0.1	7.4	11.7	0.0	2/09/2025 6:30	1.6	15.8	0.0	7.0	12.8	0.0	8.0
2/09/2025 6:45	6.1	119.0	0.1	7.5	11.7	0.0	2/09/2025 6:45	1.6	15.0	0.0	7.0	12.8	0.0	8.0
2/09/2025 7:00	6.5	126.4	0.1	7.5	11.6	0.0	2/09/2025 7:00	1.6	15.8	0.0	7.0	12.8	0.0	8.0
2/09/2025 7:15	6.7	128.4	0.1	7.6	11.5	0.0	2/09/2025 7:15	1.6	15.9	0.0	7.0	12.8	0.0	8.0
2/09/2025 7:30	6.7	126.7	0.1	7.5	11.5	0.0	2/09/2025 7:30	1.5	15.6	0.0	7.0	12.8	0.0	8.0
2/09/2025 7:45	3.9	51.8	0.0	7.5	12.3	0.0	2/09/2025 7:45	1.5	15.8	0.0	7.0	12.8	0.0	8.0
2/09/2025 8:00	6.3	125.9	0.1	7.5	11.6	0.0	2/09/2025 8:00	1.5	15.7	0.0	7.0	12.8	0.2	8.2
2/09/2025 8:15	6.6	125.0	0.1	7.6	11.5	0.0	2/09/2025 8:15	1.4	15.7	0.0	7.0	12.8	0.0	8.0
2/09/2025 8:30	6.4	118.1	0.1	7.5	11.6	0.0	2/09/2025 8:30	1.4	15.6	0.0	7.0	12.9	0.0	8.0
2/09/2025 8:45	5.4	85.1	0.0	7.5	11.8	0.0	2/09/2025 8:45	1.4	15.7	0.0	7.0	12.9	0.0	8.0
2/09/2025 9:00	3.8	67.9	0.0	7.3	12.5	0.0	2/09/2025 9:00	1.4	15.6	0.0	7.0	12.9	0.0	8.0
2/09/2025 9:15	5.5	112.9	0.1	7.4	11.9	0.0	2/09/2025 9:15	1.4	15.7	0.0	7.0	12.9	0.0	8.0
2/09/2025 9:30	6.7	126.6	0.1	7.5	11.5	0.0	2/09/2025 9:30	1.4	15.6	0.0	7.0	12.9	0.0	8.0
2/09/2025 9:45	6.8	129.1	0.1	7.5	11.5	0.0	2/09/2025 9:45	1.4	14.2	0.0	7.0	12.9	0.0	8.0
2/09/2025 10:00	5.3	76.2	0.0	7.6	11.9	0.0	2/09/2025 10:00	1.4	15.5	0.0	6.9	12.9	0.0	8.0
2/09/2025 10:15	3.1	33.7	0.0	7.4	12.7	0.0	2/09/2025 10:15	1.4	15.5	0.0	7.0	12.9	0.0	8.0
2/09/2025 10:30	3.4	74.2	0.0	7.0	12.9	0.0	2/09/2025 10:30	1.4	13.9	0.0	7.0	12.9	0.0	8.0
2/09/2025 10:45	5.8	116.5	0.1	7.5	11.7	0.0	2/09/2025 10:45	1.4	15.5	0.0	7.0	12.9	0.0	8.0
2/09/2025 11:00	6.0	127.4	0.1	7.4	11.7	0.0	2/09/2025 11:00	1.4	15.5	0.0	7.0	12.9	0.0	8.0
2/09/2025 11:15	5.5	104.2	0.0	7.5	11.8	0.0	2/09/2025 11:15	1.5	15.4	0.0	7.0	12.9	0.0	8.0
2/09/2025 11:30	5.4	124.6	0.1	7.3	12.0	0.0	2/09/2025 11:30	1.5	15.5	0.0	7.0	12.9	0.0	8.0
2/09/2025 11:45	6.8	138.8	0.1	7.5	11.5	0.0	2/09/2025 11:45	1.6	15.2	0.0	7.0	12.9	0.0	8.0
2/09/2025 12:00	6.3	113.8	0.1	7.5	11.6	0.0	2/09/2025 12:00	1.6	15.5	0.0	7.0	12.9	0.0	8.0
2/09/2025 12:15	5.6	105.9	0.0	7.4	11.8	0.0	2/09/2025 12:15	1.6	15.4	0.0	7.0	12.9	0.1	8.1
2/09/2025 12:30	6.5	136.9	0.1	7.5	11.6	0.0	2/09/2025 12:30	1.7	13.8	0.0	7.0	12.9	0.0	8.0
2/09/2025 12:45	6.9	144.1	0.1	7.6	11.4	0.0	2/09/2025 12:45	1.7	15.4	0.0	7.0	12.9	0.0	8.0
2/09/2025 13:00	7.0	125.1		7.6	11.3	0.0	2/09/2025 13:00	1.7	15.2	0.0	7.0	12.9	0.0	8.0
2/09/2025 13:15	7.1	136.4	0.1	7.7	11.3	0.0	2/09/2025 13:15	1.7	13.9	0.0	7.0	12.9	0.0	8.0
2/09/2025 13:30	7.0	136.9	0.1	7.6	11.3	0.0	2/09/2025 13:30	1.8	15.4	0.0	6.9	12.9	0.0	8.0
2/09/2025 13:45	6.6	0.1	0.0	7.4	11.4	0.0	2/09/2025 13:45	1.8	15.4	0.0	7.0	12.8	0.0	8.0
2/09/2025 14:00	5.9	103.3	0.0	7.4	11.7	0.0	2/09/2025 14:00	1.8	13.9	0.0	7.0	12.8	0.0	8.0
2/09/2025 14:15	5.3	93.5	0.0	7.4	11.8	0.0	2/09/2025 14:15	1.9	15.6	0.0	6.9	12.8	0.0	8.0
2/09/2025 14:30	6.6	137.0	0.1	7.5	11.5	0.0	2/09/2025 14:30	1.9	15.3	0.0	7.0	12.8	0.0	8.0
2/09/2025 14:45	6.9	137.2	0.1	7.5	11.4	0.0	2/09/2025 14:45	2.0	14.1	0.0	7.0	12.8	0.0	8.0
2/09/2025 15:00	5.9	124.1	0.1	7.5	11.7	0.0	2/09/2025 15:00	2.0	15.5	0.0	7.0	12.8	0.0	8.0
2/09/2025 15:15	6.7	137.0	0.1	7.5	11.5	0.0	2/09/2025 15:15	2.1	15.5	0.0	7.0	12.8	0.0	8.0
2/09/2025 15:30	7.0	136.4	0.1	7.5	11.4	0.0	2/09/2025 15:30	2.1	15.5	0.0	7.1	12.7	0.0	8.0
2/09/2025 15:45	6.9	133.0	0.1	7.5	11.4	0.0	2/09/2025 15:45	2.1	14.0	0.0	7.0	12.7	0.0	8.0
2/09/2025 16:00	6.6	123.5	0.1	7.5	11.5	0.0	2/09/2025 16:00	2.1	15.5	0.0	7.0	12.7	0.0	8.0
2/09/2025 16:15	6.2	111.3	0.1	7.4	11.6	0.0	2/09/2025 16:15	2.1	13.9	0.0	7.0	12.7	0.0	8.0
2/09/2025 16:30	6.6	132.6	0.1	7.5	11.5	0.0	2/09/2025 16:30	2.0	15.5	0.0	6.9	12.7	0.0	8.0
2/09/2025 16:45	6.6	131.9	0.1	7.5	11.5	0.0	2/09/2025 16:45	2.0	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 17:00	6.6	130.9	0.1	7.5	11.5	1.9	2/09/2025 17:00	2.0	14.1	0.0	7.0	12.7	0.0	8.0
2/09/2025 17:15	6.6	123.9	0.1	7.5	11.5	0.0	2/09/2025 17:15	2.0	15.6	0.0	6.9	12.7	0.0	8.0
2/09/2025 17:30	7.0	129.9	0.1	7.5	11.4	1.2	2/09/2025 17:30	2.1	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 17:45	6.9	125.1	0.1	7.5	11.4	1.5	2/09/2025 17:45	2.1	15.7	0.0	7.0	12.7	0.0	8.0
2/09/2025 18:00	4.2	44.9	0.0	7.2	12.2	0.0	2/09/2025 18:00	2.1	15.6	0.0	7.1	12.7	0.0	8.0
2/09/2025 18:15	3.6	40.4	0.0	7.0	12.4	0.0	2/09/2025 18:15	2.1	13.9	0.0	7.0	12.7	0.0	8.0
2/09/2025 18:30	6.4	126.5	0.1	7.4	11.6	0.0	2/09/2025 18:30	2.1	15.5	0.0	7.0	12.7	0.0	8.0
2/09/2025 18:45	7.0	130.3	0.1	7.5	11.4	0.0	2/09/2025 18:45	2.1	14.0	0.0	7.0	12.6	0.0	8.0
2/09/2025 19:00	7.1	130.4	0.1	7.5	11.4	0.0	2/09/2025 19:00	2.1	15.6	0.0	7.0	12.6	0.0	8.0
2/09/2025 19:15	7.1	129.4	0.1	7.5	11.4	0.0	2/09/2025 19:15	2.1	15.8	0.0	7.0	12.6	0.0	8.0
2/09/2025 19:30	7.0	127.8	0.1	7.5	11.4	0.0	2/09/2025 19:30	2.0	15.5	0.0	7.0	12.6	0.0	8.0
2/09/2025 19:45	6.3	111.7	0.1	7.5	11.6	0.0	2/09/2025 19:45	2.0	15.7	0.0	7.0	12.7	0.0	8.0
2/09/2025 20:00	3.5	36.0	0.0	7.0	12.5	0.0	2/09/2025 20:00	2.0	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 20:15	5.9	118.8	0.1	7.4	11.7	0.0	2/09/2025 20:15	1.9	14.7	0.0	7.0	12.7	0.0	8.0
2/09/2025 20:30	6.9	129.7	0.1	7.5	11.4	0.0	2/09/2025 20:30	1.9	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 20:45	6.9	129.6	0.1	7.5	11.4	0.0	2/09/2025 20:45	1.9	14.1	0.0	7.0	12.7	0.0	8.0
2/09/2025 21:00	6.9	128.7	0.1	7.5	11.4	0.0	2/09/2025 21:00	1.8	15.6	0.0	6.9	12.7	0.0	8.0
2/09/2025 21:15	6.7	122.3	0.1	7.5	11.5	0.0	2/09/2025 21:15	1.8	15.4	0.0	7.0	12.7	0.0	8.0
2/09/2025 21:30	5.0	81.5	0.0	7.4	11.9	0.0	2/09/2025 21:30	1.8	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 21:45	5.5	113.4	0.1	7.3	12.0	1.7	2/09/2025 21:45	1.8	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 22:00	6.8	128.3	0.1	7.5	11.5	0.5	2/09/2025 22:00	1.7	13.9	0.0	7.1	12.7	0.0	8.0
2/09/2025 22:15	6.8	127.8	0.1	7.5	11.5	0.0	2/09/2025 22:15	1.7	15.4	0.0	6.9	12.8	0.0	8.0
2/09/2025 22:30	6.8	127.2	0.1	7.5	11.5	0.0	2/09/2025 22:30	1.7	15.6	0.0	7.0	12.7	0.0	8.0
2/09/2025 22:45	6.6	123.8	0.1	7.5	11.5	2.8	2/09/2025 22:45	1.7	15.5	0.0	6.9	12.8	0.0	8.0
2/09/2025 23:00	5.4	95.6	0.0	7.4	11.8	0.0	2/09/2025 23:00	1.6	13.9	0.0	7.0	12.8	0.0	8.0
2/09/2025 23:15	3.4	42.2	0.0	7.1	12.5	0.0	2/09/2025 23:15	1.6	15.4	0.0	7.0	12.8	0.0	8.0
2/09/2025 23:30	6.0	121.6	0.1	7.5	11.7	2.2	2/09/2025 23:30	1.6	15.4	0.0	7.0	12.8	0.0	8.0
2/09/2025 23:45	6.6	125.9	0.1	7.5	11.5	0.0	2/09/2025 23:45	1.5	15.3	0.0	7.0	12.8	0.0	8.0