Eagle Mountain - Woodfibre Gas Pipeline Project

BCER Waste Discharge Permit Weekly Report

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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	2025-03-03	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	2025-03-03	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 and grouting works to mitigate water ingress.

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	2025-03-03	Yes-Appendix C	1,440m^3
Woodfibre	2025-03-04	Yes-Appendix C*lab sample day	1,599m^3
Woodfibre	2025-03-05	Yes-Appendix C	1,601m^3
Woodfibre	2025-03-06	Yes-Appendix C	1,486m^3
Woodfibre	2025-03-07	Yes-Appendix C	1,580m^3
Woodfibre	2025-03-08	Yes-Appendix C	1,775m^3
Woodfibre	2025-03-09	Yes-Appendix C	2,085m^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	2025-03-04	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	2025-03-04	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					VA25A4610-001	VA25A4610-002					
	Date Sampled					03-Mar-2025	03-Mar-2025					
	Time Sampled					10:11	09:53					
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	6.49	6.46		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]	-	11.1	11.4		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	
Conductivity (field)	µS/cm	-	-	-	-	61	62					
Turbidity (field)	NTU	Varies with background, see note Guideline = 9.33	Varies with background, see note Guideline = 4.12 5-week discrete sampling average = 3.5 (DS)	Varies with background, see note Guideline = 9.33	Varies with background, see note Guideline = 4.12 5-week discrete sampling average = 3.5 (DS)	1.33	1.41		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	14.12	13.30		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	-	-	-	-	20.4	20.2					
Total Dissolved Solids	mg/L	-	-	-	-	51	56					
Total Suspended Solids	mg/L	Varies with background, see note Guideline = 28.0	Varies with background, see note Guideline = 16.8 5-week discrete sampling average = 3.4 (DS)	Varies with background, see note Guideline = 28.0	Varies with background, see note Guideline = 16.8 5-week discrete sampling average = 3.4 (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	-	-	-	-	1.66	1.66			Long-term (30-day) median within 20% of background median [3]		
Total Alkalinity ($CaCO_3$)	mg/L	-	Categorical	-	-	17.3	17.1			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 = 25.2	Varies with pH and temperature. See note. Guideline = 1.94	Varies with pH and temperature. See note. Guideline = 131	Varies with pH, temperature and salinity. See note. Guideline = 29	0.0841	0.0722		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	3.94	3.64				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 = 0.695	-	1.5	-	0.022	0.022		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	0.196	0.169					
Nitrite (as N)	mg/L	Varies with chloride. See note. Guideline = 0.12	Varies with chloride. See note. Guideline = 0.04	-	-	0.0088	0.0071		Varies with chloride. Refer to Table 29B in BC WQG for guideline values.	Varies with chloride. Refer to Table 27B in BC WQG for guideline values.		
Total Nitrogen	mg/L	-	-	-	-	0.357	0.322					
Total Phosphorous	mg/L	-	0.005 to 0.015	-	-	0.0462	0.0402			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	-	-	5.79	5.69			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 = 0.041 5-week field average = 0.081 (US), 0.10 (DS)	-	-	0.0698	0.0815			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	0.00016	0.00017					Interim guideline status
Barium (Ba)-Total	mg/L	-	1	-	-	0.00873	0.00889			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	0.012	0.012					
Cadmium (Cd)-Total	mg/L	-	-	-	0.00012	0.0000068	0.0000081					Working guideline status
Calcium (Ca)-Total	mg/L	-	-	-	-	6.74	6.73					
Cesium (Cs)-Total	mg/L	-	-	-	-	0.000023	0.000022					
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	0.0014 5-week field average = 0.00077 (US), 0.00077 (DS)	0.00081	0.00084					
Iron (Fe)-Total	mg/L	1	-	-	-	0.199	0.169					
Lead (Pb)-Total	mg/L	-	-	0.14	0.002 5-week field average = 0.000052 (US), 0.000054 (DS)	< 0.000050	< 0.000050					
Lithium (Li)-Total	mg/L	-	-	-	-	0.0014	0.0014					
Magnesium (Mg)-Total	mg/L	-	-	-	-	0.868	0.836					
Manganese (Mn)-Total	mg/L	Varies with hardness Guideline = 0.715	Varies with hardness Guideline = 0.768	-	-	0.0106	0.00956		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	-	-	0.000528	0.00052					
Nickel (Ni)-Total	mg/L	-	-	-	0.0083	< 0.00050	< 0.00050					Working guideline status
Potassium (K)-Total	mg/L	-	-	-	-	0.84	0.832					
Rubidium (Rb)-Total	mg/L	-	-	-	-	0.00117	0.00113					
Selenium (Se)-Total	mg/L	-	0.002	-	0.002	< 0.000050	< 0.000050			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	-	-	-	-	5.26	5.1					
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), < 0.00001 (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	-	-	-	-	3.93	3.63					
Strontium (Sr)-Total	mg/L	-	-	-	-	0.0433	0.0422					
Sulfur (S)-Total	mg/L	-	-	-	-	1.9	1.96					
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	-	-	-	-	0.0013	0.00167					
Tungsten (W)-Total	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Uranium (U)-Total	mg/L	0.0165	0.0075	-	-	0.000033	0.000035			Working guideline status		
Vanadium (V)-Total	mg/L	-	0.06	-	0.005 5-week field average = 0.00142 (US), 0.00138 (DS)	0.00121	0.00117					Working guideline status
Zinc (Zn)-Total	mg/L	-	-	0.055	Guideline = 0.010 5-week field average = 0.00398 (US), 0.003 (DS)	< 0.0030	< 0.0030					
Zirconium (Zr)-Total	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Dissolved Metals												
Aluminum (Al)-Dissolved	mg/L	-	-	-	-	0.0342	0.0338					
Antimony (Sb)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Arsenic (As)-Dissolved	mg/L	-	-	-	-	0.00015	0.00014					
Barium (Ba)-Dissolved	mg/L	-	-	-	-	0.00839	0.00817					
Beryllium (Be)-Dissolved	mg/L	-	-	-	-	< 0.000100	< 0.000100					
Bismuth (Bi)-Dissolved	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Boron (B)-Dissolved	mg/L	-	-	-	-	0.012	0.011					
Cadmium (Cd)-Dissolved	mg/L	Varies with hardness, see note Guideline = 0.000114	Varies with hardness, see note Guideline = 0.000073	-	-	0.0000089	0.0000089		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	-	-	6.58	6.56			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	-	-	-	-	0.000024	0.000022					
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 = 0.0005	Guideline varies with other parameters, see note Guideline = 0.0002 5-week field average = 0.00059 (US), 0.00055 (DS)	-	-	0.00069	0.00067		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	-	-	-	0.141	0.112					
Lead (Pb)-Dissolved	mg/L	-	Guideline varies with DOC and hardness Guideline = 0.00191 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	-	-	-	-	0.0013	0.0013					
Magnesium (Mg)-Dissolved	mg/L	-	-	-	-	0.851	0.834					
Manganese (Mn)-Dissolved	mg/L	-	-	-	-	0.00951	0.00818					
Mercury (Hg)-Dissolved	mg/L	-	-	-	-	< 0.0000050	< 0.0000050					
Molybdenum (Mo)-Dissolved	mg/L	-	-	-	-	0.000553	0.000546					
Nickel (Ni)-Dissolved	mg/L	Guideline varies with other parameters, see note Guideline = 0.0146	Guideline varies with other parameters, see note Guideline = 0.000988 5-week field average = < 0.0005 (US), < 0.0005 (DS)	0.0003	-	< 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	-	-	-	-	0.053	< 0.050					
Potassium (K)-Dissolved	mg/L	-	-	-	-	0.851	0.817					
Rubidium (Rb)-Dissolved	mg/L	-	-	-	-	0.00119	0.00107					
Selenium (Se)-Dissolved	mg/L	-	-	-	-	< 0.000050	< 0.000050					
Silicon (Si)-Dissolved	mg/L	-	-	-	-	4.99	4.84					
Silver (Ag)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Sodium (Na)-Dissolved	mg/L	-	-	-	-	3.72	3.4					
Strontium (Sr)-Dissolved	mg/L	-	-	-	-	0.0448	0.0431					
Sulfur (S)-Dissolved	mg/L	-	-	-	-	1.89	1.67					
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	0.00032					
Tungsten (W)-Dissolved	mg/L	-	-	-	-	< 0.00010	< 0.00010					
Uranium (U)-Dissolved	mg/L	-	-	-	-	0.000033	0.000033					
Vanadium (V)-Dissolved	mg/L	-	-	-	-	0.00106	0.0011					
Zinc (Zn)-Dissolved	mg/L	Varies with DOC and hardness Guideline = 0.012	Varies with pH, DOC, hardness Guideline = 0.00542 5-week field average = 0.0029 (US), 0.0021 (DS)	-	-	0.0022	0.0019		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)	SQU DS1 (Downstream)
pH (field)	pH units	Field pH taken using handheld meters during sampling used in calculations	6.49	6.46
Temperature (field)	°C	Field temperature taken using handheld meters during sampling used in calculations	11.1	11.4
Turbidity (field)	NTU	Field turbidity taken using handheld meters during sampling used in calculations	1.33	1.41
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	20.4	20.2
Dissolved Organic Carbon (DOC)	mg/L	Laboratory tested dissolved organic carbon tested at the lab used in guideline calculations	1.66	1.66
Total Alkalinity ($CaCO_3$)	mg/L	Laboratory tested total alkalinity used in calculations	17.3	17.1
Chloride	mg/L	Laboratory tested chloride taken at each respective sample site on the day of sampling used in guideline calculations	3.94	3.64

BCR Site Receiving Environment Lab Documentation

CERTIFICATE OF ANALYSIS

Work Order	: **VA25A4610**		
Client	: **Triton Environmental Consultants Ltd.**	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project	: 11964	Date Samples Received	: 03-Mar-2025 11:40
PO	: 11964 - Task 20 - Phase 3C-4C/11964 - Task 30 - Phase 3C-4C	Date Analysis Commenced	: 04-Mar-2025
C-O-C number	: ----	Issue Date	: 10-Mar-2025 14:03
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*
		Metals, Burnaby, British Columbia
		Inorganics, Burnaby, British Columbia
		Inorganics, Burnaby, British Columbia
		Inorganics, Burnaby, British Columbia
		Metals, 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
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	03-Mar-2025 10:11	03-Mar-2025 09:53	03-Mar-2025 09:53	----	----
						VA25A4610-001	VA25A4610-002	VA25A4610-003	----	----
						Result	Result	Result	----	----
Field Tests										
Conductivity, field	----	EF001/VA	0.10	µS/cm		61.000	62.000	62.000	----	----
pH, field	----	EF001/VA	0.10	pH units		6.49	6.46	6.46	----	----
Temperature, field	----	EF001/VA	0.10	°C		11.1	11.4	11.4	----	----
Physical Tests										
Hardness (as CaCO3), dissolved	----	EC100/VA	0.60	mg/L		19.9	19.8	19.9	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		20.4	20.2	19.7	----	----
Solids, total dissolved [TDS]	----	E162/VA	10	mg/L		51	56	56	----	----
Solids, total suspended [TSS]	----	E160/VA	3.0	mg/L		<3.0	<3.0	<3.0	----	----
Alkalinity, total (as CaCO3)	----	E290/VA	2.0	mg/L		17.3	17.1	16.8	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/VA	0.0050	mg/L		0.0841	0.0722	0.0727	----	----
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		3.94	3.64	3.59	----	----
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L		0.022	0.022	0.023	----	----
Nitrate (as N)	14797-55-8	E235.NO3-L/VA	0.0050	mg/L		0.196	0.169	0.165	----	----
Nitrite (as N)	14797-65-0	E235.NO2-L/VA	0.0010	mg/L		0.0088	0.0071	0.0064	----	----
Nitrogen, total	7727-37-9	E366/VA	0.030	mg/L		0.357	0.322	0.323	----	----
Phosphorus, total	7723-14-0	E372-U/VA	0.0020	mg/L		0.0462	0.0402	0.0401	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L		5.79	5.69	5.68	----	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		1.66	1.66	1.75	----	----

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	03-Mar-2025 10:11	03-Mar-2025 09:53	03-Mar-2025 09:53	----	----
						VA25A4610-001	VA25A4610-002	VA25A4610-003	----	----
						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		0.0698	0.0815	0.0855	----	----
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		0.00016	0.00017	0.00017	----	----
Barium, total	7440-39-3	E420/VA	0.00010	mg/L		0.00873	0.00889	0.00901	----	----
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		0.012	0.012	0.011	----	----
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L		0.0000068	0.0000081	0.0000058	----	----
Calcium, total	7440-70-2	E420/VA	0.050	mg/L		6.74	6.73	6.54	----	----
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L		0.000023	0.000022	0.000022	----	----
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		<0.00010	<0.00010	<0.00010	----	----
Copper, total	7440-50-8	E420/VA	0.00050	mg/L		0.00081	0.00084	0.00082	----	----
Iron, total	7439-89-6	E420/VA	0.010	mg/L		0.199	0.169	0.176	----	----
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		0.0014	0.0014	0.0014	----	----
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L		0.868	0.836	0.827	----	----

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	03-Mar-2025 10:11	03-Mar-2025 09:53	03-Mar-2025 09:53	----	----
						VA25A4610-001	VA25A4610-002	VA25A4610-003	----	----
						Result	Result	Result	----	----
Total Metals										
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L		0.0106	0.00956	0.00963	----	----
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		0.000528	0.000520	0.000528	----	----
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		0.059	0.054	0.051	----	----
Potassium, total	7440-09-7	E420/VA	0.050	mg/L		0.840	0.832	0.788	----	----
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L		0.00117	0.00113	0.00118	----	----
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		5.26	5.10	5.10	----	----
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		3.93	3.63	3.64	----	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L		0.0433	0.0422	0.0434	----	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L		1.90	1.96	2.08	----	----
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		0.00130	0.00167	0.00185	----	----
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		0.000033	0.000035	0.000035	----	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L		0.00121	0.00117	0.00115	----	----

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	03-Mar-2025 10:11	03-Mar-2025 09:53	03-Mar-2025 09:53	----	----
						VA25A4610-001	VA25A4610-002	VA25A4610-003	----	----
						Result	Result	Result	----	----
Total Metals										
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L		<0.0030	<0.0030	0.0054	----	----
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		0.0342	0.0338	0.0399	----	----
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		0.00015	0.00014	0.00015	----	----
Barium, dissolved	7440-39-3	E421/VA	0.00010	mg/L		0.00839	0.00817	0.00836	----	----
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		0.012	0.011	0.011	----	----
Cadmium, dissolved	7440-43-9	E421/VA	0.0000050	mg/L		0.0000089	0.0000089	0.0000100	----	----
Calcium, dissolved	7440-70-2	E421/VA	0.050	mg/L		6.58	6.56	6.62	----	----
Cesium, dissolved	7440-46-2	E421/VA	0.000010	mg/L		0.000024	0.000022	0.000022	----	----
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		<0.00010	<0.00010	<0.00010	----	----
Copper, dissolved	7440-50-8	E421/VA	0.00020	mg/L		0.00069	0.00067	0.00072	----	----
Iron, dissolved	7439-89-6	E421/VA	0.010	mg/L		0.141	0.112	0.118	----	----
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		0.0013	0.0013	0.0013	----	----
Magnesium, dissolved	7439-95-4	E421/VA	0.0050	mg/L		0.851	0.834	0.815	----	----
Manganese, dissolved	7439-96-5	E421/VA	0.00010	mg/L		0.00951	0.00818	0.00859	----	----

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	03-Mar-2025 10:11	03-Mar-2025 09:53	03-Mar-2025 09:53	----	----
						VA25A4610-001	VA25A4610-002	VA25A4610-003	----	----
						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		0.000553	0.000546	0.000560	----	----
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		0.053	<0.050	<0.050	----	----
Potassium, dissolved	7440-09-7	E421/VA	0.050	mg/L		0.851	0.817	0.833	----	----
Rubidium, dissolved	7440-17-7	E421/VA	0.00020	mg/L		0.00119	0.00107	0.00117	----	----
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		4.99	4.84	5.01	----	----
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		3.72	3.40	3.52	----	----
Strontium, dissolved	7440-24-6	E421/VA	0.00020	mg/L		0.0448	0.0431	0.0433	----	----
Sulfur, dissolved	7704-34-9	E421/VA	0.50	mg/L		1.89	1.67	1.92	----	----
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	0.00032	0.00062	----	----
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		0.000033	0.000033	0.000034	----	----
Vanadium, dissolved	7440-62-2	E421/VA	0.00050	mg/L		0.00106	0.00110	0.00106	----	----
Zinc, dissolved	7440-66-6	E421/VA	0.0010	mg/L		0.0022	0.0019	0.0028	----	----

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	03-Mar-2025 10:11	03-Mar-2025 09:53	03-Mar-2025 09:53	----	----
						VA25A4610-001	VA25A4610-002	VA25A4610-003	----	----
						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	----	----

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

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA25A4610**	Page	: 1 of 17
Client	: **Triton Environmental Consultants Ltd.**	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	
Address		Address	
Telephone	: ----	Telephone	
Project	: 11964	Date Samples Received	: 03-Mar-2025 11:40
PO	: 11964 - Task 20 - Phase 3C-4C/11964 - Task 30 - Phase 3C-4C	Issue Date	: 10-Mar-2025 14:02
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								
Total Metals	QC-1895267-001	----	Manganese, total	7439-96-5	E420	0.00014 B mg/L	0.0001 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
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) BCR Duplicate	E298	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	06-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) SQU DS 1	E298	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	06-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) SQU US 1	E298	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	06-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE BCR Duplicate	E235.Br-L	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE SQU DS 1	E235.Br-L	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE SQU US 1	E235.Br-L	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE BCR Duplicate	E235.Cl	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-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										
SQU DS 1	E235.Cl	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE										
SQU US 1	E235.Cl	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
BCR Duplicate	E235.F	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
SQU DS 1	E235.F	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
SQU US 1	E235.F	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
BCR Duplicate	E235.NO3-L	03-Mar-2025	05-Mar-2025	3 days	2 days	✓	05-Mar-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
SQU DS 1	E235.NO3-L	03-Mar-2025	05-Mar-2025	3 days	2 days	✓	05-Mar-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
SQU US 1	E235.NO3-L	03-Mar-2025	05-Mar-2025	3 days	2 days	✓	05-Mar-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
BCR Duplicate	E235.NO2-L	03-Mar-2025	05-Mar-2025	3 days	2 days	✓	05-Mar-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 : Nitrite in Water by IC (Low Level)										
HDPE SQU DS 1	E235.NO2-L	03-Mar-2025	05-Mar-2025	3 days	2 days	✓	05-Mar-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE SQU US 1	E235.NO2-L	03-Mar-2025	05-Mar-2025	3 days	2 days	✓	05-Mar-2025	3 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE BCR Duplicate	E235.SO4	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE SQU DS 1	E235.SO4	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE SQU US 1	E235.SO4	03-Mar-2025	05-Mar-2025	28 days	2 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) BCR Duplicate	E366	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	06-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) SQU DS 1	E366	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	06-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid) SQU US 1	E366	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	06-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) BCR Duplicate	E372-U	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	05-Mar-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 : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
SQU DS 1	E372-U	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	2 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
SQU US 1	E372-U	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	2 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
BCR Duplicate	E509	03-Mar-2025	07-Mar-2025	28 days	4 days	✓	07-Mar-2025	28 days	4 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
SQU DS 1	E509	03-Mar-2025	07-Mar-2025	28 days	4 days	✓	07-Mar-2025	28 days	4 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
SQU US 1	E509	03-Mar-2025	07-Mar-2025	28 days	4 days	✓	07-Mar-2025	28 days	4 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
BCR Duplicate	E421	03-Mar-2025	04-Mar-2025	180 days	1 days	✓	05-Mar-2025	180 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
SQU DS 1	E421	03-Mar-2025	04-Mar-2025	180 days	1 days	✓	05-Mar-2025	180 days	2 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
SQU US 1	E421	03-Mar-2025	04-Mar-2025	180 days	1 days	✓	05-Mar-2025	180 days	2 days	✓
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial total (hydrochloric acid) [ON MECP]										
BCR Duplicate	EF001	03-Mar-2025	----	----	----		05-Mar-2025	----	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	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial total (hydrochloric acid) [ON MECP]										
SQU DS 1	EF001	03-Mar-2025	----	----	----		05-Mar-2025	----	2 days	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial total (hydrochloric acid) [ON MECP]										
SQU US 1	EF001	03-Mar-2025	----	----	----		05-Mar-2025	----	2 days	
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
BCR Duplicate	E358-L	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	2 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
SQU DS 1	E358-L	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	2 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
SQU US 1	E358-L	03-Mar-2025	04-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
BCR Duplicate	E290	03-Mar-2025	05-Mar-2025	14 days	2 days	✓	05-Mar-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
SQU DS 1	E290	03-Mar-2025	05-Mar-2025	14 days	2 days	✓	05-Mar-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
SQU US 1	E290	03-Mar-2025	05-Mar-2025	14 days	2 days	✓	05-Mar-2025	14 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE										
BCR Duplicate	E162	03-Mar-2025	----	----	----		07-Mar-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
Physical Tests : TDS by Gravimetry										
HDPE										
SQU DS 1	E162	03-Mar-2025	----	----	----		07-Mar-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE										
SQU US 1	E162	03-Mar-2025	----	----	----		07-Mar-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE										
BCR Duplicate	E160	03-Mar-2025	----	----	----		07-Mar-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE										
SQU DS 1	E160	03-Mar-2025	----	----	----		07-Mar-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE										
SQU US 1	E160	03-Mar-2025	----	----	----		07-Mar-2025	7 days	5 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
BCR Duplicate	E532	03-Mar-2025	----	----	----		04-Mar-2025	28 days	2 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
SQU DS 1	E532	03-Mar-2025	----	----	----		04-Mar-2025	28 days	2 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
SQU US 1	E532	03-Mar-2025	----	----	----		04-Mar-2025	28 days	2 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) [ON MECP]										
BCR Duplicate	E508	03-Mar-2025	06-Mar-2025	28 days	3 days	✓	06-Mar-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
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) [ON MECP]										
SQU DS 1	E508	03-Mar-2025	06-Mar-2025	28 days	3 days	✓	06-Mar-2025	28 days	3 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) [ON MECP]										
SQU US 1	E508	03-Mar-2025	06-Mar-2025	28 days	3 days	✓	06-Mar-2025	28 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
BCR Duplicate	E420	03-Mar-2025	05-Mar-2025	180 days	2 days	✓	05-Mar-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
SQU DS 1	E420	03-Mar-2025	05-Mar-2025	180 days	2 days	✓	05-Mar-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
SQU US 1	E420	03-Mar-2025	05-Mar-2025	180 days	2 days	✓	05-Mar-2025	180 days	2 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
BCR Duplicate	E395	03-Mar-2025	----	----	----		04-Mar-2025	7 days	1 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
SQU DS 1	E395	03-Mar-2025	----	----	----		04-Mar-2025	7 days	1 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
SQU US 1	E395	03-Mar-2025	----	----	----		04-Mar-2025	7 days	1 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	1900874	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1900873	1	18	5.5	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895512	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1895507	1	20	5.0	5.0	✓
Fluoride in Water by IC	E235.F	1895511	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895509	1	20	5.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895508	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	1895510	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1895514	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	1895275	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895277	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895274	1	9	11.1	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895279	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1895335	1	4	25.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895267	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895283	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1898693	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1899164	1	12	8.3	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Laboratory Control Samples (LCS)							
TSS by Gravimetry	E160	1900874	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1900873	1	18	5.5	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895512	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1895507	1	20	5.0	5.0	✓
Fluoride in Water by IC	E235.F	1895511	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895509	1	20	5.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895508	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	1895510	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1895514	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	1895275	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895277	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895274	1	9	11.1	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895279	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1895335	1	4	25.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895267	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895283	1	20	5.0	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 Mercury in Water by CVAAS	E508	1898693	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1899164	1	12	8.3	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Method Blanks (MB)							
TSS by Gravimetry	E160	1900874	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1900873	1	18	5.5	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895512	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1895507	1	20	5.0	5.0	✓
Fluoride in Water by IC	E235.F	1895511	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895509	1	20	5.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895508	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	1895510	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	1895514	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	1895275	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895277	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895274	1	9	11.1	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895279	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1895335	1	4	25.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895267	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895283	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1898693	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1899164	1	12	8.3	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Bromide in Water by IC (Low Level)	E235.Br-L	1895512	1	15	6.6	5.0	✓
Chloride in Water by IC	E235.Cl	1895507	1	20	5.0	5.0	✓
Fluoride in Water by IC	E235.F	1895511	1	15	6.6	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895509	1	20	5.0	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895508	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	1895510	1	20	5.0	5.0	✓
Ammonia by Fluorescence	E298	1895275	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895277	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895274	1	9	11.1	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895279	1	12	8.3	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1895335	1	4	25.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895267	1	17	5.8	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895283	1	20	5.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1898693	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1899164	1	12	8.3	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							
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	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.
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.
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.

QUALITY CONTROL REPORT

Work Order	: **VA25A4610**	Page	: 1 of 17
Client	: Triton Environmental Consultants Ltd.	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	
Address		Address	
Telephone		Telephone	
Project	: 11964	Date Samples Received	: 03-Mar-2025 11:40
PO	: 11964 - Task 20 - Phase 3C-4C/11964 - Task 30 - Phase 3C-4C	Date Analysis Commenced	: 04-Mar-2025
C-O-C number	: ----	Issue Date	: 10-Mar-2025 14:02
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*
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Administration, 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: 1895514)											
KS2500699-007	Anonymous	Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	<1.0	<1.0	0	Diff <2x LOR	----
Physical Tests (QC Lot: 1900873)											
FJ2500653-001	Anonymous	Solids, total dissolved [TDS]	----	E162	20	mg/L	395	408	3.24%	20%	----
Physical Tests (QC Lot: 1900874)											
FJ2500653-001	Anonymous	Solids, total suspended [TSS]	----	E160	3.0	mg/L	26.4	26.8	0.4	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895274)											
FJ2500650-004	Anonymous	Nitrogen, total	7727-37-9	E366	0.030	mg/L	<0.030	<0.030	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895275)											
FJ2500650-004	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895279)											
KS2500709-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	<0.0020	<0.0020	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895507)											
KS2500701-001	Anonymous	Chloride	16887-00-6	E235.Cl	25.0	mg/L	121	121	0.17	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895508)											
KS2500701-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.250	mg/L	9.76	9.73	0.330%	20%	----
Anions and Nutrients (QC Lot: 1895509)											
KS2500701-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0500	mg/L	0.950	0.931	2.00%	20%	----
Anions and Nutrients (QC Lot: 1895510)											
KS2500701-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	15.0	mg/L	5520	5530	0.0500%	20%	----
Anions and Nutrients (QC Lot: 1895511)											
KS2500701-001	Anonymous	Fluoride	16984-48-8	E235.F	1.00	mg/L	1.34	1.28	0.063	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895512)											
KS2500701-001	Anonymous	Bromide	24959-67-9	E235.Br-L	2.50	mg/L	<2.50	<2.50	0	Diff <2x LOR	----
Organic / Inorganic Carbon (QC Lot: 1895277)											
KS2500709-001	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	0.50	mg/L	1.35	1.35	0.007	Diff <2x LOR	----
Total Sulfides (QC Lot: 1895335)											
VA25A4610-001	SQU US 1	Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 1895267)											
FJ2500644-017	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	<0.0030	<0.0030	0	Diff <2x LOR	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	<0.00010	<0.00010	0	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: 1895267) - continued											
FJ2500644-017	Anonymous	Arsenic, total	7440-38-2	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		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	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	<0.000010	<0.000010	0	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	<0.00010	<0.00010	0	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	<0.010	<0.010	0	Diff <2x LOR	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	<0.00050	<0.00050	0	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	<0.050	<0.050	0	Diff <2x LOR	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Silicon, total	7440-21-3	E420	0.10	mg/L	<0.10	<0.10	0	Diff <2x LOR	----
		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	<0.050	<0.050	0	Diff <2x LOR	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	<0.50	<0.50	0	Diff <2x LOR	----
		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	<0.000010	<0.000010	0	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	<0.00030	<0.00030	0	Diff <2x LOR	----
		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	<0.000010	<0.000010	0	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: 1895267) - continued											
FJ2500644-017	Anonymous	Vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	<0.0030	<0.0030	0	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: 1898693)											
KS2500709-003	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1895283)											
FJ2500648-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00080	0.00081	0.000004	Diff <2x LOR	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.610	0.632	3.47%	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	0.150	0.155	3.58%	20%	----
		Cadmium, dissolved	7440-43-9	E421	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	38.1	38.7	1.67%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	<0.000010	<0.000010	0	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	0.00059	0.00061	0.00002	Diff <2x LOR	----
		Copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00029	<0.00020	0.00009	Diff <2x LOR	----
		Iron, dissolved	7439-89-6	E421	0.010	mg/L	0.025	0.024	0.001	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	0.0669	0.0663	0.839%	20%	----
		Magnesium, dissolved	7439-95-4	E421	0.0050	mg/L	16.3	17.0	4.20%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.259	0.270	4.06%	20%	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.00221	0.00217	2.00%	20%	----
		Nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.00107	0.00111	0.00004	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	1.85	1.92	3.70%	20%	----
		Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	0.00146	0.00146	0.000002	Diff <2x LOR	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000070	0.000086	0.000016	Diff <2x LOR	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	3.38	3.55	5.06%	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	10.5	10.9	4.33%	20%	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	0.846	0.817	3.44%	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: 1895283) - continued											
FJ2500648-001	Anonymous	Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	4.32	4.34	0.01	Diff <2x LOR	----
		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	0.000013	0.000013	0.0000001	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	0.000511	0.000518	1.42%	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	0.499	0.518	3.65%	20%	----
		Zirconium, dissolved	7440-67-7	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1899164)											
VA25A4591-006	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 1895459)											
VA25A4610-001	SQU US 1	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.00050	mg/L	<0.00050	<0.00050	0	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: 1895514)						
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
Physical Tests (QCLot: 1900873)						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Physical Tests (QCLot: 1900874)						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Anions and Nutrients (QCLot: 1895274)						
Nitrogen, total	7727-37-9	E366	0.03	mg/L	<0.030	----
Anions and Nutrients (QCLot: 1895275)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1895279)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	----
Anions and Nutrients (QCLot: 1895507)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 1895508)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1895509)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 1895510)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Anions and Nutrients (QCLot: 1895511)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 1895512)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Organic / Inorganic Carbon (QCLot: 1895277)						
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	<0.50	----
Total Sulfides (QCLot: 1895335)						
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	----
Total Metals (QCLot: 1895267)						
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: 1895267) - 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	# 0.00014	B
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: 1898693)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1895283)						
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: 1895283) - 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: 1899164)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 1895459)						
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	<0.00050	----

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: 1895514)									
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	500 mg/L	105	85.0	115	----
Physical Tests (QCLot: 1900873)									
Solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	110	85.0	115	----
Physical Tests (QCLot: 1900874)									
Solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	96.0	85.0	115	----
Anions and Nutrients (QCLot: 1895274)									
Nitrogen, total	7727-37-9	E366	0.03	mg/L	0.5 mg/L	98.0	75.0	125	----
Anions and Nutrients (QCLot: 1895275)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	104	85.0	115	----
Anions and Nutrients (QCLot: 1895279)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.05 mg/L	107	80.0	120	----
Anions and Nutrients (QCLot: 1895507)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	100	90.0	110	----
Anions and Nutrients (QCLot: 1895508)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	101	90.0	110	----
Anions and Nutrients (QCLot: 1895509)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	99.6	90.0	110	----
Anions and Nutrients (QCLot: 1895510)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	101	90.0	110	----
Anions and Nutrients (QCLot: 1895511)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	99.2	90.0	110	----
Anions and Nutrients (QCLot: 1895512)									
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	99.6	85.0	115	----
Organic / Inorganic Carbon (QCLot: 1895277)									
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	8.57 mg/L	94.3	80.0	120	----
Total Sulfides (QCLot: 1895335)									
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	0.08 mg/L	101	80.0	120	----
Total Metals (QCLot: 1895267)									

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: 1895267) - continued									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	103	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	96.2	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	100	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	101	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	104	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	93.1	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	96.4	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	97.1	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	97.4	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	95.2	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	96.2	80.0	120	----
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	96.5	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	94.3	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	99.3	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	96.9	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	95.7	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	93.6	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	95.9	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	98.4	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	95.9	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	97.0	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	108	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	88.0	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	98.7	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	92.2	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	95.4	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	98.8	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	95.7	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	94.1	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	95.2	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	97.1	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	97.0	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: 1895267) - continued									
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	99.6	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	96.2	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	93.4	80.0	120	----
Total Metals (QCLot: 1898693)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	97.6	80.0	120	----
Dissolved Metals (QCLot: 1895283)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	98.2	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	103	80.0	120	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	1 mg/L	103	80.0	120	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	97.4	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	98.1	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	101	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	97.5	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	100	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	101	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	98.7	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	98.4	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	98.9	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	102	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	101	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	98.0	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	99.8	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	95.6	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	102	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	100	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	101	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	103	80.0	120	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.1 mg/L	95.1	80.0	120	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	50 mg/L	101	80.0	120	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	0.25 mg/L	102	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	98.8	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: 1895283) - continued									
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	0.1 mg/L	97.4	80.0	120	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	1 mg/L	101	80.0	120	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	0.1 mg/L	97.0	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	102	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	101	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	99.7	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	100	80.0	120	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	93.2	80.0	120	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	0.1 mg/L	99.3	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	96.0	80.0	120	----
Speciated Metals (QCLot: 1895459)									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	0.25 mg/L	99.2	80.0	120	----

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: 1895274)										
VA25A4610-001	SQU US 1	Nitrogen, total	7727-37-9	E366	0.367 mg/L	0.4 mg/L	91.6	70.0	130	----
Anions and Nutrients (QCLot: 1895275)										
KS2500696-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0996 mg/L	0.1 mg/L	99.6	75.0	125	----
Anions and Nutrients (QCLot: 1895279)										
KS2500709-002	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0456 mg/L	0.05 mg/L	91.2	70.0	130	----
Anions and Nutrients (QCLot: 1895507)										
KS2500709-001	Anonymous	Chloride	16887-00-6	E235.Cl	99.3 mg/L	100 mg/L	99.3	75.0	125	----
Anions and Nutrients (QCLot: 1895508)										
KS2500709-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	2.48 mg/L	2.5 mg/L	99.3	75.0	125	----
Anions and Nutrients (QCLot: 1895509)										
KS2500709-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.493 mg/L	0.5 mg/L	98.5	75.0	125	----
Anions and Nutrients (QCLot: 1895510)										
KS2500709-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	100 mg/L	100 mg/L	100	75.0	125	----
Anions and Nutrients (QCLot: 1895511)										
KS2500709-001	Anonymous	Fluoride	16984-48-8	E235.F	0.999 mg/L	1 mg/L	99.9	75.0	125	----
Anions and Nutrients (QCLot: 1895512)										
KS2500709-001	Anonymous	Bromide	24959-67-9	E235.Br-L	0.495 mg/L	0.5 mg/L	99.0	75.0	125	----
Organic / Inorganic Carbon (QCLot: 1895277)										
KS2500709-002	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	5.02 mg/L	5 mg/L	100	70.0	130	----
Total Sulfides (QCLot: 1895335)										
VA25A4610-002	SQU DS 1	Sulfide, total (as S)	18496-25-8	E395	0.166 mg/L	0.2 mg/L	82.8	75.0	125	----
Total Metals (QCLot: 1895267)										
FJ2500648-001	Anonymous	Aluminum, total	7429-90-5	E420	0.202 mg/L	0.2 mg/L	101	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0186 mg/L	0.02 mg/L	92.9	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0196 mg/L	0.02 mg/L	97.9	70.0	130	----
		Barium, total	7440-39-3	E420	ND mg/L	----	ND	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0389 mg/L	0.04 mg/L	97.2	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.00966 mg/L	0.01 mg/L	96.6	70.0	130	----
		Boron, total	7440-42-8	E420	ND mg/L	----	ND	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00378 mg/L	0.004 mg/L	94.5	70.0	130	----
		Calcium, total	7440-70-2	E420	ND mg/L	----	ND	70.0	130	----
		Cesium, total	7440-46-2	E420	0.00973 mg/L	0.01 mg/L	97.3	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0376 mg/L	0.04 mg/L	94.0	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: 1895267) - continued										
FJ2500648-001	Anonymous	Cobalt, total	7440-48-4	E420	0.0185 mg/L	0.02 mg/L	92.7	70.0	130	----
		Copper, total	7440-50-8	E420	0.0181 mg/L	0.02 mg/L	90.7	70.0	130	----
		Iron, total	7439-89-6	E420	1.88 mg/L	2 mg/L	93.8	70.0	130	----
		Lead, total	7439-92-1	E420	0.0189 mg/L	0.02 mg/L	94.6	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0860 mg/L	0.1 mg/L	86.0	70.0	130	----
		Magnesium, total	7439-95-4	E420	ND mg/L	----	ND	70.0	130	----
		Manganese, total	7439-96-5	E420	ND mg/L	----	ND	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0182 mg/L	0.02 mg/L	91.3	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0368 mg/L	0.04 mg/L	91.9	70.0	130	----
		Phosphorus, total	7723-14-0	E420	9.28 mg/L	10 mg/L	92.8	70.0	130	----
		Potassium, total	7440-09-7	E420	3.66 mg/L	4 mg/L	91.6	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0187 mg/L	0.02 mg/L	93.4	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
		Silicon, total	7440-21-3	E420	9.72 mg/L	10 mg/L	97.2	70.0	130	----
		Silver, total	7440-22-4	E420	0.00369 mg/L	0.004 mg/L	92.3	70.0	130	----
		Sodium, total	7440-23-5	E420	ND mg/L	----	ND	70.0	130	----
		Strontium, total	7440-24-6	E420	ND mg/L	----	ND	70.0	130	----
		Sulfur, total	7704-34-9	E420	20.8 mg/L	20 mg/L	104	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0372 mg/L	0.04 mg/L	93.0	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00366 mg/L	0.004 mg/L	91.6	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0200 mg/L	0.02 mg/L	100	70.0	130	----
		Tin, total	7440-31-5	E420	0.0185 mg/L	0.02 mg/L	92.5	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0376 mg/L	0.04 mg/L	94.0	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0187 mg/L	0.02 mg/L	93.7	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00379 mg/L	0.004 mg/L	94.8	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0971 mg/L	0.1 mg/L	97.1	70.0	130	----
		Zinc, total	7440-66-6	E420	ND mg/L	----	ND	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0379 mg/L	0.04 mg/L	94.8	70.0	130	----
Total Metals (QCLot: 1898693)										
KS2500709-004	Anonymous	Mercury, total	7439-97-6	E508	0.0000949 mg/L	0 mg/L	94.9	70.0	130	----
Dissolved Metals (QCLot: 1895283)										
FJ2500648-002	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.196 mg/L	0.2 mg/L	98.0	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0203 mg/L	0.02 mg/L	101	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0211 mg/L	0.02 mg/L	106	70.0	130	----
		Barium, dissolved	7440-39-3	E421	ND mg/L	----	ND	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0381 mg/L	0.04 mg/L	95.2	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.00870 mg/L	0.01 mg/L	87.0	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.094 mg/L	0.1 mg/L	93.6	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00404 mg/L	0.004 mg/L	101	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	ND mg/L	----	ND	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.0105 mg/L	0.01 mg/L	105	70.0	130	----
		Chromium, dissolved	7440-47-3	E421	0.0403 mg/L	0.04 mg/L	101	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0191 mg/L	0.02 mg/L	95.3	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: 1895283) - continued										
FJ2500648-002	Anonymous	Copper, dissolved	7440-50-8	E421	0.0186 mg/L	0.02 mg/L	93.3	70.0	130	----
		Iron, dissolved	7439-89-6	E421	1.91 mg/L	2 mg/L	95.5	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0184 mg/L	0.02 mg/L	91.8	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.0953 mg/L	0.1 mg/L	95.3	70.0	130	----
		Magnesium, dissolved	7439-95-4	E421	ND mg/L	----	ND	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	0.0195 mg/L	0.02 mg/L	97.5	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	0.0202 mg/L	0.02 mg/L	101	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0369 mg/L	0.04 mg/L	92.2	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	10.9 mg/L	10 mg/L	109	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	4.04 mg/L	4 mg/L	101	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0204 mg/L	0.02 mg/L	102	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0431 mg/L	0.04 mg/L	108	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	9.93 mg/L	10 mg/L	99.3	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00402 mg/L	0.004 mg/L	100	70.0	130	----
		Sodium, dissolved	7440-23-5	E421	2.00 mg/L	2 mg/L	99.9	70.0	130	----
		Strontium, dissolved	7440-24-6	E421	ND mg/L	----	ND	70.0	130	----
		Sulfur, dissolved	7704-34-9	E421	22.4 mg/L	20 mg/L	112	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0416 mg/L	0.04 mg/L	104	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00370 mg/L	0.004 mg/L	92.6	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0197 mg/L	0.02 mg/L	98.4	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0205 mg/L	0.02 mg/L	102	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0400 mg/L	0.04 mg/L	100	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0193 mg/L	0.02 mg/L	96.5	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00389 mg/L	0.004 mg/L	97.3	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.101 mg/L	0.1 mg/L	101	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.370 mg/L	0.4 mg/L	92.5	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0426 mg/L	0.04 mg/L	106	70.0	130	----
Dissolved Metals (QCLot: 1899164)										
VA25A4593-001	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000957 mg/L	0 mg/L	95.7	70.0	130	----
Speciated Metals (QCLot: 1895459)										
VA25A4610-002	SQU DS 1	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.256 mg/L	0.25 mg/L	102	70.0	130	----

Chain of Custody (COC) / Analytical Request Form

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Affix ALS barcode label here (lab use only)

COC Number: 17 - Page 1 of 2

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Company:	Triton Environmental
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City/Province:	
Postal Code:	
Invoice To	Same as Report To ☐ YES ☑ NO
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Project Information

ALS Account # / Quote #:	VA25-TRIT100-001
Job #:	11964
PO / AFE:	11964 - Task 20 - Phase 3C-4C
LSD:	
ALS Lab Work Order # (lab use only):	VA4610

Oil
AFE/Cost Center:
Major/Minor Code:
Requisitioner:
Location:
ALS Contact:

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: March 4/2025

For tests that can not be performed according to the service level selected, you will be contacted.

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 (F)	Dissolved metals + mercury (F)	Total hexavalent chromium (F)	Total trivalent chromium (F)	TSS	TDS	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus) (P)	Total sulfide (low) (as H2S), Unionized Sulfide (low) (P)	Anions scan (Br, Cl, F, NO2, NO3, SO4)	General parameters (alkalinity)	DOC (F/P)	SAMPLES ON HOLD	Sample Is hazardous (please provide further detail)	NUMBER OF CONTAINERS
	SQU US 1	Mar 3/25	10:11	Water	R	R	R	R	R	R	R	R	R	R	R		N	9
	pH: 6.49 cond: 61 temp: 4.1																	
	SQU DS 1	Mar 3/25	9:53	Water	R	R	R	R	R	R	R	R	R	R	R		N	9
	pH: 6.46 cond: 62 temp: 11.4																	

Environmental Division Vancouver
Work Order Reference
VA25A4610

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 to ad (electr

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			
				9°C			

SHIPMENT RELEASE (client use)

Released b | March 3/25 | Time: 11:45

INITIAL SHIPMENT RECEPTION (lab use only)

Received by: | Date: | Time:

FINAL SHIPMENT RECEPTION (lab use only)

Date: Mar 3rd | Time: 11:40

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

Page 2 of 2

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

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

Email 2

Email 3

Select Invoice D

Email 1 or Fax

Email 2

Oil

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: March 11/2025

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

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Account # / Quote #:	VA23-TRIT100-012
Job #:	11964
PO / AFE:	11964 - Task 30 - Phase 3C-4C
LSD:	
ALS Lab Work Order # (ALS use only):	
AFE/Cost Center:	
Major/Minor Code:	
Requisitioner:	
Location:	
ALS Contact:	

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	Mar 3/25	9:53	Water	9	R	R	R	R	R	R	R	R	R	R	R	R			
	pH: 6.46 cond: 62 temp: 11.4																			
	~~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~~	~~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)

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			
				9.1			

SHIPMENT RELEASE (client use)

Relea	Date: March 3/25	Time: 11:42

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (ALS use only)

	Date: Mar 3rd	Time: 11:40

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.

BCR Site Receiving Environment Field Notes and Logs

FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-3-3-Renkers-1C359

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Downstream of Discharge
Inspection Date:	03/03/2025	**Location:**	BC Rail Site
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.725354 -123.165173
Temperature(c):	Low 5 High 10	**Permit:**	AE 111824
Weather Conditions:	Overcast	**Ground Conditions:**	Dry

Observations

Time: 09:53:00 **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			

Logger Maintenance

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

Describe Logger Maintenance

Photos

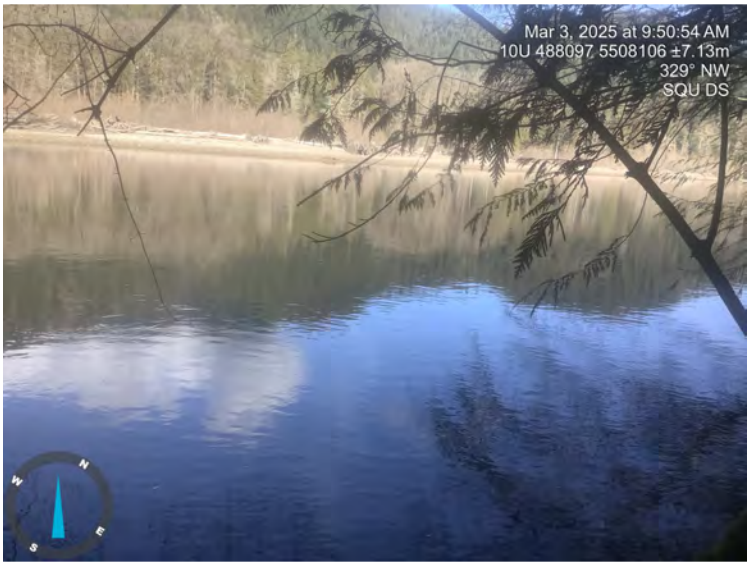


Photo: 1

Location: SQU DS

Description: Upstream view

Photo: 2

Location: SQU DS

Description: Across view

Photos

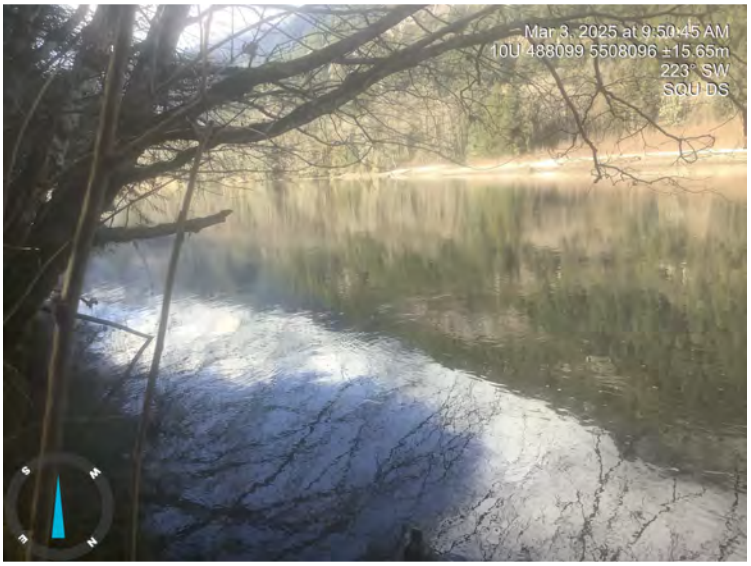


Photo: 3

Location: SQU DS

Description: Downstream view

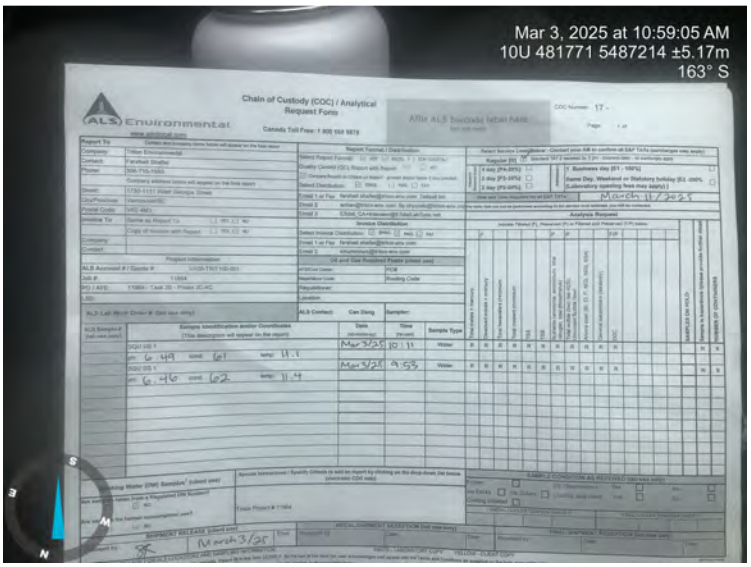


Photo: 4

Location: SQU DS

Description: Lab COC

2025-3-3-Renkers-1C359

Photos

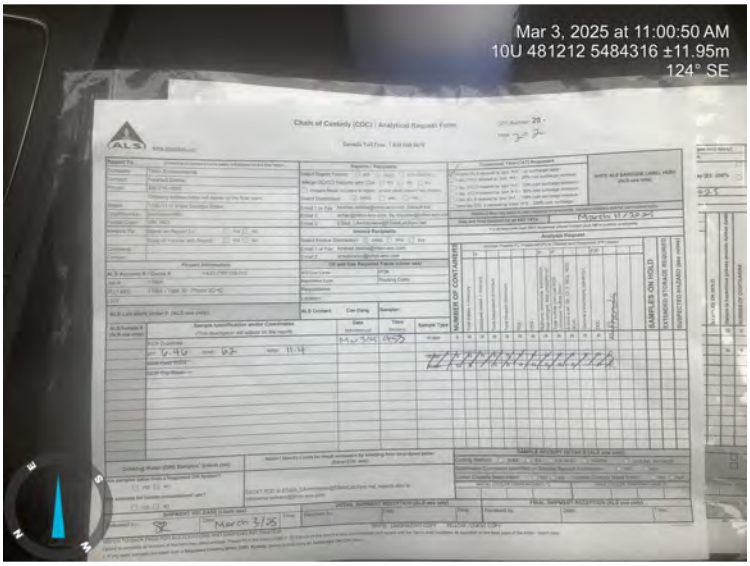


Photo: 5

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

2025-3-3-Renkers-7C91B

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Upstream of Discharge
Inspection Date:	03/03/2025	**Location:**	BC Rail Site
Triton QP:	Stephanie Renkers	**Latitude/Longitude:**	49.726866 -123.163912
Temperature(c):	Low 5 High 10	**Permit:**	AE 111824
Weather Conditions:	Overcast	**Ground Conditions:**	Dry

Observations

Time: 10:11:00 **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 DS

Description: Across view

Photos

Photo: 3

Location: SQU US

Description: Downstream view

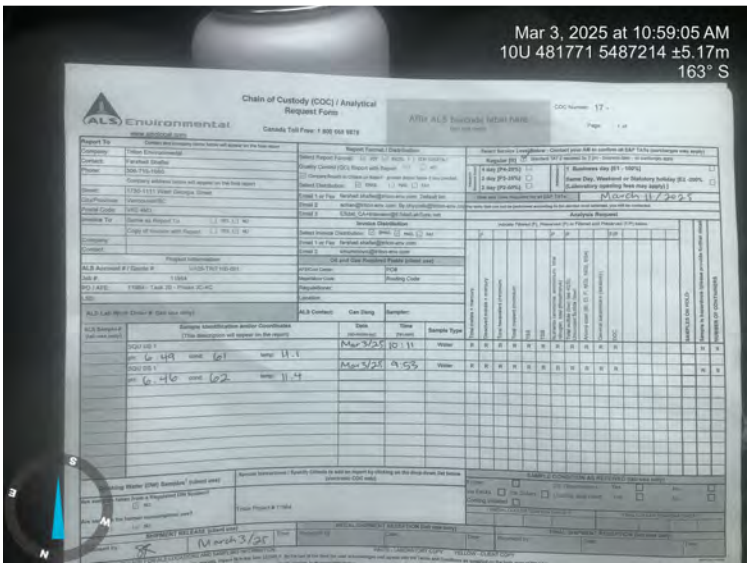


Photo: 4

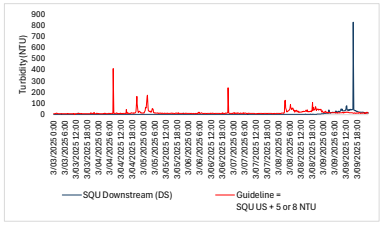
Location: SQU US

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
3/03/2025 0:00	4.8	53.6	0.0	7.1	13.3	0.9	3/03/2025 0:00	7.0	20.7	0.0	6.9	11.1	0.0	8.0
3/03/2025 0:15	4.8	53.4	0.0	7.1	13.3	0.9	3/03/2025 0:15	7.5	43.1	0.0	7.3	11.0	0.0	8.0
3/03/2025 0:30	4.8	53.4	0.0	7.0	13.3	1.1	3/03/2025 0:30	7.2	38.7	0.0	7.0	11.2	0.0	8.0
3/03/2025 0:45	4.8	53.0	0.0	7.1	13.3	0.8	3/03/2025 0:45	8.0	85.7	0.0	7.4	10.9	0.0	8.0
3/03/2025 1:00	4.7	53.0	0.0	7.1	13.3	0.9	3/03/2025 1:00	8.5	90.1	0.0	7.6	10.7	1.5	9.5
3/03/2025 1:15	4.7	53.0	0.0	7.0	13.3	1.0	3/03/2025 1:15	8.3	83.0	0.0	7.4	10.8	1.3	9.3
3/03/2025 1:30	4.7	52.7	0.0	7.1	13.3	0.9	3/03/2025 1:30	8.5	91.9	0.0	7.5	10.7	3.7	11.7
3/03/2025 1:45	4.7	52.9	0.0	7.1	13.3	0.9	3/03/2025 1:45	8.6	93.5	0.0	7.4	10.7	0.6	8.6
3/03/2025 2:00	4.7	52.7	0.0	7.1	13.3	0.9	3/03/2025 2:00	8.5	92.6	0.0	7.3	10.7	0.3	8.3
3/03/2025 2:15	4.7	53.1	0.0	7.0	13.3	1.0	3/03/2025 2:15	7.4	41.3	0.0	7.0	11.1	0.1	8.1
3/03/2025 2:30	4.7	52.8	0.0	7.1	13.3	1.0	3/03/2025 2:30	8.5	93.9	0.0	7.3	10.7	0.1	8.1
3/03/2025 2:45	4.7	52.7	0.0	7.1	13.3	0.9	3/03/2025 2:45	7.0	22.5	0.0	6.9	11.2	0.0	8.0
3/03/2025 3:00	4.7	52.7	0.0	7.1	13.3	0.8	3/03/2025 3:00	8.2	88.3	0.0	7.2	10.9	0.0	8.0
3/03/2025 3:15	4.7	52.8	0.0	7.1	13.3	0.9	3/03/2025 3:15	8.3	94.8	0.0	7.4	10.8	0.0	8.0
3/03/2025 3:30	4.7	52.6	0.0	7.1	13.3	0.9	3/03/2025 3:30	8.3	89.3	0.0	7.4	10.8	0.0	8.0
3/03/2025 3:45	4.7	52.6	0.0	7.1	13.3	1.4	3/03/2025 3:45	8.3	88.6	0.0	7.3	10.8	0.0	8.0
3/03/2025 4:00	4.7	52.5	0.0	7.1	13.3	7.3	3/03/2025 4:00	8.3	89.3	0.0	7.4	10.8	0.0	8.0
3/03/2025 4:15	4.7	52.6	0.0	7.1	13.3	0.9	3/03/2025 4:15	7.6	43.8	0.0	7.3	10.9	0.0	8.0
3/03/2025 4:30	4.7	52.5	0.0	7.1	13.3	0.8	3/03/2025 4:30	6.9	21.5	0.0	6.9	11.2	0.0	8.0
3/03/2025 4:45	4.7	52.5	0.0	7.0	13.3	0.9	3/03/2025 4:45	8.1	88.0	0.0	7.3	10.9	0.0	8.0
3/03/2025 5:00	4.6	52.5	0.0	7.1	13.3	1.0	3/03/2025 5:00	8.3	90.9	0.0	7.4	10.8	0.0	8.0
3/03/2025 5:15	4.6	52.5	0.0	7.0	13.3	1.5	3/03/2025 5:15	8.4	88.9	0.0	7.4	10.8	0.0	8.0
3/03/2025 5:30	4.6	52.5	0.0	7.1	13.3	0.9	3/03/2025 5:30	7.4	36.6	0.0	7.2	11.0	0.0	8.0
3/03/2025 5:45	4.6	52.6	0.0	7.1	13.3	0.9	3/03/2025 5:45	8.1	87.8	0.0	7.3	10.9	0.0	8.0
3/03/2025 6:00	4.6	52.3	0.0	7.0	13.3	1.1	3/03/2025 6:00	8.4	92.4	0.0	7.4	10.8	0.0	8.0
3/03/2025 6:15	4.6	52.1	0.0	7.1	13.3	0.8	3/03/2025 6:15	7.1	27.2	0.0	7.1	11.1	0.0	8.0
3/03/2025 6:30	4.6	51.9	0.0	6.9	13.3	0.9	3/03/2025 6:30	8.4	91.5	0.0	7.4	10.8	0.0	8.0
3/03/2025 6:45	4.6	52.1	0.0	7.0	13.3	0.7	3/03/2025 6:45	8.5	91.2	0.0	7.4	10.8	0.0	8.0
3/03/2025 7:00	4.6	53.0	0.0	7.0	13.2	1.0	3/03/2025 7:00	7.2	27.2	0.0	7.1	11.0	0.0	8.0
3/03/2025 7:15	4.6	53.1	0.0	6.9	13.3	0.8	3/03/2025 7:15	6.9	21.1	0.0	6.9	11.2	0.0	8.0
3/03/2025 7:30	4.6	52.5	0.0	7.1	13.3	0.8	3/03/2025 7:30	7.7	73.2	0.0	7.1	11.1	1.8	9.8
3/03/2025 7:45	4.6	52.0	0.0	7.1	13.3	0.8	3/03/2025 7:45	8.2	78.1	0.0	7.4	10.8	0.0	8.0
3/03/2025 8:00	4.6	52.2	0.0	7.1	13.3	0.8	3/03/2025 8:00	8.3	87.9	0.0	7.3	10.8	0.0	8.0
3/03/2025 8:15	4.6	52.4	0.0	7.1	13.3	0.9	3/03/2025 8:15	8.4	89.5	0.0	7.3	10.8	0.0	8.0
3/03/2025 8:30	4.6	52.4	0.0	7.1	13.3	1.0	3/03/2025 8:30	8.4	90.5	0.0	7.4	10.8	0.0	8.0
3/03/2025 8:45	4.5	52.9	0.0	7.1	13.3	0.8	3/03/2025 8:45	8.4	89.0	0.0	7.4	10.8	0.0	8.0
3/03/2025 9:00	4.5	53.2	0.0	7.1	13.3	0.8	3/03/2025 9:00	8.4	87.8	0.0	7.4	10.8	0.0	8.0
3/03/2025 9:15	4.5	53.5	0.0	7.0	13.3	1.1	3/03/2025 9:15	7.3	32.4	0.0	7.2	11.0	0.0	8.0
3/03/2025 9:30	4.5	53.9	0.0	7.1	13.3	0.7	3/03/2025 9:30	6.9	21.3	0.0	6.9	11.2	0.0	8.0
3/03/2025 9:45	4.5	54.9	0.0	7.0	13.3	0.8	3/03/2025 9:45	8.3	99.0	0.0	7.4	10.8	0.0	8.0
3/03/2025 10:00	4.5	56.0	0.0	7.0	13.3	0.8	3/03/2025 10:00	8.4	97.2	0.0	7.4	10.8	0.0	8.0
3/03/2025 10:15	4.6	56.8	0.0	6.8	13.3	0.7	3/03/2025 10:15	7.1	21.2	0.0	6.9	11.2	0.0	8.0
3/03/2025 10:30	4.6	58.5	0.0	6.9	13.3	0.9	3/03/2025 10:30	8.1	92.6	0.0	7.3	11.0	0.6	8.6
3/03/2025 10:45	4.6	58.7	0.0	7.1	13.3	0.9	3/03/2025 10:45	8.4	93.4	0.0	7.4	10.8	0.0	8.0
3/03/2025 11:00	4.6	59.6	0.0	6.8	13.2	0.8	3/03/2025 11:00	8.5	92.3	0.0	7.4	10.8	0.8	0.0
3/03/2025 11:15	4.7	59.2	0.0	7.0	13.2	1.0	3/03/2025 11:15	8.6	88.7	0.0	7.4	10.8	0.0	8.0
3/03/2025 11:30	4.8	58.2	0.0	7.1	13.3	0.8	3/03/2025 11:30	8.6	87.6	0.0	7.4	10.8	0.0	8.0
3/03/2025 11:45	4.8	56.6	0.0	7.1	13.3	0.8	3/03/2025 11:45	8.1	55.1	0.0	7.3	10.9	0.0	8.0
3/03/2025 12:00	4.9	56.3	0.0	7.1	13.3	0.8	3/03/2025 12:00	7.8	30.6	0.0	7.2	10.9	0.0	8.0
3/03/2025 12:15	4.9	56.1	0.0	7.0	13.3	1.2	3/03/2025 12:15	7.4	19.7	0.0	6.9	11.1	0.0	8.0
3/03/2025 12:30	5.0	55.6	0.0	7.1	13.3	0.9	3/03/2025 12:30	8.7	87.5	0.0	7.4	10.7	1.8	9.8
3/03/2025 12:45	5.1	55.2	0.0	7.1	13.3	0.7	3/03/2025 12:45	8.8	88.6	0.0	7.3	10.7	0.6	8.6
3/03/2025 13:00	5.2	54.6	0.0	7.0	13.3	12.8	3/03/2025 13:00	8.8	88.9	0.0	7.4	10.7	0.9	8.9
3/03/2025 13:15	5.3	54.2	0.0	7.1	13.3	2.1	3/03/2025 13:15	8.8	88.8	0.0	7.4	10.7	0.6	8.6
3/03/2025 13:30	5.4	54.1	0.0	7.1	13.2	0.8	3/03/2025 13:30	8.2	37.9	0.0	7.3	10.8	0.0	8.0
3/03/2025 13:45	5.4	54.1	0.0	7.0	13.2	0.9	3/03/2025 13:45	8.3	41.9	0.0	7.2	10.8	2.6	10.6
3/03/2025 14:00	5.5	53.9	0.0	7.0	13.3	3.3	3/03/2025 14:00	9.1	92.4	0.0	7.4	10.6	0.6	8.6
3/03/2025 14:15	5.6	53.9	0.0	7.0	13.2	1.4	3/03/2025 14:15	8.2	25.3	0.0	7.1	10.8	0.0	8.0
3/03/2025 14:30	5.6	53.6	0.0	7.1	13.2	0.9	3/03/2025 14:30	8.2	19.5	0.0	6.9	10.9	0.0	8.0
3/03/2025 14:45	5.7	53.3	0.0	7.1	13.2	1.2	3/03/2025 14:45	9.3	91.7	0.0	7.4	10.6	0.3	8.3
3/03/2025 15:00	5.8	53.0	0.0	7.1	13.2	0.8	3/03/2025 15:00	9.3	93.2	0.0	7.4	10.5	0.0	8.0
3/03/2025 15:15	5.8	53.1	0.0	7.1	13.2	1.0	3/03/2025 15:15	9.3	91.3	0.0	7.4	10.6	0.0	8.0
3/03/2025 15:30	5.8	52.9	0.0	7.1	13.2	0.8	3/03/2025 15:30	9.2	92.5	0.0	7.4	10.6	0.0	8.0
3/03/2025 15:45	5.9	52.9	0.0	7.1	13.2	0.8	3/03/2025 15:45	9.2	91.5	0.0	7.4	10.6	0.0	8.0
3/03/2025 16:00	6.0	52.9	0.0	7.0	13.2	0.9	3/03/2025 16:00	8.5	35.7	0.0	7.3	10.7	0.0	8.0
3/03/2025 16:15	6.0	52.8	0.0	7.1	13.2	0.8	3/03/2025 16:15	9.0	88.9	0.0	7.4	10.6	0.0	8.0
3/03/2025 16:30	6.0	52.9	0.0	7.1	13.2	1.2	3/03/2025 16:30	9.0	82.8	0.0	7.4	10.7	0.0	8.0
3/03/2025 16:45	5.9	52.9	0.0	7.1	13.2	1.0	3/03/2025 16:45	8.9	87.4	0.0	7.4	10.7	0.0	8.0
3/03/2025 17:00	5.9	52.9	0.0	7.1	13.2	1.2	3/03/2025 17:00	8.9	93.5	0.0	7.4	10.7	0.0	8.0
3/03/2025 17:15	5.8	52.9	0.0	7.0	13.1	0.9	3/03/2025 17:15	8.8	80.9	0.0	7.4	10.7	0.0	8.0
3/03/2025 17:30	5.7	52.9	0.0	7.0	13.1	1.0	3/03/2025 17:30	8.8	82.5	0.0	7.4	10.7	0.0	8.0
3/03/2025 17:45	5.7	52.8	0.0	7.1	13.1	0.9	3/03/2025 17:45	8.8	92.0	0.0	7.4	10.7	0.0	8.0
3/03/2025 18:00	5.6	52.8	0.0	7.0	13.1	0.9	3/03/2025 18:00	8.6	60.6	0.0	7.4	10.7	0.0	8.0
3/03/2025 18:15	5.6	52.8	0.0	7.0	13.1	0.8	3/03/2025 18:15	7.7	22.3	0.0	7.0	11.0	0.0	8.0
3/03/2025 18:30	5.5	52.7	0.0	7.0	13.1	0.9	3/03/2025 18:30	7.7	23.0	0.0	7.0	11.0	0.0	8.0
3/03/2025 18:45	5.5	52.7	0.0	7.0	13.1	0.9	3/03/2025 18:45	8.8	79.7	0.0	7.3	10.7	0.0	8.0
3/03/2025 19:00	5.5	52.6	0.0	7.1	13.1	0.8	3/03/2025 19:00	8.8	90.4	0.0	7.3	10.7	0.0	8.0
3/03/2025 19:15	5.5	52.8	0.0	7.0	13.1	0.8	3/03/2025 19:15	8.7	77.7	0.0	7.3	10.7	0.0	8.0
3/03/2025 19:30	5.5	52.7	0.0	7.1	13.1	0.9	3/03/2025 19:30	8.7	80.0	0.0	7.4	10.7	0.1	8.1
3/03/2025 19:45	5.5	52.5	0.0	7.0	13.1	1.1	3/03/2025 19:45	8.9	89.3	0.0	7.4	10.7	9.8	14.8
3/03/2025 20:00	5.4	52.1	0.0	7.1	13.1	0.9	3/03/2025 20:00	8.3	62.7	0.0	7.3	10.9	2.4	10.4
3/03/2025 20:15	5.4	51.8	0.0	7.1	13.1	0.9	3/03/2025 20:15	9.1	94.0	0.0	7.5	10.6	2.6	10.6
3/03/2025 20:30	5.4	51.4	0.0	7.0	13.1	1.6	3/03/2025 20:30	9.1	95.7	0.0	7.4	10.6	0.7	8.7
3/03/2025 20:45	5.4	51.1	0.0	7.1	13.1	0.9	3/03/2025 20:45	8.3	58.8	0.0	7.2	10.8	0.2	8.2
3/03/2025 21:00	5.4	51.7	0.0	7.0	13.1	0.9	3/03/2025 21:00	9.0	86.2	0.0	7.3	10.6	0.1	8.1
3/03/2025 21:15	5.4	53.6	0.0	6.9	13.0	1.0	3/03/2025 21:15	7.8	29.9	0.0	7.1	10.9	0.0	8.0
3/03/2025 21:30	5.4	53.7	0.0	6.9	13.0	0.9	3/03/2025 21:30	8.7	82.6	0.0	7.3	10.8	12.9	17.9
3/03/2025 21:45	5.4	53.2	0.0	6.8	13.0	1.1	3/03/2025 21:45	7.8	35.5	0.0	7.1	11.0	0.0	8.0
3/03/2025 22:00	5.4	52.6	0.0	7.1	13.0	1.0	3/03/2025 22:00	7.7	34.7	0.0	7.1	11.0	0.0	8.0
3/03/2025 22:15	5.4	54.0	0.0	6.9	13.0	1.2	3/03/2025 22:15	9.0	88.2	0.0	7.3	10.6	0.1	8.1
3/03/2025 22:30	5.4	54.4	0.0	7.0	13.0	1.2	3/03/2025 22:30	9.0	87.8	0.0	7.3	10.6	0.0	8.0
3/03/2025 22:45	5.5	55.5	0.0	6.9	13.0	1.0	3/03/2025 22:45	9.0	88.8	0.0	7.3	10.6	0.6	8.6
3/03/2025 23:00	5.5	56.1	0.0	6.9	12.9	1.3	3/03/2025 23:00	8.2	52.0	0.0	7.4	10.8	3.1	11.1
3/03/2025 23:15	5.5	56.2	0.0	7.0	13.0	0.9	3/03/2025 23:15	7.5	24.3	0.0	7.0	11.1	0.0	8.0
3/03/2025 23:30	5.4	55.5	0.0	7.1	13.0	1.1	3/03/2025 23:30	8.2	59.4	0.0	7.3	10.9	2.4	10.4
3/03/2025 23:45	5.4	54.6	0.0	7.1	13.0	0.8	3/03/2025 23:45	8.9	92.8	0.0	7.4	10.6	0.0	8.0
3/04/2025 0:00	5.4	54.2	0.0	6.8	13.0	0.9	3/04/2025 0:00	8.8	83.4	0.0	7.3	10.7	1.4	9.4
3/04/2025 0:15	5.4	54.6	0.0	7.0	13.0	1.0	3/04/2025 0:15	7.9	36.9	0.0	7.2	10.9	0.0	8.0
3/04/2025 0:30	5.4	54.7	0.0	7.0	13.0	1.0	3/04/2025 0:30	7.4	25.1	0.0	6.9	11.1	0.0	8.0
3/04/2025 0:45	5.4	54.3	0.0	7.0	13.0	0.8	3/04/2025 0:45	8.7	89.9	0.0	7.4	10.7	0.0	8.0
3/04/2025 1:00	5.4	54.1	0.0	7.0	13.0	0.9	3/04/2025 1:00	8.7	82.1	0.0	7.4	10.7	0.0	8.0
3/04/2025 1:15	5.4	53.6	0.0	7.0	13.0	1.0	3/04/2025 1:15	8.9	92.1	0.0	7.4	10.7	0.0	8.0
3/04/2025 1:30	5.3	53.5	0.0	7.0	13.0	0.8	3/04/2025 1:30	8.9	92.0	0.0	7.4	10.7	0.0	8.0
3/04/2025 1:45	5.3	53.2	0.0	7.0	13.0	0.9	3/04/2025 1:45	8.8	90.8	0.0	7.4	10.7	0.0	8.0
3/04/2025 2:00	5.3	52.8	0.0	7.0	13.0	1.0	3/04/2025 2:00	8.5	71.6	0.0	7.4	10.7	0.0	8.0
3/04/2025 2:15	5.3	52.7	0.0	7.0	13.0	0.9	3/04/2025 2:15	7.3	25.2	0.0	7.0	11.1	0.0	8.0
3/04/2025 2:30	5.3	52.5	0.0	7.0	13.0	1.1	3/04/2025 2:30	7.9	51.3	0.0	7.3	10.9	0.7	8.7
3/04/2025 2:45	5.3	52.5	0.0	7.0	13.0	0.9	3/04/2025 2:45	8.8	94.5	0.0	7.4	10.7	0.0	8.0
3/04/2025 3:00	5.3	54.0	0.0	7.0	13.0	1.1	3/04/2025 3:00	8.8	95.0	0.0	7.4	10.7	0.3	8.3
3/04/2025 3:15	5.3	52.2	0.0	7.0	13.0	1.2	3/04/2025 3:15	8.7	84.9	0.0	7.4	10.7	5.1	13.1
3/04/2025 3:30	5.3	52.4	0.0	7.0	13.0	1.4	3/04/2025 3:30	7.6	36.1	0.0	7.2	11.0	0.0	8.0



3/04/2025 3:45	5.3	52.2	0.0	7.0	13.0	1.0	3/04/2025 3:45	8.8	95.5	0.0	7.4	10.7	0.8	8.8
3/04/2025 4:00	5.3	52.4	0.0	7.0	13.0	1.0	3/04/2025 4:00	8.4	72.0	0.0	7.4	10.7	0.1	8.1
3/04/2025 4:15	5.3	52.3	0.0	7.0	13.0	1.0	3/04/2025 4:15	7.4	31.5	0.0	7.1	11.1	0.0	8.0
3/04/2025 4:30	5.3	52.2	0.0	7.0	13.0	1.1	3/04/2025 4:30	7.3	28.7	0.0	7.1	11.1	0.0	8.0
3/04/2025 4:45	5.3	52.1	0.0	7.0	13.0	1.1	3/04/2025 4:45	8.7	94.9	0.0	7.4	10.7	0.0	8.0
3/04/2025 5:00	5.3	52.1	0.0	7.0	13.0	0.9	3/04/2025 5:00	8.3	73.6	0.0	7.3	10.8	0.3	8.3
3/04/2025 5:15	5.2	52.0	0.0	7.0	13.0	1.3	3/04/2025 5:15	8.8	92.9	0.0	7.4	10.7	1.1	9.1
3/04/2025 5:30	5.2	52.0	0.0	7.1	13.0	0.9	3/04/2025 5:30	8.8	92.9	0.0	7.4	10.7	0.9	8.9
3/04/2025 5:45	5.2	51.7	0.0	7.0	13.0	0.9	3/04/2025 5:45	8.8	92.2	0.0	7.4	10.7	1.0	9.0
3/04/2025 6:00	5.1	51.4	0.0	7.0	13.1	0.9	3/04/2025 6:00	7.6	35.7	0.0	7.2	11.0	0.0	8.0
3/04/2025 6:15	5.1	51.4	0.0	7.0	13.1	0.9	3/04/2025 6:15	8.4	68.8	0.0	7.4	10.7	0.6	8.6
3/04/2025 6:30	5.1	51.2	0.0	7.0	13.1	1.0	3/04/2025 6:30	8.7	88.9	0.0	7.4	10.7	0.8	8.8
3/04/2025 6:45	5.1	51.0	0.0	6.9	13.1	1.2	3/04/2025 6:45	8.7	89.5	0.0	7.5	10.7	0.3	8.3
3/04/2025 7:00	5.1	50.9	0.0	6.9	13.1	1.2	3/04/2025 7:00	8.7	87.6	0.0	7.5	10.7	0.8	8.8
3/04/2025 7:15	5.1	51.2	0.0	7.0	13.1	1.3	3/04/2025 7:15	8.7	84.8	0.0	7.5	10.7	1.3	9.3
3/04/2025 7:30	5.1	52.6	0.0	6.9	13.0	1.5	3/04/2025 7:30	8.7	86.4	0.0	7.5	10.7	1.5	9.5
3/04/2025 7:45	5.0	51.6	0.0	7.0	13.1	1.3	3/04/2025 7:45	7.6	49.2	0.0	7.2	11.1	410.2	415.2
3/04/2025 8:00	5.0	50.8	0.0	7.1	13.1	1.0	3/04/2025 8:00	7.4	35.1	0.0	7.2	11.0	0.2	8.2
3/04/2025 8:15	5.0	50.4	0.0	7.1	13.1	1.1	3/04/2025 8:15	8.6	87.3	0.0	7.5	10.7	1.5	9.5
3/04/2025 8:30	5.0	50.5	0.0	7.1	13.1	1.2	3/04/2025 8:30	8.5	85.3	0.0	7.5	10.8	1.5	9.5
3/04/2025 8:45	5.0	50.5	0.0	6.8	13.1	1.5	3/04/2025 8:45	8.6	86.0	0.0	7.5	10.7	2.7	10.7
3/04/2025 9:00	4.9	50.7	0.0	7.0	13.1	1.2	3/04/2025 9:00	8.6	85.0	0.0	7.5	10.7	0.3	8.3
3/04/2025 9:15	4.9	51.0	0.0	7.1	13.1	0.9	3/04/2025 9:15	8.6	84.4	0.0	7.5	10.7	0.8	8.8
3/04/2025 9:30	4.9	51.5	0.0	7.1	13.2	1.0	3/04/2025 9:30	8.4	85.1	0.0	7.4	10.8	9.8	14.8
3/04/2025 9:45	4.9	52.3	0.0	7.1	13.2	0.9	3/04/2025 9:45	8.1	65.0	0.0	7.4	10.8	4.0	12.0
3/04/2025 10:00	4.9	53.5	0.0	6.6	13.2	0.9	3/04/2025 10:00	8.4	80.2	0.0	7.5	10.8	0.0	8.0
3/04/2025 10:15	4.9	54.0	0.0	6.9	13.2	0.9	3/04/2025 10:15	8.4	88.9	0.0	7.4	10.8	0.3	8.3
3/04/2025 10:30	5.0	56.5	0.0	6.9	13.2	1.1	3/04/2025 10:30	8.4	89.3	0.0	7.4	10.8	0.0	8.0
3/04/2025 10:45	5.0	58.3	0.0	6.9	13.1	0.9	3/04/2025 10:45	8.5	89.2	0.0	7.4	10.8	0.1	8.1
3/04/2025 11:00	5.0	57.9	0.0	6.7	13.1	1.1	3/04/2025 11:00	8.5	88.7	0.0	7.4	10.8	2.3	10.3
3/04/2025 11:15	5.1	57.8	0.0	7.0	13.2	1.3	3/04/2025 11:15	8.5	88.3	0.0	7.4	10.8	0.0	8.0
3/04/2025 11:30	5.1	58.3	0.0	6.9	13.1	0.9	3/04/2025 11:30	8.3	78.7	0.0	7.4	10.8	3.9	11.9
3/04/2025 11:45	5.1	57.3	0.0	7.0	13.1	0.9	3/04/2025 11:45	8.1	70.0	0.0	7.3	10.9	0.6	8.6
3/04/2025 12:00	5.1	55.4	0.0	7.1	13.2	0.8	3/04/2025 12:00	8.1	70.1	0.0	7.4	10.9	0.1	8.1
3/04/2025 12:15	5.1	54.0	0.0	7.1	13.2	0.8	3/04/2025 12:15	8.7	98.8	0.0	7.4	10.7	1.3	9.3
3/04/2025 12:30	5.1	54.2	0.0	7.0	13.2	1.1	3/04/2025 12:30	7.8	43.9	0.0	7.3	10.9	1.5	9.5
3/04/2025 12:45	5.1	53.7	0.0	7.1	13.2	0.8	3/04/2025 12:45	8.6	89.8	0.0	7.4	10.7	0.0	8.0
3/04/2025 13:00	5.1	53.3	0.0	7.0	13.2	0.9	3/04/2025 13:00	8.8	96.5	0.0	7.4	10.7	0.3	8.3
3/04/2025 13:15	5.1	52.8	0.0	7.0	13.2	0.8	3/04/2025 13:15	8.8	94.3	0.0	7.5	10.7	0.2	8.2
3/04/2025 13:30	5.1	52.7	0.0	7.1	13.2	1.0	3/04/2025 13:30	8.7	94.6	0.0	7.4	10.7	1.3	9.3
3/04/2025 13:45	5.1	52.2	0.0	7.0	13.2	0.8	3/04/2025 13:45	8.7	90.3	0.0	7.4	10.7	0.8	8.8
3/04/2025 14:00	5.1	52.1	0.0	7.1	13.2	0.8	3/04/2025 14:00	8.7	90.2	0.0	7.4	10.7	0.8	8.8
3/04/2025 14:15	5.1	52.5	0.0	7.0	13.2	0.9	3/04/2025 14:15	8.7	89.3	0.0	7.4	10.7	0.8	8.8
3/04/2025 14:30	5.1	52.3	0.0	7.0	13.2	0.8	3/04/2025 14:30	8.5	82.2	0.0	7.4	10.7	2.4	10.4
3/04/2025 14:45	5.1	52.1	0.0	7.1	13.2	1.0	3/04/2025 14:45	8.0	54.0	0.0	7.3	10.9	38.3	43.3
3/04/2025 15:00	5.1	52.0	0.0	7.0	13.3	1.1	3/04/2025 15:00	8.7	89.6	0.0	7.4	10.7	2.2	10.2
3/04/2025 15:15	5.2	52.0	0.0	7.1	13.2	1.0	3/04/2025 15:15	8.9	105.1	0.0	7.4	10.6	4.5	12.5
3/04/2025 15:30	5.2	52.2	0.0	7.0	13.2	0.9	3/04/2025 15:30	8.9	105.4	0.0	7.5	10.6	6.0	14.0
3/04/2025 15:45	5.2	52.0	0.0	7.0	13.2	0.9	3/04/2025 15:45	8.2	56.5	0.0	7.4	10.7	1.8	9.8
3/04/2025 16:00	5.2	51.7	0.0	7.0	13.2	1.4	3/04/2025 16:00	7.6	34.6	0.0	7.2	11.0	1.3	9.3
3/04/2025 16:15	5.2	51.8	0.0	7.1	13.2	0.8	3/04/2025 16:15	8.6	96.7	0.0	7.4	10.7	1.5	9.5
3/04/2025 16:30	5.2	52.1	0.0	6.9	13.2	1.2	3/04/2025 16:30	8.6	96.2	0.0	7.4	10.7	2.1	10.1
3/04/2025 16:45	5.1	51.5	0.0	7.0	13.2	1.1	3/04/2025 16:45	8.4	93.1	0.0	7.4	10.8	0.8	8.8
3/04/2025 17:00	5.1	51.2	0.0	7.1	13.2	0.9	3/04/2025 17:00	8.5	96.5	0.0	7.4	10.7	2.5	10.5
3/04/2025 17:15	5.1	51.5	0.0	7.0	13.2	1.0	3/04/2025 17:15	8.5	98.4	0.0	7.4	10.7	10.0	15.0
3/04/2025 17:30	5.1	51.7	0.0	7.1	13.2	1.0	3/04/2025 17:30	8.4	97.5	0.0	7.4	10.7	6.9	14.9
3/04/2025 17:45	5.1	51.7	0.0	7.1	13.2	0.9	3/04/2025 17:45	8.4	96.5	0.0	7.4	10.8	5.8	13.8
3/04/2025 18:00	5.1	51.3	0.0	7.0	13.2	0.9	3/04/2025 18:00	8.4	95.2	0.0	7.4	10.7	3.6	11.6
3/04/2025 18:15	5.1	51.1	0.0	7.1	13.2	0.9	3/04/2025 18:15	8.4	93.4	0.0	7.4	10.8	3.4	11.4
3/04/2025 18:30	5.1	51.1	0.0	7.0	13.2	1.0	3/04/2025 18:30	8.4	91.5	0.0	7.4	10.8	2.8	10.8
3/04/2025 18:45	5.1	51.0	0.0	7.1	13.2	0.9	3/04/2025 18:45	8.2	87.1	0.0	7.4	10.9	7.2	15.2
3/04/2025 19:00	5.1	51.2	0.0	7.1	13.2	1.0	3/04/2025 19:00	8.3	89.5	0.0	7.4	10.8	3.2	11.2
3/04/2025 19:15	5.1	51.2	0.0	7.0	13.2	0.9	3/04/2025 19:15	7.2	46.2	0.0	7.2	11.1	5.3	13.3
3/04/2025 19:30	5.1	51.1	0.0	7.1	13.2	1.0	3/04/2025 19:30	8.1	88.9	0.0	7.4	10.9	10.3	15.3
3/04/2025 19:45	5.1	51.2	0.0	7.1	13.2	1.0	3/04/2025 19:45	7.6	68.5	0.0	7.3	11.0	20.1	25.1
3/04/2025 20:00	5.1	51.6	0.0	7.1	13.1	1.1	3/04/2025 20:00	7.9	88.8	0.0	7.4	10.9	56.2	61.2
3/04/2025 20:15	5.1	51.6	0.0	7.1	13.2	1.2	3/04/2025 20:15	7.9	97.4	0.0	7.5	10.9	156.7	161.7
3/04/2025 20:30	5.0	51.5	0.0	7.1	13.2	1.1	3/04/2025 20:30	7.9	90.9	0.0	7.5	10.9	88.9	93.9
3/04/2025 20:45	5.0	51.4	0.0	7.1	13.2	1.4	3/04/2025 20:45	7.6	77.8	0.0	7.4	11.0	36.9	41.9
3/04/2025 21:00	5.0	51.6	0.0	7.1	13.2	1.1	3/04/2025 21:00	7.8	87.9	0.0	7.4	11.0	14.4	19.4
3/04/2025 21:15	5.0	51.8	0.0	7.1	13.2	0.9	3/04/2025 21:15	7.8	87.5	0.0	7.4	11.0	12.0	17.0
3/04/2025 21:30	5.0	52.4	0.0	7.1	13.2	1.0	3/04/2025 21:30	7.1	63.0	0.0	7.2	11.2	22.4	27.4
3/04/2025 21:45	5.0	52.6	0.0	6.9	13.2	2.2	3/04/2025 21:45	7.6	83.5	0.0	7.4	11.0	25.3	30.3
3/04/2025 22:00	5.0	52.8	0.0	6.8	13.2	1.3	3/04/2025 22:00	7.9	98.9	0.0	7.4	10.9	20.3	25.3
3/04/2025 22:15	5.0	52.3	0.0	7.0	13.2	1.1	3/04/2025 22:15	8.0	97.6	0.0	7.4	10.9	13.3	18.3
3/04/2025 22:30	5.0	53.0	0.0	6.9	13.2	1.2	3/04/2025 22:30	7.9	96.7	0.0	7.4	10.9	8.6	13.6
3/04/2025 22:45	5.0	53.2	0.0	7.1	13.2	1.3	3/04/2025 22:45	6.9	57.1	0.0	7.2	11.2	6.9	14.9
3/04/2025 23:00	4.9	52.2	0.0	7.0	13.3	1.2	3/04/2025 23:00	6.6	43.4	0.0	7.1	11.3	4.1	12.1
3/04/2025 23:15	4.9	52.1	0.0	7.2	13.3	1.0	3/04/2025 23:15	8.0	98.6	0.0	7.4	10.9	4.8	12.8
3/04/2025 23:30	4.9	53.6	0.0	7.0	13.3	1.2	3/04/2025 23:30	8.0	97.5	0.0	7.4	10.9	3.5	11.5
3/04/2025 23:45	4.9	55.0	0.0	7.0	13.2	1.0	3/04/2025 23:45	8.0	96.1	0.0	7.4	10.9	10.3	15.3
3/05/2025 0:00	4.9	54.6	0.0	7.0	13.2	1.2	3/05/2025 0:00	7.9	89.8	0.0	7.4	10.9	5.5	13.5
3/05/2025 0:15	4.9	54.6	0.0	6.8	13.2	1.2	3/05/2025 0:15	8.1	100.5	0.0	7.4	10.9	6.0	14.0
3/05/2025 0:30	4.9	56.6	0.0	6.8	13.2	1.3	3/05/2025 0:30	8.2	100.1	0.0	7.5	10.9	20.4	25.4
3/05/2025 0:45	4.9	57.3	0.0	7.1	13.2	1.1	3/05/2025 0:45	6.7	45.8	0.0	7.2	11.3	29.4	34.4
3/05/2025 1:00	4.9	57.1	0.0	7.1	13.2	1.4	3/05/2025 1:00	6.5	48.6	0.0	7.2	11.4	59.0	64.0
3/05/2025 1:15	4.9	56.3	0.0	6.8	13.2	1.4	3/05/2025 1:15	7.7	101.4	0.0	7.4	11.0	53.4	58.4
3/05/2025 1:30	4.9	56.4	0.0	6.8	13.2	1.2	3/05/2025 1:30	7.4	85.4	0.0	7.4	11.1	85.9	90.9
3/05/2025 1:45	4.9	55.3	0.0	7.0	13.2	1.6	3/05/2025 1:45	7.7	105.8	0.0	7.5	11.0	156.6	161.6
3/05/2025 2:00	4.9	54.1	0.0	7.1	13.2	2.2	3/05/2025 2:00	7.0	83.4	0.0	7.5	11.2	168.6	173.6
3/05/2025 2:15	4.9	53.9	0.0	7.1	13.2	1.1	3/05/2025 2:15	7.8	103.4	0.0	7.4	11.0	52.8	57.8
3/05/2025 2:30	4.9	53.9	0.0	7.1	13.3	1.1	3/05/2025 2:30	7.6	90.6	0.0	7.4	11.0	29.0	34.0
3/05/2025 2:45	4.9	54.2	0.0	7.1	13.2	1.3	3/05/2025 2:45	7.8	99.9	0.0	7.4	11.0	25.7	30.7
3/05/2025 3:00	4.9	53.7	0.0	7.1	13.2	1.1	3/05/2025 3:00	7.8	102.4	0.0	7.4	11.0	22.6	27.6
3/05/2025 3:15	4.9	53.6	0.0	7.0	13.3	1.5	3/05/2025 3:15	7.9	103.8	0.0	7.4	11.0	24.5	29.5
3/05/2025 3:30	4.8	53.4	0.0	7.1	13.2	1.2	3/05/2025 3:30	7.9	102.0	0.0	7.5	11.0	17.3	22.3
3/05/2025 3:45	4.8	53.3	0.0	7.1	13.2	1.0	3/05/2025 3:45	6.6	53.0	0.0	7.2	11.3	24.4	29.4
3/05/2025 4:00	4.8	53.3	0.0	7.1	13.3	1.1	3/05/2025 4:00	6.5	53.8	0.0	7.2	11.4	16.0	21.0
3/05/2025 4:15	4.8	53.2	0.0	7.0	13.2	1.3	3/05/2025 4:15	7.7	98.9	0.0	7.4	11.0	20.4	25.4
3/05/2025 4:30	4.8	53.1	0.0	7.1	13.3	1.1	3/05/2025 4:30	7.5	88.7	0.0	7.4	11.0	48.6	53.6
3/05/2025 4:45	4.8	52.9	0.0	7.1	13.3	1.2	3/05/2025 4:45	7.7	100.6	0.0	7.4	11.0	48.7	53.7
3/05/2025 5:00	4.8	52.9	0.0	7.1	13.2	1.1	3/05/2025 5:00	6.6	60.9	0.0	7.3	11.3	40.3	45.3
3/05/2025 5:15	4.8	52.7	0.0	7.1	13.3	1.1	3/05/2025 5:15	7.7	97.1	0.0	7.3	11.0	12.3	17.3
3/05/2025 5:30	4.7	52.6	0.0	7.1	13.3	1.1	3/05/2025 5:30	7.7	94.9	0.0	7.4	11.0	7.5	15.5
3/05/2025 5:45	4.7	52.5	0.0	7.1	13.3	1.2	3/05/2025 5:45	7.7	93.6	0.0	7.4	11.0	5.4	13.4
3/05/2025 6:00	4.7	52.4	0.0	7.1	13.3	1.2	3/05/2025 6:00	7.7	93.0	0.0	7.3	11.0	6.9	14.9
3/05/2025 6:15	4.7	52.3	0.0	6.8	13.3	1.5	3/05/2025 6:15	6.4	44.6	0.0	7.1	11.4	4.8	12.8
3/05/2025 6:30	4.7	52.2	0.0	7.0	13.3	1.3	3/05/2025 6:30	6.4	45.6	0.0	7.1	11.4	3.7	11.7
3/05/2025 6:45	4.6	52.3	0.0	7.1	13.3	1.1	3/05/2025 6:45	7.6	89.4	0.0	7.3	11.1	4.4	12.4
3/05/2025 7:00	4.6	52.4	0.0	6.9	13.3	1.4	3/05/2025 7:00	7.6	88.1	0.0	7.4	11.1	3.2	11.2
3/05/2025 7:15	4.6	52.3	0.0	7.0	13.3	1.5	3/05/2025 7:15	7.6	87.7	0.0	7.3	11.1	3.9	11.9
3/05/2025 7:30	4.6	52.7	0.0	6.9	13.3	1.3	3/05/2025 7:30	6.6	42.6	0.0	7.2	11.3	7.7	15.7
3/05/2025 7:45	4.6	52.2	0.0	7.0	13.3	1.8	3/05/2025 7:45	6.3	39.5	0.0	7.1	11.4	1.6	9.6
3/05/2025 8:00	4.5	52.0	0.0	7.0	13.4	1.1	3/05/2025 8:00	7.5	83.6	0.0	7.3	11.1	2.6	10.6
3/05/2025 8:15	4.5	52.3	0.0	7.1	13.4	1.2	3/05/2025 8:15	6.6	44.8	0.0	7.2	11.3	2.1	10.1

3/05/2025 8:30	4.5	52.0	0.0	7.1	13.4	1.2	3/05/2025 8:30	7.4	84.5	0.0	7.3	11.2	3.5	11.5
3/05/2025 8:45	4.5	51.5	0.0	7.0	13.4	1.3	3/05/2025 8:45	7.6	86.7	0.0	7.4	11.1	5.5	13.5
3/05/2025 9:00	4.5	51.8	0.0	7.0	13.4	1.3	3/05/2025 9:00	7.6	86.5	0.0	7.3	11.0	1.9	9.9
3/05/2025 9:15	4.5	52.2	0.0	7.1	13.4	1.3	3/05/2025 9:15	7.4	74.7	0.0	7.3	11.1	3.1	11.1
3/05/2025 9:30	4.5	52.6	0.0	6.9	13.4	1.3	3/05/2025 9:30	7.7	85.6	0.0	7.3	11.0	1.8	9.8
3/05/2025 9:45	4.5	52.4	0.0	6.9	13.4	1.0	3/05/2025 9:45	7.7	84.2	0.0	7.4	11.0	1.0	9.0
3/05/2025 10:00	4.5	52.3	0.0	6.9	13.5	1.4	3/05/2025 10:00	7.7	82.8	0.0	7.4	11.0	4.2	12.2
3/05/2025 10:15	4.5	52.8	0.0	7.0	13.5	0.8	3/05/2025 10:15	6.6	31.6	0.0	7.0	11.4	2.1	10.1
3/05/2025 10:30	4.6	53.0	0.0	7.1	13.5	0.8	3/05/2025 10:30	7.2	56.8	0.0	7.1	11.3	1.8	9.8
3/05/2025 10:45	4.6	52.7	0.0	6.9	13.5	1.3	3/05/2025 10:45	8.0	84.9	0.0	7.3	11.0	1.5	9.5
3/05/2025 11:00	4.7	54.1	0.0	7.1	13.5	1.1	3/05/2025 11:00	8.1	84.4	0.0	7.4	10.9	2.0	10.0
3/05/2025 11:15	4.8	56.4	0.0	7.1	13.5	1.0	3/05/2025 11:15	7.2	33.3	0.0	7.1	11.1	5.9	13.9
3/05/2025 11:30	4.8	56.9	0.0	7.0	13.4	0.9	3/05/2025 11:30	8.0	82.4	0.0	7.3	11.0	1.7	9.7
3/05/2025 11:45	4.9	56.8	0.0	6.9	13.4	0.9	3/05/2025 11:45	8.4	86.6	0.0	7.4	10.9	1.5	9.5
3/05/2025 12:00	4.9	55.8	0.0	7.0	13.4	1.0	3/05/2025 12:00	8.4	86.6	0.0	7.4	10.8	2.4	10.4
3/05/2025 12:15	5.0	55.2	0.0	7.1	13.5	1.0	3/05/2025 12:15	8.4	84.7	0.0	7.4	10.8	1.7	9.7
3/05/2025 12:30	5.0	54.6	0.0	7.1	13.4	1.0	3/05/2025 12:30	8.3	83.0	0.0	7.4	10.9	4.5	12.5
3/05/2025 12:45	4.9	53.2	0.0	7.1	13.5	1.2	3/05/2025 12:45	7.2	30.1	0.0	7.0	11.2	0.7	8.7
3/05/2025 13:00	4.9	53.5	0.0	7.1	13.5	0.8	3/05/2025 13:00	7.7	48.7	0.0	7.2	11.0	1.6	9.6
3/05/2025 13:15	4.9	53.3	0.0	7.1	13.4	0.9	3/05/2025 13:15	8.7	85.3	0.0	7.4	10.8	1.5	9.5
3/05/2025 13:30	4.9	53.5	0.0	7.1	13.5	1.1	3/05/2025 13:30	8.8	84.3	0.0	7.4	10.7	2.1	10.1
3/05/2025 13:45	5.0	53.4	0.0	7.1	13.4	1.0	3/05/2025 13:45	8.9	84.5	0.0	7.4	10.7	2.8	10.8
3/05/2025 14:00	5.1	53.4	0.0	7.1	13.4	0.9	3/05/2025 14:00	8.8	83.0	0.0	7.4	10.7	0.6	8.6
3/05/2025 14:15	5.3	53.4	0.0	7.1	13.4	1.0	3/05/2025 14:15	8.9	87.3	0.0	7.4	10.7	1.8	9.8
3/05/2025 14:30	5.4	53.4	0.0	7.1	13.4	1.1	3/05/2025 14:30	8.9	86.3	0.0	7.4	10.7	3.5	11.5
3/05/2025 14:45	5.5	53.0	0.0	7.1	13.4	1.1	3/05/2025 14:45	8.5	56.1	0.0	7.3	10.8	4.1	12.1
3/05/2025 15:00	5.5	53.1	0.0	7.1	13.4	1.0	3/05/2025 15:00	9.0	90.2	0.0	7.4	10.6	2.3	10.3
3/05/2025 15:15	5.6	53.3	0.0	7.1	13.4	1.0	3/05/2025 15:15	9.0	89.1	0.0	7.4	10.6	2.1	10.1
3/05/2025 15:30	5.6	53.3	0.0	7.1	13.4	1.0	3/05/2025 15:30	8.6	65.9	0.0	7.3	10.8	4.1	12.1
3/05/2025 15:45	5.6	53.5	0.0	7.1	13.4	1.1	3/05/2025 15:45	8.9	87.5	0.0	7.4	10.7	2.8	10.8
3/05/2025 16:00	5.6	53.4	0.0	7.1	13.4	1.2	3/05/2025 16:00	8.8	86.8	0.0	7.4	10.7	2.3	10.3
3/05/2025 16:15	5.7	53.9	0.0	7.1	13.4	1.1	3/05/2025 16:15	7.8	26.8	0.0	7.0	11.0	0.9	8.9
3/05/2025 16:30	5.7	53.8	0.0	7.1	13.4	1.2	3/05/2025 16:30	7.7	25.3	0.0	6.9	11.0	0.1	8.1
3/05/2025 16:45	5.7	53.7	0.0	7.1	13.3	1.1	3/05/2025 16:45	8.7	86.8	0.0	7.4	10.7	2.6	10.6
3/05/2025 17:00	5.7	53.7	0.0	7.1	13.3	1.1	3/05/2025 17:00	8.7	85.6	0.0	7.4	10.7	3.1	11.1
3/05/2025 17:15	5.7	53.9	0.0	7.1	13.3	1.2	3/05/2025 17:15	8.7	88.2	0.0	7.4	10.8	5.5	13.5
3/05/2025 17:30	5.6	53.8	0.0	7.1	13.3	1.1	3/05/2025 17:30	8.7	89.1	0.0	7.4	10.7	2.1	10.1
3/05/2025 17:45	5.6	54.0	0.0	7.1	13.3	1.1	3/05/2025 17:45	8.6	88.2	0.0	7.4	10.7	3.5	11.5
3/05/2025 18:00	5.5	54.3	0.0	7.1	13.3	1.0	3/05/2025 18:00	7.4	28.2	0.0	7.1	11.0	0.3	8.3
3/05/2025 18:15	5.5	54.2	0.0	7.1	13.3	1.1	3/05/2025 18:15	7.3	27.2	0.0	7.0	11.1	0.4	8.4
3/05/2025 18:30	5.4	54.3	0.0	7.1	13.3	1.0	3/05/2025 18:30	8.0	68.3	0.0	7.3	10.9	11.3	16.3
3/05/2025 18:45	5.4	54.5	0.0	7.1	13.2	1.0	3/05/2025 18:45	8.4	89.3	0.0	7.4	10.8	1.3	9.3
3/05/2025 19:00	5.4	54.6	0.0	7.1	13.2	0.9	3/05/2025 19:00	8.3	88.9	0.0	7.4	10.8	1.4	9.4
3/05/2025 19:15	5.3	54.6	0.0	7.1	13.2	1.0	3/05/2025 19:15	8.3	88.2	0.0	7.4	10.8	0.7	8.7
3/05/2025 19:30	5.3	54.6	0.0	7.1	13.2	1.0	3/05/2025 19:30	8.1	81.5	0.0	7.4	10.8	1.0	9.0
3/05/2025 19:45	5.3	54.9	0.0	7.1	13.2	1.1	3/05/2025 19:45	7.2	32.5	0.0	7.2	11.1	0.5	8.5
3/05/2025 20:00	5.3	54.9	0.0	7.1	13.2	1.1	3/05/2025 20:00	7.0	31.2	0.0	7.0	11.2	0.5	8.5
3/05/2025 20:15	5.3	55.1	0.0	7.1	13.2	1.0	3/05/2025 20:15	8.1	90.3	0.0	7.4	10.9	1.7	9.7
3/05/2025 20:30	5.2	55.2	0.0	7.0	13.1	1.1	3/05/2025 20:30	8.1	89.2	0.0	7.4	10.9	1.2	9.2
3/05/2025 20:45	5.2	55.3	0.0	7.1	13.1	1.0	3/05/2025 20:45	6.9	32.0	0.0	7.2	11.2	0.8	8.8
3/05/2025 21:00	5.2	55.2	0.0	7.0	13.1	12.3	3/05/2025 21:00	7.9	90.3	0.0	7.4	10.9	2.3	10.3
3/05/2025 21:15	5.2	55.1	0.0	7.1	13.1	1.2	3/05/2025 21:15	7.0	50.6	0.0	7.0	11.2	1.7	9.7
3/05/2025 21:30	5.2	55.1	0.0	7.1	13.1	1.1	3/05/2025 21:30	6.8	30.6	0.0	7.2	11.2	0.7	8.7
3/05/2025 21:45	5.2	55.3	0.0	7.1	13.1	1.1	3/05/2025 21:45	7.9	89.9	0.0	7.3	10.9	0.7	8.7
3/05/2025 22:00	5.2	54.9	0.0	7.0	13.1	1.1	3/05/2025 22:00	7.9	89.8	0.0	7.4	10.9	0.8	8.8
3/05/2025 22:15	5.1	54.5	0.0	6.8	13.1	1.1	3/05/2025 22:15	7.8	89.3	0.0	7.4	10.9	1.0	9.0
3/05/2025 22:30	5.1	53.9	0.0	7.0	13.2	1.3	3/05/2025 22:30	7.8	88.6	0.0	7.4	11.0	3.3	11.3
3/05/2025 22:45	5.1	53.7	0.0	7.1	13.2	1.1	3/05/2025 22:45	7.9	92.6	0.0	7.4	10.9	1.4	9.4
3/05/2025 23:00	5.1	53.9	0.0	6.9	13.2	1.1	3/05/2025 23:00	7.3	62.8	0.0	7.3	11.1	1.4	9.4
3/05/2025 23:15	5.1	54.2	0.0	7.1	13.2	1.1	3/05/2025 23:15	6.5	29.7	0.0	7.1	11.3	1.8	9.8
3/05/2025 23:30	5.1	55.0	0.0	7.1	13.1	1.0	3/05/2025 23:30	7.5	88.2	0.0	7.3	11.1	2.2	10.2
3/05/2025 23:45	5.1	56.3	0.0	7.0	13.1	1.6	3/05/2025 23:45	7.6	89.3	0.0	7.4	11.0	0.4	8.4
3/06/2025 0:00	5.0	55.0	0.0	6.8	13.1	1.1	3/06/2025 0:00	7.6	89.6	0.0	7.4	11.0	0.8	8.8
3/06/2025 0:15	5.0	55.0	0.0	7.1	13.1	1.0	3/06/2025 0:15	7.6	91.1	0.0	7.4	11.0	1.5	9.5
3/06/2025 0:30	5.0	54.6	0.0	6.8	13.2	1.6	3/06/2025 0:30	7.6	91.7	0.0	7.4	11.0	2.5	10.5
3/06/2025 0:45	5.0	54.7	0.0	7.1	13.1	1.2	3/06/2025 0:45	7.6	92.5	0.0	7.4	11.0	0.5	8.5
3/06/2025 1:00	5.0	54.1	0.0	6.9	13.2	1.2	3/06/2025 1:00	7.6	91.4	0.0	7.4	11.0	0.1	8.1
3/06/2025 1:15	4.9	54.1	0.0	7.1	13.2	1.1	3/06/2025 1:15	7.5	90.2	0.0	7.4	11.0	0.6	8.6
3/06/2025 1:30	4.9	55.1	0.0	7.0	13.2	1.0	3/06/2025 1:30	7.5	89.5	0.0	7.4	11.0	0.4	8.4
3/06/2025 1:45	4.9	55.7	0.0	7.1	13.2	1.1	3/06/2025 1:45	7.5	90.5	0.0	7.4	11.0	0.8	8.8
3/06/2025 2:00	4.9	56.1	0.0	7.0	13.1	1.2	3/06/2025 2:00	6.2	27.6	0.0	7.1	11.4	0.1	8.1
3/06/2025 2:15	4.9	56.2	0.0	7.1	13.1	1.3	3/06/2025 2:15	6.0	27.6	0.0	7.0	11.5	0.0	8.0
3/06/2025 2:30	4.8	56.2	0.0	7.0	13.1	1.1	3/06/2025 2:30	7.3	90.7	0.0	7.3	11.1	0.3	8.3
3/06/2025 2:45	4.8	57.2	0.0	7.1	13.1	1.2	3/06/2025 2:45	6.0	26.6	0.0	7.1	11.5	1.4	9.4
3/06/2025 3:00	4.8	56.6	0.0	7.0	13.1	1.0	3/06/2025 3:00	7.4	94.5	0.0	7.3	11.1	0.1	8.1
3/06/2025 3:15	4.7	55.6	0.0	7.1	13.2	1.0	3/06/2025 3:15	7.4	94.2	0.0	7.4	11.1	0.1	8.1
3/06/2025 3:30	4.7	55.8	0.0	7.0	13.2	1.1	3/06/2025 3:30	7.4	92.8	0.0	7.4	11.1	0.3	8.3
3/06/2025 3:45	4.7	55.3	0.0	6.9	13.2	0.9	3/06/2025 3:45	7.4	92.0	0.0	7.4	11.1	0.4	8.4
3/06/2025 4:00	4.6	55.1	0.0	7.0	13.2	0.9	3/06/2025 4:00	5.9	28.3	0.0	7.1	11.5	0.0	8.0
3/06/2025 4:15	4.6	55.0	0.0	6.9	13.2	1.4	3/06/2025 4:15	5.8	28.3	0.0	7.0	11.6	0.0	8.0
3/06/2025 4:30	4.6	55.2	0.0	7.1	13.2	0.9	3/06/2025 4:30	5.9	36.2	0.0	7.0	11.6	4.7	12.7
3/06/2025 4:45	4.5	55.0	0.0	7.0	13.2	1.0	3/06/2025 4:45	7.3	94.4	0.0	7.4	11.1	0.0	8.0
3/06/2025 5:00	4.5	54.9	0.0	7.0	13.2	0.8	3/06/2025 5:00	7.4	93.1	0.0	7.4	11.1	3.6	11.6
3/06/2025 5:15	4.5	54.8	0.0	7.0	13.2	1.2	3/06/2025 5:15	7.3	92.4	0.0	7.4	11.1	3.7	11.7
3/06/2025 5:30	4.4	54.7	0.0	7.1	13.2	0.8	3/06/2025 5:30	6.2	40.9	0.0	7.3	11.4	16.2	21.2
3/06/2025 5:45	4.4	54.6	0.0	7.0	13.2	0.9	3/06/2025 5:45	7.2	92.0	0.0	7.3	11.1	1.6	9.6
3/06/2025 6:00	4.4	54.6	0.0	7.1	13.2	0.8	3/06/2025 6:00	7.3	91.4	0.0	7.4	11.1	0.9	8.9
3/06/2025 6:15	4.3	54.6	0.0	7.0	13.3	1.0	3/06/2025 6:15	7.2	90.2	0.0	7.4	11.1	0.7	8.7
3/06/2025 6:30	4.3	54.4	0.0	7.0	13.3	1.0	3/06/2025 6:30	7.3	88.9	0.0	7.4	11.1	3.7	11.7
3/06/2025 6:45	4.3	54.4	0.0	7.1	13.3	0.9	3/06/2025 6:45	7.3	91.5	0.0	7.4	11.1	7.2	15.2
3/06/2025 7:00	4.2	54.4	0.0	7.0	13.3	0.8	3/06/2025 7:00	5.9	31.1	0.0	7.2	11.5	3.1	11.1
3/06/2025 7:15	4.2	54.3	0.0	7.1	13.3	0.8	3/06/2025 7:15	6.7	80.3	0.0	7.2	11.4	0.5	8.5
3/06/2025 7:30	4.2	54.3	0.0	7.1	13.3	0.8	3/06/2025 7:30	7.0	87.1	0.0	7.3	11.2	1.8	9.8
3/06/2025 7:45	4.1	54.4	0.0	6.9	13.3	0.9	3/06/2025 7:45	7.3	91.5	0.0	7.4	11.1	0.6	8.6
3/06/2025 8:00	4.1	54.8	0.0	6.9	13.3	0.7	3/06/2025 8:00	7.2	86.6	0.0	7.4	11.1	0.0	8.0
3/06/2025 8:15	4.1	54.9	0.0	6.9	13.3	0.8	3/06/2025 8:15	7.0	82.9	0.0	7.4	11.2	1.6	9.6
3/06/2025 8:30	4.1	55.0	0.0	7.0	13.3	0.9	3/06/2025 8:30	7.1	86.4	0.0	7.4	11.2	1.6	9.6
3/06/2025 8:45	4.0	54.8	0.0	7.0	13.4	0.9	3/06/2025 8:45	7.1	85.6	0.0	7.4	11.2	1.2	9.2
3/06/2025 9:00	4.0	54.7	0.0	7.1	13.4	1.1	3/06/2025 9:00	7.1	85.7	0.0	7.4	11.2	0.5	8.5
3/06/2025 9:15	4.0	54.6	0.0	6.9	13.4	1.0	3/06/2025 9:15	7.1	86.1	0.0	7.4	11.2	1.0	9.0
3/06/2025 9:30	4.0	55.6	0.0	6.9	13.4	1.1	3/06/2025 9:30	5.6	24.8	0.0	7.0	11.6	0.0	8.0
3/06/2025 9:45	4.0	55.4	0.0	6.8	13.4	1.0	3/06/2025 9:45	6.2	62.6	0.0	7.1	11.6	1.3	9.3
3/06/2025 10:00	4.0	54.9	0.0	7.0	13.5	0.9	3/06/2025 10:00	7.1	87.2	0.0	7.4	11.2	0.2	8.2
3/06/2025 10:15	4.0	54.7	0.0	6.9	13.5	0.9	3/06/2025 10:15	7.2	86.9	0.0	7.4	11.1	0.5	8.5
3/06/2025 10:30	4.0	55.1	0.0	6.9	13.5	0.8	3/06/2025 10:30	7.3	86.0	0.0	7.4	11.1	0.6	8.6
3/06/2025 10:45	4.0	55.7	0.0	7.1	13.5	0.9	3/06/2025 10:45	7.0	75.4	0.0	7.3	11.3	2.5	10.5
3/06/2025 11:00	4.1	56.1	0.0	7.0	13.5	1.0	3/06/2025 11:00	7.6	92.9	0.0	7.5	11.0	0.8	8.8
3/06/2025 11:15	4.1	56.3	0.0	7.1	13.5	0.8	3/06/2025 11:15	7.7	93.1	0.0	7.4	11.0	2.0	10.0
3/06/2025 11:30	4.2	57.1	0.0	7.1	13.5	0.9	3/06/2025 11:30	7.8	93.1	0.0	7.4	11.0	1.1	9.1
3/06/2025 11:45	4.3	59.0	0.0	7.0	13.5	0.9	3/06/2025 11:45	7.7	80.5	0.0	7.4	11.0	4.8	12.8
3/06/2025 12:00	4.4	59.2	0.0	7.1	13.5	0.8	3/06/2025 12:00	8.0	93.9	0.0	7.4	10.9	1.8	9.8
3/06/2025 12:15	4.5	58.7	0.0	7.1	13.5	0.7	3/06/2025 12:15	6.9	32.4	0.0	7.2	11.2	0.4	8.4
3/06/2025 12:30	4.5	58.0	0.0	7.1	13.5	0.8	3/06/2025 12:30	8.2	92.6	0.0	7.4	10.8	0.5	8.5
3/06/2025 12:45	4.6	56.9	0.0	7.0	13.5	0.9	3/06/2025 12:45	8.1	82.0	0.0	7.4	10.8	3.5	11.5
3/06/2025 13:00	4.7	57.0	0.0	7.1	13.5	0.9	3/06/2025 13:00	8.5	95.3	0.0	7.4	10.8	1.2	9.2
3/06/2025 13:15	4.7	57.1	0.0	7.1	13.5	0.7	3/06/2025 13:15	8.6	94.3	0.0	7.4	10.7	0.5	8.5

3/06/2025 13:30	4.8	56.8	0.0	7.1	13.5	0.7	3/06/2025 13:30	8.6	92.2	0.0	7.5	10.7	1.0	9.0
3/06/2025 13:45	4.8	56.8	0.0	7.0	13.5	1.0	3/06/2025 13:45	8.6	90.3	0.0	7.4	10.7	0.1	8.1
3/06/2025 14:00	4.9	56.6	0.0	7.1	13.5	0.9	3/06/2025 14:00	8.8	94.3	0.0	7.4	10.7	1.0	9.0
3/06/2025 14:15	4.9	56.5	0.0	7.0	13.5	0.9	3/06/2025 14:15	8.8	91.8	0.0	7.4	10.6	0.8	8.8
3/06/2025 14:30	5.0	56.3	0.0	7.0	13.5	0.9	3/06/2025 14:30	7.6	26.8	0.0	7.1	11.0	0.4	8.4
3/06/2025 14:45	5.0	56.2	0.0	7.0	13.4	1.1	3/06/2025 14:45	8.6	89.3	0.0	7.4	10.8	1.0	9.0
3/06/2025 15:00	5.1	56.1	0.0	7.0	13.5	1.1	3/06/2025 15:00	8.9	95.1	0.0	7.5	10.6	1.1	9.1
3/06/2025 15:15	5.1	56.0	0.0	7.1	13.5	1.1	3/06/2025 15:15	8.9	94.5	0.0	7.4	10.6	0.8	8.8
3/06/2025 15:30	5.2	56.0	0.0	7.0	13.5	0.9	3/06/2025 15:30	8.9	92.3	0.0	7.5	10.6	0.7	8.7
3/06/2025 15:45	5.2	56.2	0.0	7.1	13.5	0.9	3/06/2025 15:45	8.9	92.0	0.0	7.4	10.6	1.8	9.8
3/06/2025 16:00	5.2	55.9	0.0	7.1	13.5	1.0	3/06/2025 16:00	8.9	93.1	0.0	7.5	10.7	1.2	9.2
3/06/2025 16:15	5.2	56.5	0.0	7.1	13.4	1.0	3/06/2025 16:15	8.8	93.0	0.0	7.5	10.6	0.4	8.4
3/06/2025 16:30	5.2	56.5	0.0	7.1	13.4	1.1	3/06/2025 16:30	8.8	92.3	0.0	7.4	10.7	1.0	9.0
3/06/2025 16:45	5.2	56.4	0.0	7.0	13.4	1.1	3/06/2025 16:45	7.7	31.9	0.0	7.3	10.9	0.1	8.1
3/06/2025 17:00	5.2	56.7	0.0	7.1	13.4	1.0	3/06/2025 17:00	7.3	25.5	0.0	7.0	11.1	0.0	8.0
3/06/2025 17:15	5.2	56.6	0.0	7.0	13.4	1.0	3/06/2025 17:15	8.4	87.7	0.0	7.4	10.8	0.7	8.7
3/06/2025 17:30	5.1	56.6	0.0	7.1	13.4	0.8	3/06/2025 17:30	8.5	92.2	0.0	7.4	10.7	1.6	9.6
3/06/2025 17:45	5.0	56.6	0.0	7.1	13.4	0.8	3/06/2025 17:45	8.4	90.8	0.0	7.4	10.8	1.1	9.1
3/06/2025 18:00	5.0	56.8	0.0	7.1	13.4	0.9	3/06/2025 18:00	8.4	94.8	0.0	7.4	10.8	6.1	14.1
3/06/2025 18:15	4.9	57.0	0.0	7.0	13.3	0.7	3/06/2025 18:15	8.5	95.9	0.0	7.5	10.7	1.4	9.4
3/06/2025 18:30	4.9	57.3	0.0	7.0	13.3	0.8	3/06/2025 18:30	8.5	96.4	0.0	7.4	10.8	3.0	11.0
3/06/2025 18:45	4.8	57.0	0.0	7.1	13.3	0.8	3/06/2025 18:45	8.1	74.3	0.0	7.4	10.8	2.4	10.4
3/06/2025 19:00	4.8	56.7	0.0	7.1	13.4	2.2	3/06/2025 19:00	6.8	24.8	0.0	7.0	11.2	0.0	8.0
3/06/2025 19:15	4.7	57.2	0.0	7.1	13.3	0.8	3/06/2025 19:15	6.8	28.9	0.0	7.0	11.2	0.0	8.0
3/06/2025 19:30	4.7	57.1	0.0	7.0	13.3	0.8	3/06/2025 19:30	8.2	93.0	0.0	7.4	10.8	4.3	12.3
3/06/2025 19:45	4.7	57.5	0.0	7.1	13.3	0.8	3/06/2025 19:45	8.4	98.4	0.0	7.5	10.8	4.2	12.2
3/06/2025 20:00	4.7	57.5	0.0	7.0	13.3	0.9	3/06/2025 20:00	8.3	91.5	0.0	7.5	10.8	2.6	10.6
3/06/2025 20:15	4.7	57.2	0.0	7.0	13.3	0.8	3/06/2025 20:15	8.3	90.5	0.0	7.5	10.8	4.3	12.3
3/06/2025 20:30	4.7	57.4	0.0	7.0	13.2	0.9	3/06/2025 20:30	8.2	90.0	0.0	7.5	10.8	4.1	12.1
3/06/2025 20:45	4.6	57.5	0.0	7.0	13.2	1.0	3/06/2025 20:45	8.0	87.1	0.0	7.4	10.9	9.6	14.6
3/06/2025 21:00	4.6	57.4	0.0	7.0	13.3	0.9	3/06/2025 21:00	8.2	92.4	0.0	7.5	10.8	234.2	239.2
3/06/2025 21:15	4.6	57.5	0.0	7.0	13.2	0.9	3/06/2025 21:15	7.7	77.0	0.0	7.4	10.9	6.2	14.2
3/06/2025 21:30	4.6	57.7	0.0	7.0	13.2	1.0	3/06/2025 21:30	6.5	25.8	0.0	7.1	11.2	0.8	8.8
3/06/2025 21:45	4.6	57.8	0.0	7.0	13.2	0.9	3/06/2025 21:45	6.6	29.8	0.0	7.2	11.2	0.8	8.8
3/06/2025 22:00	4.6	57.8	0.0	7.0	13.2	0.8	3/06/2025 22:00	6.4	28.5	0.0	7.0	11.4	0.6	8.6
3/06/2025 22:15	4.6	58.2	0.0	7.0	13.2	1.0	3/06/2025 22:15	7.8	90.0	0.0	7.4	11.0	0.5	8.5
3/06/2025 22:30	4.6	57.8	0.0	7.0	13.2	0.9	3/06/2025 22:30	7.7	84.9	0.0	7.4	10.9	0.5	8.5
3/06/2025 22:45	4.6	58.4	0.0	7.0	13.2	0.8	3/06/2025 22:45	6.6	31.4	0.0	7.2	11.1	0.8	8.8
3/06/2025 23:00	4.6	57.6	0.0	7.0	13.2	1.0	3/06/2025 23:00	6.2	22.3	0.0	6.9	11.4	0.5	8.5
3/06/2025 23:15	4.5	57.2	0.0	7.1	13.3	1.0	3/06/2025 23:15	6.8	51.6	0.0	7.3	11.2	0.0	8.0
3/06/2025 23:30	4.5	56.8	0.0	7.1	13.3	0.7	3/06/2025 23:30	8.0	99.0	0.0	7.5	10.9	3.3	11.3
3/06/2025 23:45	4.5	56.3	0.0	7.1	13.3	0.7	3/06/2025 23:45	8.1	101.0	0.0	7.4	10.9	5.6	13.6
3/07/2025 0:00	4.5	56.1	0.0	6.9	13.3	0.8	3/07/2025 0:00	8.1	100.0	0.0	7.4	10.9	6.6	14.6
3/07/2025 0:15	4.5	56.1	0.0	7.1	13.3	0.8	3/07/2025 0:15	7.7	104.0	0.0	7.4	11.1	2.3	10.3
3/07/2025 0:30	4.5	56.5	0.0	6.8	13.3	0.8	3/07/2025 0:30	7.7	88.7	0.0	7.3	11.0	6.7	14.7
3/07/2025 0:45	4.5	56.5	0.0	7.0	13.3	0.8	3/07/2025 0:45	7.2	58.4	0.0	7.4	10.9	1.5	9.5
3/07/2025 1:00	4.5	57.2	0.0	7.0	13.3	0.8	3/07/2025 1:00	7.8	90.0	0.0	7.4	10.9	2.5	10.5
3/07/2025 1:15	4.5	58.3	0.0	6.9	13.2	0.9	3/07/2025 1:15	7.6	90.0	0.0	7.4	11.1	5.7	13.7
3/07/2025 1:30	4.5	57.6	0.0	7.1	13.3	0.8	3/07/2025 1:30	7.9	99.0	0.0	7.4	10.9	2.2	10.2
3/07/2025 1:45	4.4	57.5	0.0	6.8	13.3	0.8	3/07/2025 1:45	7.9	94.2	0.0	7.4	10.9	5.4	13.4
3/07/2025 2:00	4.4	57.3	0.0	7.1	13.3	0.7	3/07/2025 2:00	7.0	55.0	0.0	7.4	11.0	1.3	9.3
3/07/2025 2:15	4.4	57.4	0.0	6.9	13.3	0.8	3/07/2025 2:15	7.6	93.7	0.0	7.4	11.1	7.1	15.1
3/07/2025 2:30	4.4	57.5	0.0	6.9	13.3	0.7	3/07/2025 2:30	7.7	100.3	0.0	7.4	11.1	4.6	12.6
3/07/2025 2:45	4.3	57.7	0.0	6.9	13.3	0.8	3/07/2025 2:45	7.7	99.1	0.0	7.4	11.0	2.0	10.0
3/07/2025 3:00	4.3	58.3	0.0	6.9	13.3	1.0	3/07/2025 3:00	7.7	98.6	0.0	7.4	11.0	1.8	9.8
3/07/2025 3:15	4.3	58.9	0.0	7.0	13.3	1.8	3/07/2025 3:15	6.5	46.2	0.0	7.4	11.1	0.1	8.1
3/07/2025 3:30	4.3	58.5	0.0	6.9	13.3	1.0	3/07/2025 3:30	7.6	99.2	0.0	7.4	11.1	5.8	13.8
3/07/2025 3:45	4.3	58.7	0.0	7.1	13.3	0.8	3/07/2025 3:45	7.6	99.1	0.0	7.4	11.0	3.8	11.8
3/07/2025 4:00	4.3	59.3	0.0	6.8	13.3	0.7	3/07/2025 4:00	6.8	72.7	0.0	7.3	11.3	0.6	8.6
3/07/2025 4:15	4.3	60.2	0.0	7.1	13.2	0.7	3/07/2025 4:15	7.1	82.6	0.0	7.5	11.1	0.5	8.5
3/07/2025 4:30	4.2	60.1	0.0	6.9	13.3	1.0	3/07/2025 4:30	7.5	103.0	0.0	7.4	11.1	0.8	8.8
3/07/2025 4:45	4.2	60.0	0.0	6.9	13.3	0.8	3/07/2025 4:45	7.6	100.8	0.0	7.5	11.0	3.3	11.3
3/07/2025 5:00	4.2	59.5	0.0	7.1	13.3	0.7	3/07/2025 5:00	6.3	53.8	0.0	7.2	11.4	2.5	10.5
3/07/2025 5:15	4.2	58.7	0.0	7.1	13.3	0.8	3/07/2025 5:15	7.5	98.5	0.0	7.4	11.1	7.4	15.4
3/07/2025 5:30	4.2	58.4	0.0	6.9	13.3	0.8	3/07/2025 5:30	7.5	97.8	0.0	7.4	11.1	1.6	9.6
3/07/2025 5:45	4.1	58.4	0.0	6.9	13.3	0.7	3/07/2025 5:45	7.5	97.3	0.0	7.4	11.0	0.4	8.4
3/07/2025 6:00	4.1	57.5	0.0	6.9	13.3	0.6	3/07/2025 6:00	7.3	90.4	0.0	7.4	11.1	3.3	11.3
3/07/2025 6:15	4.1	57.4	0.0	6.9	13.3	0.7	3/07/2025 6:15	7.5	95.1	0.0	7.5	11.1	3.9	11.9
3/07/2025 6:30	4.1	57.5	0.0	7.1	13.3	0.7	3/07/2025 6:30	7.5	92.5	0.0	7.5	11.1	3.3	11.3
3/07/2025 6:45	4.1	57.9	0.0	6.8	13.3	1.5	3/07/2025 6:45	5.6	24.8	0.0	7.0	11.5	0.0	8.0
3/07/2025 7:00	4.1	57.9	0.0	6.9	13.3	0.9	3/07/2025 7:00	5.5	21.9	0.0	6.9	11.6	0.0	8.0
3/07/2025 7:15	4.1	57.8	0.0	6.8	13.3	0.7	3/07/2025 7:15	7.2	92.5	0.0	7.4	11.2	0.5	8.5
3/07/2025 7:30	4.0	57.5	0.0	6.9	13.4	0.6	3/07/2025 7:30	7.4	91.8	0.0	7.4	11.1	0.8	8.8
3/07/2025 7:45	4.0	57.4	0.0	7.1	13.4	1.2	3/07/2025 7:45	7.6	98.9	0.0	7.4	11.1	1.9	9.9
3/07/2025 8:00	4.0	57.6	0.0	7.1	13.4	0.7	3/07/2025 8:00	7.4	94.5	0.0	7.4	11.1	3.7	11.7
3/07/2025 8:15	4.0	57.4	0.0	7.1	13.4	0.7	3/07/2025 8:15	7.6	98.8	0.0	7.4	11.0	2.7	10.7
3/07/2025 8:30	4.0	57.5	0.0	7.1	13.4	0.7	3/07/2025 8:30	7.5	95.9	0.0	7.5	11.1	2.5	10.5
3/07/2025 8:45	4.0	57.3	0.0	7.0	13.4	0.7	3/07/2025 8:45	7.5	95.2	0.0	7.4	11.1	0.7	8.7
3/07/2025 9:00	4.0	57.3	0.0	7.1	13.4	0.7	3/07/2025 9:00	7.5	94.7	0.0	7.4	11.1	0.5	8.5
3/07/2025 9:15	4.0	57.6	0.0	7.1	13.4	0.7	3/07/2025 9:15	7.5	93.0	0.0	7.5	11.1	0.4	8.4
3/07/2025 9:30	4.0	58.0	0.0	7.1	13.4	0.7	3/07/2025 9:30	6.6	48.1	0.0	7.4	11.2	0.2	8.2
3/07/2025 9:45	4.0	58.2	0.0	7.0	13.4	1.7	3/07/2025 9:45	5.6	23.1	0.0	7.0	11.5	0.5	8.5
3/07/2025 10:00	4.0	58.0	0.0	7.1	13.5	0.7	3/07/2025 10:00	7.4	93.1	0.0	7.4	11.1	1.2	9.2
3/07/2025 10:15	4.0	58.3	0.0	7.0	13.5	0.8	3/07/2025 10:15	7.6	94.4	0.0	7.5	11.1	1.2	9.2
3/07/2025 10:30	4.0	59.6	0.0	7.0	13.5	0.8	3/07/2025 10:30	7.7	94.9	0.0	7.4	11.0	0.5	8.5
3/07/2025 10:45	4.0	58.7	0.0	7.0	13.5	0.7	3/07/2025 10:45	7.8	94.3	0.0	7.5	11.0	0.4	8.4
3/07/2025 11:00	4.1	58.9	0.0	6.9	13.5	0.7	3/07/2025 11:00	7.9	95.5	0.0	7.5	11.0	0.4	8.4
3/07/2025 11:15	4.1	58.5	0.0	7.1	13.6	0.7	3/07/2025 11:15	7.0	61.7	0.0	7.3	11.2	0.0	8.0
3/07/2025 11:30	4.2	60.5	0.0	7.0	13.5	0.7	3/07/2025 11:30	6.2	26.7	0.0	7.1	11.3	0.0	8.0
3/07/2025 11:45	4.2	60.2	0.0	7.1	13.5	0.8	3/07/2025 11:45	7.8	95.0	0.0	7.4	11.0	0.0	8.0
3/07/2025 12:00	4.3	60.8	0.0	7.1	13.6	0.7	3/07/2025 12:00	8.0	96.6	0.0	7.4	11.0	0.0	8.0
3/07/2025 12:15	4.3	60.2	0.0	6.9	13.6	0.8	3/07/2025 12:15	8.1	96.9	0.0	7.4	10.9	0.0	8.0
3/07/2025 12:30	4.3	58.9	0.0	6.8	13.6	0.7	3/07/2025 12:30	8.1	96.5	0.0	7.5	10.9	0.7	8.7
3/07/2025 12:45	4.4	60.4	0.0	7.0	13.6	0.7	3/07/2025 12:45	8.2	97.1	0.0	7.5	10.9	0.0	8.0
3/07/2025 13:00	4.5	61.5	0.0	7.1	13.5	0.7	3/07/2025 13:00	8.2	96.6	0.0	7.4	10.9	0.4	8.4
3/07/2025 13:15	4.5	61.3	0.0	7.1	13.5	0.6	3/07/2025 13:15	8.2	94.0	0.0	7.5	10.9	0.8	8.8
3/07/2025 13:30	4.5	60.7	0.0	7.1	13.6	0.7	3/07/2025 13:30	6.7	24.5	0.0	7.1	11.1	0.0	8.0
3/07/2025 13:45	4.6	61.3	0.0	7.0	13.6	0.7	3/07/2025 13:45	8.1	95.0	0.0	7.4	11.0	0.6	8.6
3/07/2025 14:00	4.6	60.8	0.0	7.0	13.6	0.8	3/07/2025 14:00	8.3	95.1	0.0	7.4	10.9	2.3	10.3
3/07/2025 14:15	4.7	60.9	0.0	7.0	13.6	0.9	3/07/2025 14:15	8.4	98.1	0.0	7.5	10.8	1.7	9.7
3/07/2025 14:30	4.7	60.0	0.0	7.1	13.6	0.9	3/07/2025 14:30	8.4	98.5	0.0	7.4	10.8	1.5	9.5
3/07/2025 14:45	4.7	59.9	0.0	7.1	13.6	0.9	3/07/2025 14:45	8.4	98.3	0.0	7.5	10.8	1.9	9.9
3/07/2025 15:00	4.7	59.7	0.0	7.1	13.6	0.9	3/07/2025 15:00	8.2	84.8	0.0	7.5	10.8	1.0	9.0
3/07/2025 15:15	4.7	59.6	0.0	7.1	13.6	0.9	3/07/2025 15:15	6.9	23.6	0.0	7.0	11.1	0.0	8.0
3/07/2025 15:30	4.7	59.4	0.0	7.1	13.6	0.9	3/07/2025 15:30	8.0	92.4	0.0	7.3	11.1	0.7	8.7
3/07/2025 15:45	4.7	59.5	0.0	7.1	13.6	1.0	3/07/2025 15:45	8.4	103.2	0.0	7.5	10.8	0.1	8.1
3/07/2025 16:00	4.7	59.6	0.0	7.1	13.5	0.9	3/07/2025 16:00	8.2	89.3	0.0	7.5	10.9	1.3	9.3
3/07/2025 16:15	4.7	59.3	0.0	7.1	13.6	0.9	3/07/2025 16:15	8.4	101.4	0.0	7.5	10.8	1.5	9.5
3/07/2025 16:30	4.7	59.0	0.0	7.1	13.6	0.9	3/07/2025 16:30	8.4	103.2	0.0	7.6	10.8	2.4	10.4
3/07/2025 16:45	4.7	58.9	0.0	7.1	13.6	0.9	3/07/2025 16:45	8.4	100.4	0.0	7.7	10.8	1.9	9.9
3/07/2025 17:00	4.7	58.8	0.0	7.1	13.6	1.0	3/07/2025 17:00	7.6	52.0	0.0	7.5	10.9	0.4	8.4
3/07/2025 17:15	4.7	58.8	0.0	7.1	13.6	0.9	3/07/2025 17:15	8.4	102.0	0.0	7.5	10.9	1.2	9.2
3/07/2025 17:30	4.7	59.0	0.0	7.1	13.5	1.1	3/07/2025 17:30	8.4	100.3	0.0	7.5	10.8	1.6	9.6
3/07/2025 17:45	4.7	58.8	0.0	7.1	13.5	1.0	3/07/2025 17:45	6.8	24.5	0.0	7.0	11.0	0.0	8.0
3/07/2025 18:00	4.7	58.9	0.0	7.1	13.5	1.0	3/07/2025 18:00	8.3	98.9	0.0	7.5	10.9	0.7	8.7
3/07/2025 18:15	4.7	58.8	0.0	7.1	13.5	1.8	3/07/2025 18:15	8.3	97.9	0.0	7.5	10.8	1.6	9.6

3/07/2025 18:30	4.6	58.7	0.0	7.1	13.5	1.1	3/07/2025 18:30	8.3	95.8	0.0	7.5	10.8	0.3	8.3
3/07/2025 18:45	4.6	58.7	0.0	7.1	13.5	1.2	3/07/2025 18:45	8.3	94.1	0.0	7.5	10.9	0.8	8.8
3/07/2025 19:00	4.6	58.9	0.0	7.1	13.5	1.2	3/07/2025 19:00	8.2	92.5	0.0	7.5	10.9	0.5	8.5
3/07/2025 19:15	4.6	59.1	0.0	7.0	13.4	1.0	3/07/2025 19:15	8.2	90.8	0.0	7.5	10.9	0.5	8.5
3/07/2025 19:30	4.6	59.0	0.0	7.1	13.5	1.0	3/07/2025 19:30	8.2	89.4	0.0	7.5	10.9	0.5	8.5
3/07/2025 19:45	4.6	58.9	0.0	7.1	13.4	1.0	3/07/2025 19:45	8.2	88.5	0.0	7.5	10.9	0.6	8.6
3/07/2025 20:00	4.6	59.0	0.0	7.1	13.4	0.9	3/07/2025 20:00	8.1	87.8	0.0	7.5	10.9	0.5	8.5
3/07/2025 20:15	4.6	59.0	0.0	7.1	13.4	1.0	3/07/2025 20:15	7.5	57.9	0.0	7.4	11.0	0.8	8.8
3/07/2025 20:30	4.6	58.8	0.0	7.1	13.4	1.0	3/07/2025 20:30	6.5	23.0	0.0	7.0	11.2	0.0	8.0
3/07/2025 20:45	4.6	58.9	0.0	7.1	13.4	1.0	3/07/2025 20:45	8.0	94.1	0.0	7.4	11.0	0.1	8.1
3/07/2025 21:00	4.6	58.8	0.0	7.1	13.4	0.9	3/07/2025 21:00	8.2	96.1	0.0	7.5	10.9	0.4	8.4
3/07/2025 21:15	4.6	59.0	0.0	7.1	13.4	1.0	3/07/2025 21:15	8.2	96.5	0.0	7.5	10.9	0.1	8.1
3/07/2025 21:30	4.6	58.6	0.0	7.1	13.4	1.0	3/07/2025 21:30	8.2	95.8	0.0	7.5	10.9	1.3	9.3
3/07/2025 21:45	4.7	58.8	0.0	7.1	13.4	0.9	3/07/2025 21:45	8.1	95.3	0.0	7.5	10.9	1.2	9.2
3/07/2025 22:00	4.7	58.7	0.0	7.1	13.4	0.9	3/07/2025 22:00	6.6	27.2	0.0	7.1	11.1	0.0	8.0
3/07/2025 22:15	4.7	58.8	0.0	7.1	13.4	1.0	3/07/2025 22:15	6.5	27.5	0.0	7.1	11.3	0.1	8.1
3/07/2025 22:30	4.7	59.2	0.0	7.1	13.4	1.0	3/07/2025 22:30	8.1	98.9	0.0	7.4	10.9	2.7	10.7
3/07/2025 22:45	4.7	59.1	0.0	7.1	13.4	1.0	3/07/2025 22:45	8.2	100.1	0.0	7.5	10.9	2.1	10.1
3/07/2025 23:00	4.7	59.1	0.0	7.1	13.4	1.0	3/07/2025 23:00	8.2	100.2	0.0	7.5	10.9	1.2	9.2
3/07/2025 23:15	4.7	59.2	0.0	7.0	13.4	0.9	3/07/2025 23:15	7.1	50.2	0.0	7.3	11.0	1.2	9.2
3/07/2025 23:30	4.7	59.6	0.0	7.1	13.4	1.0	3/07/2025 23:30	7.6	87.7	0.0	7.3	11.1	2.5	10.5
3/07/2025 23:45	4.7	59.5	0.0	7.1	13.4	2.2	3/07/2025 23:45	8.3	101.6	0.0	7.4	10.8	1.1	9.1
3/08/2025 0:00	4.7	59.9	0.0	7.1	13.4	1.0	3/08/2025 0:00	8.3	100.3	0.0	7.5	10.8	1.9	9.9
3/08/2025 0:15	4.7	60.0	0.0	7.1	13.4	1.0	3/08/2025 0:15	7.7	67.1	0.0	7.4	10.9	0.3	8.3
3/08/2025 0:30	4.7	59.5	0.0	7.1	13.4	0.9	3/08/2025 0:30	8.0	97.1	0.0	7.4	11.1	0.6	8.6
3/08/2025 0:45	4.7	59.6	0.0	7.1	13.4	0.8	3/08/2025 0:45	8.2	100.5	0.0	7.4	10.8	0.0	8.0
3/08/2025 1:00	4.7	59.6	0.0	7.0	13.4	4.3	3/08/2025 1:00	8.2	100.9	0.0	7.5	10.8	0.6	8.6
3/08/2025 1:15	4.7	59.5	0.0	6.9	13.4	0.8	3/08/2025 1:15	8.3	107.9	0.0	7.5	10.9	1.7	9.7
3/08/2025 1:30	4.7	60.0	0.0	7.1	13.4	1.0	3/08/2025 1:30	8.4	106.3	0.0	7.5	10.8	3.2	11.2
3/08/2025 1:45	4.7	59.2	0.0	7.1	13.4	0.9	3/08/2025 1:45	8.3	105.1	0.0	7.6	10.8	3.1	11.1
3/08/2025 2:00	4.6	58.9	0.0	6.8	13.5	1.1	3/08/2025 2:00	8.3	101.4	0.0	7.6	10.8	3.6	11.6
3/08/2025 2:15	4.6	59.3	0.0	7.1	13.4	0.9	3/08/2025 2:15	8.3	101.6	0.0	7.6	10.8	4.3	12.3
3/08/2025 2:30	4.6	57.9	0.0	7.0	13.5	0.9	3/08/2025 2:30	8.2	97.3	0.0	7.6	10.8	5.3	13.3
3/08/2025 2:45	4.6	57.9	0.0	7.0	13.5	0.8	3/08/2025 2:45	6.3	26.4	0.0	7.0	11.2	2.6	10.6
3/08/2025 3:00	4.6	58.1	0.0	7.2	13.5	1.0	3/08/2025 3:00	6.2	33.2	0.0	7.0	11.4	13.8	18.8
3/08/2025 3:15	4.6	58.1	0.0	7.0	13.5	0.9	3/08/2025 3:15	7.9	110.0	0.1	7.6	11.0	116.4	121.4
3/08/2025 3:30	4.6	58.1	0.0	7.0	13.5	1.2	3/08/2025 3:30	8.0	110.5	0.1	7.7	10.9	123.0	128.0
3/08/2025 3:45	4.6	58.5	0.0	7.0	13.5	0.9	3/08/2025 3:45	7.9	108.3	0.1	7.7	11.0	54.5	59.5
3/08/2025 4:00	4.6	58.6	0.0	7.1	13.5	2.1	3/08/2025 4:00	8.0	113.6	0.1	7.1	10.9	37.5	42.5
3/08/2025 4:15	4.5	58.3	0.0	6.9	13.5	0.9	3/08/2025 4:15	7.9	104.4	0.0	7.5	10.9	19.7	24.7
3/08/2025 4:30	4.5	58.3	0.0	7.2	13.5	1.0	3/08/2025 4:30	7.8	104.7	0.0	7.2	11.0	17.9	22.9
3/08/2025 4:45	4.5	58.2	0.0	6.9	13.5	0.9	3/08/2025 4:45	6.3	49.6	0.0	7.3	11.3	26.1	31.1
3/08/2025 5:00	4.5	58.7	0.0	7.0	13.5	1.0	3/08/2025 5:00	7.7	102.3	0.0	7.3	11.0	26.5	31.5
3/08/2025 5:15	4.5	59.5	0.0	7.1	13.5	0.9	3/08/2025 5:15	7.6	101.5	0.0	7.4	11.0	28.0	33.0
3/08/2025 5:30	4.5	60.1	0.0	7.0	13.5	0.9	3/08/2025 5:30	7.3	99.5	0.0	7.2	11.2	35.1	40.1
3/08/2025 5:45	4.5	60.9	0.0	7.1	13.5	1.0	3/08/2025 5:45	7.6	103.9	0.0	7.4	11.0	35.9	40.9
3/08/2025 6:00	4.5	61.5	0.0	7.1	13.5	1.5	3/08/2025 6:00	7.5	108.4	0.1	7.1	11.0	40.7	45.7
3/08/2025 6:15	4.5	63.2	0.0	7.0	13.4	1.2	3/08/2025 6:15	7.4	103.7	0.0	7.4	11.1	84.0	89.0
3/08/2025 6:30	4.5	61.9	0.0	7.2	13.5	1.4	3/08/2025 6:30	7.1	94.1	0.0	7.4	11.2	53.0	58.0
3/08/2025 6:45	4.4	62.0	0.0	6.9	13.5	1.6	3/08/2025 6:45	6.2	68.6	0.0	7.4	11.3	49.4	54.4
3/08/2025 7:00	4.4	62.5	0.0	7.0	13.5	1.4	3/08/2025 7:00	5.9	65.2	0.0	7.3	11.6	38.3	43.3
3/08/2025 7:15	4.5	63.6	0.0	7.2	13.4	1.0	3/08/2025 7:15	7.2	101.7	0.0	7.2	11.1	48.5	53.5
3/08/2025 7:30	4.4	62.1	0.0	7.2	13.5	1.1	3/08/2025 7:30	7.2	97.8	0.0	7.4	11.2	52.3	57.3
3/08/2025 7:45	4.4	61.9	0.0	7.1	13.5	0.9	3/08/2025 7:45	7.0	96.4	0.0	7.4	11.2	41.6	46.6
3/08/2025 8:00	4.4	61.8	0.0	7.0	13.5	1.1	3/08/2025 8:00	7.1	92.0	0.0	7.4	11.2	28.2	33.2
3/08/2025 8:15	4.4	61.1	0.0	7.1	13.5	1.1	3/08/2025 8:15	6.7	82.0	0.0	7.3	11.3	34.8	39.8
3/08/2025 8:30	4.3	60.9	0.0	6.9	13.5	1.2	3/08/2025 8:30	7.0	86.4	0.0	7.4	11.2	16.9	21.9
3/08/2025 8:45	4.3	61.1	0.0	7.2	13.5	1.6	3/08/2025 8:45	6.9	85.2	0.0	7.4	11.3	22.6	27.6
3/08/2025 9:00	4.3	61.2	0.0	7.1	13.5	1.1	3/08/2025 9:00	6.8	82.7	0.0	7.1	11.3	30.8	35.8
3/08/2025 9:15	4.3	61.2	0.0	7.2	13.5	1.9	3/08/2025 9:15	6.8	81.1	0.0	7.3	11.3	31.5	36.5
3/08/2025 9:30	4.3	61.4	0.0	7.0	13.5	1.5	3/08/2025 9:30	6.7	77.2	0.0	7.1	11.3	33.0	38.0
3/08/2025 9:45	4.3	61.4	0.0	7.1	13.5	1.1	3/08/2025 9:45	6.6	72.3	0.0	7.3	11.3	19.5	24.5
3/08/2025 10:00	4.3	61.6	0.0	7.0	13.5	1.5	3/08/2025 10:00	6.6	67.9	0.0	7.3	11.4	18.7	23.7
3/08/2025 10:15	4.3	61.4	0.0	7.2	13.5	1.1	3/08/2025 10:15	6.8	73.8	0.0	7.3	11.3	28.9	33.9
3/08/2025 10:30	4.3	61.1	0.0	6.9	13.5	1.0	3/08/2025 10:30	6.8	70.5	0.0	7.3	11.3	15.5	20.5
3/08/2025 10:45	4.3	61.0	0.0	7.1	13.5	1.0	3/08/2025 10:45	6.7	69.8	0.0	7.3	11.3	14.3	19.3
3/08/2025 11:00	4.3	61.0	0.0	7.2	13.5	1.1	3/08/2025 11:00	6.7	66.7	0.0	7.3	11.3	18.6	23.6
3/08/2025 11:15	4.3	60.7	0.0	7.0	13.5	1.0	3/08/2025 11:15	6.7	68.6	0.0	7.2	11.3	17.5	22.5
3/08/2025 11:30	4.3	60.5	0.0	7.1	13.5	1.0	3/08/2025 11:30	6.7	65.8	0.0	7.3	11.3	17.4	22.4
3/08/2025 11:45	4.4	60.8	0.0	7.1	13.5	1.8	3/08/2025 11:45	6.6	64.6	0.0	7.2	11.3	17.5	22.5
3/08/2025 12:00	4.4	60.3	0.0	6.9	13.5	1.0	3/08/2025 12:00	6.6	64.4	0.0	7.1	11.4	15.7	20.7
3/08/2025 12:15	4.4	60.1	0.0	7.2	13.6	0.8	3/08/2025 12:15	6.6	62.6	0.0	7.2	11.4	17.9	22.9
3/08/2025 12:30	4.4	60.9	0.0	7.2	13.5	1.0	3/08/2025 12:30	6.6	61.4	0.0	7.2	11.4	18.6	23.6
3/08/2025 12:45	4.4	60.4	0.0	6.9	13.6	1.4	3/08/2025 12:45	6.1	39.9	0.0	7.1	11.5	21.7	26.7
3/08/2025 13:00	4.4	60.1	0.0	7.0	13.6	1.1	3/08/2025 13:00	5.9	36.7	0.0	7.0	11.6	20.1	25.1
3/08/2025 13:15	4.4	60.5	0.0	7.1	13.6	0.9	3/08/2025 13:15	5.9	35.6	0.0	7.1	11.5	23.6	28.6
3/08/2025 13:30	4.4	61.2	0.0	7.2	13.5	0.9	3/08/2025 13:30	6.0	35.7	0.0	7.1	11.5	20.8	25.8
3/08/2025 13:45	4.4	60.1	0.0	7.0	13.6	1.1	3/08/2025 13:45	6.4	54.1	0.0	7.1	11.4	22.1	27.1
3/08/2025 14:00	4.4	59.8	0.0	6.9	13.6	1.2	3/08/2025 14:00	6.4	54.2	0.0	6.9	11.4	23.1	28.1
3/08/2025 14:15	4.4	60.8	0.0	6.9	13.6	2.4	3/08/2025 14:15	6.2	40.6	0.0	7.1	11.5	25.4	30.4
3/08/2025 14:30	4.4	60.1	0.0	6.9	13.6	1.8	3/08/2025 14:30	6.5	50.9	0.0	7.2	11.4	32.2	37.2
3/08/2025 14:45	4.4	60.0	0.0	7.2	13.6	1.0	3/08/2025 14:45	6.5	50.0	0.0	7.1	11.4	34.0	39.0
3/08/2025 15:00	4.4	60.2	0.0	7.2	13.6	1.1	3/08/2025 15:00	6.5	48.4	0.0	7.0	11.4	22.7	27.7
3/08/2025 15:15	4.3	59.7	0.0	7.1	13.6	1.3	3/08/2025 15:15	6.3	40.5	0.0	7.0	11.5	35.0	40.0
3/08/2025 15:30	4.3	59.6	0.0	7.1	13.6	1.2	3/08/2025 15:30	6.5	47.3	0.0	7.1	11.4	18.1	23.1
3/08/2025 15:45	4.3	59.6	0.0	7.0	13.6	1.2	3/08/2025 15:45	6.5	46.0	0.0	7.1	11.4	19.9	24.9
3/08/2025 16:00	4.3	59.2	0.0	7.2	13.6	1.3	3/08/2025 16:00	6.5	45.2	0.0	6.9	11.4	20.7	25.7
3/08/2025 16:15	4.3	59.2	0.0	7.1	13.6	1.2	3/08/2025 16:15	6.4	39.4	0.0	7.0	11.4	20.0	25.0
3/08/2025 16:30	4.3	59.1	0.0	7.1	13.6	1.4	3/08/2025 16:30	6.5	44.0	0.0	7.1	11.4	22.3	27.3
3/08/2025 16:45	4.3	58.7	0.0	7.1	13.6	1.3	3/08/2025 16:45	6.4	41.2	0.0	6.9	11.4	22.0	27.0
3/08/2025 17:00	4.3	58.6	0.0	7.0	13.6	3.2	3/08/2025 17:00	6.4	40.7	0.0	7.0	11.4	21.1	26.1
3/08/2025 17:15	4.3	58.4	0.0	7.2	13.6	1.2	3/08/2025 17:15	6.2	31.9	0.0	7.0	11.5	26.3	31.3
3/08/2025 17:30	4.2	58.4	0.0	7.1	13.6	1.2	3/08/2025 17:30	6.5	42.8	0.0	7.0	11.4	18.0	23.0
3/08/2025 17:45	4.2	58.5	0.0	7.1	13.6	1.3	3/08/2025 17:45	6.5	41.8	0.0	7.0	11.4	26.5	31.5
3/08/2025 18:00	4.2	58.5	0.0	7.1	13.6	1.6	3/08/2025 18:00	6.4	40.5	0.0	7.0	11.4	102.5	107.5
3/08/2025 18:15	4.2	58.0	0.0	6.9	13.6	2.5	3/08/2025 18:15	6.3	34.2	0.0	6.9	11.5	31.1	36.1
3/08/2025 18:30	4.2	58.0	0.0	7.1	13.6	1.7	3/08/2025 18:30	6.4	39.7	0.0	7.0	11.4	60.4	65.4
3/08/2025 18:45	4.2	57.9	0.0	7.1	13.6	1.3	3/08/2025 18:45	6.1	27.5	0.0	6.9	11.5	35.6	40.6
3/08/2025 19:00	4.2	57.8	0.0	7.1	13.6	1.2	3/08/2025 19:00	6.3	34.6	0.0	7.0	11.4	37.4	42.4
3/08/2025 19:15	4.2	57.5	0.0	7.1	13.6	1.7	3/08/2025 19:15	6.3	33.2	0.0	7.0	11.5	34.9	39.9
3/08/2025 19:30	4.2	57.2	0.0	7.1	13.6	1.3	3/08/2025 19:30	6.3	31.6	0.0	7.0	11.5	65.6	70.6
3/08/2025 19:45	4.2	56.9	0.0	7.2	13.6	1.8	3/08/2025 19:45	6.3	32.7	0.0	7.0	11.5	63.1	68.1
3/08/2025 20:00	4.1	57.0	0.0	7.1	13.6	1.7	3/08/2025 20:00	6.3	31.0	0.0	6.9	11.4	31.7	36.7
3/08/2025 20:15	4.1	56.7	0.0	7.1	13.6	1.6	3/08/2025 20:15	6.2	30.2	0.0	6.9	11.4	41.0	46.0
3/08/2025 20:30	4.1	56.8	0.0	7.1	13.6	3.6	3/08/2025 20:30	6.2	26.6	0.0	6.9	11.3	41.9	46.9
3/08/2025 20:45	4.1	56.3	0.0	7.1	13.6	3.6	3/08/2025 20:45	6.3	30.2	0.0	6.8	11.5	42.7	47.7
3/08/2025 21:00	4.1	56.1	0.0	7.0	13.6	2.9	3/08/2025 21:00	6.2	29.8	0.0	6.7	11.5	45.9	50.9
3/08/2025 21:15	4.1	56.2	0.0	7.0	13.6	2.7	3/08/2025 21:15	6.1	22.7	0.0	6.8	11.5	33.0	38.0
3/08/2025 21:30	4.1	55.7	0.0	7.1	13.6	2.8	3/08/2025 21:30	6.2	24.0	0.0	6.7	11.5	37.8	42.8
3/08/2025 21:45	4.1	55.4	0.0	7.0	13.6	3.2	3/08/2025 21:45	6.3	29.1	0.0	6.8	11.5	38.9	43.9
3/08/2025 22:00	4.1	55.2	0.0	7.1	13.6	4.0	3/08/2025 22:00	6.3	28.2	0.0	6.7	11.5	43.3	48.3
3/08/2025 22:15	4.1	55.1	0.0	7.0	13.6	3.7	3/08/2025 22:15	6.2	20.4	0.0	6.7	11.5	36.0	41.0
3/08/2025 22:30	4.1	54.6	0.0	7.0	13.6	4.9	3/08/2025 22:30	6.1	19.5	0.0	6.7	11.5	42.5	47.5
3/08/2025 22:45	4.1	54.8	0.0	7.1	13.6	7.3	3/08/2025 22:45	6.4	27.2	0.0	6.8	11.5	21.7	26.7
3/08/2025 23:00	4.1	54.2	0.0	7.2	13.6	5.4	3/08/2025 23:00	6.4	27.1	0.0	6.8	11.5	15.5	20.5
3/08/2025 23:15	4.1	53.9	0.0	7.0	13.6	6.3	3/08/2025 23:15	6.2	22.8	0.0	6.6	11.5	27.8	32.8

3/08/2025 23:30	4.1	53.2	0.0	7.2	13.6	7.3	3/08/2025 23:30	6.3	25.6	0.0	6.7	11.5	19.2	24.2
3/08/2025 23:45	4.1	52.2	0.0	7.2	13.7	7.0	3/08/2025 23:45	6.4	27.4	0.0	6.9	11.4	14.6	19.6
3/09/2025 0:00	4.1	51.9	0.0	7.2	13.7	5.3	3/09/2025 0:00	6.4	22.1	0.0	6.8	11.4	12.8	17.8
3/09/2025 0:15	4.1	51.5	0.0	7.2	13.7	8.7	3/09/2025 0:15	6.6	28.1	0.0	6.8	11.4	13.7	18.7
3/09/2025 0:30	4.1	50.5	0.0	7.1	13.7	12.1	3/09/2025 0:30	6.7	27.5	0.0	6.8	11.4	18.1	23.1
3/09/2025 0:45	4.1	50.0	0.0	7.1	13.8	8.5	3/09/2025 0:45	6.7	27.3	0.0	6.9	11.3	17.5	22.5
3/09/2025 1:00	4.0	49.0	0.0	7.2	13.8	9.9	3/09/2025 1:00	6.7	26.3	0.0	6.8	11.3	23.4	28.4
3/09/2025 1:15	4.0	47.8	0.0	7.1	13.8	10.2	3/09/2025 1:15	6.7	23.7	0.0	6.6	11.3	12.7	17.7
3/09/2025 1:30	4.0	46.4	0.0	7.1	13.9	12.9	3/09/2025 1:30	6.8	26.8	0.0	6.8	11.3	9.6	14.6
3/09/2025 1:45	4.0	45.7	0.0	7.0	13.9	11.6	3/09/2025 1:45	6.8	26.6	0.0	6.6	11.3	16.4	21.4
3/09/2025 2:00	4.0	45.5	0.0	6.9	13.9	16.8	3/09/2025 2:00	6.9	27.6	0.0	6.8	11.3	10.8	15.8
3/09/2025 2:15	4.0	45.1	0.0	7.0	13.9	10.1	3/09/2025 2:15	6.9	27.5	0.0	6.8	11.3	10.5	15.5
3/09/2025 2:30	4.0	45.0	0.0	6.9	13.9	12.4	3/09/2025 2:30	6.9	28.4	0.0	6.6	11.3	9.8	14.8
3/09/2025 2:45	4.0	45.1	0.0	7.0	13.9	40.3	3/09/2025 2:45	6.9	27.9	0.0	6.7	11.3	16.0	21.0
3/09/2025 3:00	4.0	44.3	0.0	7.0	14.0	18.3	3/09/2025 3:00	6.8	24.0	0.0	6.7	11.3	9.9	14.9
3/09/2025 3:15	4.0	43.4	0.0	7.1	14.0	12.5	3/09/2025 3:15	6.9	28.5	0.0	6.7	11.3	9.2	14.2
3/09/2025 3:30	3.9	42.5	0.0	7.1	14.0	9.8	3/09/2025 3:30	6.9	28.2	0.0	6.8	11.2	11.2	16.2
3/09/2025 3:45	3.9	41.5	0.0	7.1	14.1	17.3	3/09/2025 3:45	6.8	23.2	0.0	6.6	11.3	8.0	16.0
3/09/2025 4:00	3.9	41.6	0.0	6.9	14.1	18.4	3/09/2025 4:00	6.9	28.5	0.0	6.8	11.2	7.1	15.1
3/09/2025 4:15	3.9	41.2	0.0	7.0	14.1	14.4	3/09/2025 4:15	6.9	27.5	0.0	6.8	11.2	9.6	14.6
3/09/2025 4:30	4.0	41.6	0.0	7.0	14.1	18.9	3/09/2025 4:30	6.9	29.2	0.0	6.8	11.2	7.7	15.7
3/09/2025 4:45	4.0	42.0	0.0	6.8	14.1	19.7	3/09/2025 4:45	6.9	28.0	0.0	6.8	11.2	6.0	14.0
3/09/2025 5:00	4.0	42.7	0.0	7.1	14.1	14.8	3/09/2025 5:00	6.9	27.6	0.0	6.8	11.2	13.5	18.5
3/09/2025 5:15	4.0	41.6	0.0	7.1	14.1	18.9	3/09/2025 5:15	6.9	27.8	0.0	6.8	11.2	7.0	15.0
3/09/2025 5:30	4.0	40.3	0.0	6.9	14.2	22.4	3/09/2025 5:30	6.9	28.2	0.0	6.8	11.2	7.4	15.4
3/09/2025 5:45	4.0	40.2	0.0	6.9	14.2	17.9	3/09/2025 5:45	6.9	26.9	0.0	6.8	11.3	10.7	15.7
3/09/2025 6:00	4.0	39.4	0.0	6.9	14.2	18.4	3/09/2025 6:00	7.0	31.4	0.0	6.8	11.2	10.2	15.2
3/09/2025 6:15	4.0	38.7	0.0	6.8	14.2	13.2	3/09/2025 6:15	7.0	31.3	0.0	6.9	11.2	15.8	20.8
3/09/2025 6:30	4.0	37.6	0.0	6.9	14.2	33.2	3/09/2025 6:30	7.0	31.0	0.0	6.9	11.2	13.3	18.3
3/09/2025 6:45	4.0	37.5	0.0	6.9	14.2	27.3	3/09/2025 6:45	7.0	31.4	0.0	6.9	11.2	10.4	15.4
3/09/2025 7:00	4.0	37.1	0.0	6.8	14.3	19.6	3/09/2025 7:00	6.7	20.4	0.0	6.7	11.3	5.7	13.7
3/09/2025 7:15	4.0	36.5	0.0	6.8	14.3	15.3	3/09/2025 7:15	7.0	31.8	0.0	6.9	11.2	6.6	14.6
3/09/2025 7:30	4.0	36.0	0.0	7.0	14.3	27.0	3/09/2025 7:30	6.8	22.1	0.0	6.7	11.3	5.4	13.4
3/09/2025 7:45	4.0	35.8	0.0	6.9	14.3	26.4	3/09/2025 7:45	7.0	31.5	0.0	6.8	11.2	6.5	14.5
3/09/2025 8:00	4.0	35.3	0.0	6.9	14.3	30.0	3/09/2025 8:00	6.9	31.2	0.0	6.8	11.2	10.5	15.5
3/09/2025 8:15	4.0	35.1	0.0	6.9	14.3	20.9	3/09/2025 8:15	6.9	29.8	0.0	6.8	11.2	4.9	12.9
3/09/2025 8:30	4.0	34.5	0.0	6.9	14.3	25.3	3/09/2025 8:30	6.9	29.2	0.0	6.8	11.2	6.9	14.9
3/09/2025 8:45	4.0	34.6	0.0	6.8	14.3	30.0	3/09/2025 8:45	6.9	30.8	0.0	6.8	11.2	11.6	16.6
3/09/2025 9:00	4.0	34.0	0.0	6.8	14.4	32.8	3/09/2025 9:00	6.9	30.0	0.0	6.9	11.2	11.5	16.5
3/09/2025 9:15	4.0	33.8	0.0	6.8	14.4	49.1	3/09/2025 9:15	6.9	29.3	0.0	6.8	11.2	10.2	15.2
3/09/2025 9:30	3.9	33.5	0.0	6.8	14.4	38.0	3/09/2025 9:30	6.9	29.3	0.0	6.8	11.2	6.3	14.3
3/09/2025 9:45	4.0	33.4	0.0	6.8	14.4	49.2	3/09/2025 9:45	6.9	29.4	0.0	6.7	11.2	9.9	14.9
3/09/2025 10:00	3.9	32.9	0.0	7.0	14.4	32.5	3/09/2025 10:00	6.9	28.5	0.0	6.8	11.2	14.4	19.4
3/09/2025 10:15	3.9	32.3	0.0	6.8	14.4	31.9	3/09/2025 10:15	6.9	28.3	0.0	6.8	11.3	15.9	20.9
3/09/2025 10:30	3.9	32.0	0.0	6.8	14.4	31.2	3/09/2025 10:30	6.9	28.0	0.0	6.9	11.2	8.4	13.4
3/09/2025 10:45	3.9	32.1	0.0	6.9	14.4	32.9	3/09/2025 10:45	6.9	26.6	0.0	6.8	11.2	13.5	18.5
3/09/2025 11:00	3.9	31.5	0.0	6.7	14.4	33.2	3/09/2025 11:00	6.9	26.5	0.0	6.8	11.2	9.9	14.9
3/09/2025 11:15	3.9	31.5	0.0	6.7	14.4	32.4	3/09/2025 11:15	6.9	26.2	0.0	6.8	11.3	13.2	18.2
3/09/2025 11:30	3.9	31.3	0.0	6.6	14.5	37.3	3/09/2025 11:30	6.9	25.8	0.0	6.6	11.2	13.3	18.3
3/09/2025 11:45	3.9	31.0	0.0	6.8	14.5	39.3	3/09/2025 11:45	6.9	25.7	0.0	6.8	11.2	15.4	20.4
3/09/2025 12:00	3.9	30.8	0.0	6.7	14.5	72.8	3/09/2025 12:00	6.9	25.6	0.0	6.7	11.2	12.2	17.2
3/09/2025 12:15	3.9	30.1	0.0	6.8	14.5	78.2	3/09/2025 12:15	6.9	24.9	0.0	6.7	11.3	17.1	22.1
3/09/2025 12:30	3.9	29.7	0.0	6.7	14.5	38.9	3/09/2025 12:30	6.9	24.1	0.0	6.8	11.3	15.2	20.2
3/09/2025 12:45	3.9	29.6	0.0	6.8	14.5	38.5	3/09/2025 12:45	6.9	24.3	0.0	6.8	11.2	13.9	18.9
3/09/2025 13:00	3.9	29.2	0.0	6.8	14.5	41.0	3/09/2025 13:00	6.9	24.0	0.0	6.6	11.3	17.1	22.1
3/09/2025 13:15	3.9	28.8	0.0	6.8	14.6	36.0	3/09/2025 13:15	6.9	23.5	0.0	6.7	11.3	13.4	18.4
3/09/2025 13:30	3.9	28.6	0.0	6.7	14.5	44.9	3/09/2025 13:30	6.9	23.4	0.0	6.7	11.3	10.5	15.5
3/09/2025 13:45	4.0	28.6	0.0	6.6	14.5	37.4	3/09/2025 13:45	6.8	22.3	0.0	6.5	11.3	10.3	15.3
3/09/2025 14:00	4.0	28.9	0.0	6.8	14.5	38.6	3/09/2025 14:00	6.9	24.6	0.0	6.6	11.2	11.0	16.0
3/09/2025 14:15	4.0	29.2	0.0	6.8	14.5	46.6	3/09/2025 14:15	6.9	24.1	0.0	6.7	11.2	7.0	15.0
3/09/2025 14:30	4.0	28.9	0.0	6.7	14.5	41.5	3/09/2025 14:30	6.9	24.2	0.0	6.7	11.2	7.5	15.5
3/09/2025 14:45	4.0	28.7	0.0	6.8	14.5	42.9	3/09/2025 14:45	6.7	19.4	0.0	6.6	11.3	9.8	14.8
3/09/2025 15:00	4.0	28.8	0.0	6.6	14.5	41.3	3/09/2025 15:00	6.9	25.2	0.0	6.7	11.2	9.8	14.8
3/09/2025 15:15	4.0	28.9	0.0	6.7	14.5	45.5	3/09/2025 15:15	6.9	25.0	0.0	6.7	11.2	9.2	14.2
3/09/2025 15:30	4.0	28.9	0.0	6.9	14.5	47.9	3/09/2025 15:30	6.9	25.1	0.0	6.7	11.3	4.2	12.2
3/09/2025 15:45	4.0	28.6	0.0	6.7	14.5	830.8	3/09/2025 15:45	6.8	22.5	0.0	6.7	11.3	5.9	13.9
3/09/2025 16:00	4.1	28.8	0.0	6.7	14.4	38.5	3/09/2025 16:00	6.9	25.5	0.0	6.7	11.2	2.7	10.7
3/09/2025 16:15	4.1	28.9	0.0	6.6	14.4	37.0	3/09/2025 16:15	6.9	25.7	0.0	6.7	11.2	4.3	12.3
3/09/2025 16:30	4.1	28.6	0.0	6.8	14.4	35.1	3/09/2025 16:30	6.8	25.6	0.0	6.7	11.2	7.2	15.2
3/09/2025 16:45	4.1	28.7	0.0	6.7	14.4	33.3	3/09/2025 16:45	6.8	25.3	0.0	6.7	11.2	5.1	13.1
3/09/2025 17:00	4.1	28.6	0.0	6.8	14.4	34.1	3/09/2025 17:00	6.9	26.7	0.0	6.7	11.2	2.9	10.9
3/09/2025 17:15	4.1	28.6	0.0	6.6	14.4	29.4	3/09/2025 17:15	6.8	25.9	0.0	6.7	11.2	1.7	9.7
3/09/2025 17:30	4.1	28.8	0.0	6.7	14.4	26.9	3/09/2025 17:30	6.8	26.7	0.0	6.7	11.2	3.5	11.5
3/09/2025 17:45	4.1	28.6	0.0	6.8	14.4	28.4	3/09/2025 17:45	6.8	26.8	0.0	6.7	11.2	6.8	14.8
3/09/2025 18:00	4.1	28.7	0.0	6.7	14.4	28.0	3/09/2025 18:00	6.8	27.4	0.0	6.8	11.2	8.3	13.3
3/09/2025 18:15	4.1	29.4	0.0	6.6	14.3	23.9	3/09/2025 18:15	6.8	27.1	0.0	6.8	11.2	3.2	11.2
3/09/2025 18:30	4.1	30.1	0.0	6.7	14.3	24.4	3/09/2025 18:30	6.8	27.4	0.0	6.8	11.2	1.2	9.2
3/09/2025 18:45	4.1	29.5	0.0	6.8	14.3	20.9	3/09/2025 18:45	6.8	27.7	0.0	6.7	11.2	6.0	14.0
3/09/2025 19:00	4.1	29.4	0.0	6.9	14.3	21.8	3/09/2025 19:00	6.8	28.3	0.0	6.8	11.2	14.7	19.7
3/09/2025 19:15	4.1	30.3	0.0	6.7	14.3	20.1	3/09/2025 19:15	6.8	28.4	0.0	6.8	11.2	4.8	12.8
3/09/2025 19:30	4.1	30.0	0.0	6.8	14.3	19.4	3/09/2025 19:30	6.5	17.4	0.0	6.7	11.3	1.6	9.6
3/09/2025 19:45	4.1	29.8	0.0	6.7	14.3	20.8	3/09/2025 19:45	6.4	17.1	0.0	6.7	11.3	1.1	9.1
3/09/2025 20:00	4.1	30.2	0.0	6.8	14.2	19.7	3/09/2025 20:00	6.8	30.9	0.0	6.6	11.2	5.0	13.0
3/09/2025 20:15	4.1	30.5	0.0	6.8	14.2	16.9	3/09/2025 20:15	6.8	30.8	0.0	6.8	11.2	3.7	11.7
3/09/2025 20:30	4.1	30.4	0.0	6.8	14.2	19.2	3/09/2025 20:30	6.7	30.0	0.0	6.8	11.3	3.0	11.0
3/09/2025 20:45	4.0	30.7	0.0	6.7	14.2	19.9	3/09/2025 20:45	6.8	30.9	0.0	6.9	11.3	5.1	13.1
3/09/2025 21:00	4.0	31.1	0.0	6.7	14.2	20.9	3/09/2025 21:00	6.7	31.3	0.0	6.8	11.3	4.4	12.4
3/09/2025 21:15	4.0	30.7	0.0	6.9	14.2	18.8	3/09/2025 21:15	6.5	27.1	0.0	6.7	11.4	6.2	14.2
3/09/2025 21:30	4.0	31.0	0.0	6.6	14.2	17.4	3/09/2025 21:30	6.7	31.7	0.0	6.8	11.3	4.8	12.8
3/09/2025 21:45	4.0	31.2	0.0	6.9	14.2	10.0	3/09/2025 21:45	6.6	30.9	0.0	6.8	11.3	2.5	10.5
3/09/2025 22:00	4.0	31.2	0.0	6.9	14.2	15.3	3/09/2025 22:00	6.6	31.2	0.0	6.9	11.3	11.1	16.1
3/09/2025 22:15	4.0	31.4	0.0	6.8	14.2	13.7	3/09/2025 22:15	6.5	29.6	0.0	6.8	11.3	1.2	9.2
3/09/2025 22:30	4.0	31.5	0.0	6.7	14.2	12.9	3/09/2025 22:30	6.5	28.5	0.0	6.8	11.4	7.1	15.1
3/09/2025 22:45	3.9	31.6	0.0	6.9	14.2	12.1	3/09/2025 22:45	6.4	28.2	0.0	6.8	11.4	5.3	13.3
3/09/2025 23:00	3.9	31.6	0.0	6.9	14.2	11.4	3/09/2025 23:00	6.6	33.2	0.0	6.9	11.3	14.7	19.7
3/09/2025 23:15	3.9	32.1	0.0	6.7	14.2	15.7	3/09/2025 23:15	6.5	32.4	0.0	7.0	11.3	7.2	15.2
3/09/2025 23:30	3.9	32.4	0.0	6.8	14.1	17.7	3/09/2025 23:30	6.5	33.2	0.0	7.0	11.3	5.3	13.3
3/09/2025 23:45	3.9	32.1	0.0	6.9	14.2	11.7	3/09/2025 23:45	6.5	33.4	0.0	6.9	11.3	4.2	12.2

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.	(College of Applied Biologists seal: Farshad Shafiei, RPBio 3781, CAB)	WLNG EOP	Sample or value notes	BCWQ FAL - Short Term	BCWQ MAL - Short Term
	LAB ID			VA25A4716-001			
	Date Sampled			04-Mar-2025			
	Time Sampled			10:27			
Analyte	Units	FAL-ST [1,2]	MAL-ST [1]	Water		Guideline notes	
				N/A			
In Situ Parameters							
pH (field)	pH units	6.5-9.0	7.0-8.7	7.06		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	10.7		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 salmoid 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	-	-	168			
Turbidity (field)	NTU	Varies with background, see note Guideline = 8.5	Varies with background, see note Guideline = 8.5	0.51		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
General Parameters							
Hardness (as $CaCO_3$) (total)	mg/L	-	-	72.9			
Total Dissolved Solids	mg/L	-	-	95			
Total Suspended Solids	mg/L	Varies with background, see note Guideline = 28.0	Varies with background, see note Guideline = 28.0	<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 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	-	-	0.58			
Total Phenols	mg/L	0.05	-	<0.0010		Interim guideline	Interim guideline
Total Alkalinity ($CaCO_3$)	mg/L	-	-	66			
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 = 24.7	Varies with pH and temperature. See note. Guideline = 131	0.0158		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	8.56			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 = 1.329	1.5	0.176		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	-	0.0209			
Nitrite (as N)	mg/L	Varies with chloride. Table 27B, see note. Guideline = 0.60	-	<0.0010		Varies with chloride. Refer to Table 27B in BC WQG for guideline values.	
Total Nitrogen	mg/L	-	-	0.236			
Total Phosphorous	mg/L	-	-	0.0035			
Sulfate (as SO_4)	mg/L	-	-	6.88			
Total Metals							
Aluminum (Al)-Total	mg/L	-	-	0.112			
Antimony (Sb)-Total	mg/L	0.25	-	0.00028			
Arsenic (As)-Total	mg/L	-	-	0.00103			
Barium (Ba)-Total	mg/L	-	-	0.00626			
Beryllium (Be)-Total	mg/L	-	-	< 0.000100			
Bismuth (Bi)-Total	mg/L	-	-	< 0.000050			
Boron (B)-Total	mg/L	-	-	0.018			
Cadmium (Cd)-Total	mg/L	-	-	< 0.0000200			
Calcium (Ca)-Total	mg/L	-	-	27.4			
Cesium (Cs)-Total	mg/L	-	-	0.000056			
Chromium (Cr) - Total	mg/L	-	-	0.00085			
Chromium (Cr(III))-Total	mg/L	-	-	< 0.00050			
Chromium (Cr(VI))-Total	mg/L	-	-	0.00087			
Cobalt (Co)-Total	mg/L	0.11	-	< 0.00010			
Copper (Cu)-Total	mg/L	-	0.003	< 0.00050			
Iron (Fe)-Total	mg/L	1	-	0.016			
Lead (Pb)-Total	mg/L		0.14	< 0.000050			
Lithium (Li)-Total	mg/L	-	-	0.0035			
Magnesium (Mg)-Total	mg/L	-	-	1.1			
Manganese (Mn)-Total	mg/L	Varies with hardness Guideline = 1.343	-	0.00336		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	-	0.0207			
Nickel (Ni)-Total	mg/L	-	-	< 0.00050			
Phosphorus (P)-Total	mg/L	-	-	< 0.050			
Potassium (K)-Total	mg/L	-	-	1.4			
Rubidium (Rb)-Total	mg/L	-	-	0.00252			
Selenium (Se)-Total	mg/L	-	-	0.000055			
Silicon (Si)-Total	mg/L	-	-	5.99			
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	-	-	5.1			
Strontium (Sr)-Total	mg/L	-	-	0.0552			
Sulfur (S)-Total	mg/L	-	-	2.18			
Tellurium (Te)-Total	mg/L	-	-	< 0.00020			
Thallium (Tl)-Total	mg/L	-	-	< 0.000010			
Thorium (Th)-Total	mg/L	-	-	< 0.00010			
Tin (Sn)-Total	mg/L	-	-	< 0.00010			
Titanium (Ti)-Total	mg/L	-	-	0.00073			
Tungsten (W)-Total	mg/L	-	-	0.00033			
Uranium (U)-Total	mg/L	0.0165	-	0.00341			
Vanadium (V)-Total	mg/L	-	-	0.00116			
Zinc (Zn)-Total	mg/L	-	0.055	< 0.00300			
Zirconium (Zr)-Total	mg/L	-	-	< 0.00020			
Dissolved Metals							
Aluminum (Al)-Dissolved	mg/L	-	-	0.049			
Antimony (Sb)-Dissolved	mg/L	-	-	0.00028			
Arsenic (As)-Dissolved	mg/L	-	-	0.001			
Barium (Ba)-Dissolved	mg/L	-	-	0.00633			
Beryllium (Be)-Dissolved	mg/L	-	-	< 0.000100			
Bismuth (Bi)-Dissolved	mg/L	-	-	< 0.000050			
Boron (B)-Dissolved	mg/L	-	-	0.019			
Cadmium (Cd)-Dissolved	mg/L	Varies with hardness, see note Guideline = 0.000425	-	< 0.0000200		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	-	-	25.3			
Cesium (Cs)-Dissolved	mg/L	-	-	0.000052			
Chromium (Cr)-Dissolved	mg/L	-	-	0.00083			
Cobalt (Co)-Dissolved	mg/L	-	-	< 0.00010			
Copper (Cu)-Dissolved	mg/L	Guideline varies with other parameters, see note Guideline = 0.0138	-	0.00023		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	-	< 0.0100			
Lead (Pb)-Dissolved	mg/L	-	-	< 0.000050			
Lithium (Li)-Dissolved	mg/L	-	-	0.0035			
Magnesium (Mg)-Dissolved	mg/L	-	-	1.12			
Manganese (Mn)-Dissolved	mg/L	-	-	0.003			
Mercury (Hg)-Dissolved	mg/L	-	-	< 0.000005			
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.0208			
Nickel (Ni)-Dissolved	mg/L	Guideline varies with pH, temperature, DOC, and hardness Guideline: 0.0735	-	< 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	-	-	< 0.0500			
Potassium (K)-Dissolved	mg/L	-	-	1.56		0.0651	
Rubidium (Rb)-Dissolved	mg/L	-	-	0.00281			
Selenium (Se)-Dissolved	mg/L	-	-	0.000051			
Silicon (Si)-Dissolved	mg/L	-	-	5.77			
Silver (Ag)-Dissolved	mg/L	-	-	< 0.000010			
Sodium (Na)-Dissolved	mg/L	-	-	5.4			
Strontium (Sr)-Dissolved	mg/L	-	-	0.0537			
Sulfur (S)-Dissolved	mg/L	-	-	2.38			
Tellurium (Te)-Dissolved	mg/L	-	-	< 0.00020			
Thallium (Tl)-Dissolved	mg/L	-	-	< 0.000010			
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	-	-	0.00034			
Uranium (U)-Dissolved	mg/L	-	-	0.00331			
Vanadium (V)-Dissolved	mg/L	-	-	0.00103			
Zinc (Zn)-Dissolved	mg/L	Varies with DOC and hardness Guideline = 0.055	-	0.002		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	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	-	-	7.16			
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	-	-	0.056			
Methylnaphthalene, 2-	µg/L	-	-	0.076			
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

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	7.06	7.06
Temperature (field)	°C	Field temperature taken using handheld meters during sampling used in calculations	10.7	10.7
Turbidity (field)	NTU	Field turbidity taken using handheld meters during sampling used in calculations	0.51	0.51
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	72.9	72.9
Dissolved Organic Carbon (DOC)	mg/L	Laboratory tested dissolved organic carbon tested at the lab used in guideline calculations	0.58	0.58
Total Alkalinity ($CaCO_3$)	mg/L	Laboratory tested total alkalinity used in calculations	66	66
Chloride	mg/L	Laboratory tested chloride taken at each respective sample site on the day of sampling used in guideline calculations	8.56	8.56
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	:	**VA25A4716**		
Client	:	**Triton Environmental Consultants Ltd.**	Laboratory	: ALS Environmental - Vancouver
Contact	:		Account Manager	:
Address	:		Address	:
Telephone	:		Telephone	:
Project	:	11964	Date Samples Received	: 04-Mar-2025 17:45
PO	:	11964-Task 40-Phase3C-4C	Date Analysis Commenced	: 04-Mar-2025
C-O-C number	:	----	Issue Date	: 12-Mar-2025 16:18
Sampler	:	----		
Site	:	Water Analysis		
Quote number	:	VA25-TRIT100-001		
No. of samples received	:	2		
No. of samples analysed	:	2		

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*

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
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Field Tests										
Conductivity, field	----	EF001/VA	0.10	µS/cm		168.00	----	----	----	----
pH, field	----	EF001/VA	0.10	pH units		7.06	----	----	----	----
Temperature, field	----	EF001/VA	0.10	°C		10.7	----	----	----	----
Physical Tests										
Hardness (as CaCO3), dissolved	----	EC100/VA	0.60	mg/L		67.8	67.7	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		72.9	71.2	----	----	----
Solids, total dissolved [TDS]	----	E162/VA	10	mg/L		95	89	----	----	----
Solids, total suspended [TSS]	----	E160/VA	3.0	mg/L		<3.0	<3.0	----	----	----
Alkalinity, total (as CaCO3)	----	E290/VA	2.0	mg/L		66.0	66.0	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/VA	0.0050	mg/L		0.0158	0.0159	----	----	----
Bromide	24959-67-9	E235.Br-L/VA	0.050	mg/L		<0.050	<0.050	----	----	----
Chloride	16887-00-6	E235.Cl/VA	0.50	mg/L		8.56	8.52	----	----	----
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L		0.176	0.175	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3-L/VA	0.0050	mg/L		0.0209	0.0206	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2-L/VA	0.0010	mg/L		<0.0010	<0.0010	----	----	----
Nitrogen, total	7727-37-9	E366/VA	0.030	mg/L		0.236	0.238	----	----	----
Phosphorus, total	7723-14-0	E372-U/VA	0.0020	mg/L		0.0035	0.0026	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L		6.88	6.88	----	----	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		0.58	0.66	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: WLNG EOP	Client sample ID: WLNG Duplicate	Client sample ID: ----	Client sample ID: ----	Client sample ID: ----
					Client sampling date / time: 04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
					VA25A4716-001	VA25A4716-002	----	----	----
					Result	Result	----	----	----
Total Sulfides									
Sulfide, total (as S)	18496-25-8	E395/VA	0.0015	mg/L	<0.0015	<0.0015	----	----	----
Sulfide, un-ionized (as H2S), from total	7783-06-4	EC395/VA	0.0015	mg/L	<0.0015	----	----	----	----
Sulfide, total (as H2S)	7783-06-4	E395/VA	0.0016	mg/L	<0.0016	<0.0016	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L	0.112	0.108	----	----	----
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L	0.00028	0.00028	----	----	----
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L	0.00103	0.00104	----	----	----
Barium, total	7440-39-3	E420/VA	0.00010	mg/L	0.00626	0.00625	----	----	----
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L	<0.000100	<0.000100	----	----	----
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Boron, total	7440-42-8	E420/VA	0.010	mg/L	0.018	0.018	----	----	----
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L	<0.0000200 DLM	<0.0000150 DLM	----	----	----
Calcium, total	7440-70-2	E420/VA	0.050	mg/L	27.4	26.7	----	----	----
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L	0.000056	0.000052	----	----	----
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L	0.00085	0.00082	----	----	----
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Copper, total	7440-50-8	E420/VA	0.00050	mg/L	<0.00050	<0.00050	----	----	----
Iron, total	7439-89-6	E420/VA	0.010	mg/L	0.016	0.024	----	----	----
Lead, total	7439-92-1	E420/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L	0.0035	0.0033	----	----	----
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L	1.10	1.10	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L		0.00336	0.00329	----	----	----
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L		<0.0000050	<0.0000050	----	----	----
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L		0.0207	0.0205	----	----	----
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L		<0.050	<0.050	----	----	----
Potassium, total	7440-09-7	E420/VA	0.050	mg/L		1.40	1.43	----	----	----
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L		0.00252	0.00267	----	----	----
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L		0.000055	0.000053	----	----	----
Silicon, total	7440-21-3	E420/VA	0.10	mg/L		5.99	5.92	----	----	----
Silver, total	7440-22-4	E420/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Sodium, total	7440-23-5	E420/VA	0.050	mg/L		5.10	5.06	----	----	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L		0.0552	0.0542	----	----	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L		2.18	2.31	----	----	----
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Tin, total	7440-31-5	E420/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L		0.00073	0.00072	----	----	----
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L		0.00033	0.00036	----	----	----
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L		0.00341	0.00348	----	----	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L		0.00116	0.00118	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L		<0.0030	<0.0030	----	----	----
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/VA	0.0010	mg/L		0.0490	0.0449	----	----	----
Antimony, dissolved	7440-36-0	E421/VA	0.00010	mg/L		0.00028	0.00027	----	----	----
Arsenic, dissolved	7440-38-2	E421/VA	0.00010	mg/L		0.00100	0.00098	----	----	----
Barium, dissolved	7440-39-3	E421/VA	0.00010	mg/L		0.00633	0.00618	----	----	----
Beryllium, dissolved	7440-41-7	E421/VA	0.000100	mg/L		<0.000100	<0.000100	----	----	----
Bismuth, dissolved	7440-69-9	E421/VA	0.000050	mg/L		<0.000050	<0.000050	----	----	----
Boron, dissolved	7440-42-8	E421/VA	0.010	mg/L		0.019	0.018	----	----	----
Cadmium, dissolved	7440-43-9	E421/VA	0.0000050	mg/L		<0.0000200 DLM	<0.0000150 DLM	----	----	----
Calcium, dissolved	7440-70-2	E421/VA	0.050	mg/L		25.3	25.3	----	----	----
Cesium, dissolved	7440-46-2	E421/VA	0.000010	mg/L		0.000052	0.000052	----	----	----
Chromium, dissolved	7440-47-3	E421/VA	0.00050	mg/L		0.00083	0.00078	----	----	----
Cobalt, dissolved	7440-48-4	E421/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Copper, dissolved	7440-50-8	E421/VA	0.00020	mg/L		0.00023	<0.00020	----	----	----
Iron, dissolved	7439-89-6	E421/VA	0.010	mg/L		<0.010	<0.010	----	----	----
Lead, dissolved	7439-92-1	E421/VA	0.000050	mg/L		<0.000050	<0.000050	----	----	----
Lithium, dissolved	7439-93-2	E421/VA	0.0010	mg/L		0.0035	0.0034	----	----	----
Magnesium, dissolved	7439-95-4	E421/VA	0.0050	mg/L		1.12	1.10	----	----	----
Manganese, dissolved	7439-96-5	E421/VA	0.00010	mg/L		0.00300	0.00298	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/VA	0.0000050	mg/L		<0.0000050	<0.0000050	----	----	----
Molybdenum, dissolved	7439-98-7	E421/VA	0.000050	mg/L		0.0208	0.0210	----	----	----
Nickel, dissolved	7440-02-0	E421/VA	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Phosphorus, dissolved	7723-14-0	E421/VA	0.050	mg/L		<0.050	<0.050	----	----	----
Potassium, dissolved	7440-09-7	E421/VA	0.050	mg/L		1.56	1.53	----	----	----
Rubidium, dissolved	7440-17-7	E421/VA	0.00020	mg/L		0.00281	0.00270	----	----	----
Selenium, dissolved	7782-49-2	E421/VA	0.000050	mg/L		0.000051	<0.000050	----	----	----
Silicon, dissolved	7440-21-3	E421/VA	0.050	mg/L		5.77	5.67	----	----	----
Silver, dissolved	7440-22-4	E421/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Sodium, dissolved	7440-23-5	E421/VA	0.050	mg/L		5.40	5.27	----	----	----
Strontium, dissolved	7440-24-6	E421/VA	0.00020	mg/L		0.0537	0.0543	----	----	----
Sulfur, dissolved	7704-34-9	E421/VA	0.50	mg/L		2.38	2.13	----	----	----
Tellurium, dissolved	13494-80-9	E421/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Thallium, dissolved	7440-28-0	E421/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Thorium, dissolved	7440-29-1	E421/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Tin, dissolved	7440-31-5	E421/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Titanium, dissolved	7440-32-6	E421/VA	0.00030	mg/L		<0.00030	<0.00030	----	----	----
Tungsten, dissolved	7440-33-7	E421/VA	0.00010	mg/L		0.00034	0.00034	----	----	----
Uranium, dissolved	7440-61-1	E421/VA	0.000010	mg/L		0.00331	0.00325	----	----	----
Vanadium, dissolved	7440-62-2	E421/VA	0.00050	mg/L		0.00103	0.00105	----	----	----
Zinc, dissolved	7440-66-6	E421/VA	0.0010	mg/L		0.0020	0.0020	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	WLNG EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Dissolved Metals										
Zirconium, dissolved	7440-67-7	E421/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Dissolved mercury filtration location	----	EP509/VA	-	-		Laboratory	Laboratory	----	----	----
Dissolved metals filtration location	----	EP421/VA	-	-		Laboratory	Laboratory	----	----	----
Speciated Metals										
Chromium, hexavalent [Cr VI], total	18540-29-9	E532/VA	0.00050	mg/L		0.00087	0.00092	----	----	----
Chromium, trivalent [Cr III], total	16065-83-1	EC535/VA	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Aggregate Organics										
Phenols, total (4AAP)	----	E562/EO	0.0010	mg/L		<0.0010	<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 EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						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		7.16	7.11	----	----	----
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 EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						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/CG	250	µg/L		<250	<250	----	----	----
EPH (C19-C32)	----	E601A/CG	250	µg/L		<250	<250	----	----	----
VHw (C6-C10)	----	E581.VH+F1/VA	100	µg/L		<100	<100	----	----	----
HEPHw	----	EC600A/CG	250	µg/L		<250	<250	----	----	----
LEPHw	----	EC600A/CG	250	µg/L		<250	<250	----	----	----
VPHw	----	EC580A/VA	100	µg/L		<100	<100	----	----	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (EPH surrogate)	392-83-6	E601A/CG	1.0	%		92.7	89.0	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.VH+F1/VA	1.0	%		84.2	86.3	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611C/VA	1.0	%		96.2	101	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611C/VA	1.0	%		103	103	----	----	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/CG	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 EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthylene	208-96-8	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Acridine	260-94-6	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Anthracene	120-12-7	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Benz(a)anthracene	56-55-3	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(a)pyrene	50-32-8	E641A/CG	0.0050	µg/L		<0.0050	<0.0050	----	----	----
Benzo(b+j)fluoranthene	n/a	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(b+j+k)fluoranthene	n/a	E641A/CG	0.015	µg/L		<0.015	<0.015	----	----	----
Benzo(g,h,i)perylene	191-24-2	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(k)fluoranthene	207-08-9	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Chrysene	218-01-9	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Dibenz(a,h)anthracene	53-70-3	E641A/CG	0.0050	µg/L		<0.0050	<0.0050	----	----	----
Fluoranthene	206-44-0	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Fluorene	86-73-7	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Methylnaphthalene, 1-	90-12-0	E641A/CG	0.010	µg/L		0.056	0.063	----	----	----
Methylnaphthalene, 2-	91-57-6	E641A/CG	0.010	µg/L		0.076	0.084	----	----	----
Naphthalene	91-20-3	E641A/CG	0.050	µg/L		<0.050	<0.050	----	----	----
Phenanthrene	85-01-8	E641A/CG	0.020	µg/L		<0.020	<0.020	----	----	----
Pyrene	129-00-0	E641A/CG	0.010	µg/L		<0.010	<0.010	----	----	----
Quinoline	91-22-5	E641A/CG	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 EOP	WLNG Duplicate	----	----	----
					Client sampling date / time	04-Mar-2025 10:27	04-Mar-2025 10:27	----	----	----
						VA25A4716-001	VA25A4716-002	----	----	----
						Result	Result	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/CG	0.1	%		110	109	----	----	----
Naphthalene-d8	1146-65-2	E641A/CG	0.1	%		114	116	----	----	----
Phenanthrene-d10	1517-22-2	E641A/CG	0.1	%		111	114	----	----	----
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	%		102	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	: **VA25A4716**	Page	: 1 of 16
Client	: **Triton Environmental Consultants Ltd.**	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	
Address		Address	
Telephone	: ----	Telephone	
Project	: 11964	Date Samples Received	: 04-Mar-2025 17:45
PO	: 11964-Task 40-Phase3C-4C	Issue Date	: 12-Mar-2025 16:18
C-O-C number	: ----		
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 2		
No. of samples analysed	: 2		

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 Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- 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.

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 Duplicate	E562	04-Mar-2025	07-Mar-2025	28 days	3 days	✓	07-Mar-2025	28 days	3 days	✓
Aggregate Organics : Phenols (4AAP) in Water by Colorimetry										
Amber glass total (sulfuric acid) WLNG EOP	E562	04-Mar-2025	07-Mar-2025	28 days	3 days	✓	07-Mar-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG Duplicate	E298	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	11-Mar-2025	28 days	7 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG EOP	E298	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	11-Mar-2025	28 days	7 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG Duplicate	E235.Br-L	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG EOP	E235.Br-L	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG Duplicate	E235.Cl	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-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		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Anions and Nutrients : Chloride in Water by IC										
HDPE										
WLNG EOP	E235.Cl	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
WLNG Duplicate	E235.F	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
WLNG EOP	E235.F	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
WLNG Duplicate	E235.NO3-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
WLNG EOP	E235.NO3-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
WLNG Duplicate	E235.NO2-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
WLNG EOP	E235.NO2-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
WLNG Duplicate	E235.SO4	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
WLNG EOP	E235.SO4	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-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
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
WLNG Duplicate	E366	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	09-Mar-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
WLNG EOP	E366	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	09-Mar-2025	28 days	5 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG Duplicate	E372-U	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG EOP	E372-U	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial - dissolved (lab preserved)										
WLNG Duplicate	E509	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial - dissolved (lab preserved)										
WLNG EOP	E509	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved)										
WLNG Duplicate	E421	04-Mar-2025	04-Mar-2025	180 days	0 days	✓	04-Mar-2025	180 days	0 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved)										
WLNG EOP	E421	04-Mar-2025	04-Mar-2025	180 days	0 days	✓	04-Mar-2025	180 days	0 days	✓
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Amber glass - dissolved (unpreserved)										
WLNG EOP	EF001	04-Mar-2025	----	----	----		06-Mar-2025	----	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
Glycols : Glycols (4 analytes) by GC-FID										
Glass vial										
WLNG Duplicate	E680E	04-Mar-2025	11-Mar-2025	7 days	7 days	✓	11-Mar-2025	40 days	0 days	✓
Glycols : Glycols (4 analytes) by GC-FID										
Glass vial										
WLNG EOP	E680E	04-Mar-2025	11-Mar-2025	7 days	7 days	✓	11-Mar-2025	40 days	0 days	✓
Hydrocarbons : BC PHCs - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG Duplicate	E601A	04-Mar-2025	09-Mar-2025	14 days	5 days	✓	09-Mar-2025	40 days	0 days	✓
Hydrocarbons : BC PHCs - EPH by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
WLNG EOP	E601A	04-Mar-2025	09-Mar-2025	14 days	5 days	✓	09-Mar-2025	40 days	0 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
WLNG Duplicate	E581.VH+F1	04-Mar-2025	08-Mar-2025	14 days	4 days	✓	08-Mar-2025	14 days	4 days	✓
Hydrocarbons : VH and F1 by Headspace GC-FID										
Glass vial (sodium bisulfate)										
WLNG EOP	E581.VH+F1	04-Mar-2025	08-Mar-2025	14 days	4 days	✓	08-Mar-2025	14 days	4 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (unpreserved)										
WLNG Duplicate	E358-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	28 days	0 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (unpreserved)										
WLNG EOP	E358-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	28 days	0 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG Duplicate	E290	04-Mar-2025	05-Mar-2025	14 days	1 days	✓	05-Mar-2025	14 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
Physical Tests : Alkalinity Species by Titration										
HDPE WLNG EOP	E290	04-Mar-2025	05-Mar-2025	14 days	1 days	✓	05-Mar-2025	14 days	1 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG Duplicate	E162	04-Mar-2025	----	----	----		10-Mar-2025	7 days	7 days	✓
Physical Tests : TDS by Gravimetry										
HDPE WLNG EOP	E162	04-Mar-2025	----	----	----		10-Mar-2025	7 days	7 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG Duplicate	E160	04-Mar-2025	----	----	----		11-Mar-2025	7 days	7 days	✓
Physical Tests : TSS by Gravimetry										
HDPE WLNG EOP	E160	04-Mar-2025	----	----	----		11-Mar-2025	7 days	7 days	✓
Polycyclic Aromatic Hydrocarbons : PAHs in Water by Hexane LVI GC-MS										
Amber glass/Teflon lined cap (sodium bisulfate) WLNG Duplicate	E641A	04-Mar-2025	09-Mar-2025	14 days	5 days	✓	09-Mar-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	E641A	04-Mar-2025	09-Mar-2025	14 days	5 days	✓	09-Mar-2025	40 days	0 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide) WLNG Duplicate	E532	04-Mar-2025	----	----	----		04-Mar-2025	28 days	1 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide) WLNG EOP	E532	04-Mar-2025	----	----	----		04-Mar-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) WLNG Duplicate	E508	04-Mar-2025	04-Mar-2025	28 days	1 days	✓	04-Mar-2025	28 days	1 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid) WLNG EOP	E508	04-Mar-2025	04-Mar-2025	28 days	1 days	✓	04-Mar-2025	28 days	1 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) WLNG Duplicate	E420	04-Mar-2025	04-Mar-2025	180 days	0 days	✓	05-Mar-2025	180 days	1 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) WLNG EOP	E420	04-Mar-2025	04-Mar-2025	180 days	0 days	✓	05-Mar-2025	180 days	1 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide) WLNG Duplicate	E395	04-Mar-2025	----	----	----		10-Mar-2025	7 days	6 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide) WLNG EOP	E395	04-Mar-2025	----	----	----		10-Mar-2025	7 days	6 days	✓
Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS										
Glass vial (sodium bisulfate) WLNG Duplicate	E611C	04-Mar-2025	08-Mar-2025	14 days	4 days	✓	08-Mar-2025	14 days	4 days	✓
Volatile Organic Compounds : VOCs (BC List) by Headspace GC-MS										
Glass vial (sodium bisulfate) WLNG EOP	E611C	04-Mar-2025	08-Mar-2025	14 days	4 days	✓	08-Mar-2025	14 days	4 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	1903518	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1903511	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895534	1	7	14.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895533	1	7	14.2	5.0	✓
Fluoride in Water by IC	E235.F	1895532	1	7	14.2	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895536	1	7	14.2	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895535	1	7	14.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1895537	1	7	14.2	5.0	✓
Alkalinity Species by Titration	E290	1895530	1	7	14.2	5.0	✓
Ammonia by Fluorescence	E298	1895587	1	10	10.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895588	1	8	12.5	5.0	✓
Total Nitrogen by Colourimetry	E366	1895585	1	10	10.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895586	1	8	12.5	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895366	1	2	50.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895367	1	2	50.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1895497	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1895539	1	5	20.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1899630	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1900887	1	2	50.0	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1900888	1	13	7.6	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1903971	1	7	14.2	5.0	✓
Laboratory Control Samples (LCS)							
TSS by Gravimetry	E160	1903518	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1903511	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895534	1	7	14.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895533	1	7	14.2	5.0	✓
Fluoride in Water by IC	E235.F	1895532	1	7	14.2	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895536	1	7	14.2	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895535	1	7	14.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1895537	1	7	14.2	5.0	✓
Alkalinity Species by Titration	E290	1895530	1	7	14.2	5.0	✓
Ammonia by Fluorescence	E298	1895587	1	10	10.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895588	1	8	12.5	5.0	✓
Total Nitrogen by Colourimetry	E366	1895585	1	10	10.0	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	1895586	1	8	12.5	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895366	1	2	50.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895367	1	2	50.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1895497	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1895539	1	5	20.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1899630	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1900887	1	2	50.0	5.0	✓
BC PHCs - EPH by GC-FID	E601A	1901294	1	18	5.5	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1900888	1	13	7.6	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	1901295	1	18	5.5	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1903971	1	7	14.2	5.0	✓
Method Blanks (MB)							
TSS by Gravimetry	E160	1903518	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1903511	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895534	1	7	14.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895533	1	7	14.2	5.0	✓
Fluoride in Water by IC	E235.F	1895532	1	7	14.2	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895536	1	7	14.2	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895535	1	7	14.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1895537	1	7	14.2	5.0	✓
Alkalinity Species by Titration	E290	1895530	1	7	14.2	5.0	✓
Ammonia by Fluorescence	E298	1895587	1	10	10.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895588	1	8	12.5	5.0	✓
Total Nitrogen by Colourimetry	E366	1895585	1	10	10.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895586	1	8	12.5	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895366	1	2	50.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895367	1	2	50.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1895497	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1895539	1	5	20.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1899630	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1900887	1	2	50.0	5.0	✓
BC PHCs - EPH by GC-FID	E601A	1901294	1	18	5.5	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1900888	1	13	7.6	5.0	✓
PAHs in Water by Hexane LVI GC-MS	E641A	1901295	1	18	5.5	5.0	✓
Glycols (4 analytes) by GC-FID	E680E	1903971	1	7	14.2	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)							
Bromide in Water by IC (Low Level)	E235.Br-L	1895534	1	7	14.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895533	1	7	14.2	5.0	✓
Fluoride in Water by IC	E235.F	1895532	1	7	14.2	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895536	1	7	14.2	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895535	1	7	14.2	5.0	✓
Sulfate in Water by IC	E235.SO4	1895537	1	7	14.2	5.0	✓
Ammonia by Fluorescence	E298	1895587	1	10	10.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895588	1	8	12.5	5.0	✓
Total Nitrogen by Colourimetry	E366	1895585	1	10	10.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895586	1	8	12.5	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895366	1	2	50.0	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1895367	1	2	50.0	5.0	✓
Total Mercury in Water by CVAAS	E508	1895497	1	8	12.5	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1895539	1	5	20.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Phenols (4AAP) in Water by Colorimetry	E562	1899630	1	20	5.0	5.0	✓
VH and F1 by Headspace GC-FID	E581.VH+F1	1900887	1	2	50.0	5.0	✓
VOCs (BC List) by Headspace GC-MS	E611C	1900888	1	13	7.6	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 - Calgary	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 - Calgary	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 - Calgary	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 - Calgary	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	: **VA25A4716**	Page	: 1 of 23
Client	: Triton Environmental Consultants Ltd.	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	:
Address		Address	:
Telephone	: ----	Telephone	:
Project	: 11964	Date Samples Received	: 04-Mar-2025 17:45
PO	: 11964-Task 40-Phase3C-4C	Date Analysis Commenced	: 04-Mar-2025
C-O-C number	: ----	Issue Date	: 12-Mar-2025 16:18
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 2		
No. of samples analysed	: 2		

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*

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: 1895530)											
VA25A4664-001	Anonymous	Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	135	134	0.826%	20%	----
Physical Tests (QC Lot: 1903511)											
KS2500762-003	Anonymous	Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	<10	0	Diff <2x LOR	----
Physical Tests (QC Lot: 1903518)											
KS2500735-001	Anonymous	Solids, total suspended [TSS]	----	E160	3.0	mg/L	15.5	14.9	0.6	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895532)											
VA25A4664-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.106	0.106	0.0006	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895533)											
VA25A4664-001	Anonymous	Chloride	16887-00-6	E235.Cl	0.50	mg/L	12.4	12.4	0.0433%	20%	----
Anions and Nutrients (QC Lot: 1895534)											
VA25A4664-001	Anonymous	Bromide	24959-67-9	E235.Br-L	0.050	mg/L	0.134	0.134	0.00006	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895535)											
VA25A4664-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.578	0.579	0.220%	20%	----
Anions and Nutrients (QC Lot: 1895536)											
VA25A4664-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	0.0180	0.0183	1.54%	20%	----
Anions and Nutrients (QC Lot: 1895537)											
VA25A4664-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	104	104	0.00605%	20%	----
Anions and Nutrients (QC Lot: 1895585)											
VA25A4590-001	Anonymous	Nitrogen, total	7727-37-9	E366	0.030	mg/L	0.612	0.610	0.336%	20%	----
Anions and Nutrients (QC Lot: 1895586)											
VA25A4590-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.0057	0.0059	0.0002	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895587)											
VA25A4590-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0512	0.0491	4.14%	20%	----
Organic / Inorganic Carbon (QC Lot: 1895588)											
VA25A4590-001	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	0.50	mg/L	2.06	2.04	0.02	Diff <2x LOR	----
Total Sulfides (QC Lot: 1903075)											
VA25A4672-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.0075	mg/L	0.0242	0.0235	0.0007	Diff <2x LOR	----
Total Metals (QC Lot: 1895366)											
VA25A4716-001	WLNG EOP	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.112	0.112	0.368%	20%	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00028	0.00030	0.00002	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: 1895366) - continued											
VA25A4716-001	WLNG EOP	Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00103	0.00100	3.76%	20%	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.00626	0.00624	0.293%	20%	----
		Beryllium, total	7440-41-7	E420	0.000100	mg/L	<0.000100	<0.000100	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	0.018	0.018	0.00003	Diff <2x LOR	----
		Cadmium, total	7440-43-9	E420	0.0000200	mg/L	<0.0000200	<0.0000200	0	Diff <2x LOR	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	27.4	27.4	0.314%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.000056	0.000061	0.000004	Diff <2x LOR	----
		Chromium, total	7440-47-3	E420	0.00050	mg/L	0.00085	0.00087	0.00002	Diff <2x LOR	----
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	<0.00010	<0.00010	0	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	0.016	0.016	0.00004	Diff <2x LOR	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	0.0035	0.0035	0.00002	Diff <2x LOR	----
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	1.10	1.09	0.952%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.00336	0.00336	0.151%	20%	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.0207	0.0206	0.443%	20%	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	<0.00050	<0.00050	0	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	1.40	1.43	1.54%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00252	0.00266	5.30%	20%	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.000055	0.000057	0.000002	Diff <2x LOR	----
		Silicon, total	7440-21-3	E420	0.10	mg/L	5.99	6.02	0.598%	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	5.10	5.04	1.04%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.0552	0.0550	0.325%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	2.18	2.18	0.004	Diff <2x LOR	----
		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	<0.000010	<0.000010	0	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	0.00073	0.00077	0.00004	Diff <2x LOR	----
		Tungsten, total	7440-33-7	E420	0.00010	mg/L	0.00033	0.00034	0.00002	Diff <2x LOR	----
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.00341	0.00349	2.11%	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: 1895366) - continued											
VA25A4716-001	WLNG EOP	Vanadium, total	7440-62-2	E420	0.00050	mg/L	0.00116	0.00122	0.00006	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	<0.0030	<0.0030	0	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: 1895497)											
VA25A4159-004	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1895367)											
VA25A4716-001	WLNG EOP	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	0.0490	0.0444	9.82%	20%	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.00028	0.00027	0.00001	Diff <2x LOR	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00100	0.00103	2.92%	20%	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.00633	0.00618	2.32%	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	0.019	0.018	0.0008	Diff <2x LOR	----
		Cadmium, dissolved	7440-43-9	E421	0.0000200	mg/L	<0.0000200	<0.0000200	0	Diff <2x LOR	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	25.3	24.4	3.54%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	0.000052	0.000051	0.000001	Diff <2x LOR	----
		Chromium, dissolved	7440-47-3	E421	0.00050	mg/L	0.00083	0.00078	0.00005	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	0.00023	<0.00020	0.00003	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	0.0035	0.0034	0.0001	Diff <2x LOR	----
		Magnesium, dissolved	7439-95-4	E421	0.0050	mg/L	1.12	1.08	2.99%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.00300	0.00298	0.494%	20%	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.0208	0.0206	0.928%	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	1.56	1.54	1.78%	20%	----
		Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	0.00281	0.00276	1.76%	20%	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000051	<0.000050	0.000001	Diff <2x LOR	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	5.77	5.54	4.06%	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	5.40	5.30	1.84%	20%	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	0.0537	0.0529	1.43%	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: 1895367) - continued											
VA25A4716-001	WLNG EOP	Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	2.38	2.21	0.17	Diff <2x LOR	----
		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	0.00034	0.00034	0.000004	Diff <2x LOR	----
		Uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.00331	0.00327	1.06%	20%	----
		Vanadium, dissolved	7440-62-2	E421	0.00050	mg/L	0.00103	0.00103	0.000001	Diff <2x LOR	----
		Zinc, dissolved	7440-66-6	E421	0.0010	mg/L	0.0020	0.0019	0.0001	Diff <2x LOR	----
		Zirconium, dissolved	7440-67-7	E421	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1895539)											
FJ2500574-003	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 1895459)											
VA25A4610-001	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: 1899630)											
EO2501659-014	Anonymous	Phenols, total (4AAP)	----	E562	0.0010	mg/L	0.0016	0.0014	0.0002	Diff <2x LOR	----
Volatile Organic Compounds (QC Lot: 1900888)											
VA25A4716-001	WLNG EOP	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	----
		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	----

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*
Volatile Organic Compounds (QC Lot: 1900888) - continued											
VA25A4716-001	WLNG EOP	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	7.16	7.42	3.50%	30%	----
		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: 1900887)											
VA25A4716-001	WLNG EOP	VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	<100	0.0%	30%	----
Glycols (QC Lot: 1903971)											
VA25A4716-001	WLNG EOP	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	----

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: 1895530)						
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
Physical Tests (QCLot: 1903511)						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Physical Tests (QCLot: 1903518)						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Anions and Nutrients (QCLot: 1895532)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 1895533)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 1895534)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 1895535)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1895536)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 1895537)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Anions and Nutrients (QCLot: 1895585)						
Nitrogen, total	7727-37-9	E366	0.03	mg/L	<0.030	----
Anions and Nutrients (QCLot: 1895586)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	----
Anions and Nutrients (QCLot: 1895587)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Organic / Inorganic Carbon (QCLot: 1895588)						
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	<0.50	----
Total Sulfides (QCLot: 1903075)						
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	----
Total Metals (QCLot: 1895366)						
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: 1895366) - 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: 1895497)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1895367)						
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: 1895367) - 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: 1895539)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 1895459)						
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	<0.00050	----
Aggregate Organics (QCLot: 1899630)						
Phenols, total (4AAP)	----	E562	0.001	mg/L	<0.0010	----
Volatile Organic Compounds (QCLot: 1900888)						
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	----
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	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 1900888) - continued						
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: 1900887)						
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	<100	----
Hydrocarbons (QCLot: 1901294)						
EPH (C10-C19)	----	E601A	250	µg/L	<250	----
EPH (C19-C32)	----	E601A	250	µg/L	<250	----
Polycyclic Aromatic Hydrocarbons (QCLot: 1901295)						
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	----
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	<0.010	----
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 1901295) - continued						
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: 1903971)						
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: 1895530)									
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	500 mg/L	106	85.0	115	----
Physical Tests (QCLot: 1903511)									
Solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	104	85.0	115	----
Physical Tests (QCLot: 1903518)									
Solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	92.2	85.0	115	----
Anions and Nutrients (QCLot: 1895532)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	100	90.0	110	----
Anions and Nutrients (QCLot: 1895533)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	99.2	90.0	110	----
Anions and Nutrients (QCLot: 1895534)									
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	104	85.0	115	----
Anions and Nutrients (QCLot: 1895535)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	99.5	90.0	110	----
Anions and Nutrients (QCLot: 1895536)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	97.8	90.0	110	----
Anions and Nutrients (QCLot: 1895537)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	100.0	90.0	110	----
Anions and Nutrients (QCLot: 1895585)									
Nitrogen, total	7727-37-9	E366	0.03	mg/L	0.5 mg/L	99.4	75.0	125	----
Anions and Nutrients (QCLot: 1895586)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.05 mg/L	107	80.0	120	----
Anions and Nutrients (QCLot: 1895587)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	103	85.0	115	----
Organic / Inorganic Carbon (QCLot: 1895588)									
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	8.57 mg/L	108	80.0	120	----
Total Sulfides (QCLot: 1903075)									
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	0.08 mg/L	108	80.0	120	----
Total Metals (QCLot: 1895366)									

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: 1895366) - continued									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	103	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	99.0	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	106	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	104	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	103	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	93.5	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	104	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	104	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	100	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	103	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	101	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	101	80.0	120	----
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	96.7	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	99.5	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	109	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	101	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	100.0	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	106	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	102	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	105	80.0	120	----
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	110	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	91.0	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	100	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	103	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	107	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	95.5	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	99.9	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	98.8	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	100	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	99.9	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	99.0	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	99.1	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
Total Metals (QCLot: 1895366) - continued									
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	100	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	98.6	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	102	80.0	120	----
Total Metals (QCLot: 1895497)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	96.7	80.0	120	----
Dissolved Metals (QCLot: 1895367)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	106	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	103	80.0	120	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	1 mg/L	109	80.0	120	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.25 mg/L	107	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	99.4	80.0	120	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	1 mg/L	100	80.0	120	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	1 mg/L	106	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	99.9	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	101	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	106	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	105	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	102	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	101	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	104	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	105	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	105	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	102	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	117	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	110	80.0	120	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	0.1 mg/L	106	80.0	120	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	1 mg/L	98.2	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	104	80.0	120	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.1 mg/L	97.2	80.0	120	----
Sodium, dissolved	7440-23-5	E421	0.05	mg/L	50 mg/L	108	80.0	120	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	0.25 mg/L	107	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	105	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
Dissolved Metals (QCLot: 1895367) - continued									
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	0.1 mg/L	103	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	100	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	100	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	99.9	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	102	80.0	120	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.005 mg/L	104	80.0	120	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.5 mg/L	103	80.0	120	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	102	80.0	120	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	0.1 mg/L	102	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	94.1	80.0	120	----
Speciated Metals (QCLot: 1895459)									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	0.25 mg/L	99.2	80.0	120	----
Aggregate Organics (QCLot: 1899630)									
Phenols, total (4AAP)	----	E562	0.001	mg/L	0.02 mg/L	95.2	85.0	115	----
Volatile Organic Compounds (QCLot: 1900888)									
Benzene	71-43-2	E611C	0.5	µg/L	100 µg/L	98.8	70.0	130	----
Bromodichloromethane	75-27-4	E611C	0.5	µg/L	100 µg/L	95.8	70.0	130	----
Bromoform	75-25-2	E611C	0.5	µg/L	100 µg/L	93.3	70.0	130	----
Carbon tetrachloride	56-23-5	E611C	0.5	µg/L	100 µg/L	109	70.0	130	----
Chlorobenzene	108-90-7	E611C	0.5	µg/L	100 µg/L	105	70.0	130	----
Chloroethane	75-00-3	E611C	0.5	µg/L	100 µg/L	119	60.0	140	----
Chloroform	67-66-3	E611C	0.5	µg/L	100 µg/L	101	70.0	130	----
Chloromethane	74-87-3	E611C	5	µg/L	100 µg/L	115	60.0	140	----
Dibromochloromethane	124-48-1	E611C	0.5	µg/L	100 µg/L	96.1	70.0	130	----
Dichlorobenzene, 1,2-	95-50-1	E611C	0.5	µg/L	100 µg/L	103	70.0	130	----
Dichlorobenzene, 1,3-	541-73-1	E611C	0.5	µg/L	100 µg/L	113	70.0	130	----
Dichlorobenzene, 1,4-	106-46-7	E611C	0.5	µg/L	100 µg/L	113	70.0	130	----
Dichloroethane, 1,1-	75-34-3	E611C	0.5	µg/L	100 µg/L	109	70.0	130	----
Dichloroethane, 1,2-	107-06-2	E611C	0.5	µg/L	100 µg/L	97.6	70.0	130	----
Dichloroethylene, 1,1-	75-35-4	E611C	0.5	µg/L	100 µg/L	112	70.0	130	----
Dichloroethylene, cis-1,2-	156-59-2	E611C	0.5	µg/L	100 µg/L	102	70.0	130	----
Dichloroethylene, trans-1,2-	156-60-5	E611C	0.5	µg/L	100 µg/L	118	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: 1900888) - continued									
Dichloromethane	75-09-2	E611C	1	µg/L	100 µg/L	99.5	70.0	130	----
Dichloropropane, 1,2-	78-87-5	E611C	0.5	µg/L	100 µg/L	98.3	70.0	130	----
Dichloropropylene, cis-1,3-	10061-01-5	E611C	0.5	µg/L	100 µg/L	92.3	70.0	130	----
Dichloropropylene, trans-1,3-	10061-02-6	E611C	0.5	µg/L	100 µg/L	93.8	70.0	130	----
Ethylbenzene	100-41-4	E611C	0.5	µg/L	100 µg/L	106	70.0	130	----
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	0.5	µg/L	100 µg/L	106	70.0	130	----
Styrene	100-42-5	E611C	0.5	µg/L	100 µg/L	103	70.0	130	----
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	0.5	µg/L	100 µg/L	100	70.0	130	----
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	0.2	µg/L	100 µg/L	89.3	70.0	130	----
Tetrachloroethylene	127-18-4	E611C	0.5	µg/L	100 µg/L	120	70.0	130	----
Toluene	108-88-3	E611C	0.4	µg/L	100 µg/L	103	70.0	130	----
Trichloroethane, 1,1,1-	71-55-6	E611C	0.5	µg/L	100 µg/L	110	70.0	130	----
Trichloroethane, 1,1,2-	79-00-5	E611C	0.5	µg/L	100 µg/L	96.2	70.0	130	----
Trichloroethylene	79-01-6	E611C	0.5	µg/L	100 µg/L	114	70.0	130	----
Trichlorofluoromethane	75-69-4	E611C	0.5	µg/L	100 µg/L	94.8	60.0	140	----
Vinyl chloride	75-01-4	E611C	0.4	µg/L	100 µg/L	126	60.0	140	----
Xylene, m+p-	179601-23-1	E611C	0.4	µg/L	200 µg/L	109	70.0	130	----
Xylene, o-	95-47-6	E611C	0.3	µg/L	100 µg/L	101	70.0	130	----
Hydrocarbons (QCLot: 1900887)									
VHw (C6-C10)	----	E581.VH+F1	100	µg/L	6310 µg/L	75.4	70.0	130	----
Hydrocarbons (QCLot: 1901294)									
EPH (C10-C19)	----	E601A	250	µg/L	6950 µg/L	106	70.0	130	----
EPH (C19-C32)	----	E601A	250	µg/L	4230 µg/L	116	70.0	130	----
Polycyclic Aromatic Hydrocarbons (QCLot: 1901295)									
Acenaphthene	83-32-9	E641A	0.01	µg/L	0.5 µg/L	117	60.0	130	----
Acenaphthylene	208-96-8	E641A	0.01	µg/L	0.5 µg/L	119	60.0	130	----
Acridine	260-94-6	E641A	0.01	µg/L	0.5 µg/L	84.6	60.0	130	----
Anthracene	120-12-7	E641A	0.01	µg/L	0.5 µg/L	121	60.0	130	----
Benz(a)anthracene	56-55-3	E641A	0.01	µg/L	0.5 µg/L	125	60.0	130	----
Benzo(a)pyrene	50-32-8	E641A	0.005	µg/L	0.5 µg/L	112	60.0	130	----
Benzo(b+j)fluoranthene	n/a	E641A	0.01	µg/L	0.5 µg/L	87.2	60.0	130	----
Benzo(g,h,i)perylene	191-24-2	E641A	0.01	µg/L	0.5 µg/L	116	60.0	130	----
Benzo(k)fluoranthene	207-08-9	E641A	0.01	µg/L	0.5 µg/L	123	60.0	130	----
Chrysene	218-01-9	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike: Target Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Polycyclic Aromatic Hydrocarbons (QCLot: 1901295) - continued									
Dibenz(a,h)anthracene	53-70-3	E641A	0.005	µg/L	0.5 µg/L	112	60.0	130	----
Fluoranthene	206-44-0	E641A	0.01	µg/L	0.5 µg/L	123	60.0	130	----
Fluorene	86-73-7	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A	0.01	µg/L	0.5 µg/L	120	60.0	130	----
Methylnaphthalene, 1-	90-12-0	E641A	0.01	µg/L	0.5 µg/L	110	60.0	130	----
Methylnaphthalene, 2-	91-57-6	E641A	0.01	µg/L	0.5 µg/L	123	60.0	130	----
Naphthalene	91-20-3	E641A	0.05	µg/L	0.5 µg/L	119	50.0	130	----
Phenanthrene	85-01-8	E641A	0.02	µg/L	0.5 µg/L	116	60.0	130	----
Pyrene	129-00-0	E641A	0.01	µg/L	0.5 µg/L	123	60.0	130	----
Quinoline	91-22-5	E641A	0.05	µg/L	0.5 µg/L	93.4	60.0	130	----
Glycols (QCLot: 1903971)									
Diethylene glycol	111-46-6	E680E	5	mg/L	25 mg/L	97.1	70.0	130	----
Ethylene glycol	107-21-1	E680E	5	mg/L	25 mg/L	96.3	70.0	130	----
Propylene glycol, 1,2-	57-55-6	E680E	5	mg/L	25 mg/L	92.6	70.0	130	----
Triethylene glycol	112-27-6	E680E	5	mg/L	25 mg/L	97.3	70.0	130	----

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: 1895532)										
VA25A4664-002	Anonymous	Fluoride	16984-48-8	E235.F	0.948 mg/L	1 mg/L	94.8	75.0	125	----
Anions and Nutrients (QCLot: 1895533)										
VA25A4664-002	Anonymous	Chloride	16887-00-6	E235.Cl	96.3 mg/L	100 mg/L	96.3	75.0	125	----
Anions and Nutrients (QCLot: 1895534)										
VA25A4664-002	Anonymous	Bromide	24959-67-9	E235.Br-L	0.481 mg/L	0.5 mg/L	96.1	75.0	125	----
Anions and Nutrients (QCLot: 1895535)										
VA25A4664-002	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	2.41 mg/L	2.5 mg/L	96.5	75.0	125	----
Anions and Nutrients (QCLot: 1895536)										
VA25A4664-002	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.464 mg/L	0.5 mg/L	92.7	75.0	125	----
Anions and Nutrients (QCLot: 1895537)										
VA25A4664-002	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	ND mg/L	----	ND	75.0	125	----
Anions and Nutrients (QCLot: 1895585)										
VA25A4590-002	Anonymous	Nitrogen, total	7727-37-9	E366	0.395 mg/L	0.4 mg/L	98.8	70.0	130	----
Anions and Nutrients (QCLot: 1895586)										
VA25A4590-002	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0540 mg/L	0.05 mg/L	108	70.0	130	----
Anions and Nutrients (QCLot: 1895587)										
VA25A4590-002	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.104 mg/L	0.1 mg/L	104	75.0	125	----
Organic / Inorganic Carbon (QCLot: 1895588)										
VA25A4590-002	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	5.42 mg/L	5 mg/L	108	70.0	130	----
Total Sulfides (QCLot: 1903075)										
VA25A4672-002	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.236 mg/L	0.2 mg/L	118	75.0	125	----
Total Metals (QCLot: 1895366)										
VA25A4716-002	WLNG Duplicate	Aluminum, total	7429-90-5	E420	0.186 mg/L	0.2 mg/L	93.3	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0180 mg/L	0.02 mg/L	90.0	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0197 mg/L	0.02 mg/L	98.3	70.0	130	----
		Barium, total	7440-39-3	E420	0.0190 mg/L	0.02 mg/L	94.8	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0399 mg/L	0.04 mg/L	99.8	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.00947 mg/L	0.01 mg/L	94.7	70.0	130	----
		Boron, total	7440-42-8	E420	0.102 mg/L	0.1 mg/L	102	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00380 mg/L	0.004 mg/L	94.9	70.0	130	----
		Calcium, total	7440-70-2	E420	ND mg/L	----	ND	70.0	130	----
		Cesium, total	7440-46-2	E420	0.00939 mg/L	0.01 mg/L	93.9	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0392 mg/L	0.04 mg/L	98.0	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: 1895366) - continued										
VA25A4716-002	WLNG Duplicate	Cobalt, total	7440-48-4	E420	0.0190 mg/L	0.02 mg/L	94.8	70.0	130	----
		Copper, total	7440-50-8	E420	0.0188 mg/L	0.02 mg/L	94.2	70.0	130	----
		Iron, total	7439-89-6	E420	1.87 mg/L	2 mg/L	93.6	70.0	130	----
		Lead, total	7439-92-1	E420	0.0188 mg/L	0.02 mg/L	94.0	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0952 mg/L	0.1 mg/L	95.2	70.0	130	----
		Magnesium, total	7439-95-4	E420	ND mg/L	----	ND	70.0	130	----
		Manganese, total	7439-96-5	E420	0.0188 mg/L	0.02 mg/L	94.3	70.0	130	----
		Molybdenum, total	7439-98-7	E420	ND mg/L	----	ND	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0377 mg/L	0.04 mg/L	94.4	70.0	130	----
		Phosphorus, total	7723-14-0	E420	9.92 mg/L	10 mg/L	99.2	70.0	130	----
		Potassium, total	7440-09-7	E420	3.96 mg/L	4 mg/L	99.1	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0186 mg/L	0.02 mg/L	92.8	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
		Silicon, total	7440-21-3	E420	9.28 mg/L	10 mg/L	92.8	70.0	130	----
		Silver, total	7440-22-4	E420	0.00372 mg/L	0.004 mg/L	93.1	70.0	130	----
		Sodium, total	7440-23-5	E420	ND mg/L	----	ND	70.0	130	----
		Strontium, total	7440-24-6	E420	ND mg/L	----	ND	70.0	130	----
		Sulfur, total	7704-34-9	E420	19.8 mg/L	20 mg/L	99.2	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0368 mg/L	0.04 mg/L	91.9	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00376 mg/L	0.004 mg/L	94.0	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0191 mg/L	0.02 mg/L	95.6	70.0	130	----
		Tin, total	7440-31-5	E420	0.0187 mg/L	0.02 mg/L	93.6	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0378 mg/L	0.04 mg/L	94.6	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0189 mg/L	0.02 mg/L	94.6	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00385 mg/L	0.004 mg/L	96.3	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0941 mg/L	0.1 mg/L	94.1	70.0	130	----
		Zinc, total	7440-66-6	E420	0.378 mg/L	0.4 mg/L	94.5	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0398 mg/L	0.04 mg/L	99.5	70.0	130	----
Total Metals (QCLot: 1895497)										
VA25A4159-005	Anonymous	Mercury, total	7439-97-6	E508	ND mg/L	----	ND	70.0	130	----
Dissolved Metals (QCLot: 1895367)										
VA25A4716-002	WLNG Duplicate	Aluminum, dissolved	7429-90-5	E421	0.189 mg/L	0.2 mg/L	94.7	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0198 mg/L	0.02 mg/L	99.2	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0224 mg/L	0.02 mg/L	112	70.0	130	----
		Barium, dissolved	7440-39-3	E421	0.0211 mg/L	0.02 mg/L	106	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0406 mg/L	0.04 mg/L	101	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.00884 mg/L	0.01 mg/L	88.4	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.107 mg/L	0.1 mg/L	107	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00400 mg/L	0.004 mg/L	100.0	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	ND mg/L	----	ND	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.0100 mg/L	0.01 mg/L	100	70.0	130	----
		Chromium, dissolved	7440-47-3	E421	0.0407 mg/L	0.04 mg/L	102	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0196 mg/L	0.02 mg/L	98.2	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: 1895367) - continued										
VA25A4716-002	WLNG Duplicate	Copper, dissolved	7440-50-8	E421	0.0192 mg/L	0.02 mg/L	96.2	70.0	130	----
		Iron, dissolved	7439-89-6	E421	1.91 mg/L	2 mg/L	95.5	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0193 mg/L	0.02 mg/L	96.5	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.102 mg/L	0.1 mg/L	102	70.0	130	----
		Magnesium, dissolved	7439-95-4	E421	ND mg/L	----	ND	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	0.0198 mg/L	0.02 mg/L	98.9	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	ND mg/L	----	ND	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0397 mg/L	0.04 mg/L	99.2	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	11.5 mg/L	10 mg/L	115	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	3.97 mg/L	4 mg/L	99.4	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0207 mg/L	0.02 mg/L	103	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0443 mg/L	0.04 mg/L	111	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	9.29 mg/L	10 mg/L	92.9	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00382 mg/L	0.004 mg/L	95.4	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	20.7 mg/L	20 mg/L	103	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0424 mg/L	0.04 mg/L	106	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00382 mg/L	0.004 mg/L	95.6	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0155 mg/L	0.02 mg/L	77.4	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0191 mg/L	0.02 mg/L	95.6	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0392 mg/L	0.04 mg/L	98.1	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0199 mg/L	0.02 mg/L	99.6	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00397 mg/L	0.004 mg/L	99.2	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.100 mg/L	0.1 mg/L	100	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.416 mg/L	0.4 mg/L	104	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
Dissolved Metals (QCLot: 1895539)										
VA25A4202-001	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000826 mg/L	0 mg/L	82.6	70.0	130	----
Speciated Metals (QCLot: 1895459)										
VA25A4610-002	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.256 mg/L	0.25 mg/L	102	70.0	130	----
Aggregate Organics (QCLot: 1899630)										
EO2501674-001	Anonymous	Phenols, total (4AAP)	----	E562	0.0197 mg/L	0.02 mg/L	98.5	75.0	125	----
Volatile Organic Compounds (QCLot: 1900888)										
VA25A5070-001	Anonymous	Benzene	71-43-2	E611C	97.7 µg/L	100 µg/L	97.7	60.0	140	----
		Bromodichloromethane	75-27-4	E611C	101 µg/L	100 µg/L	101	60.0	140	----
		Bromoform	75-25-2	E611C	92.7 µg/L	100 µg/L	92.7	60.0	140	----
		Carbon tetrachloride	56-23-5	E611C	107 µg/L	100 µg/L	107	60.0	140	----
		Chlorobenzene	108-90-7	E611C	105 µg/L	100 µg/L	105	60.0	140	----
		Chloroethane	75-00-3	E611C	108 µg/L	100 µg/L	108	50.0	150	----
		Chloroform	67-66-3	E611C	103 µg/L	100 µg/L	103	60.0	140	----
		Chloromethane	74-87-3	E611C	97.5 µg/L	100 µg/L	97.5	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: 1900888) - continued										
VA25A5070-001	Anonymous	Dibromochloromethane	124-48-1	E611C	98.7 µg/L	100 µg/L	98.7	60.0	140	----
		Dichlorobenzene, 1,2-	95-50-1	E611C	104 µg/L	100 µg/L	104	60.0	140	----
		Dichlorobenzene, 1,3-	541-73-1	E611C	111 µg/L	100 µg/L	111	60.0	140	----
		Dichlorobenzene, 1,4-	106-46-7	E611C	112 µg/L	100 µg/L	112	60.0	140	----
		Dichloroethane, 1,1-	75-34-3	E611C	108 µg/L	100 µg/L	108	60.0	140	----
		Dichloroethane, 1,2-	107-06-2	E611C	101 µg/L	100 µg/L	101	60.0	140	----
		Dichloroethylene, 1,1-	75-35-4	E611C	106 µg/L	100 µg/L	106	60.0	140	----
		Dichloroethylene, cis-1,2-	156-59-2	E611C	101 µg/L	100 µg/L	101	60.0	140	----
		Dichloroethylene, trans-1,2-	156-60-5	E611C	114 µg/L	100 µg/L	114	60.0	140	----
		Dichloromethane	75-09-2	E611C	102 µg/L	100 µg/L	102	60.0	140	----
		Dichloropropane, 1,2-	78-87-5	E611C	98.5 µg/L	100 µg/L	98.5	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	85.7 µg/L	100 µg/L	85.7	60.0	140	----
		Ethylbenzene	100-41-4	E611C	103 µg/L	100 µg/L	103	60.0	140	----
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C	105 µg/L	100 µg/L	105	60.0	140	----
		Styrene	100-42-5	E611C	101 µg/L	100 µg/L	101	60.0	140	----
		Tetrachloroethane, 1,1,1,2-	630-20-6	E611C	102 µg/L	100 µg/L	102	60.0	140	----
		Tetrachloroethane, 1,1,2,2-	79-34-5	E611C	91.0 µg/L	100 µg/L	91.0	60.0	140	----
		Tetrachloroethylene	127-18-4	E611C	115 µg/L	100 µg/L	115	60.0	140	----
		Toluene	108-88-3	E611C	99.9 µg/L	100 µg/L	99.9	60.0	140	----
		Trichloroethane, 1,1,1-	71-55-6	E611C	109 µg/L	100 µg/L	109	60.0	140	----
		Trichloroethane, 1,1,2-	79-00-5	E611C	99.5 µg/L	100 µg/L	99.5	60.0	140	----
		Trichloroethylene	79-01-6	E611C	115 µg/L	100 µg/L	115	60.0	140	----
		Trichlorofluoromethane	75-69-4	E611C	139 µg/L	100 µg/L	139	50.0	150	----
		Vinyl chloride	75-01-4	E611C	109 µg/L	100 µg/L	109	50.0	150	----
		Xylene, m+p-	179601-23-1	E611C	212 µg/L	200 µg/L	106	60.0	140	----
		Xylene, o-	95-47-6	E611C	99.1 µg/L	100 µg/L	99.1	60.0	140	----
Hydrocarbons (QCLot: 1900887)										
VA25A4716-002	WLNG Duplicate	VHw (C6-C10)	----	E581.VH+F1	4370 µg/L	6310 µg/L	69.3	60.0	140	----

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 -

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Environmental Division Vancouver

Work Order Reference VA25A4716

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Telephone : +1 604 253 4188

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	Triton Environmental	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 minin
Phone:		☐ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge mini
		Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge mini
Street:	1730-1111 West Georgia Street	Email 1 or Fax	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge min
City/Province:	Vancouver/BC	Email 2	ame day [E2] if received by 10am M-S - 200% rush surchar
Postal Code:	V6E 4M3	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: dd-mmm-yy hh:mm 03-Apr-2025
	Copy of Invoice with Report ☐ YES ☑ NO	Select Invoice	For all tests with rush TATs requested, please contact your AM to confirm availability.
Company:		Email 1 or Fax	
Contact:		Email 2	

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:	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 CONTAINE	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	F				P	P	P	P	F/P						
	WLNG EOP			Water	16	~~R~~ E2	~~R~~ E2	R	R	R	R	R	R	R	R	R	R	R			
	pH: ~~5.7~~ 7.06 cond: 168 µs/cm temp: 10.7 °C	04-03-25	10:27																		
	WLNG Duplicate	04-03-25	10:27	Water	16	~~R~~ E2	~~R~~ E2	R	R	R	R	R	R	R	R	R	R	R			

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	Dissolved nutrients, metals, mercury were rinsed of preservative and not field filtered.
Are samples for human consumption/ use? ☐ YES ☑ NO	ESDAT EDD to ESdat_CA+tritonenv@ESdatLabSync.net

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			
				8.0			

RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by:	Date: 04-03-25	Time:	Received by:	Date:	Time:	Received by: SM	Date: 4/3/25	Time: 5:45

INSTRUCTIONS 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

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

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Appendix C- Photos

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 March 3 was 95,924 m³.

Daily Volume Summary:

Table 1: Discharge Volumes Daily Summary

Date	Location	Volume (m3)	Comments
March 3	Woodfibre (WF)	1,440	None
March 4	WF	1,599	Exceeded discharge volume limit
March 5	WF	1,601	Exceeded discharge volume limit
March 6	WF	1,486	None
March 7	WF	1,580	Exceeded discharge volume limit
March 8	WF	1,775	Exceeded discharge volume limit
March 9	WF	2,085	Exceeded discharge volume limit
	Total	11,566	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)
3/3/2025	0:00:00	6.7	1.669	3.9	95,924	11.5	287
3/3/2025	0:15:00	7.3	0.246	3.3	95,943	11.4	282
3/3/2025	0:30:00	7.5	1.650	2.4	95,966	11.5	281
3/3/2025	0:45:00	7.4	1.669	0.8	95,991	11.6	287
3/3/2025	1:00:00	7.7	1.355	1	96,015	11.6	284
3/3/2025	1:15:00	7.2	1.730	0.6	96,025	11.6	284
3/3/2025	1:30:00	7.7	0.363	1.6	96,049	11.3	283
3/3/2025	1:45:00	7.8	0.000	1.3	96,049	11.8	281
3/3/2025	2:00:00	7.7	1.344	5.1	96,059	11.3	300
3/3/2025	2:15:00	7.5	1.332	0.4	96,080	11.1	289
3/3/2025	2:30:00	7.4	1.098	0.8	96,100	11.1	287
3/3/2025	2:45:00	7.5	1.313	1	96,119	11	289
3/3/2025	3:00:00	7.6	1.294	1.1	96,139	10.8	286
3/3/2025	3:45:00	7.4	1.359	1.1	96,159	10.8	289
3/3/2025	4:00:00	7.6	1.366	1.2	96,179	10.8	287
3/3/2025	4:15:00	7.4	1.351	0.9	96,200	10.9	286
3/3/2025	4:30:00	8	0.000	0.9	96,209	11.4	110
3/3/2025	4:45:00	7.5	1.412	0.9	96,219	11.1	289
3/3/2025	5:00:00	7.6	1.397	0.8	96,240	11	286
3/3/2025	5:15:00	7.4	1.385	0.7	96,244	11.3	288
3/3/2025	5:30:00	7.5	1.461	0.8	96,265	11.1	288
3/3/2025	5:45:00	7.5	1.435	1.8	96,287	11.1	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/3/2025	6:00:00	7.5	0.000	1.1	96,295	11.6	287
3/3/2025	6:15:00	7.5	0.000	1.3	96,295	11.9	291
3/3/2025	6:30:00	7.9	1.571	2.5	96,304	11	109
3/3/2025	7:00:00	7.4	1.537	0.9	96,334	10.9	278
3/3/2025	7:15:00	7.4	1.529	0.8	96,357	10.9	281
3/3/2025	7:30:00	7.5	1.537	0.7	96,380	10.9	280
3/3/2025	7:45:00	7.5	1.499	0.4	96,403	10.9	277
3/3/2025	8:00:00	7.4	1.423	0.7	96,424	10.9	278
3/3/2025	8:45:00	7.6	1.442	1.9	96,457	11	297
3/3/2025	9:30:00	7.6	1.457	1.3	96,486	11	305
3/3/2025	9:45:00	7.4	1.393	0.8	96,507	11	295
3/3/2025	10:00:00	7.6	1.378	0.9	96,528	11	293
3/3/2025	10:15:00	7.4	1.321	0.6	96,548	11	289
3/3/2025	10:30:00	7.6	1.336	1.4	96,568	11.1	288
3/3/2025	10:45:00	7.6	1.548	6.1	96,581	11.2	283
3/3/2025	11:15:00	7.5	1.442	5.1	96,591	11.3	279
3/3/2025	11:30:00	7.5	1.522	3.9	96,614	10.9	277
3/3/2025	11:45:00	7.5	1.469	3.8	96,637	10.9	279
3/3/2025	12:00:00	7.5	1.480	3.3	96,659	10.9	278
3/3/2025	12:15:00	7.4	1.457	2.4	96,681	10.9	281
3/3/2025	12:45:00	7.6	1.453	3.2	96,698	11.1	291
3/3/2025	13:00:00	7.4	1.419	6.9	96,720	11.1	291
3/3/2025	13:45:00	7.4	1.400	1.8	96,745	11.3	294
3/3/2025	14:00:00	7.6	1.389	1.7	96,765	11.3	291
3/3/2025	14:15:00	7.4	1.359	1	96,786	11.3	291

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/3/2025	14:30:00	7.6	1.336	0.9	96,806	11.3	293
3/3/2025	14:45:00	7.5	1.491	2.2	96,826	11.3	290
3/3/2025	15:00:00	7.5	1.382	2.3	96,834	11.3	288
3/3/2025	15:15:00	7.3	1.332	0.7	96,854	11.1	298
3/3/2025	15:30:00	7.5	1.310	0.7	96,874	11.1	283
3/3/2025	15:45:00	7.6	1.283	0.9	96,893	11.1	291
3/3/2025	16:00:00	7.4	1.234	0.5	96,911	11.2	303
3/3/2025	16:15:00	7.4	1.200	0.6	96,930	11.2	291
3/3/2025	16:30:00	7.6	1.166	0.9	96,948	11.3	298
3/3/2025	16:45:00	7.4	1.120	0.6	96,965	11.3	304
3/3/2025	17:15:00	7.6	1.136	0.7	96,978	11.7	283
3/3/2025	17:30:00	7.2	1.442	1	96,983	11.4	306
3/3/2025	17:45:00	7.6	1.336	1	97,004	11.2	277
3/3/2025	18:00:00	7.4	1.298	1	97,024	11.2	294
3/3/2025	18:15:00	7.4	1.257	0.8	97,043	11.3	281
3/3/2025	18:30:00	7.6	1.241	0.9	97,060	11.3	282
3/3/2025	18:45:00	7.5	0.382	9	97,077	11.3	285
3/3/2025	19:00:00	7.7	1.313	2.1	97,085	11.4	280
3/3/2025	19:15:00	7.4	2.010	2.5	97,115	11.3	279
3/3/2025	19:30:00	7.7	1.968	3.8	97,143	11.3	274
3/3/2025	19:45:00	7.3	1.544	2.1	97,158	11.5	280
3/3/2025	20:00:00	7.6	1.472	1.4	97,181	11.5	275
3/3/2025	20:30:00	7.4	0.852	13.4	97,199	11.6	276
3/3/2025	20:45:00	7.5	0.163	2	97,204	11.8	277
3/3/2025	21:00:00	7.5	1.578	5.4	97,208	12.3	279

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/3/2025	21:15:00	7.6	1.522	0.9	97,231	11.7	279
3/3/2025	21:30:00	7.6	1.446	0.9	97,253	11.7	279
3/3/2025	21:45:00	7.6	1.450	1.5	97,273	11.7	279
3/3/2025	22:00:00	7.5	0.889	0.9	97,287	12.4	284
3/3/2025	22:30:00	7.5	1.673	1.1	97,298	11.8	276
3/3/2025	22:45:00	7.6	1.575	1	97,322	11.5	281
3/3/2025	23:00:00	7.4	1.514	0.8	97,343	11.6	281
3/3/2025	23:45:00	7.4	1.540	0.2	97,366	11.8	282
3/4/2025	0:00:00	7.5	1.529	1.3	97,387	12	281
3/4/2025	0:15:00	7.6	1.488	0.8	97,409	11.6	281
3/4/2025	0:30:00	7.5	1.450	1	97,431	11.6	280
3/4/2025	0:45:00	7.3	1.366	0.6	97,452	11.6	282
3/4/2025	1:45:00	7.5	1.453	1.5	97,488	11.5	282
3/4/2025	2:00:00	7.5	1.393	2.9	97,509	11.5	283
3/4/2025	2:15:00	7.6	1.427	2.8	97,528	11.7	288
3/4/2025	2:30:00	7.4	0.008	1.7	97,532	12	110
3/4/2025	2:45:00	7.6	1.419	1.9	97,553	11.4	288
3/4/2025	3:00:00	7.3	0.568	3.3	97,569	11.5	286
3/4/2025	3:15:00	7.4	0.216	12.8	97,574	11.4	289
3/4/2025	3:45:00	7.5	1.453	2.4	97,593	11.4	289
3/4/2025	4:00:00	7.5	1.450	2.4	97,610	11.4	286
3/4/2025	4:15:00	7.5	1.393	2.1	97,631	11.5	282
3/4/2025	4:30:00	7.4	1.397	2.5	97,652	11.7	283
3/4/2025	4:45:00	7.5	1.351	2.8	97,673	11.8	287
3/4/2025	5:00:00	7.5	1.431	15.5	97,682	11.9	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	5:15:00	7.6	0.469	8.8	97,698	11.5	281
3/4/2025	5:30:00	7.5	1.400	3	97,716	11.5	283
3/4/2025	5:45:00	7.6	1.306	3.1	97,736	11.5	283
3/4/2025	6:00:00	7.7	1.291	3.1	97,755	11.5	283
3/4/2025	6:15:00	7.8	0.912	5.9	97,773	11.4	279
3/4/2025	6:30:00	7.8	1.397	2	97,792	11.3	276
3/4/2025	6:45:00	8.4	0.121	13.3	97,799	11.2	269
3/4/2025	7:15:00	7.9	1.461	8.9	97,823	11.1	269
3/4/2025	7:30:00	8	1.419	3.1	97,844	11	269
3/4/2025	7:45:00	8	1.393	2.6	97,865	11.1	268
3/4/2025	8:00:00	8	1.374	2.5	97,885	11.1	267
3/4/2025	8:15:00	8	1.321	1.8	97,905	11.2	266
3/4/2025	8:30:00	7.7	1.170	3.3	97,924	11.2	276
3/4/2025	8:45:00	7.8	1.915	27.3	97,939	11.1	272
3/4/2025	9:00:00	7.9	1.113	0.9	97,956	11.3	275
3/4/2025	9:15:00	7.6	1.090	0.6	97,973	11.6	275
3/4/2025	9:30:00	7.3	0.409	10.2	97,988	11.3	278
3/4/2025	9:45:00	7.5	1.230	1.3	98,003	11.1	287
3/4/2025	10:00:00	7.6	1.196	1.4	98,021	11.2	288
3/4/2025	10:15:00	7.5	1.124	1.3	98,038	11.3	289
3/4/2025	10:30:00	7.5	0.344	0.9	98,053	11.1	291
3/4/2025	10:45:00	7.5	0.655	1.4	98,063	11.1	290
3/4/2025	11:00:00	7.6	0.659	3	98,073	11.1	290
3/4/2025	11:15:00	7.6	1.794	4.6	98,094	11.1	287
3/4/2025	11:30:00	7.5	1.219	1	98,102	11.2	286

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	11:45:00	7.5	1.170	0.4	98,120	11.2	286
3/4/2025	12:00:00	7.5	1.654	0.9	98,142	11.1	284
3/4/2025	12:15:00	7.4	1.628	1.1	98,166	11.1	282
3/4/2025	12:30:00	7.6	1.491	1.8	98,187	11.2	283
3/4/2025	12:45:00	7.6	1.457	4.9	98,209	11.2	284
3/4/2025	13:00:00	7.6	1.397	4.4	98,231	11.4	284
3/4/2025	13:15:00	7.5	1.374	3.3	98,251	11.5	288
3/4/2025	13:30:00	7.4	1.291	3	98,268	11.5	286
3/4/2025	13:45:00	7.6	1.593	9.9	98,282	11.4	288
3/4/2025	14:00:00	7.5	1.181	2.2	98,301	11.5	294
3/4/2025	14:15:00	7.5	1.851	8.1	98,327	11.4	297
3/4/2025	14:30:00	7.5	1.862	8.2	98,355	11.4	297
3/4/2025	14:45:00	7.5	0.220	13.3	98,372	11.3	297
3/4/2025	15:00:00	7.5	1.423	4.7	98,380	11.3	302
3/4/2025	15:15:00	7.5	1.400	2.7	98,401	11.3	304
3/4/2025	15:30:00	7.5	1.325	3.1	98,421	11.3	303
3/4/2025	15:45:00	7.5	1.382	3	98,435	11.2	300
3/4/2025	16:00:00	7.4	1.340	2.4	98,455	11.2	299
3/4/2025	16:15:00	7.4	1.336	3	98,475	11.3	298
3/4/2025	16:30:00	7.6	1.313	4	98,495	11.4	298
3/4/2025	16:45:00	7.5	1.416	2.2	98,512	11.4	296
3/4/2025	17:00:00	7.5	1.374	2.6	98,532	11.4	296
3/4/2025	17:15:00	7.5	1.340	4	98,553	11.6	298
3/4/2025	17:30:00	7.5	1.310	4.1	98,573	11.5	294
3/4/2025	17:45:00	7.5	1.355	2.5	98,590	11.4	296

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	18:00:00	7.5	0.223	3.4	98,609	11.3	292
3/4/2025	18:15:00	7.5	0.269	1.7	98,611	11.5	295
3/4/2025	18:30:00	7.4	1.219	0.6	98,628	11.3	293
3/4/2025	18:45:00	7.5	1.306	1.1	98,643	11.1	289
3/4/2025	19:00:00	7.6	1.264	1.7	98,662	11.5	298
3/4/2025	19:15:00	7.4	1.226	0.6	98,680	11.9	296
3/4/2025	19:30:00	7.5	1.196	0.6	98,698	12.5	296
3/4/2025	19:45:00	7.5	1.098	2.1	98,714	12.2	294
3/4/2025	20:00:00	7.6	1.086	0.7	98,730	11.4	296
3/4/2025	20:15:00	7.6	1.079	1.2	98,746	11.3	299
3/4/2025	20:30:00	7.4	1.086	1.5	98,754	11.2	295
3/4/2025	20:45:00	7.6	0.700	1.7	98,769	11.3	298
3/4/2025	21:00:00	7.4	1.654	2.6	98,789	10.9	294
3/4/2025	21:15:00	7.4	1.616	2.5	98,813	10.9	296
3/4/2025	21:30:00	7.4	1.544	2	98,837	11	296
3/4/2025	22:00:00	7.3	0.507	13	98,842	11.2	300
3/4/2025	22:15:00	7.4	1.699	3.2	98,862	10.9	296
3/4/2025	22:30:00	7.6	1.639	4.9	98,887	10.9	292
3/4/2025	22:45:00	7.4	1.699	4	98,910	11	289
3/4/2025	23:00:00	7.4	0.636	10.6	98,929	11	291
3/4/2025	23:15:00	7.6	1.790	2.9	98,955	11	291
3/4/2025	23:30:00	7.4	1.734	2.7	98,982	11.1	294
3/4/2025	23:45:00	7.7	0.000	1.6	98,986	11.3	298
3/5/2025	0:00:00	7.7	0.000	2.3	98,986	12	298
3/5/2025	0:15:00	7.6	1.718	2.9	98,998	11.1	298

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	0:30:00	7.4	0.802	2.5	99,019	11.1	298
3/5/2025	1:00:00	7.4	1.446	2	99,044	11.2	306
3/5/2025	1:15:00	7.6	1.393	1.8	99,066	11.2	301
3/5/2025	1:30:00	7.6	0.946	1.6	99,085	11.3	301
3/5/2025	1:45:00	7.5	1.514	1.3	99,104	11.4	303
3/5/2025	2:00:00	7.6	1.730	1.7	99,122	11.2	301
3/5/2025	2:15:00	7.6	1.715	1.7	99,147	11.1	301
3/5/2025	2:30:00	7.4	1.681	0.8	99,173	11.2	302
3/5/2025	3:15:00	7.5	1.658	0.6	99,200	11.2	300
3/5/2025	3:30:00	7.6	0.640	1	99,220	11.2	301
3/5/2025	3:45:00	7.4	0.322	0.6	99,241	11.2	299
3/5/2025	4:00:00	7.4	0.197	0.1	99,244	11.7	302
3/5/2025	4:15:00	7.7	1.722	0.2	99,266	11.4	295
3/5/2025	4:30:00	7.4	1.340	0.3	99,291	11.5	296
3/5/2025	4:45:00	7.4	1.726	0.1	99,313	11.4	291
3/5/2025	5:00:00	7.6	0.344	0	99,338	11.4	289
3/5/2025	5:45:00	7.6	1.715	0.5	99,357	11.2	289
3/5/2025	6:00:00	7.3	1.688	0.6	99,383	11	289
3/5/2025	6:15:00	7.7	1.639	0.9	99,408	10.9	288
3/5/2025	6:30:00	7.7	0.000	1.1	99,418	11.1	288
3/5/2025	6:45:00	7.7	0.000	0.8	99,418	11.4	291
3/5/2025	7:00:00	7.4	1.601	0.7	99,436	10.8	288
3/5/2025	7:15:00	7.5	1.752	2.6	99,448	10.8	287
3/5/2025	7:30:00	7.5	1.771	0.9	99,459	10.8	290
3/5/2025	7:45:00	7.4	1.737	1.5	99,486	10.8	288

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	8:00:00	7.6	1.707	2.2	99,512	10.8	288
3/5/2025	8:15:00	7.4	1.173	1.2	99,533	10.8	286
3/5/2025	8:30:00	7.6	1.696	1.8	99,559	10.7	286
3/5/2025	8:45:00	7.4	1.646	0.8	99,584	10.6	286
3/5/2025	9:00:00	7.5	0.000	0.8	99,605	10.6	288
3/5/2025	9:15:00	7.5	0.000	0.5	99,605	11	293
3/5/2025	9:30:00	7.5	1.094	5.3	99,610	10.8	295
3/5/2025	9:45:00	7.5	1.696	0.6	99,633	10.8	287
3/5/2025	10:00:00	7.5	1.616	0.7	99,657	10.8	290
3/5/2025	10:30:00	7.6	1.166	1.6	99,675	10.9	294
3/5/2025	10:45:00	7.5	1.654	1.1	99,700	11	292
3/5/2025	11:00:00	7.5	1.703	1.6	99,725	11	291
3/5/2025	11:15:00	7.5	1.597	2.1	99,750	11	291
3/5/2025	11:30:00	7.5	0.855	1.3	99,773	11.1	291
3/5/2025	12:00:00	7.5	1.022	28.4	99,778	11.2	293
3/5/2025	12:15:00	7.4	1.612	1.1	99,801	11.1	293
3/5/2025	12:30:00	7.5	1.544	0.7	99,824	11.2	294
3/5/2025	12:45:00	7.5	1.491	1	99,847	11.2	294
3/5/2025	13:00:00	7.5	1.041	15.8	99,868	11.3	296
3/5/2025	13:15:00	7.5	1.593	1	99,889	11.3	297
3/5/2025	13:30:00	7.5	1.544	0.9	99,913	11.3	296
3/5/2025	13:45:00	7.7	0.961	2	99,929	11.5	297
3/5/2025	14:00:00	7.5	1.756	1.6	99,954	11.3	294
3/5/2025	14:15:00	7.4	1.684	1.8	99,980	11.3	292
3/5/2025	14:30:00	7.5	1.730	1.8	99,998	11.3	288

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	14:45:00	7.5	1.628	1.5	100,023	11.2	288
3/5/2025	15:00:00	7.5	0.447	2	100,047	11.2	292
3/5/2025	15:45:00	7.5	1.544	5.1	100,063	11.4	297
3/5/2025	16:00:00	7.5	1.499	8.6	100,086	11.4	295
3/5/2025	16:15:00	7.5	1.718	3.5	100,100	11.3	292
3/5/2025	16:30:00	7.5	1.628	4.1	100,125	11.3	292
3/5/2025	16:45:00	7.6	1.559	5.1	100,149	11.2	292
3/5/2025	17:30:00	7.5	0.602	9.1	100,163	11.2	297
3/5/2025	17:45:00	7.5	1.643	0.7	100,185	11.2	294
3/5/2025	18:00:00	7.5	1.575	1	100,209	11.2	293
3/5/2025	18:15:00	7.5	1.525	1.6	100,232	11.1	292
3/5/2025	18:30:00	7.5	0.609	4.8	100,253	11.2	290
3/5/2025	19:15:00	7.5	1.646	0.2	100,280	11.1	291
3/5/2025	19:30:00	7.4	1.067	6.3	100,303	11	289
3/5/2025	20:15:00	7.5	0.503	10.8	100,324	10.9	293
3/5/2025	20:30:00	7.5	1.605	1.2	100,331	10.9	294
3/5/2025	20:45:00	7.4	1.484	1.1	100,354	10.8	295
3/5/2025	21:00:00	7.5	1.469	1.5	100,376	10.8	297
3/5/2025	21:15:00	7.6	1.446	2	100,398	10.7	297
3/5/2025	21:30:00	7.5	1.809	2	100,421	10.6	296
3/5/2025	21:45:00	7.6	1.768	1.7	100,448	10.6	298
3/5/2025	22:00:00	7.5	0.757	1.9	100,465	10.7	298
3/5/2025	22:30:00	7.6	1.476	1.8	100,480	10.4	300
3/5/2025	22:45:00	7.5	1.461	1.7	100,502	10.4	299
3/5/2025	23:00:00	7.4	1.393	1.6	100,523	10.4	302

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	23:15:00	7.6	1.472	1.2	100,543	10.5	305
3/5/2025	23:30:00	7.5	1.533	0.9	100,565	10.6	300
3/5/2025	23:45:00	7.5	1.465	0.6	100,588	10.7	299
3/6/2025	0:00:00	7.5	1.423	0.6	100,609	10.8	298
3/6/2025	0:15:00	7.5	1.400	0.5	100,631	10.9	300
3/6/2025	0:30:00	7.5	1.385	1.3	100,652	11	300
3/6/2025	0:45:00	7.6	1.363	1.5	100,672	11.1	300
3/6/2025	1:30:00	7.6	0.526	43.4	100,690	10.9	304
3/6/2025	1:45:00	7.5	0.000	1.3	100,692	10.5	303
3/6/2025	2:00:00	7.5	1.605	0.6	100,712	10.5	302
3/6/2025	2:15:00	7.5	1.575	0.8	100,736	10.5	298
3/6/2025	2:30:00	7.4	1.522	1.5	100,759	10.6	297
3/6/2025	3:30:00	7.6	1.688	1	100,783	10.9	302
3/6/2025	3:45:00	7.5	1.696	1.2	100,808	10.5	298
3/6/2025	4:00:00	7.4	1.650	1	100,833	10.5	295
3/6/2025	4:15:00	7.5	0.371	9.3	100,857	10.5	295
3/6/2025	4:45:00	7.5	1.616	1.5	100,879	10.7	291
3/6/2025	5:00:00	7.5	1.544	1.3	100,903	10.7	293
3/6/2025	5:15:00	7.5	1.491	0.8	100,926	10.8	288
3/6/2025	5:30:00	7.4	1.673	0.7	100,948	10.9	289
3/6/2025	5:45:00	7.5	1.616	1	100,973	11	291
3/6/2025	6:00:00	7.5	0.000	0.5	100,979	11.6	291
3/6/2025	6:15:00	7.4	1.207	0	100,988	11.1	291
3/6/2025	6:30:00	7.5	1.336	0	101,003	11	287
3/6/2025	6:45:00	7.4	1.677	0.2	101,028	10.9	284

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	7:00:00	7.5	1.438	0	101,051	11	284
3/6/2025	7:15:00	7.4	1.480	0.2	101,071	11	284
3/6/2025	7:30:00	7.4	1.461	1	101,092	10.8	280
3/6/2025	7:45:00	7.4	1.416	1	101,114	10.7	282
3/6/2025	8:00:00	7.5	1.336	1.5	101,134	10.6	279
3/6/2025	8:45:00	7.4	1.283	1.7	101,157	10.5	290
3/6/2025	9:00:00	7.6	1.272	1.3	101,176	10.4	292
3/6/2025	9:15:00	7.5	1.249	1.6	101,195	10.5	290
3/6/2025	9:30:00	7.4	1.211	1.6	101,213	10.5	292
3/6/2025	9:45:00	7.4	1.506	2.1	101,229	10.6	293
3/6/2025	10:00:00	7.5	1.366	1.2	101,250	10.6	292
3/6/2025	10:15:00	7.5	1.412	1.7	101,271	10.8	292
3/6/2025	10:30:00	7.6	1.397	1.6	101,292	10.9	294
3/6/2025	10:45:00	7.5	1.484	1	101,312	10.9	293
3/6/2025	11:00:00	7.6	0.273	1.2	101,333	10.9	292
3/6/2025	11:15:00	7.6	1.446	1	101,337	11.1	297
3/6/2025	11:30:00	7.4	1.389	1	101,358	11	297
3/6/2025	11:45:00	7.5	1.537	15.1	101,376	11.1	293
3/6/2025	12:00:00	7.6	1.510	1.4	101,399	11.1	297
3/6/2025	12:15:00	7.5	1.457	1.2	101,421	11.2	295
3/6/2025	12:30:00	7.4	1.385	0.9	101,443	11.3	293
3/6/2025	12:45:00	7.6	0.681	15.6	101,461	11.4	293
3/6/2025	13:00:00	7.6	1.457	2.6	101,482	11.4	295
3/6/2025	13:45:00	7.5	0.863	1.5	101,508	11.7	299
3/6/2025	14:00:00	7.5	1.419	1.2	101,528	11.6	297

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	14:15:00	7.6	1.378	2.5	101,548	11.6	297
3/6/2025	14:30:00	7.4	1.340	1.2	101,569	11.6	298
3/6/2025	14:45:00	7.6	1.310	2.2	101,589	11.6	297
3/6/2025	15:00:00	7.4	1.397	1.3	101,607	11.6	295
3/6/2025	15:15:00	7.5	1.336	1.2	101,628	11.6	295
3/6/2025	15:30:00	7.5	1.294	2.6	101,648	11.6	295
3/6/2025	16:15:00	7.4	1.245	1.2	101,666	11.6	300
3/6/2025	16:30:00	7.6	1.245	3.6	101,685	11.6	303
3/6/2025	16:45:00	7.4	1.181	1.5	101,702	11.6	300
3/6/2025	17:00:00	7.5	1.412	3	101,720	11.5	298
3/6/2025	17:15:00	7.4	1.404	4.7	101,741	11.5	298
3/6/2025	17:30:00	7.5	1.366	5.7	101,761	11.6	299
3/6/2025	18:15:00	7.5	1.329	11.9	101,778	11.9	302
3/6/2025	18:30:00	7.4	1.366	8.4	101,797	11.4	298
3/6/2025	18:45:00	7.8	1.665	4.8	101,815	11.3	290
3/6/2025	19:00:00	7.9	1.355	5.4	101,837	11.3	286
3/6/2025	19:15:00	8	1.359	4.9	101,857	11.5	281
3/6/2025	19:30:00	8	1.374	11	101,878	11.5	281
3/6/2025	19:45:00	7.5	1.408	10.1	101,895	11.7	292
3/6/2025	20:00:00	7.4	1.359	5.7	101,915	12.2	294
3/6/2025	20:15:00	7.5	1.370	10.6	101,931	11.8	288
3/6/2025	20:30:00	7.4	1.060	16.8	101,937	11.5	290
3/6/2025	21:15:00	7.4	1.098	2.4	101,956	11.1	298
3/6/2025	21:30:00	7.4	0.897	11.6	101,971	11.1	296
3/6/2025	22:15:00	7.4	0.284	4.5	101,985	11.4	299

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	22:30:00	7.8	1.681	7.6	102,004	11	289
3/6/2025	22:45:00	7.6	1.635	13.3	102,029	11	291
3/6/2025	23:00:00	7.6	0.193	12.6	102,051	11	294
3/6/2025	23:15:00	7.5	1.416	5.7	102,064	10.7	304
3/6/2025	23:30:00	7.5	1.188	8.9	102,080	10.9	294
3/6/2025	23:45:00	7.4	1.238	8.6	102,096	11	292
3/7/2025	0:00:00	7.4	1.257	7.1	102,114	10.9	290
3/7/2025	0:15:00	7.6	1.567	9.4	102,130	10.9	292
3/7/2025	0:30:00	7.4	1.503	9.9	102,153	10.9	291
3/7/2025	0:45:00	7.5	1.510	9.8	102,175	10.7	293
3/7/2025	1:00:00	7.4	0.238	9.8	102,189	10.6	289
3/7/2025	1:15:00	7.4	0.484	70.8	102,202	10.7	298
3/7/2025	1:30:00	7.6	1.310	6.6	102,218	10.7	298
3/7/2025	1:45:00	7.6	1.294	6.3	102,237	10.8	296
3/7/2025	2:00:00	7.6	1.238	5.3	102,256	11.1	296
3/7/2025	2:30:00	7.3	1.495	6.1	102,286	11	292
3/7/2025	2:45:00	7.6	1.476	8.2	102,308	10.9	290
3/7/2025	3:00:00	7.4	0.965	4.4	102,321	11.8	292
3/7/2025	3:15:00	7.6	0.155	1.8	102,334	12.4	295
3/7/2025	3:30:00	7.6	1.465	4.4	102,352	11.3	295
3/7/2025	3:45:00	7.5	0.223	6.2	102,372	11.3	292
3/7/2025	4:15:00	7.4	1.355	4.4	102,395	10.8	292
3/7/2025	4:30:00	7.5	1.344	2.4	102,415	10.8	292
3/7/2025	4:45:00	7.5	1.332	2.8	102,436	11	288
3/7/2025	5:00:00	7.6	1.382	4.7	102,454	11.2	288

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	5:15:00	7.5	1.321	4.1	102,475	11	284
3/7/2025	6:15:00	7.6	1.325	2.5	102,506	11.2	286
3/7/2025	6:45:00	7.4	0.814	2.8	102,541	10.8	281
3/7/2025	7:00:00	7.4	1.741	4.3	102,559	10.7	279
3/7/2025	7:15:00	7.6	1.699	7.3	102,585	10.6	280
3/7/2025	7:30:00	7.4	1.453	4.3	102,608	10.7	281
3/7/2025	7:45:00	7.5	1.457	2.6	102,630	10.8	281
3/7/2025	8:00:00	7.6	1.453	2.5	102,651	10.7	281
3/7/2025	8:15:00	7.4	1.393	2.1	102,672	10.6	281
3/7/2025	9:00:00	7.5	1.559	2	102,701	10.4	282
3/7/2025	9:15:00	7.4	1.495	1.7	102,724	10.4	281
3/7/2025	9:30:00	7.6	1.499	1.9	102,747	10.5	280
3/7/2025	9:45:00	7.4	1.030	1.8	102,768	10.6	280
3/7/2025	10:00:00	7.5	1.495	1.6	102,789	10.7	281
3/7/2025	10:15:00	7.4	1.552	7.1	102,796	11	282
3/7/2025	10:45:00	7.5	1.056	0.3	102,816	10.7	282
3/7/2025	11:00:00	7.6	1.552	1.9	102,836	10.8	283
3/7/2025	11:15:00	7.5	1.540	1.6	102,860	10.9	283
3/7/2025	11:30:00	7.4	1.514	0.9	102,883	10.9	282
3/7/2025	11:45:00	7.5	1.506	1.5	102,905	11	282
3/7/2025	12:00:00	7.5	1.518	2.7	102,925	11	281
3/7/2025	12:45:00	7.5	1.533	2	102,956	11	282
3/7/2025	13:00:00	7.4	1.548	3.6	102,976	10.9	283
3/7/2025	13:15:00	7.5	1.529	4.4	102,999	11	283
3/7/2025	13:30:00	7.5	1.499	4.2	103,022	11	283

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	13:45:00	7.5	1.461	3.8	103,044	11	283
3/7/2025	14:30:00	7.6	1.559	2.2	103,070	10.9	289
3/7/2025	14:45:00	7.7	1.548	2.2	103,093	10.9	289
3/7/2025	15:00:00	7.7	1.522	5.6	103,113	10.9	288
3/7/2025	15:15:00	7.8	1.499	4.6	103,136	10.9	286
3/7/2025	15:30:00	8.1	1.510	4.9	103,159	10.9	286
3/7/2025	15:45:00	8.6	1.503	4.8	103,181	10.9	280
3/7/2025	16:15:00	7.8	1.503	3.7	103,213	11	283
3/7/2025	17:00:00	7.6	1.416	3.2	103,250	11	287
3/7/2025	17:15:00	7.6	1.389	2.7	103,271	11	286
3/7/2025	17:30:00	7.6	1.359	2.6	103,292	11	286
3/7/2025	17:45:00	7.7	1.344	3	103,312	11	283
3/7/2025	18:00:00	7.7	1.336	3.7	103,332	11	280
3/7/2025	18:15:00	7.8	1.313	3.3	103,352	11	280
3/7/2025	18:30:00	7.8	1.283	3.8	103,371	11	277
3/7/2025	18:45:00	7.9	1.272	4	103,391	11	277
3/7/2025	19:00:00	7.9	1.279	3.7	103,410	11	277
3/7/2025	19:45:00	7.5	1.503	2	103,431	10.8	279
3/7/2025	20:00:00	7.5	1.461	1.7	103,453	10.8	281
3/7/2025	20:15:00	7.5	1.446	2.4	103,474	10.8	281
3/7/2025	20:30:00	7.4	1.370	4	103,496	10.8	281
3/7/2025	20:45:00	7.4	0.655	5.9	103,516	10.8	284
3/7/2025	21:30:00	7.5	1.631	4.4	103,536	10.6	287
3/7/2025	21:45:00	7.5	1.575	4.6	103,560	10.7	286
3/7/2025	22:00:00	7.4	1.544	5	103,584	10.7	287

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	22:30:00	7.4	1.563	4	103,602	10.7	286
3/7/2025	22:45:00	7.6	1.548	3.7	103,625	10.8	284
3/7/2025	23:00:00	7.4	1.514	2.4	103,648	10.8	284
3/7/2025	23:30:00	7.4	1.563	1.3	103,673	11	282
3/7/2025	23:45:00	7.6	1.435	1.1	103,695	11.1	281
3/8/2025	0:00:00	7.5	1.472	3.1	103,718	11.4	284
3/8/2025	0:15:00	7.5	1.847	1.7	103,739	11.5	284
3/8/2025	0:30:00	7.7	1.703	2	103,765	11.2	283
3/8/2025	0:45:00	7.8	1.681	2.9	103,791	11.3	281
3/8/2025	1:00:00	7.9	0.954	9.7	103,813	11.4	279
3/8/2025	1:15:00	8.2	1.654	3.7	103,836	11.5	277
3/8/2025	2:15:00	8.2	1.718	4.5	103,879	11.6	277
3/8/2025	2:30:00	8.3	1.018	9.2	103,904	11.6	274
3/8/2025	2:45:00	8.3	1.768	4.3	103,923	12	277
3/8/2025	3:00:00	7.5	1.662	5.2	103,949	11.7	289
3/8/2025	3:15:00	7	1.537	4.2	103,973	11.7	300
3/8/2025	3:30:00	7.5	1.491	17.6	103,996	11.7	296
3/8/2025	4:00:00	7.2	1.586	4.6	104,021	11.7	298
3/8/2025	4:15:00	7.6	1.499	8.9	104,044	11.8	296
3/8/2025	4:30:00	7.2	1.639	2.9	104,061	11.8	299
3/8/2025	4:45:00	7	1.567	2.7	104,085	11.9	296
3/8/2025	5:00:00	7.3	1.453	5.2	104,107	12.1	299
3/8/2025	5:15:00	7.6	1.397	10.2	104,129	12.1	294
3/8/2025	5:30:00	6.8	1.552	10.2	104,148	12.2	296
3/8/2025	6:00:00	7.1	0.954	15.6	104,160	12.6	292

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	6:15:00	7.5	1.669	8.6	104,181	11.6	291
3/8/2025	6:30:00	7.6	1.529	10.9	104,205	11.4	289
3/8/2025	6:45:00	7.6	1.499	8.4	104,227	11.2	287
3/8/2025	7:00:00	7.6	1.431	4.9	104,249	11.4	285
3/8/2025	7:15:00	7.4	1.397	2.2	104,259	11.4	289
3/8/2025	7:30:00	6.9	1.556	1.2	104,282	11.2	281
3/8/2025	7:45:00	7.5	1.423	1.2	104,304	11.1	286
3/8/2025	8:00:00	6.9	0.503	4.5	104,322	11.1	282
3/8/2025	8:15:00	7.5	1.291	1.5	104,340	11	282
3/8/2025	8:30:00	7	1.067	1.1	104,358	11	280
3/8/2025	8:45:00	7.5	1.022	1.4	104,373	11.1	287
3/8/2025	9:00:00	7.6	0.522	5.5	104,388	11.1	286
3/8/2025	9:15:00	7.4	1.457	2.3	104,406	10.8	286
3/8/2025	9:30:00	7.6	1.435	3	104,428	10.7	279
3/8/2025	9:45:00	7.4	1.404	2.5	104,449	10.7	283
3/8/2025	10:00:00	7.6	1.393	2.5	104,470	10.7	281
3/8/2025	10:15:00	7.4	1.419	1.7	104,488	10.8	284
3/8/2025	10:30:00	7.1	1.412	2.8	104,509	10.8	284
3/8/2025	10:45:00	7.5	1.385	2.9	104,530	10.9	288
3/8/2025	11:00:00	7.2	1.332	2.7	104,551	11	293
3/8/2025	11:15:00	7.5	1.423	4.7	104,568	11	293
3/8/2025	11:30:00	7.4	1.355	5.5	104,589	10.9	299
3/8/2025	12:15:00	7.1	1.488	3.6	104,605	11.1	297
3/8/2025	12:45:00	7.5	1.495	5.8	104,626	11.1	300
3/8/2025	13:00:00	7.1	1.359	5.5	104,648	11.3	303

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	13:15:00	7.4	1.514	5.8	104,664	11.8	305
3/8/2025	13:30:00	7.5	1.461	7.4	104,686	11	297
3/8/2025	13:45:00	7.5	1.419	6.4	104,708	11.2	298
3/8/2025	14:00:00	7.3	1.370	4.9	104,729	11.5	299
3/8/2025	14:15:00	7	0.662	15.5	104,746	12	297
3/8/2025	14:30:00	7.5	1.609	6	104,767	11.5	298
3/8/2025	14:45:00	7.5	1.540	7.4	104,790	11.4	298
3/8/2025	15:00:00	7.2	1.469	6	104,812	11.3	296
3/8/2025	15:30:00	7.5	1.537	9.6	104,846	11.1	294
3/8/2025	15:45:00	7.2	1.249	6.7	104,868	11.3	295
3/8/2025	16:00:00	7.5	1.287	7.8	104,887	11.7	297
3/8/2025	16:15:00	7.5	1.389	19.1	104,901	13.5	296
3/8/2025	16:30:00	7.5	1.692	7.5	104,924	11.2	287
3/8/2025	16:45:00	7.5	1.628	7.9	104,949	11.2	287
3/8/2025	17:00:00	7.6	1.567	10.3	104,973	11.4	287
3/8/2025	17:15:00	7.1	1.783	9	104,991	11.9	299
3/8/2025	17:30:00	7.1	1.559	11.3	105,005	11.3	287
3/8/2025	17:45:00	7.5	1.461	9.8	105,015	11.6	286
3/8/2025	18:00:00	7.5	1.397	8.3	105,036	12.3	287
3/8/2025	18:15:00	7.5	1.306	6.8	105,056	12.9	287
3/8/2025	18:30:00	7.5	1.340	5.5	105,073	13.7	289
3/8/2025	18:45:00	7.5	1.378	4.6	105,094	14.2	287
3/8/2025	19:00:00	7.5	1.310	4.9	105,114	14.9	288
3/8/2025	19:15:00	7.5	1.268	4.4	105,133	15.6	286
3/8/2025	19:45:00	7.1	1.419	8.5	105,163	11.6	292

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	20:00:00	7	1.332	7.2	105,184	11.5	296
3/8/2025	20:15:00	6.9	0.000	18	105,196	11.3	297
3/8/2025	20:45:00	7.5	1.794	8.8	105,228	11.2	295
3/8/2025	21:00:00	7.3	1.692	6.9	105,254	11.1	291
3/8/2025	21:15:00	7	0.197	17.5	105,271	11	296
3/8/2025	21:30:00	7	2.029	17.2	105,279	11.7	288
3/8/2025	21:45:00	7.6	1.877	6.8	105,307	11.3	288
3/8/2025	22:00:00	7.5	1.737	9.3	105,334	11.4	294
3/8/2025	22:15:00	7.4	0.500	31.2	105,352	11.2	298
3/8/2025	22:30:00	7.4	1.313	14.9	105,372	11.2	301
3/8/2025	22:45:00	7.6	1.457	11.6	105,396	12	297
3/8/2025	23:00:00	7.3	0.136	28.9	105,418	11.4	301
3/8/2025	23:15:00	7.5	1.821	18.7	105,444	11.5	305
3/8/2025	23:30:00	7.1	1.692	8.8	105,469	11.6	303
3/8/2025	23:45:00	7.1	1.635	8.9	105,494	12.5	309
3/9/2025	0:00:00	7	1.646	20.2	105,514	11.6	299
3/9/2025	0:15:00	7.1	1.385	11.1	105,528	11.9	296
3/9/2025	0:30:00	7.1	1.340	4.7	105,546	13.3	302
3/9/2025	0:45:00	7.1	1.340	4.8	105,565	12.1	299
3/9/2025	1:00:00	7.5	1.805	9.4	105,585	11.9	288
3/9/2025	1:15:00	6.8	1.798	6.8	105,612	12.6	299
3/9/2025	1:30:00	7.1	1.794	6.1	105,639	11.9	291
3/9/2025	1:45:00	7.4	1.779	8.5	105,665	11.8	288
3/9/2025	2:00:00	7.6	1.741	14.4	105,685	11.7	289
3/9/2025	2:15:00	6.9	1.737	8.2	105,711	11.7	294

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	2:30:00	7.4	1.749	8.7	105,737	11.9	288
3/9/2025	2:45:00	6.8	1.741	12.7	105,759	12	291
3/9/2025	3:00:00	7.2	1.726	13.7	105,785	11.8	284
3/9/2025	3:30:00	7.3	1.472	8.7	105,823	12.2	284
3/9/2025	3:45:00	7.4	1.431	5.8	105,845	12.9	289
3/9/2025	4:00:00	7.3	1.276	7.4	105,867	13.4	287
3/9/2025	4:15:00	7.4	1.355	6.4	105,887	14.2	289
3/9/2025	4:30:00	7.4	0.901	6.5	105,907	15.6	288
3/9/2025	4:45:00	7.4	1.423	5.7	105,926	16.6	287
3/9/2025	5:00:00	7.4	1.911	5.5	105,951	17.5	288
3/9/2025	5:15:00	7.4	1.911	5.5	105,980	18.2	288
3/9/2025	5:30:00	7.4	1.870	5.9	106,009	18.8	292
3/9/2025	5:45:00	7.4	1.927	5.1	106,035	19.6	290
3/9/2025	6:15:00	7.1	1.783	3.6	106,069	11.7	280
3/9/2025	6:30:00	7.1	0.182	51.5	106,089	11.3	281
3/9/2025	6:45:00	7.5	1.533	80.8	106,111	11.6	282
3/9/2025	7:00:00	7.3	1.726	5.3	106,132	11.3	283
3/9/2025	7:15:00	7	1.628	4	106,157	11.3	281
3/9/2025	7:30:00	7.5	0.689	4.5	106,180	11.2	281
3/9/2025	7:45:00	7.3	1.760	2.9	106,203	11.2	280
3/9/2025	8:00:00	7	1.699	2.4	106,229	11.2	281
3/9/2025	8:15:00	7.5	1.677	3.9	106,254	11.2	282
3/9/2025	8:30:00	7.4	1.612	3	106,278	11.2	282
3/9/2025	8:45:00	7	1.749	0.6	106,301	11.4	279
3/9/2025	9:00:00	7.6	1.707	1.4	106,327	11.3	277

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	9:15:00	7.5	1.677	1.1	106,352	11.4	281
3/9/2025	9:30:00	7.4	1.605	1.4	106,377	11.6	281
3/9/2025	9:45:00	7.2	1.707	0.7	106,399	11.7	274
3/9/2025	10:00:00	7.5	1.662	2.3	106,424	11.7	276
3/9/2025	10:15:00	7.4	1.605	2.2	106,449	11.7	281
3/9/2025	10:30:00	7	1.537	1.8	106,472	11.8	278
3/9/2025	10:45:00	7.5	1.749	1.3	106,489	11.5	277
3/9/2025	11:00:00	7.4	1.669	5.1	106,515	11.5	278
3/9/2025	11:15:00	7	1.628	4.3	106,540	11.6	276
3/9/2025	11:30:00	7.5	1.575	5.3	106,563	11.7	276
3/9/2025	11:45:00	7.3	1.677	2.9	106,582	11.8	278
3/9/2025	12:00:00	6.9	1.662	3.8	106,608	11.6	273
3/9/2025	12:15:00	7.5	1.605	9.6	106,632	11.7	276
3/9/2025	12:30:00	7.5	1.529	8.5	106,655	11.9	278
3/9/2025	12:45:00	7.4	1.711	6.4	106,670	11.8	276
3/9/2025	13:00:00	7.1	1.612	3.6	106,695	11.7	276
3/9/2025	13:15:00	7.6	1.586	6.8	106,719	11.7	276
3/9/2025	13:30:00	7.5	1.525	4.8	106,742	11.8	281
3/9/2025	13:45:00	7.4	1.688	9.5	106,759	11.7	276
3/9/2025	14:00:00	7	1.677	1.8	106,784	11.9	274
3/9/2025	14:15:00	7.6	1.631	3.3	106,809	12	278
3/9/2025	14:30:00	7.5	1.533	3.5	106,832	12	281
3/9/2025	14:45:00	7.1	1.079	0.8	106,854	12	281
3/9/2025	15:00:00	7.6	1.650	1.7	106,876	11.7	279
3/9/2025	15:15:00	7.5	1.593	3.1	106,900	11.8	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	15:30:00	7.3	1.525	3.1	106,924	11.7	281
3/9/2025	15:45:00	7.6	1.264	2.6	106,946	11.8	276
3/9/2025	16:00:00	7.4	1.578	1.7	106,966	11.8	281
3/9/2025	16:15:00	7.5	1.525	3.2	106,990	11.8	276
3/9/2025	16:30:00	7.2	1.435	2	107,012	11.7	281
3/9/2025	16:45:00	7.2	1.385	2.4	107,028	11.6	286
3/9/2025	17:00:00	7.5	1.540	1.8	107,046	11.5	279
3/9/2025	17:15:00	7.2	1.529	1.3	107,069	11.5	274
3/9/2025	17:30:00	7.5	1.476	4.1	107,091	11.7	279
3/9/2025	17:45:00	7.3	1.423	1.9	107,113	11.8	279
3/9/2025	18:00:00	7.5	1.518	2.1	107,132	11.9	276
3/9/2025	18:15:00	7.4	1.476	2.7	107,155	11.9	276
3/9/2025	19:00:00	7.6	1.609	5.8	107,182	11.7	273
3/9/2025	19:15:00	6.8	1.707	5.8	107,207	11.8	290
3/9/2025	19:30:00	6.8	1.628	5.8	107,232	12.7	297
3/9/2025	19:45:00	7.5	1.805	10.9	107,254	11.9	282
3/9/2025	20:00:00	7.5	1.756	8.8	107,280	11.8	279
3/9/2025	20:15:00	6.6	1.635	8.5	107,291	11.2	277
3/9/2025	20:30:00	7.2	1.692	5.1	107,315	11.4	282
3/9/2025	20:45:00	7.3	1.635	4.4	107,340	11.7	283
3/9/2025	21:00:00	7.3	1.915	13.4	107,362	12.1	283
3/9/2025	21:15:00	7	1.151	8	107,385	11.5	275
3/9/2025	21:30:00	7	1.109	4	107,402	11.9	277
3/9/2025	21:45:00	7	1.075	3	107,418	12.3	276
3/9/2025	22:00:00	7	1.718	5.2	107,438	13.2	274

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	22:15:00	7	1.616	5.7	107,461	14.1	271
3/9/2025	22:30:00	7.6	1.624	6.7	107,486	12.1	271
3/9/2025	22:45:00	6.7	1.472	3.8	107,508	12.8	276
3/9/2025	23:00:00	7.6	2.063	4.2	107,537	11.8	274
3/9/2025	23:15:00	7.5	2.074	3.9	107,567	11.7	276
3/9/2025	23:30:00	7.3	0.170	2.5	107,589	11.9	276
3/9/2025	23:45:00	7.5	1.908	5.2	107,600	11.6	276

Table 3. In-Situ Parameters

Date	Time	Temperature °C	DO mg/L	Conductivity SPC-uS/cm	SAL-ppt	pH	ORP (mV)	NTU
03/3/2025	06:20:00PM	11.5	10.34	172.0	0.08	7.45	140.0	3.28
03/4/2025	06:43:58PM	12.3	10.93	221.3	0.11	7.56	145.6	3.59
03/5/2025	01:21:15PM	11.7	11.22	355.1	0.17	7.11	149.7	3.56
03/6/2025	11:43:00AM	10.9	10.98	188.7	0.09	7.65	119.87	3.67
03/7/2025	02:54:16PM	10.8	11.06	165.9	0.08	7.59	141.5	4.71
03/8/2025	07:31:08AM	10.7	11.14	158.7	0.08	7.57	141.0	5.13
03/9/2025	07:46:11AM	11.4	11.4	158.3	0.08	7.39	160.7	4.84

3. Calibration Log:

Table 4. Calibration Log

Date	Unit	pH	Conductivity/Temp.	Salinity	NTU
3/5/2025	YSI	✓	✓	✓	✓
3/5/2025	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)
3/3/2025	0:00:00	6.7	1.669	3.9	95,924	Open	11.5	287
3/3/2025	0:15:00	7.3	0.246	3.3	95,943	Open	11.4	282
3/3/2025	0:30:00	7.5	1.650	2.4	95,966	Open	11.5	281
3/3/2025	0:45:00	7.4	1.669	0.8	95,991	Open	11.6	287
3/3/2025	1:00:00	7.7	1.355	1	96,015	Open	11.6	284
3/3/2025	1:15:00	7.2	1.730	0.6	96,025	Open	11.6	284
3/3/2025	1:30:00	7.7	0.363	1.6	96,049	Open	11.3	283
3/3/2025	1:45:00	7.8	0.000	1.3	96,049	Open	11.8	281
3/3/2025	2:00:00	7.7	1.344	5.1	96,059	Open	11.3	300
3/3/2025	2:15:00	7.5	1.332	0.4	96,080	Open	11.1	289
3/3/2025	2:30:00	7.4	1.098	0.8	96,100	Open	11.1	287
3/3/2025	2:45:00	7.5	1.313	1	96,119	Open	11	289
3/3/2025	3:00:00	7.6	1.294	1.1	96,139	Open	10.8	286
3/3/2025	3:15:00	7.5	0.000	1.1	96,150	Open	11	291
3/3/2025	3:30:00	7.5	0.000	1.2	96,150	Open	11.4	296
3/3/2025	3:45:00	7.4	1.359	1.1	96,159	Open	10.8	289
3/3/2025	4:00:00	7.6	1.366	1.2	96,179	Open	10.8	287
3/3/2025	4:15:00	7.4	1.351	0.9	96,200	Open	10.9	286
3/3/2025	4:30:00	8	0.000	0.9	96,209	Open	11.4	110
3/3/2025	4:45:00	7.5	1.412	0.9	96,219	Open	11.1	289
3/3/2025	5:00:00	7.6	1.397	0.8	96,240	Open	11	286
3/3/2025	5:15:00	7.4	1.385	0.7	96,244	Open	11.3	288
3/3/2025	5:30:00	7.5	1.461	0.8	96,265	Open	11.1	288

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/3/2025	5:45:00	7.5	1.435	1.8	96,287	Open	11.1	284
3/3/2025	6:00:00	7.5	0.000	1.1	96,295	Open	11.6	287
3/3/2025	6:15:00	7.5	0.000	1.3	96,295	Open	11.9	291
3/3/2025	6:30:00	7.9	1.571	2.5	96,304	Open	11	109
3/3/2025	6:45:00	7.5	0.000	1	96,320	Open	10.9	284
3/3/2025	7:00:00	7.4	1.537	0.9	96,334	Open	10.9	278
3/3/2025	7:15:00	7.4	1.529	0.8	96,357	Open	10.9	281
3/3/2025	7:30:00	7.5	1.537	0.7	96,380	Open	10.9	280
3/3/2025	7:45:00	7.5	1.499	0.4	96,403	Open	10.9	277
3/3/2025	8:00:00	7.4	1.423	0.7	96,424	Open	10.9	278
3/3/2025	8:15:00	7.5	0.000	1.1	96,435	Open	11.1	284
3/3/2025	8:30:00	7.4	1.393	1.6	96,435	Closed	11.5	289
3/3/2025	8:45:00	7.6	1.442	1.9	96,457	Open	11	297
3/3/2025	9:00:00	7.4	0.000	1.6	96,476	Closed	10.9	300
3/3/2025	9:15:00	7.4	0.000	1.5	96,476	Closed	11.3	302
3/3/2025	9:30:00	7.6	1.457	1.3	96,486	Open	11	305
3/3/2025	9:45:00	7.4	1.393	0.8	96,507	Open	11	295
3/3/2025	10:00:00	7.6	1.378	0.9	96,528	Open	11	293
3/3/2025	10:15:00	7.4	1.321	0.6	96,548	Open	11	289
3/3/2025	10:30:00	7.6	1.336	1.4	96,568	Open	11.1	288
3/3/2025	10:45:00	7.6	1.548	6.1	96,581	Open	11.2	283
3/3/2025	11:00:00	7.5	0.000	2.4	96,590	Closed	11	283
3/3/2025	11:15:00	7.5	1.442	5.1	96,591	Open	11.3	279
3/3/2025	11:30:00	7.5	1.522	3.9	96,614	Open	10.9	277
3/3/2025	11:45:00	7.5	1.469	3.8	96,637	Open	10.9	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/3/2025	12:00:00	7.5	1.480	3.3	96,659	Open	10.9	278
3/3/2025	12:15:00	7.4	1.457	2.4	96,681	Open	10.9	281
3/3/2025	12:30:00	7.4	0.000	2.4	96,692	Closed	11	281
3/3/2025	12:45:00	7.6	1.453	3.2	96,698	Open	11.1	291
3/3/2025	13:00:00	7.4	1.419	6.9	96,720	Open	11.1	291
3/3/2025	13:15:00	7.6	0.000	1.7	96,726	Closed	11.3	294
3/3/2025	13:30:00	7.7	0.000	1.7	96,726	Closed	11.5	295
3/3/2025	13:45:00	7.4	1.400	1.8	96,745	Open	11.3	294
3/3/2025	14:00:00	7.6	1.389	1.7	96,765	Open	11.3	291
3/3/2025	14:15:00	7.4	1.359	1	96,786	Open	11.3	291
3/3/2025	14:30:00	7.6	1.336	0.9	96,806	Open	11.3	293
3/3/2025	14:45:00	7.5	1.491	2.2	96,826	Open	11.3	290
3/3/2025	15:00:00	7.5	1.382	2.3	96,834	Open	11.3	288
3/3/2025	15:15:00	7.3	1.332	0.7	96,854	Open	11.1	298
3/3/2025	15:30:00	7.5	1.310	0.7	96,874	Open	11.1	283
3/3/2025	15:45:00	7.6	1.283	0.9	96,893	Open	11.1	291
3/3/2025	16:00:00	7.4	1.234	0.5	96,911	Open	11.2	303
3/3/2025	16:15:00	7.4	1.200	0.6	96,930	Open	11.2	291
3/3/2025	16:30:00	7.6	1.166	0.9	96,948	Open	11.3	298
3/3/2025	16:45:00	7.4	1.120	0.6	96,965	Open	11.3	304
3/3/2025	17:00:00	7.7	0.000	0.8	96,977	Open	11.4	293
3/3/2025	17:15:00	7.6	1.136	0.7	96,978	Open	11.7	283
3/3/2025	17:30:00	7.2	1.442	1	96,983	Open	11.4	306
3/3/2025	17:45:00	7.6	1.336	1	97,004	Open	11.2	277
3/3/2025	18:00:00	7.4	1.298	1	97,024	Open	11.2	294

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/3/2025	18:15:00	7.4	1.257	0.8	97,043	Open	11.3	281
3/3/2025	18:30:00	7.6	1.241	0.9	97,060	Open	11.3	282
3/3/2025	18:45:00	7.5	0.382	9	97,077	Open	11.3	285
3/3/2025	19:00:00	7.7	1.313	2.1	97,085	Open	11.4	280
3/3/2025	19:15:00	7.4	2.010	2.5	97,115	Open	11.3	279
3/3/2025	19:30:00	7.7	1.968	3.8	97,143	Open	11.3	274
3/3/2025	19:45:00	7.3	1.544	2.1	97,158	Open	11.5	280
3/3/2025	20:00:00	7.6	1.472	1.4	97,181	Open	11.5	275
3/3/2025	20:15:00	7.4	0.000	0.5	97,188	Open	11.6	277
3/3/2025	20:30:00	7.4	0.852	13.4	97,199	Open	11.6	276
3/3/2025	20:45:00	7.5	0.163	2	97,204	Open	11.8	277
3/3/2025	21:00:00	7.5	1.578	5.4	97,208	Open	12.3	279
3/3/2025	21:15:00	7.6	1.522	0.9	97,231	Open	11.7	279
3/3/2025	21:30:00	7.6	1.446	0.9	97,253	Open	11.7	279
3/3/2025	21:45:00	7.6	1.450	1.5	97,273	Open	11.7	279
3/3/2025	22:00:00	7.5	0.889	0.9	97,287	Open	12.4	284
3/3/2025	22:15:00	7.5	0.000	0.9	97,287	Open	12.7	286
3/3/2025	22:30:00	7.5	1.673	1.1	97,298	Open	11.8	276
3/3/2025	22:45:00	7.6	1.575	1	97,322	Open	11.5	281
3/3/2025	23:00:00	7.4	1.514	0.8	97,343	Open	11.6	281
3/3/2025	23:15:00	7.3	0.000	0.8	97,354	Open	11.8	279
3/3/2025	23:30:00	7.3	0.000	0.3	97,354	Open	12.4	279
3/3/2025	23:45:00	7.4	1.540	0.2	97,366	Open	11.8	282
3/4/2025	0:00:00	7.5	1.529	1.3	97,387	Open	12	281
3/4/2025	0:15:00	7.6	1.488	0.8	97,409	Open	11.6	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	0:30:00	7.5	1.450	1	97,431	Open	11.6	280
3/4/2025	0:45:00	7.3	1.366	0.6	97,452	Open	11.6	282
3/4/2025	1:00:00	7.5	0.000	0.7	97,467	Open	11.7	287
3/4/2025	1:15:00	7.5	0.000	0.9	97,467	Open	12	290
3/4/2025	1:30:00	7.2	0.000	11.5	97,471	Open	11.5	285
3/4/2025	1:45:00	7.5	1.453	1.5	97,488	Open	11.5	282
3/4/2025	2:00:00	7.5	1.393	2.9	97,509	Open	11.5	283
3/4/2025	2:15:00	7.6	1.427	2.8	97,528	Open	11.7	288
3/4/2025	2:30:00	7.4	0.008	1.7	97,532	Open	12	110
3/4/2025	2:45:00	7.6	1.419	1.9	97,553	Open	11.4	288
3/4/2025	3:00:00	7.3	0.568	3.3	97,569	Open	11.5	286
3/4/2025	3:15:00	7.4	0.216	12.8	97,574	Open	11.4	289
3/4/2025	3:30:00	7.4	0.000	4.8	97,574	Open	11.5	291
3/4/2025	3:45:00	7.5	1.453	2.4	97,593	Open	11.4	289
3/4/2025	4:00:00	7.5	1.450	2.4	97,610	Open	11.4	286
3/4/2025	4:15:00	7.5	1.393	2.1	97,631	Open	11.5	282
3/4/2025	4:30:00	7.4	1.397	2.5	97,652	Open	11.7	283
3/4/2025	4:45:00	7.5	1.351	2.8	97,673	Open	11.8	287
3/4/2025	5:00:00	7.5	1.431	15.5	97,682	Open	11.9	286
3/4/2025	5:15:00	7.6	0.469	8.8	97,698	Open	11.5	281
3/4/2025	5:30:00	7.5	1.400	3	97,716	Open	11.5	283
3/4/2025	5:45:00	7.6	1.306	3.1	97,736	Open	11.5	283
3/4/2025	6:00:00	7.7	1.291	3.1	97,755	Open	11.5	283
3/4/2025	6:15:00	7.8	0.912	5.9	97,773	Open	11.4	279
3/4/2025	6:30:00	7.8	1.397	2	97,792	Open	11.3	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	6:45:00	8.4	0.121	13.3	97,799	Open	11.2	269
3/4/2025	7:00:00	8	0.000	29.3	97,805	Open	11.3	109
3/4/2025	7:15:00	7.9	1.461	8.9	97,823	Open	11.1	269
3/4/2025	7:30:00	8	1.419	3.1	97,844	Open	11	269
3/4/2025	7:45:00	8	1.393	2.6	97,865	Open	11.1	268
3/4/2025	8:00:00	8	1.374	2.5	97,885	Open	11.1	267
3/4/2025	8:15:00	8	1.321	1.8	97,905	Open	11.2	266
3/4/2025	8:30:00	7.7	1.170	3.3	97,924	Open	11.2	276
3/4/2025	8:45:00	7.8	1.915	27.3	97,939	Open	11.1	272
3/4/2025	9:00:00	7.9	1.113	0.9	97,956	Open	11.3	275
3/4/2025	9:15:00	7.6	1.090	0.6	97,973	Open	11.6	275
3/4/2025	9:30:00	7.3	0.409	10.2	97,988	Open	11.3	278
3/4/2025	9:45:00	7.5	1.230	1.3	98,003	Open	11.1	287
3/4/2025	10:00:00	7.6	1.196	1.4	98,021	Open	11.2	288
3/4/2025	10:15:00	7.5	1.124	1.3	98,038	Open	11.3	289
3/4/2025	10:30:00	7.5	0.344	0.9	98,053	Open	11.1	291
3/4/2025	10:45:00	7.5	0.655	1.4	98,063	Open	11.1	290
3/4/2025	11:00:00	7.6	0.659	3	98,073	Open	11.1	290
3/4/2025	11:15:00	7.6	1.794	4.6	98,094	Open	11.1	287
3/4/2025	11:30:00	7.5	1.219	1	98,102	Open	11.2	286
3/4/2025	11:45:00	7.5	1.170	0.4	98,120	Open	11.2	286
3/4/2025	12:00:00	7.5	1.654	0.9	98,142	Open	11.1	284
3/4/2025	12:15:00	7.4	1.628	1.1	98,166	Open	11.1	282
3/4/2025	12:30:00	7.6	1.491	1.8	98,187	Open	11.2	283
3/4/2025	12:45:00	7.6	1.457	4.9	98,209	Open	11.2	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	13:00:00	7.6	1.397	4.4	98,231	Open	11.4	284
3/4/2025	13:15:00	7.5	1.374	3.3	98,251	Open	11.5	288
3/4/2025	13:30:00	7.4	1.291	3	98,268	Open	11.5	286
3/4/2025	13:45:00	7.6	1.593	9.9	98,282	Open	11.4	288
3/4/2025	14:00:00	7.5	1.181	2.2	98,301	Open	11.5	294
3/4/2025	14:15:00	7.5	1.851	8.1	98,327	Open	11.4	297
3/4/2025	14:30:00	7.5	1.862	8.2	98,355	Open	11.4	297
3/4/2025	14:45:00	7.5	0.220	13.3	98,372	Open	11.3	297
3/4/2025	15:00:00	7.5	1.423	4.7	98,380	Open	11.3	302
3/4/2025	15:15:00	7.5	1.400	2.7	98,401	Open	11.3	304
3/4/2025	15:30:00	7.5	1.325	3.1	98,421	Open	11.3	303
3/4/2025	15:45:00	7.5	1.382	3	98,435	Open	11.2	300
3/4/2025	16:00:00	7.4	1.340	2.4	98,455	Open	11.2	299
3/4/2025	16:15:00	7.4	1.336	3	98,475	Open	11.3	298
3/4/2025	16:30:00	7.6	1.313	4	98,495	Open	11.4	298
3/4/2025	16:45:00	7.5	1.416	2.2	98,512	Open	11.4	296
3/4/2025	17:00:00	7.5	1.374	2.6	98,532	Open	11.4	296
3/4/2025	17:15:00	7.5	1.340	4	98,553	Open	11.6	298
3/4/2025	17:30:00	7.5	1.310	4.1	98,573	Open	11.5	294
3/4/2025	17:45:00	7.5	1.355	2.5	98,590	Open	11.4	296
3/4/2025	18:00:00	7.5	0.223	3.4	98,609	Open	11.3	292
3/4/2025	18:15:00	7.5	0.269	1.7	98,611	Open	11.5	295
3/4/2025	18:30:00	7.4	1.219	0.6	98,628	Open	11.3	293
3/4/2025	18:45:00	7.5	1.306	1.1	98,643	Open	11.1	289
3/4/2025	19:00:00	7.6	1.264	1.7	98,662	Open	11.5	298

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/4/2025	19:15:00	7.4	1.226	0.6	98,680	Open	11.9	296
3/4/2025	19:30:00	7.5	1.196	0.6	98,698	Open	12.5	296
3/4/2025	19:45:00	7.5	1.098	2.1	98,714	Open	12.2	294
3/4/2025	20:00:00	7.6	1.086	0.7	98,730	Open	11.4	296
3/4/2025	20:15:00	7.6	1.079	1.2	98,746	Open	11.3	299
3/4/2025	20:30:00	7.4	1.086	1.5	98,754	Open	11.2	295
3/4/2025	20:45:00	7.6	0.700	1.7	98,769	Open	11.3	298
3/4/2025	21:00:00	7.4	1.654	2.6	98,789	Open	10.9	294
3/4/2025	21:15:00	7.4	1.616	2.5	98,813	Open	10.9	296
3/4/2025	21:30:00	7.4	1.544	2	98,837	Open	11	296
3/4/2025	21:45:00	7.3	0.000	2.5	98,842	Open	11	296
3/4/2025	22:00:00	7.3	0.507	13	98,842	Open	11.2	300
3/4/2025	22:15:00	7.4	1.699	3.2	98,862	Open	10.9	296
3/4/2025	22:30:00	7.6	1.639	4.9	98,887	Open	10.9	292
3/4/2025	22:45:00	7.4	1.699	4	98,910	Open	11	289
3/4/2025	23:00:00	7.4	0.636	10.6	98,929	Open	11	291
3/4/2025	23:15:00	7.6	1.790	2.9	98,955	Open	11	291
3/4/2025	23:30:00	7.4	1.734	2.7	98,982	Open	11.1	294
3/4/2025	23:45:00	7.7	0.000	1.6	98,986	Open	11.3	298
3/5/2025	0:00:00	7.7	0.000	2.3	98,986	Open	12	298
3/5/2025	0:15:00	7.6	1.718	2.9	98,998	Open	11.1	298
3/5/2025	0:30:00	7.4	0.802	2.5	99,019	Open	11.1	298
3/5/2025	0:45:00	7.6	0.000	3.9	99,039	Open	11.1	296
3/5/2025	1:00:00	7.4	1.446	2	99,044	Open	11.2	306
3/5/2025	1:15:00	7.6	1.393	1.8	99,066	Open	11.2	301

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	1:30:00	7.6	0.946	1.6	99,085	Open	11.3	301
3/5/2025	1:45:00	7.5	1.514	1.3	99,104	Open	11.4	303
3/5/2025	2:00:00	7.6	1.730	1.7	99,122	Open	11.2	301
3/5/2025	2:15:00	7.6	1.715	1.7	99,147	Open	11.1	301
3/5/2025	2:30:00	7.4	1.681	0.8	99,173	Open	11.2	302
3/5/2025	2:45:00	7.8	0.000	0.6	99,177	Open	11.7	301
3/5/2025	3:00:00	7.8	0.000	0.5	99,177	Open	12.4	301
3/5/2025	3:15:00	7.5	1.658	0.6	99,200	Open	11.2	300
3/5/2025	3:30:00	7.6	0.640	1	99,220	Open	11.2	301
3/5/2025	3:45:00	7.4	0.322	0.6	99,241	Open	11.2	299
3/5/2025	4:00:00	7.4	0.197	0.1	99,244	Open	11.7	302
3/5/2025	4:15:00	7.7	1.722	0.2	99,266	Open	11.4	295
3/5/2025	4:30:00	7.4	1.340	0.3	99,291	Open	11.5	296
3/5/2025	4:45:00	7.4	1.726	0.1	99,313	Open	11.4	291
3/5/2025	5:00:00	7.6	0.344	0	99,338	Open	11.4	289
3/5/2025	5:15:00	7.4	0.000	0	99,339	Open	12.3	294
3/5/2025	5:30:00	7.4	0.000	0.1	99,339	Open	13	296
3/5/2025	5:45:00	7.6	1.715	0.5	99,357	Open	11.2	289
3/5/2025	6:00:00	7.3	1.688	0.6	99,383	Open	11	289
3/5/2025	6:15:00	7.7	1.639	0.9	99,408	Open	10.9	288
3/5/2025	6:30:00	7.7	0.000	1.1	99,418	Open	11.1	288
3/5/2025	6:45:00	7.7	0.000	0.8	99,418	Open	11.4	291
3/5/2025	7:00:00	7.4	1.601	0.7	99,436	Open	10.8	288
3/5/2025	7:15:00	7.5	1.752	2.6	99,448	Open	10.8	287
3/5/2025	7:30:00	7.5	1.771	0.9	99,459	Open	10.8	290

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	7:45:00	7.4	1.737	1.5	99,486	Open	10.8	288
3/5/2025	8:00:00	7.6	1.707	2.2	99,512	Open	10.8	288
3/5/2025	8:15:00	7.4	1.173	1.2	99,533	Open	10.8	286
3/5/2025	8:30:00	7.6	1.696	1.8	99,559	Open	10.7	286
3/5/2025	8:45:00	7.4	1.646	0.8	99,584	Open	10.6	286
3/5/2025	9:00:00	7.5	0.000	0.8	99,605	Open	10.6	288
3/5/2025	9:15:00	7.5	0.000	0.5	99,605	Open	11	293
3/5/2025	9:30:00	7.5	1.094	5.3	99,610	Open	10.8	295
3/5/2025	9:45:00	7.5	1.696	0.6	99,633	Open	10.8	287
3/5/2025	10:00:00	7.5	1.616	0.7	99,657	Open	10.8	290
3/5/2025	10:15:00	7.5	0.000	0.5	99,666	Open	11	294
3/5/2025	10:30:00	7.6	1.166	1.6	99,675	Open	10.9	294
3/5/2025	10:45:00	7.5	1.654	1.1	99,700	Open	11	292
3/5/2025	11:00:00	7.5	1.703	1.6	99,725	Open	11	291
3/5/2025	11:15:00	7.5	1.597	2.1	99,750	Open	11	291
3/5/2025	11:30:00	7.5	0.855	1.3	99,773	Open	11.1	291
3/5/2025	11:45:00	7.5	0.000	1.9	99,774	Open	11.3	293
3/5/2025	12:00:00	7.5	1.022	28.4	99,778	Open	11.2	293
3/5/2025	12:15:00	7.4	1.612	1.1	99,801	Open	11.1	293
3/5/2025	12:30:00	7.5	1.544	0.7	99,824	Open	11.2	294
3/5/2025	12:45:00	7.5	1.491	1	99,847	Open	11.2	294
3/5/2025	13:00:00	7.5	1.041	15.8	99,868	Open	11.3	296
3/5/2025	13:15:00	7.5	1.593	1	99,889	Open	11.3	297
3/5/2025	13:30:00	7.5	1.544	0.9	99,913	Open	11.3	296
3/5/2025	13:45:00	7.7	0.961	2	99,929	Open	11.5	297

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	14:00:00	7.5	1.756	1.6	99,954	Open	11.3	294
3/5/2025	14:15:00	7.4	1.684	1.8	99,980	Open	11.3	292
3/5/2025	14:30:00	7.5	1.730	1.8	99,998	Open	11.3	288
3/5/2025	14:45:00	7.5	1.628	1.5	100,023	Open	11.2	288
3/5/2025	15:00:00	7.5	0.447	2	100,047	Open	11.2	292
3/5/2025	15:15:00	7.5	0.000	1.3	100,047	Open	11.6	299
3/5/2025	15:30:00	7.5	0.000	1.2	100,047	Open	12.1	299
3/5/2025	15:45:00	7.5	1.544	5.1	100,063	Open	11.4	297
3/5/2025	16:00:00	7.5	1.499	8.6	100,086	Open	11.4	295
3/5/2025	16:15:00	7.5	1.718	3.5	100,100	Open	11.3	292
3/5/2025	16:30:00	7.5	1.628	4.1	100,125	Open	11.3	292
3/5/2025	16:45:00	7.6	1.559	5.1	100,149	Open	11.2	292
3/5/2025	17:00:00	7.5	0.000	1.8	100,155	Open	11.4	298
3/5/2025	17:15:00	7.5	0.000	1.3	100,155	Open	11.7	300
3/5/2025	17:30:00	7.5	0.602	9.1	100,163	Open	11.2	297
3/5/2025	17:45:00	7.5	1.643	0.7	100,185	Open	11.2	294
3/5/2025	18:00:00	7.5	1.575	1	100,209	Open	11.2	293
3/5/2025	18:15:00	7.5	1.525	1.6	100,232	Open	11.1	292
3/5/2025	18:30:00	7.5	0.609	4.8	100,253	Open	11.2	290
3/5/2025	18:45:00	7.6	0.000	1.5	100,258	Open	11.4	295
3/5/2025	19:00:00	7.6	0.000	1.6	100,258	Open	12.2	295
3/5/2025	19:15:00	7.5	1.646	0.2	100,280	Open	11.1	291
3/5/2025	19:30:00	7.4	1.067	6.3	100,303	Open	11	289
3/5/2025	19:45:00	7.6	0.000	3.7	100,306	Open	11.3	296
3/5/2025	20:00:00	7.4	0.000	10.6	100,320	Open	10.8	293

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/5/2025	20:15:00	7.5	0.503	10.8	100,324	Open	10.9	293
3/5/2025	20:30:00	7.5	1.605	1.2	100,331	Open	10.9	294
3/5/2025	20:45:00	7.4	1.484	1.1	100,354	Open	10.8	295
3/5/2025	21:00:00	7.5	1.469	1.5	100,376	Open	10.8	297
3/5/2025	21:15:00	7.6	1.446	2	100,398	Open	10.7	297
3/5/2025	21:30:00	7.5	1.809	2	100,421	Open	10.6	296
3/5/2025	21:45:00	7.6	1.768	1.7	100,448	Open	10.6	298
3/5/2025	22:00:00	7.5	0.757	1.9	100,465	Open	10.7	298
3/5/2025	22:15:00	7.5	0.000	1.6	100,467	Open	10.9	299
3/5/2025	22:30:00	7.6	1.476	1.8	100,480	Open	10.4	300
3/5/2025	22:45:00	7.5	1.461	1.7	100,502	Open	10.4	299
3/5/2025	23:00:00	7.4	1.393	1.6	100,523	Open	10.4	302
3/5/2025	23:15:00	7.6	1.472	1.2	100,543	Open	10.5	305
3/5/2025	23:30:00	7.5	1.533	0.9	100,565	Open	10.6	300
3/5/2025	23:45:00	7.5	1.465	0.6	100,588	Open	10.7	299
3/6/2025	0:00:00	7.5	1.423	0.6	100,609	Open	10.8	298
3/6/2025	0:15:00	7.5	1.400	0.5	100,631	Open	10.9	300
3/6/2025	0:30:00	7.5	1.385	1.3	100,652	Open	11	300
3/6/2025	0:45:00	7.6	1.363	1.5	100,672	Open	11.1	300
3/6/2025	1:00:00	7.5	0.000	0.9	100,676	Open	11.7	304
3/6/2025	1:15:00	7.5	0.000	0.7	100,676	Open	15.9	305
3/6/2025	1:30:00	7.6	0.526	43.4	100,690	Open	10.9	304
3/6/2025	1:45:00	7.5	0.000	1.3	100,692	Open	10.5	303
3/6/2025	2:00:00	7.5	1.605	0.6	100,712	Open	10.5	302
3/6/2025	2:15:00	7.5	1.575	0.8	100,736	Open	10.5	298

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	2:30:00	7.4	1.522	1.5	100,759	Open	10.6	297
3/6/2025	2:45:00	7.5	0.000	0.8	100,778	Open	10.6	298
3/6/2025	3:00:00	7.5	0.000	0.9	100,778	Open	11.1	303
3/6/2025	3:15:00	7.5	0.000	0.9	100,778	Open	11.6	303
3/6/2025	3:30:00	7.6	1.688	1	100,783	Open	10.9	302
3/6/2025	3:45:00	7.5	1.696	1.2	100,808	Open	10.5	298
3/6/2025	4:00:00	7.4	1.650	1	100,833	Open	10.5	295
3/6/2025	4:15:00	7.5	0.371	9.3	100,857	Open	10.5	295
3/6/2025	4:30:00	7.5	0.000	1.7	100,863	Open	10.6	295
3/6/2025	4:45:00	7.5	1.616	1.5	100,879	Open	10.7	291
3/6/2025	5:00:00	7.5	1.544	1.3	100,903	Open	10.7	293
3/6/2025	5:15:00	7.5	1.491	0.8	100,926	Open	10.8	288
3/6/2025	5:30:00	7.4	1.673	0.7	100,948	Open	10.9	289
3/6/2025	5:45:00	7.5	1.616	1	100,973	Open	11	291
3/6/2025	6:00:00	7.5	0.000	0.5	100,979	Open	11.6	291
3/6/2025	6:15:00	7.4	1.207	0	100,988	Open	11.1	291
3/6/2025	6:30:00	7.5	1.336	0	101,003	Open	11	287
3/6/2025	6:45:00	7.4	1.677	0.2	101,028	Open	10.9	284
3/6/2025	7:00:00	7.5	1.438	0	101,051	Open	11	284
3/6/2025	7:15:00	7.4	1.480	0.2	101,071	Open	11	284
3/6/2025	7:30:00	7.4	1.461	1	101,092	Open	10.8	280
3/6/2025	7:45:00	7.4	1.416	1	101,114	Open	10.7	282
3/6/2025	8:00:00	7.5	1.336	1.5	101,134	Open	10.6	279
3/6/2025	8:15:00	7.6	0.000	1.8	101,151	Open	10.5	285
3/6/2025	8:30:00	7.6	0.000	1.2	101,151	Open	10.8	292

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	8:45:00	7.4	1.283	1.7	101,157	Open	10.5	290
3/6/2025	9:00:00	7.6	1.272	1.3	101,176	Open	10.4	292
3/6/2025	9:15:00	7.5	1.249	1.6	101,195	Open	10.5	290
3/6/2025	9:30:00	7.4	1.211	1.6	101,213	Open	10.5	292
3/6/2025	9:45:00	7.4	1.506	2.1	101,229	Open	10.6	293
3/6/2025	10:00:00	7.5	1.366	1.2	101,250	Open	10.6	292
3/6/2025	10:15:00	7.5	1.412	1.7	101,271	Open	10.8	292
3/6/2025	10:30:00	7.6	1.397	1.6	101,292	Open	10.9	294
3/6/2025	10:45:00	7.5	1.484	1	101,312	Open	10.9	293
3/6/2025	11:00:00	7.6	0.273	1.2	101,333	Open	10.9	292
3/6/2025	11:15:00	7.6	1.446	1	101,337	Open	11.1	297
3/6/2025	11:30:00	7.4	1.389	1	101,358	Open	11	297
3/6/2025	11:45:00	7.5	1.537	15.1	101,376	Open	11.1	293
3/6/2025	12:00:00	7.6	1.510	1.4	101,399	Open	11.1	297
3/6/2025	12:15:00	7.5	1.457	1.2	101,421	Open	11.2	295
3/6/2025	12:30:00	7.4	1.385	0.9	101,443	Open	11.3	293
3/6/2025	12:45:00	7.6	0.681	15.6	101,461	Open	11.4	293
3/6/2025	13:00:00	7.6	1.457	2.6	101,482	Open	11.4	295
3/6/2025	13:15:00	7.5	0.000	1.7	101,499	Open	11.5	298
3/6/2025	13:30:00	7.5	0.000	1.6	101,499	Open	11.8	300
3/6/2025	13:45:00	7.5	0.863	1.5	101,508	Open	11.7	299
3/6/2025	14:00:00	7.5	1.419	1.2	101,528	Open	11.6	297
3/6/2025	14:15:00	7.6	1.378	2.5	101,548	Open	11.6	297
3/6/2025	14:30:00	7.4	1.340	1.2	101,569	Open	11.6	298
3/6/2025	14:45:00	7.6	1.310	2.2	101,589	Open	11.6	297

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	15:00:00	7.4	1.397	1.3	101,607	Open	11.6	295
3/6/2025	15:15:00	7.5	1.336	1.2	101,628	Open	11.6	295
3/6/2025	15:30:00	7.5	1.294	2.6	101,648	Open	11.6	295
3/6/2025	15:45:00	7.4	0.000	0.9	101,654	Open	11.7	298
3/6/2025	16:00:00	7.4	0.000	0.8	101,654	Open	12	302
3/6/2025	16:15:00	7.4	1.245	1.2	101,666	Open	11.6	300
3/6/2025	16:30:00	7.6	1.245	3.6	101,685	Open	11.6	303
3/6/2025	16:45:00	7.4	1.181	1.5	101,702	Open	11.6	300
3/6/2025	17:00:00	7.5	1.412	3	101,720	Open	11.5	298
3/6/2025	17:15:00	7.4	1.404	4.7	101,741	Open	11.5	298
3/6/2025	17:30:00	7.5	1.366	5.7	101,761	Open	11.6	299
3/6/2025	17:45:00	7.4	0.000	5.2	101,775	Open	11.7	299
3/6/2025	18:00:00	7.4	0.000	3.8	101,775	Open	12.1	300
3/6/2025	18:15:00	7.5	1.329	11.9	101,778	Open	11.9	302
3/6/2025	18:30:00	7.4	1.366	8.4	101,797	Open	11.4	298
3/6/2025	18:45:00	7.8	1.665	4.8	101,815	Open	11.3	290
3/6/2025	19:00:00	7.9	1.355	5.4	101,837	Open	11.3	286
3/6/2025	19:15:00	8	1.359	4.9	101,857	Open	11.5	281
3/6/2025	19:30:00	8	1.374	11	101,878	Open	11.5	281
3/6/2025	19:45:00	7.5	1.408	10.1	101,895	Open	11.7	292
3/6/2025	20:00:00	7.4	1.359	5.7	101,915	Open	12.2	294
3/6/2025	20:15:00	7.5	1.370	10.6	101,931	Open	11.8	288
3/6/2025	20:30:00	7.4	1.060	16.8	101,937	Open	11.5	290
3/6/2025	20:45:00	7.5	0.000	3.3	101,941	Open	11.7	302
3/6/2025	21:00:00	7.5	0.000	4.2	101,941	Open	12.2	303

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
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Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/6/2025	21:15:00	7.4	1.098	2.4	101,956	Open	11.1	298
3/6/2025	21:30:00	7.4	0.897	11.6	101,971	Open	11.1	296
3/6/2025	21:45:00	7.8	0.000	9.9	101,976	Open	11.1	298
3/6/2025	22:00:00	7.8	0.000	9.5	101,976	Open	11.2	296
3/6/2025	22:15:00	7.4	0.284	4.5	101,985	Open	11.4	299
3/6/2025	22:30:00	7.8	1.681	7.6	102,004	Open	11	289
3/6/2025	22:45:00	7.6	1.635	13.3	102,029	Open	11	291
3/6/2025	23:00:00	7.6	0.193	12.6	102,051	Open	11	294
3/6/2025	23:15:00	7.5	1.416	5.7	102,064	Open	10.7	304
3/6/2025	23:30:00	7.5	1.188	8.9	102,080	Open	10.9	294
3/6/2025	23:45:00	7.4	1.238	8.6	102,096	Open	11	292
3/7/2025	0:00:00	7.4	1.257	7.1	102,114	Open	10.9	290
3/7/2025	0:15:00	7.6	1.567	9.4	102,130	Open	10.9	292
3/7/2025	0:30:00	7.4	1.503	9.9	102,153	Open	10.9	291
3/7/2025	0:45:00	7.5	1.510	9.8	102,175	Open	10.7	293
3/7/2025	1:00:00	7.4	0.238	9.8	102,189	Open	10.6	289
3/7/2025	1:15:00	7.4	0.484	70.8	102,202	Open	10.7	298
3/7/2025	1:30:00	7.6	1.310	6.6	102,218	Open	10.7	298
3/7/2025	1:45:00	7.6	1.294	6.3	102,237	Open	10.8	296
3/7/2025	2:00:00	7.6	1.238	5.3	102,256	Open	11.1	296
3/7/2025	2:15:00	7.6	0.000	61.6	102,264	Open	11.1	297
3/7/2025	2:30:00	7.3	1.495	6.1	102,286	Open	11	292
3/7/2025	2:45:00	7.6	1.476	8.2	102,308	Open	10.9	290
3/7/2025	3:00:00	7.4	0.965	4.4	102,321	Open	11.8	292
3/7/2025	3:15:00	7.6	0.155	1.8	102,334	Open	12.4	295

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	3:30:00	7.6	1.465	4.4	102,352	Open	11.3	295
3/7/2025	3:45:00	7.5	0.223	6.2	102,372	Open	11.3	292
3/7/2025	4:00:00	7.3	0.000	13	102,378	Closed	10.9	293
3/7/2025	4:15:00	7.4	1.355	4.4	102,395	Open	10.8	292
3/7/2025	4:30:00	7.5	1.344	2.4	102,415	Open	10.8	292
3/7/2025	4:45:00	7.5	1.332	2.8	102,436	Open	11	288
3/7/2025	5:00:00	7.6	1.382	4.7	102,454	Open	11.2	288
3/7/2025	5:15:00	7.5	1.321	4.1	102,475	Open	11	284
3/7/2025	5:30:00	7.5	0.000	3.4	102,491	Closed	10.9	283
3/7/2025	5:45:00	7.5	0.000	3.2	102,491	Closed	11.2	286
3/7/2025	6:00:00	7.5	0.000	3.1	102,491	Closed	12	288
3/7/2025	6:15:00	7.6	1.325	2.5	102,506	Open	11.2	286
3/7/2025	6:30:00	7.6	0.503	2.2	102,525	Closed	11.3	284
3/7/2025	6:45:00	7.4	0.814	2.8	102,541	Open	10.8	281
3/7/2025	7:00:00	7.4	1.741	4.3	102,559	Open	10.7	279
3/7/2025	7:15:00	7.6	1.699	7.3	102,585	Open	10.6	280
3/7/2025	7:30:00	7.4	1.453	4.3	102,608	Open	10.7	281
3/7/2025	7:45:00	7.5	1.457	2.6	102,630	Open	10.8	281
3/7/2025	8:00:00	7.6	1.453	2.5	102,651	Open	10.7	281
3/7/2025	8:15:00	7.4	1.393	2.1	102,672	Open	10.6	281
3/7/2025	8:30:00	7.5	1.162	1.5	102,682	Closed	10.4	281
3/7/2025	8:45:00	7.5	0.806	6	102,682	Closed	10.4	282
3/7/2025	9:00:00	7.5	1.559	2	102,701	Open	10.4	282
3/7/2025	9:15:00	7.4	1.495	1.7	102,724	Open	10.4	281
3/7/2025	9:30:00	7.6	1.499	1.9	102,747	Open	10.5	280

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	9:45:00	7.4	1.030	1.8	102,768	Open	10.6	280
3/7/2025	10:00:00	7.5	1.495	1.6	102,789	Open	10.7	281
3/7/2025	10:15:00	7.4	1.552	7.1	102,796	Open	11	282
3/7/2025	10:30:00	7.6	0.000	1	102,797	Closed	11	284
3/7/2025	10:45:00	7.5	1.056	0.3	102,816	Open	10.7	282
3/7/2025	11:00:00	7.6	1.552	1.9	102,836	Open	10.8	283
3/7/2025	11:15:00	7.5	1.540	1.6	102,860	Open	10.9	283
3/7/2025	11:30:00	7.4	1.514	0.9	102,883	Open	10.9	282
3/7/2025	11:45:00	7.5	1.506	1.5	102,905	Open	11	282
3/7/2025	12:00:00	7.5	1.518	2.7	102,925	Open	11	281
3/7/2025	12:15:00	7.6	0.000	3.9	102,942	Closed	11.1	281
3/7/2025	12:30:00	7.5	0.000	3.8	102,942	Closed	11.4	282
3/7/2025	12:45:00	7.5	1.533	2	102,956	Open	11	282
3/7/2025	13:00:00	7.4	1.548	3.6	102,976	Open	10.9	283
3/7/2025	13:15:00	7.5	1.529	4.4	102,999	Open	11	283
3/7/2025	13:30:00	7.5	1.499	4.2	103,022	Open	11	283
3/7/2025	13:45:00	7.5	1.461	3.8	103,044	Open	11	283
3/7/2025	14:00:00	7.5	0.000	5	103,058	Closed	11	286
3/7/2025	14:15:00	7.5	0.000	4.9	103,058	Closed	11.2	288
3/7/2025	14:30:00	7.6	1.559	2.2	103,070	Open	10.9	289
3/7/2025	14:45:00	7.7	1.548	2.2	103,093	Open	10.9	289
3/7/2025	15:00:00	7.7	1.522	5.6	103,113	Open	10.9	288
3/7/2025	15:15:00	7.8	1.499	4.6	103,136	Open	10.9	286
3/7/2025	15:30:00	8.1	1.510	4.9	103,159	Open	10.9	286
3/7/2025	15:45:00	8.6	1.503	4.8	103,181	Open	10.9	280

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	16:00:00	8.2	0.000	0.7	103,192	Closed	11.3	112
3/7/2025	16:15:00	7.8	1.503	3.7	103,213	Open	11	283
3/7/2025	16:30:00	7.7	0.000	4.6	103,230	Closed	11.1	287
3/7/2025	16:45:00	7.7	0.038	4.6	103,230	Closed	11.4	288
3/7/2025	17:00:00	7.6	1.416	3.2	103,250	Open	11	287
3/7/2025	17:15:00	7.6	1.389	2.7	103,271	Open	11	286
3/7/2025	17:30:00	7.6	1.359	2.6	103,292	Open	11	286
3/7/2025	17:45:00	7.7	1.344	3	103,312	Open	11	283
3/7/2025	18:00:00	7.7	1.336	3.7	103,332	Open	11	280
3/7/2025	18:15:00	7.8	1.313	3.3	103,352	Open	11	280
3/7/2025	18:30:00	7.8	1.283	3.8	103,371	Open	11	277
3/7/2025	18:45:00	7.9	1.272	4	103,391	Open	11	277
3/7/2025	19:00:00	7.9	1.279	3.7	103,410	Open	11	277
3/7/2025	19:15:00	7.7	0.000	3.8	103,415	Closed	11	277
3/7/2025	19:30:00	7.7	0.000	2.8	103,415	Closed	11.2	278
3/7/2025	19:45:00	7.5	1.503	2	103,431	Open	10.8	279
3/7/2025	20:00:00	7.5	1.461	1.7	103,453	Open	10.8	281
3/7/2025	20:15:00	7.5	1.446	2.4	103,474	Open	10.8	281
3/7/2025	20:30:00	7.4	1.370	4	103,496	Open	10.8	281
3/7/2025	20:45:00	7.4	0.655	5.9	103,516	Open	10.8	284
3/7/2025	21:00:00	7.4	0.000	10.7	103,516	Closed	10.6	281
3/7/2025	21:15:00	7.6	0.000	4.8	103,517	Closed	10.7	286
3/7/2025	21:30:00	7.5	1.631	4.4	103,536	Open	10.6	287
3/7/2025	21:45:00	7.5	1.575	4.6	103,560	Open	10.7	286
3/7/2025	22:00:00	7.4	1.544	5	103,584	Open	10.7	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/7/2025	22:15:00	7.8	0.000	10.8	103,592	Closed	10.7	286
3/7/2025	22:30:00	7.4	1.563	4	103,602	Open	10.7	286
3/7/2025	22:45:00	7.6	1.548	3.7	103,625	Open	10.8	284
3/7/2025	23:00:00	7.4	1.514	2.4	103,648	Open	10.8	284
3/7/2025	23:15:00	7.5	0.000	2.5	103,660	Closed	10.8	284
3/7/2025	23:30:00	7.4	1.563	1.3	103,673	Open	11	282
3/7/2025	23:45:00	7.6	1.435	1.1	103,695	Open	11.1	281
3/8/2025	0:00:00	7.5	1.472	3.1	103,718	Open	11.4	284
3/8/2025	0:15:00	7.5	1.847	1.7	103,739	Open	11.5	284
3/8/2025	0:30:00	7.7	1.703	2	103,765	Open	11.2	283
3/8/2025	0:45:00	7.8	1.681	2.9	103,791	Open	11.3	281
3/8/2025	1:00:00	7.9	0.954	9.7	103,813	Open	11.4	279
3/8/2025	1:15:00	8.2	1.654	3.7	103,836	Open	11.5	277
3/8/2025	1:30:00	8.2	0.000	3.7	103,856	Closed	11.6	277
3/8/2025	1:45:00	8.2	0.000	3.1	103,856	Closed	12.4	276
3/8/2025	2:00:00	8.1	0.000	4.3	103,856	Closed	13.4	276
3/8/2025	2:15:00	8.2	1.718	4.5	103,879	Open	11.6	277
3/8/2025	2:30:00	8.3	1.018	9.2	103,904	Open	11.6	274
3/8/2025	2:45:00	8.3	1.768	4.3	103,923	Open	12	277
3/8/2025	3:00:00	7.5	1.662	5.2	103,949	Open	11.7	289
3/8/2025	3:15:00	7	1.537	4.2	103,973	Open	11.7	300
3/8/2025	3:30:00	7.5	1.491	17.6	103,996	Open	11.7	296
3/8/2025	3:45:00	6.7	0.000	9	103,999	Open	12.1	299
3/8/2025	4:00:00	7.2	1.586	4.6	104,021	Open	11.7	298
3/8/2025	4:15:00	7.6	1.499	8.9	104,044	Open	11.8	296

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	4:30:00	7.2	1.639	2.9	104,061	Open	11.8	299
3/8/2025	4:45:00	7	1.567	2.7	104,085	Open	11.9	296
3/8/2025	5:00:00	7.3	1.453	5.2	104,107	Open	12.1	299
3/8/2025	5:15:00	7.6	1.397	10.2	104,129	Open	12.1	294
3/8/2025	5:30:00	6.8	1.552	10.2	104,148	Open	12.2	296
3/8/2025	5:45:00	7.7	0.000	10.6	104,158	Closed	12.4	291
3/8/2025	6:00:00	7.1	0.954	15.6	104,160	Open	12.6	292
3/8/2025	6:15:00	7.5	1.669	8.6	104,181	Open	11.6	291
3/8/2025	6:30:00	7.6	1.529	10.9	104,205	Open	11.4	289
3/8/2025	6:45:00	7.6	1.499	8.4	104,227	Open	11.2	287
3/8/2025	7:00:00	7.6	1.431	4.9	104,249	Open	11.4	285
3/8/2025	7:15:00	7.4	1.397	2.2	104,259	Open	11.4	289
3/8/2025	7:30:00	6.9	1.556	1.2	104,282	Open	11.2	281
3/8/2025	7:45:00	7.5	1.423	1.2	104,304	Open	11.1	286
3/8/2025	8:00:00	6.9	0.503	4.5	104,322	Open	11.1	282
3/8/2025	8:15:00	7.5	1.291	1.5	104,340	Open	11	282
3/8/2025	8:30:00	7	1.067	1.1	104,358	Open	11	280
3/8/2025	8:45:00	7.5	1.022	1.4	104,373	Open	11.1	287
3/8/2025	9:00:00	7.6	0.522	5.5	104,388	Open	11.1	286
3/8/2025	9:15:00	7.4	1.457	2.3	104,406	Open	10.8	286
3/8/2025	9:30:00	7.6	1.435	3	104,428	Open	10.7	279
3/8/2025	9:45:00	7.4	1.404	2.5	104,449	Open	10.7	283
3/8/2025	10:00:00	7.6	1.393	2.5	104,470	Open	10.7	281
3/8/2025	10:15:00	7.4	1.419	1.7	104,488	Open	10.8	284
3/8/2025	10:30:00	7.1	1.412	2.8	104,509	Open	10.8	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	10:45:00	7.5	1.385	2.9	104,530	Open	10.9	288
3/8/2025	11:00:00	7.2	1.332	2.7	104,551	Open	11	293
3/8/2025	11:15:00	7.5	1.423	4.7	104,568	Open	11	293
3/8/2025	11:30:00	7.4	1.355	5.5	104,589	Open	10.9	299
3/8/2025	11:45:00	7.6	0.000	5.7	104,602	Open	11	297
3/8/2025	12:00:00	7.6	0.000	4.6	104,602	Open	11.7	295
3/8/2025	12:15:00	7.1	1.488	3.6	104,605	Open	11.1	297
3/8/2025	12:30:00	6.9	1.136	6.8	104,618	Closed	11	298
3/8/2025	12:45:00	7.5	1.495	5.8	104,626	Open	11.1	300
3/8/2025	13:00:00	7.1	1.359	5.5	104,648	Open	11.3	303
3/8/2025	13:15:00	7.4	1.514	5.8	104,664	Open	11.8	305
3/8/2025	13:30:00	7.5	1.461	7.4	104,686	Open	11	297
3/8/2025	13:45:00	7.5	1.419	6.4	104,708	Open	11.2	298
3/8/2025	14:00:00	7.3	1.370	4.9	104,729	Open	11.5	299
3/8/2025	14:15:00	7	0.662	15.5	104,746	Open	12	297
3/8/2025	14:30:00	7.5	1.609	6	104,767	Open	11.5	298
3/8/2025	14:45:00	7.5	1.540	7.4	104,790	Open	11.4	298
3/8/2025	15:00:00	7.2	1.469	6	104,812	Open	11.3	296
3/8/2025	15:15:00	7.5	0.246	52.4	104,831	Closed	11.3	291
3/8/2025	15:30:00	7.5	1.537	9.6	104,846	Open	11.1	294
3/8/2025	15:45:00	7.2	1.249	6.7	104,868	Open	11.3	295
3/8/2025	16:00:00	7.5	1.287	7.8	104,887	Open	11.7	297
3/8/2025	16:15:00	7.5	1.389	19.1	104,901	Open	13.5	296
3/8/2025	16:30:00	7.5	1.692	7.5	104,924	Open	11.2	287
3/8/2025	16:45:00	7.5	1.628	7.9	104,949	Open	11.2	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	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	17:00:00	7.6	1.567	10.3	104,973	Open	11.4	287
3/8/2025	17:15:00	7.1	1.783	9	104,991	Open	11.9	299
3/8/2025	17:30:00	7.1	1.559	11.3	105,005	Open	11.3	287
3/8/2025	17:45:00	7.5	1.461	9.8	105,015	Open	11.6	286
3/8/2025	18:00:00	7.5	1.397	8.3	105,036	Open	12.3	287
3/8/2025	18:15:00	7.5	1.306	6.8	105,056	Open	12.9	287
3/8/2025	18:30:00	7.5	1.340	5.5	105,073	Open	13.7	289
3/8/2025	18:45:00	7.5	1.378	4.6	105,094	Open	14.2	287
3/8/2025	19:00:00	7.5	1.310	4.9	105,114	Open	14.9	288
3/8/2025	19:15:00	7.5	1.268	4.4	105,133	Open	15.6	286
3/8/2025	19:30:00	6.9	1.662	15.4	105,145	Closed	11.7	279
3/8/2025	19:45:00	7.1	1.419	8.5	105,163	Open	11.6	292
3/8/2025	20:00:00	7	1.332	7.2	105,184	Open	11.5	296
3/8/2025	20:15:00	6.9	0.000	18	105,196	Open	11.3	297
3/8/2025	20:30:00	7.6	0.000	13.2	105,213	Closed	11.7	294
3/8/2025	20:45:00	7.5	1.794	8.8	105,228	Open	11.2	295
3/8/2025	21:00:00	7.3	1.692	6.9	105,254	Open	11.1	291
3/8/2025	21:15:00	7	0.197	17.5	105,271	Open	11	296
3/8/2025	21:30:00	7	2.029	17.2	105,279	Open	11.7	288
3/8/2025	21:45:00	7.6	1.877	6.8	105,307	Open	11.3	288
3/8/2025	22:00:00	7.5	1.737	9.3	105,334	Open	11.4	294
3/8/2025	22:15:00	7.4	0.500	31.2	105,352	Open	11.2	298
3/8/2025	22:30:00	7.4	1.313	14.9	105,372	Open	11.2	301
3/8/2025	22:45:00	7.6	1.457	11.6	105,396	Open	12	297
3/8/2025	23:00:00	7.3	0.136	28.9	105,418	Open	11.4	301

FRONTIER-KEMPER MICHELS® joint venture		Eagle Mountain- Woodfibre Gas Pipeline Project- Tunnel Scope	
Title	**WoodFibre Weekly Water Discharge Report**	**Revision:**	**0**
Data Date Range	**March 3, 2025 to March 9, 2025**	**Prepared by:** **Approved by:** **Date:**	**SD** **BC2** **March 12, 2025**

Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/8/2025	23:15:00	7.5	1.821	18.7	105,444	Open	11.5	305
3/8/2025	23:30:00	7.1	1.692	8.8	105,469	Open	11.6	303
3/8/2025	23:45:00	7.1	1.635	8.9	105,494	Open	12.5	309
3/9/2025	0:00:00	7	1.646	20.2	105,514	Open	11.6	299
3/9/2025	0:15:00	7.1	1.385	11.1	105,528	Open	11.9	296
3/9/2025	0:30:00	7.1	1.340	4.7	105,546	Open	13.3	302
3/9/2025	0:45:00	7.1	1.340	4.8	105,565	Open	12.1	299
3/9/2025	1:00:00	7.5	1.805	9.4	105,585	Open	11.9	288
3/9/2025	1:15:00	6.8	1.798	6.8	105,612	Open	12.6	299
3/9/2025	1:30:00	7.1	1.794	6.1	105,639	Open	11.9	291
3/9/2025	1:45:00	7.4	1.779	8.5	105,665	Open	11.8	288
3/9/2025	2:00:00	7.6	1.741	14.4	105,685	Open	11.7	289
3/9/2025	2:15:00	6.9	1.737	8.2	105,711	Open	11.7	294
3/9/2025	2:30:00	7.4	1.749	8.7	105,737	Open	11.9	288
3/9/2025	2:45:00	6.8	1.741	12.7	105,759	Open	12	291
3/9/2025	3:00:00	7.2	1.726	13.7	105,785	Open	11.8	284
3/9/2025	3:15:00	7.1	0.000	51.2	105,808	Open	11.9	284
3/9/2025	3:30:00	7.3	1.472	8.7	105,823	Open	12.2	284
3/9/2025	3:45:00	7.4	1.431	5.8	105,845	Open	12.9	289
3/9/2025	4:00:00	7.3	1.276	7.4	105,867	Open	13.4	287
3/9/2025	4:15:00	7.4	1.355	6.4	105,887	Open	14.2	289
3/9/2025	4:30:00	7.4	0.901	6.5	105,907	Open	15.6	288
3/9/2025	4:45:00	7.4	1.423	5.7	105,926	Open	16.6	287
3/9/2025	5:00:00	7.4	1.911	5.5	105,951	Open	17.5	288
3/9/2025	5:15:00	7.4	1.911	5.5	105,980	Open	18.2	288

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Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	5:30:00	7.4	1.870	5.9	106,009	Open	18.8	292
3/9/2025	5:45:00	7.4	1.927	5.1	106,035	Open	19.6	290
3/9/2025	6:00:00	7.7	1.098	48.7	106,043	Closed	14	281
3/9/2025	6:15:00	7.1	1.783	3.6	106,069	Open	11.7	280
3/9/2025	6:30:00	7.1	0.182	51.5	106,089	Open	11.3	281
3/9/2025	6:45:00	7.5	1.533	80.8	106,111	Open	11.6	282
3/9/2025	7:00:00	7.3	1.726	5.3	106,132	Open	11.3	283
3/9/2025	7:15:00	7	1.628	4	106,157	Open	11.3	281
3/9/2025	7:30:00	7.5	0.689	4.5	106,180	Open	11.2	281
3/9/2025	7:45:00	7.3	1.760	2.9	106,203	Open	11.2	280
3/9/2025	8:00:00	7	1.699	2.4	106,229	Open	11.2	281
3/9/2025	8:15:00	7.5	1.677	3.9	106,254	Open	11.2	282
3/9/2025	8:30:00	7.4	1.612	3	106,278	Open	11.2	282
3/9/2025	8:45:00	7	1.749	0.6	106,301	Open	11.4	279
3/9/2025	9:00:00	7.6	1.707	1.4	106,327	Open	11.3	277
3/9/2025	9:15:00	7.5	1.677	1.1	106,352	Open	11.4	281
3/9/2025	9:30:00	7.4	1.605	1.4	106,377	Open	11.6	281
3/9/2025	9:45:00	7.2	1.707	0.7	106,399	Open	11.7	274
3/9/2025	10:00:00	7.5	1.662	2.3	106,424	Open	11.7	276
3/9/2025	10:15:00	7.4	1.605	2.2	106,449	Open	11.7	281
3/9/2025	10:30:00	7	1.537	1.8	106,472	Open	11.8	278
3/9/2025	10:45:00	7.5	1.749	1.3	106,489	Open	11.5	277
3/9/2025	11:00:00	7.4	1.669	5.1	106,515	Open	11.5	278
3/9/2025	11:15:00	7	1.628	4.3	106,540	Open	11.6	276
3/9/2025	11:30:00	7.5	1.575	5.3	106,563	Open	11.7	276

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Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	11:45:00	7.3	1.677	2.9	106,582	Open	11.8	278
3/9/2025	12:00:00	6.9	1.662	3.8	106,608	Open	11.6	273
3/9/2025	12:15:00	7.5	1.605	9.6	106,632	Open	11.7	276
3/9/2025	12:30:00	7.5	1.529	8.5	106,655	Open	11.9	278
3/9/2025	12:45:00	7.4	1.711	6.4	106,670	Open	11.8	276
3/9/2025	13:00:00	7.1	1.612	3.6	106,695	Open	11.7	276
3/9/2025	13:15:00	7.6	1.586	6.8	106,719	Open	11.7	276
3/9/2025	13:30:00	7.5	1.525	4.8	106,742	Open	11.8	281
3/9/2025	13:45:00	7.4	1.688	9.5	106,759	Open	11.7	276
3/9/2025	14:00:00	7	1.677	1.8	106,784	Open	11.9	274
3/9/2025	14:15:00	7.6	1.631	3.3	106,809	Open	12	278
3/9/2025	14:30:00	7.5	1.533	3.5	106,832	Open	12	281
3/9/2025	14:45:00	7.1	1.079	0.8	106,854	Open	12	281
3/9/2025	15:00:00	7.6	1.650	1.7	106,876	Open	11.7	279
3/9/2025	15:15:00	7.5	1.593	3.1	106,900	Open	11.8	279
3/9/2025	15:30:00	7.3	1.525	3.1	106,924	Open	11.7	281
3/9/2025	15:45:00	7.6	1.264	2.6	106,946	Open	11.8	276
3/9/2025	16:00:00	7.4	1.578	1.7	106,966	Open	11.8	281
3/9/2025	16:15:00	7.5	1.525	3.2	106,990	Open	11.8	276
3/9/2025	16:30:00	7.2	1.435	2	107,012	Open	11.7	281
3/9/2025	16:45:00	7.2	1.385	2.4	107,028	Open	11.6	286
3/9/2025	17:00:00	7.5	1.540	1.8	107,046	Open	11.5	279
3/9/2025	17:15:00	7.2	1.529	1.3	107,069	Open	11.5	274
3/9/2025	17:30:00	7.5	1.476	4.1	107,091	Open	11.7	279
3/9/2025	17:45:00	7.3	1.423	1.9	107,113	Open	11.8	279

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Date	Time	Discharge pH	Flow Rate (m3)	Discharge NTU	Flow Total (m3)	Discharge Valve Status	Discharge Temperature (°C)	Discharge Conductivity (uS/cm)
3/9/2025	18:00:00	7.5	1.518	2.1	107,132	Open	11.9	276
3/9/2025	18:15:00	7.4	1.476	2.7	107,155	Open	11.9	276
3/9/2025	18:30:00	7.5	0.000	6.1	107,166	Closed	12	274
3/9/2025	18:45:00	7.5	1.499	29.2	107,166	Closed	12.7	272
3/9/2025	19:00:00	7.6	1.609	5.8	107,182	Open	11.7	273
3/9/2025	19:15:00	6.8	1.707	5.8	107,207	Open	11.8	290
3/9/2025	19:30:00	6.8	1.628	5.8	107,232	Open	12.7	297
3/9/2025	19:45:00	7.5	1.805	10.9	107,254	Open	11.9	282
3/9/2025	20:00:00	7.5	1.756	8.8	107,280	Open	11.8	279
3/9/2025	20:15:00	6.6	1.635	8.5	107,291	Open	11.2	277
3/9/2025	20:30:00	7.2	1.692	5.1	107,315	Open	11.4	282
3/9/2025	20:45:00	7.3	1.635	4.4	107,340	Open	11.7	283
3/9/2025	21:00:00	7.3	1.915	13.4	107,362	Open	12.1	283
3/9/2025	21:15:00	7	1.151	8	107,385	Open	11.5	275
3/9/2025	21:30:00	7	1.109	4	107,402	Open	11.9	277
3/9/2025	21:45:00	7	1.075	3	107,418	Open	12.3	276
3/9/2025	22:00:00	7	1.718	5.2	107,438	Open	13.2	274
3/9/2025	22:15:00	7	1.616	5.7	107,461	Open	14.1	271
3/9/2025	22:30:00	7.6	1.624	6.7	107,486	Open	12.1	271
3/9/2025	22:45:00	6.7	1.472	3.8	107,508	Open	12.8	276
3/9/2025	23:00:00	7.6	2.063	4.2	107,537	Open	11.8	274
3/9/2025	23:15:00	7.5	2.074	3.9	107,567	Open	11.7	276
3/9/2025	23:30:00	7.3	0.170	2.5	107,589	Open	11.9	276
3/9/2025	23:45:00	7.5	1.908	5.2	107,600	Open	11.6	276

Appendix B: Photos

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

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

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

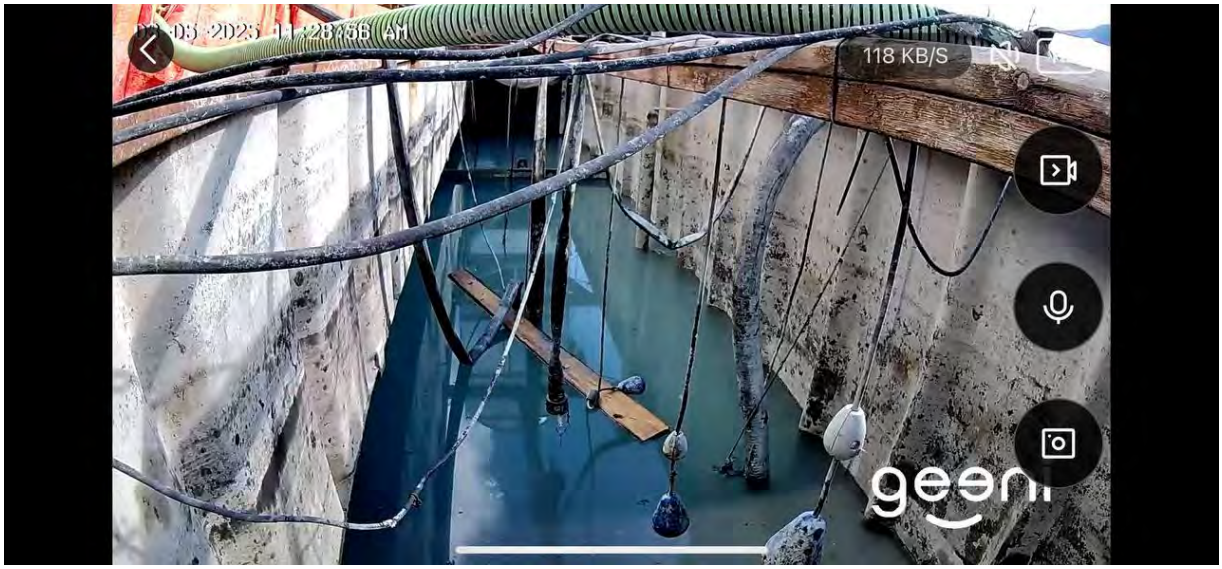
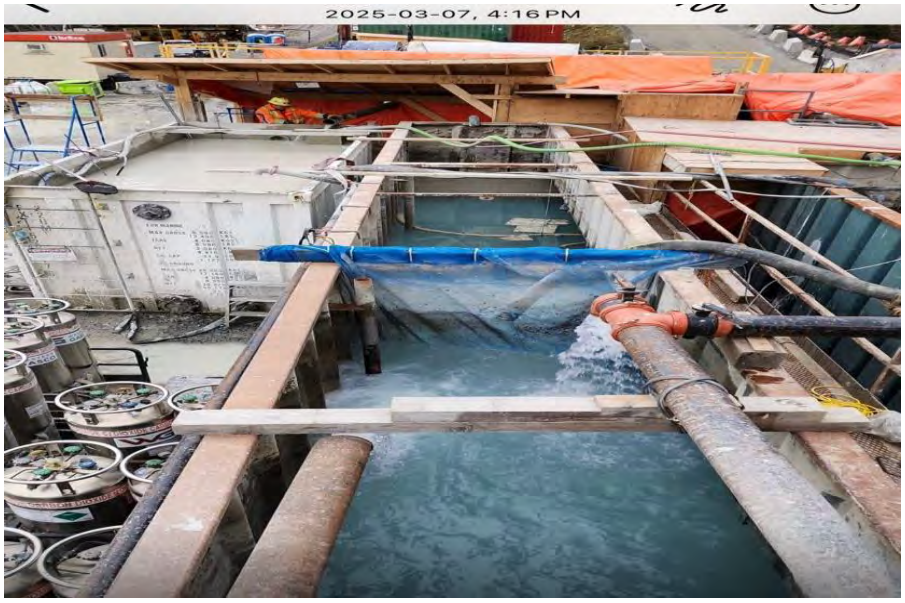


Photo 4: No visible sheen observed in the WTP water, March 6

Photo 5: No visible sheen observed in the WTP water, March 7


FortisBC Eagle Mountain-Woodfibre Gas Pipeline

Water Discharge Authorization Water Quality Monitoring

2025-3-4-Chycoski-20562

Project Component:	Tunnel	**Site Name:**	WLNG Treatment Discharge
Inspection Date:	03/04/2025	**Location:**	WLNG
Triton QP:	Lily Chycoski	**Latitude/Longitude:**	49.669953 -123.249108
Temperature(c):	Low 2 High 7	**Permit:**	PE 110136
Weather Conditions:	Light Rain	**Ground Conditions:**	Wet

Observations

Time: 10:27:00 **Flow Volume (visual):** N/A

Notes: Unable to filter any samples. Therefore, rinsed all dissolved bottles of preservative and filled with unfiltered sample. LC50 was taken, held until metals indicate need for LC50.

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	Yes		

Logger Maintenance

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

Describe Logger Maintenance

Photos

Photo: 1

Location: WLNG EOP

Description: End of pipe collection

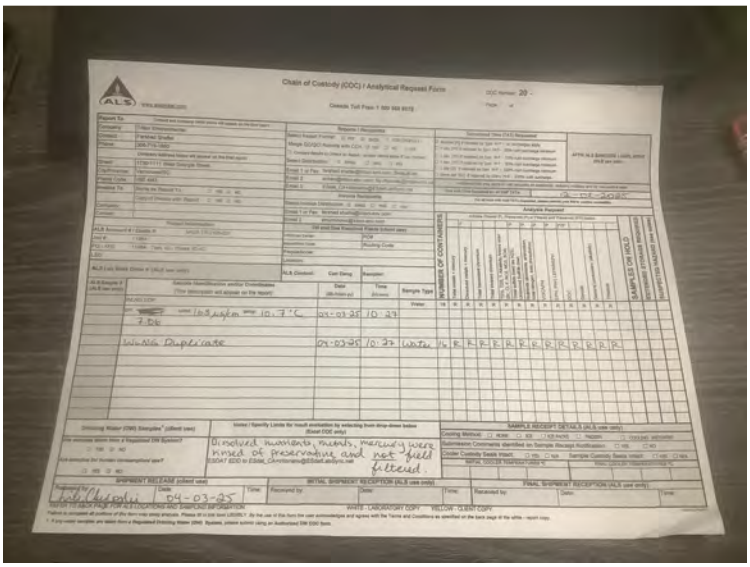


Photo: 2

Location: WLNG EOP

Description: Lab COC

Photos

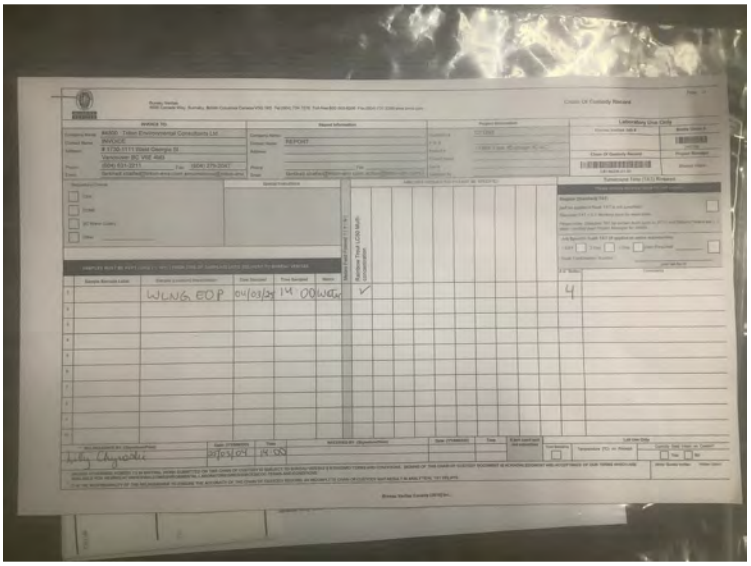


Photo: 3

Location: WLNG EOP

Description: LC50 lab COC

Photo: 4

Location: WLNG EOP

Description: EOP discharging

Sign Off

Report Prepared By: Lily Chycoski

Report Reviewed: Yes

Report Reviewer:

Professional(s) of Record:

Name:

Designation:

Designation Number:

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					VA25A4729-001	VA25A4729-002					
	Date Sampled					04-Mar-2025	04-Mar-2025					
	Time Sampled					11:03	10:01					
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	7.57	7.66		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]	-	7.1	8.8		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	-	-	-	-	16	80					
Turbidity (field)	NTU	Varies with background, see note Guideline = 8.0	Varies with background, see note Guideline = 4.20 5-week discrete sampling average = 2.66 (DS)	Varies with background, see note Guideline = 8.0	Varies with background, see note Guideline = 4.20 5-week discrete sampling average = 2.66 (DS)	0.02	0.48		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	10.95	10.77		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	-	-	-	-	5.49	30.3					
Total Dissolved Solids	mg/L	-	-	-	-	10	43					
Total Suspended Solids	mg/L	Varies with background, see note Guideline = 28.0	Varies with background, see note Guideline = 8.74 5-week discrete sampling average = 4.06 (DS)	Varies with background, see note Guideline = 28.0	Varies with background, see note Guideline = 8.74 5-week discrete sampling average = 4.06 (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	-	-	-	-	1.99	1.26			Long-term (30-day) median within 20% of background median [3]		
Total Alkalinity ($CaCO_3$)	mg/L	-	Categorical	-	-	5.2	30.2			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 = 11.5	Varies with pH and temperature. See note. Guideline = 1.97	Varies with pH and temperature. See note. Guideline = 48	Varies with pH, temperature and salinity. See note. Guideline = 12	< 0.0050	< 0.0050		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	0.51	3.91				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 = 0.167	-	1.5	-	< 0.020	0.08		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	0.0128	0.0101					
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	-	-	-	-	0.051	0.128					
Total Phosphorous	mg/L	-	0.005 to 0.015	-	-	0.0033	0.0033			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	-	-	1.61	3.99			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 = 0.111 5-week field average = 0.207 (US), 0.264 (DS)	-	-	0.0724	0.088			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	0.00016					
Arsenic (As)-Total	mg/L	-	0.005	-	0.0125	0.00013	0.00051					Interim guideline status
Barium (Ba)-Total	mg/L	-	1	-	-	0.0025	0.00408			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	< 0.010					
Cadmium (Cd)-Total	mg/L	-	-	-	0.00012	0.0000066	0.0000089					Working guideline status
Calcium (Ca)-Total	mg/L	-	-	-	-	1.88	11.3					
Cesium (Cs)-Total	mg/L	-	-	-	-	< 0.000010	0.000026					
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	0.00051			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 = 0.001292 (US), 0.001058 DS)	0.00053	< 0.00050					
Iron (Fe)-Total	mg/L	1	-	-	-	0.029	0.02					
Lead (Pb)-Total	mg/L	-	-	0.14	0.002 5-week field averages = 0.0001034(US), 0.000096 DS)	< 0.000050	< 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	0.0016					
Magnesium (Mg)-Total	mg/L	-	-	-	-	0.194	0.512					
Manganese (Mn)-Total	mg/L	Varies with hardness Guideline = 0.82	Varies with hardness Guideline = 0.77	-	-	0.00104	0.00173		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	-	-	0.000341	0.00942					
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	-	-	-	-	0.154	0.641					
Rubidium (Rb)-Total	mg/L	-	-	-	-	0.00027	0.00143					
Selenium (Se)-Total	mg/L	-	0.002	-	0.002	< 0.000050	< 0.000050			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 information on guideliens and sampling guidance.
Silicon (Si)-Total	mg/L	-	-	-	-	3.4	4.27					
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	-	-	-	-	1.18	2.76					
Strontium (Sr)-Total	mg/L	-	-	-	-	0.0102	0.0284					
Sulfur (S)-Total	mg/L	-	-	-	-	0.66	1.31					
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	-	-	-	-	0.00069	0.00068					
Tungsten (W)-Total	mg/L	-	-	-	-	< 0.00010	0.00017					
Uranium (U)-Total	mg/L	0.0165	0.0075	-	-	0.000107	0.00178			Working guideline status		
Vanadium (V)-Total	mg/L	-	0.06	-	0.005	< 0.00050	0.00057					Working guideline status
Zinc (Zn)-Total	mg/L	-	-	0.055	0.010 5-week field average = 0.0037 (US), 0.0068 (DS)	< 0.0030	< 0.0030					
Zirconium (Zr)-Total	mg/L	-	-	-	-	< 0.00020	< 0.00020					
Dissolved Metals												
Aluminum (Al)-Dissolved	mg/L	-	-	-	-	0.0592	0.0589					
Antimony (Sb)-Dissolved	mg/L	-	-	-	-	< 0.00010	0.00015					
Arsenic (As)-Dissolved	mg/L	-	-	-	-	< 0.00010	0.00044					
Barium (Ba)-Dissolved	mg/L	-	-	-	-	0.00244	0.00389					
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	< 0.010					
Cadmium (Cd)-Dissolved	mg/L	Varies with hardness, see note Guideline = 0.000038	Varies with hardness, see note Guideline = 0.000034	-	-	0.0000056	< 0.0000100		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	-	-	1.72	11.4			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	0.000026					
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 = 0.003	Guideline varies with other parameters, see note Guideline = 0.0006 5-week field average = 0.00101 (US), 0.00076 (DS)	-	-	0.0005	0.00038		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	-	-	-	0.013	< 0.010					
Lead (Pb)-Dissolved	mg/L	-	Guideline varies with DOC and hardness Guideline: 0.00201 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	0.0015					
Magnesium (Mg)-Dissolved	mg/L	-	-	-	-	0.194	0.525					
Manganese (Mn)-Dissolved	mg/L	-	-	-	-	0.00056	0.00142					
Mercury (Hg)-Dissolved	mg/L	-	-	-	-	< 0.0000050	< 0.0000050					
Molybdenum (Mo)-Dissolved	mg/L	-	-	-	-	0.0003	0.00919					
Nickel (Ni)-Dissolved	mg/L	Guideline varies with pH, temperature, DOC, and hardness Guideline: 0.0189	Guideline varies with pH, temperature, DOC, and hardness Guideline: 0.00142 5-week field average = 0.00056 (US), 0.00053 (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	-	-	-	-	0.156	0.639					
Rubidium (Rb)-Dissolved	mg/L	-	-	-	-	0.00025	0.00136					
Selenium (Se)-Dissolved	mg/L	-	-	-	-	< 0.00005	< 0.00005					
Silicon (Si)-Dissolved	mg/L	-	-	-	-	3.52	4.42					
Silver (Ag)-Dissolved	mg/L	-	-	-	-	< 0.000010	< 0.000010					
Sodium (Na)-Dissolved	mg/L	-	-	-	-	1.23	2.73					
Strontium (Sr)-Dissolved	mg/L	-	-	-	-	0.00908	0.0282					
Sulfur (S)-Dissolved	mg/L	-	-	-	-	< 0.50	0.98					
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	0.00016					
Uranium (U)-Dissolved	mg/L	-	-	-	-	0.000098	0.00162					
Vanadium (V)-Dissolved	mg/L	-	-	-	-	< 0.00050	0.00061					
Zinc (Zn)-Dissolved	mg/L	Varies with DOC and hardness Guideline = 0.009	Varies with pH, DOC, hardness Guideline = 0.003685 5-week field average = 0.0023 (US), 0.0031 (DS)	-	-	0.0012	0.0018		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)	Values: EAS DS 1 (Downstream)
pH (field)	pH units	Field pH taken using handheld meters during sampling used in calculations	7.57	7.66
Temperature (field)	°C	Field temperature taken using handheld meters during sampling used in calculations	7.1	8.8
Turbidity (field)	NTU	Field turbidity taken using handheld meters during sampling used in calculations	0.02	0.48
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	5.49	30.3
Dissolved Organic Carbon (DOC)	mg/L	Laboratory tested dissolved organic carbon tested at the lab used in guideline calculations	1.99	1.26
Total Alkalinity ($CaCO_3$)	mg/L	Laboratory tested total alkalinity used in calculations	5.2	30.2
Chloride	mg/L	Laboratory tested chloride taken at each respective sample site on the day of sampling used in guideline calculations	0.51	3.91

Woodfibre Site Receiving Environment Lab Documentation

CERTIFICATE OF ANALYSIS

Work Order	: **VA25A4729**			
Client	: **Triton Environmental Consultants Ltd.**	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Account Manager	:	
Address	:	Address	:	
Telephone	: ----	Telephone	:	
Project	: 11964	Date Samples Received	:	04-Mar-2025 17:45
PO	: 11964-Task 20-Phase 3C-4C	Date Analysis Commenced	:	04-Mar-2025
C-O-C number	: ----	Issue Date	:	12-Mar-2025 13:33
Sampler	: ----			
Site	: Water Analysis			
Quote number	: VA25-TRIT100-001			
No. of samples received	: 2			
No. of samples analysed	: 2			

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*
		Metals, Burnaby, British Columbia
		Inorganics, Burnaby, British Columbia
		Metals, 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
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
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	----	----	----
					Client sampling date / time	04-Mar-2025 11:03	04-Mar-2025 10:01	----	----	----
						VA25A4729-001	VA25A4729-002	----	----	----
						Result	Result	----	----	----
Field Tests										
Conductivity, field	----	EF001/VA	0.10	µS/cm		16.000	80.000	----	----	----
pH, field	----	EF001/VA	0.10	pH units		7.57	7.66	----	----	----
Temperature, field	----	EF001/VA	0.10	°C		7.10	8.80	----	----	----
Physical Tests										
Hardness (as CaCO3), dissolved	----	EC100/VA	0.60	mg/L		5.09	30.6	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		5.49	30.3	----	----	----
Solids, total dissolved [TDS]	----	E162/VA	10	mg/L		10	43	----	----	----
Solids, total suspended [TSS]	----	E160/VA	3.0	mg/L		<3.0	<3.0	----	----	----
Alkalinity, total (as CaCO3)	----	E290/VA	2.0	mg/L		5.2	30.2	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/VA	0.0050	mg/L		<0.0050	<0.0050	----	----	----
Bromide	24959-67-9	E235.Br-L/VA	0.050	mg/L		<0.050	<0.050	----	----	----
Chloride	16887-00-6	E235.Cl/VA	0.50	mg/L		0.51	3.91	----	----	----
Fluoride	16984-48-8	E235.F/VA	0.020	mg/L		<0.020	0.080	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3-L/VA	0.0050	mg/L		0.0128	0.0101	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2-L/VA	0.0010	mg/L		<0.0010	<0.0010	----	----	----
Nitrogen, total	7727-37-9	E366/VA	0.030	mg/L		0.051	0.128	----	----	----
Phosphorus, total	7723-14-0	E372-U/VA	0.0020	mg/L		0.0033	0.0033	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L		1.61	3.99	----	----	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		1.99	1.26	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: WLNG US 1	WLNG DS 1	----	----	----
					Client sampling date / time: 04-Mar-2025 11:03	04-Mar-2025 10:01	----	----	----
					VA25A4729-001	VA25A4729-002	----	----	----
					Result	Result	----	----	----
Total Sulfides									
Sulfide, total (as S)	18496-25-8	E395/VA	0.0015	mg/L	<0.0015	<0.0015	----	----	----
Sulfide, un-ionized (as H2S), from total	7783-06-4	EC395/VA	0.0015	mg/L	<0.0015	<0.0015	----	----	----
Sulfide, total (as H2S)	7783-06-4	E395/VA	0.0016	mg/L	<0.0016	<0.0016	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L	0.0724	0.0880	----	----	----
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L	<0.00010	0.00016	----	----	----
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L	0.00013	0.00051	----	----	----
Barium, total	7440-39-3	E420/VA	0.00010	mg/L	0.00250	0.00408	----	----	----
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L	<0.000100	<0.000100	----	----	----
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Boron, total	7440-42-8	E420/VA	0.010	mg/L	<0.010	<0.010	----	----	----
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L	0.0000066	0.0000089	----	----	----
Calcium, total	7440-70-2	E420/VA	0.050	mg/L	1.88	11.3	----	----	----
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L	<0.000010	0.000026	----	----	----
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L	<0.00050	<0.00050	----	----	----
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Copper, total	7440-50-8	E420/VA	0.00050	mg/L	0.00053	<0.00050	----	----	----
Iron, total	7439-89-6	E420/VA	0.010	mg/L	0.029	0.020	----	----	----
Lead, total	7439-92-1	E420/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L	<0.0010	0.0016	----	----	----
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L	0.194	0.512	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	----	----	----
					Client sampling date / time	04-Mar-2025 11:03	04-Mar-2025 10:01	----	----	----
						VA25A4729-001	VA25A4729-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L		0.00104	0.00173	----	----	----
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L		<0.0000050	<0.0000050	----	----	----
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L		0.000341	0.00942	----	----	----
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L		<0.050	<0.050	----	----	----
Potassium, total	7440-09-7	E420/VA	0.050	mg/L		0.154	0.641	----	----	----
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L		0.00027	0.00143	----	----	----
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L		<0.000050	<0.000050	----	----	----
Silicon, total	7440-21-3	E420/VA	0.10	mg/L		3.40	4.27	----	----	----
Silver, total	7440-22-4	E420/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Sodium, total	7440-23-5	E420/VA	0.050	mg/L		1.18	2.76	----	----	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L		0.0102	0.0284	----	----	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L		0.66	1.31	----	----	----
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Tin, total	7440-31-5	E420/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L		0.00069	0.00068	----	----	----
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L		<0.00010	0.00017	----	----	----
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L		0.000107	0.00178	----	----	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L		<0.00050	0.00057	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	WLNG US 1	WLNG DS 1	----	----	----
Client sample ID					WLNG US 1	WLNG DS 1	----	----	----
Client sampling date / time					04-Mar-2025 11:03	04-Mar-2025 10:01	----	----	----
					VA25A4729-001	VA25A4729-002	----	----	----
					Result	Result	----	----	----
Total Metals									
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L	<0.0030	<0.0030	----	----	----
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L	<0.00020	<0.00020	----	----	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/VA	0.0010	mg/L	0.0592	0.0589	----	----	----
Antimony, dissolved	7440-36-0	E421/VA	0.00010	mg/L	<0.00010	0.00015	----	----	----
Arsenic, dissolved	7440-38-2	E421/VA	0.00010	mg/L	<0.00010	0.00044	----	----	----
Barium, dissolved	7440-39-3	E421/VA	0.00010	mg/L	0.00244	0.00389	----	----	----
Beryllium, dissolved	7440-41-7	E421/VA	0.000100	mg/L	<0.000100	<0.000100	----	----	----
Bismuth, dissolved	7440-69-9	E421/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Boron, dissolved	7440-42-8	E421/VA	0.010	mg/L	<0.010	<0.010	----	----	----
Cadmium, dissolved	7440-43-9	E421/VA	0.0000050	mg/L	0.0000056	<0.0000100 DLM	----	----	----
Calcium, dissolved	7440-70-2	E421/VA	0.050	mg/L	1.72	11.4	----	----	----
Cesium, dissolved	7440-46-2	E421/VA	0.000010	mg/L	<0.000010	0.000026	----	----	----
Chromium, dissolved	7440-47-3	E421/VA	0.00050	mg/L	<0.00050	<0.00050	----	----	----
Cobalt, dissolved	7440-48-4	E421/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Copper, dissolved	7440-50-8	E421/VA	0.00020	mg/L	0.00050	0.00038	----	----	----
Iron, dissolved	7439-89-6	E421/VA	0.010	mg/L	0.013	<0.010	----	----	----
Lead, dissolved	7439-92-1	E421/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Lithium, dissolved	7439-93-2	E421/VA	0.0010	mg/L	<0.0010	0.0015	----	----	----
Magnesium, dissolved	7439-95-4	E421/VA	0.0050	mg/L	0.194	0.525	----	----	----
Manganese, dissolved	7439-96-5	E421/VA	0.00010	mg/L	0.00056	0.00142	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	WLNG US 1	WLNG DS 1	----	----	----
					Client sampling date / time	04-Mar-2025 11:03	04-Mar-2025 10:01	----	----	----
						VA25A4729-001	VA25A4729-002	----	----	----
						Result	Result	----	----	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/VA	0.0000050	mg/L		<0.0000050	<0.0000050	----	----	----
Molybdenum, dissolved	7439-98-7	E421/VA	0.000050	mg/L		0.000300	0.00919	----	----	----
Nickel, dissolved	7440-02-0	E421/VA	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Phosphorus, dissolved	7723-14-0	E421/VA	0.050	mg/L		<0.050	<0.050	----	----	----
Potassium, dissolved	7440-09-7	E421/VA	0.050	mg/L		0.156	0.639	----	----	----
Rubidium, dissolved	7440-17-7	E421/VA	0.00020	mg/L		0.00025	0.00136	----	----	----
Selenium, dissolved	7782-49-2	E421/VA	0.000050	mg/L		<0.000050	<0.000050	----	----	----
Silicon, dissolved	7440-21-3	E421/VA	0.050	mg/L		3.52	4.42	----	----	----
Silver, dissolved	7440-22-4	E421/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Sodium, dissolved	7440-23-5	E421/VA	0.050	mg/L		1.23	2.73	----	----	----
Strontium, dissolved	7440-24-6	E421/VA	0.00020	mg/L		0.00908	0.0282	----	----	----
Sulfur, dissolved	7704-34-9	E421/VA	0.50	mg/L		<0.50	0.98	----	----	----
Tellurium, dissolved	13494-80-9	E421/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Thallium, dissolved	7440-28-0	E421/VA	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Thorium, dissolved	7440-29-1	E421/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Tin, dissolved	7440-31-5	E421/VA	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Titanium, dissolved	7440-32-6	E421/VA	0.00030	mg/L		<0.00030	<0.00030	----	----	----
Tungsten, dissolved	7440-33-7	E421/VA	0.00010	mg/L		<0.00010	0.00016	----	----	----
Uranium, dissolved	7440-61-1	E421/VA	0.000010	mg/L		0.000098	0.00162	----	----	----
Vanadium, dissolved	7440-62-2	E421/VA	0.00050	mg/L		<0.00050	0.00061	----	----	----
Zinc, dissolved	7440-66-6	E421/VA	0.0010	mg/L		0.0012	0.0018	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	WLNG US 1	WLNG DS 1	----	----	----
					Client sampling date / time	04-Mar-2025 11:03	04-Mar-2025 10:01	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A4729-001	VA25A4729-002	----	----	----
						Result	Result	----	----	----
Dissolved Metals										
Zirconium, dissolved	7440-67-7	E421/VA	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Dissolved mercury filtration location	----	EP509/VA	-	-		Field	Laboratory	----	----	----
Dissolved metals filtration location	----	EP421/VA	-	-		Field	Laboratory	----	----	----
Speciated Metals										
Chromium, hexavalent [Cr VI], total	18540-29-9	E532/VA	0.00050	mg/L		<0.00050	0.00051	----	----	----
Chromium, trivalent [Cr III], total	16065-83-1	EC535/VA	0.00050	mg/L		<0.00050	<0.00050	----	----	----

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

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **VA25A4729**	Page	: 1 of 15
Client	: **Triton Environmental Consultants Ltd.**	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	
Address		Address	
Telephone	: ----	Telephone	
Project	: 11964	Date Samples Received	: 04-Mar-2025 17:45
PO	: 11964-Task 20-Phase 3C-4C	Issue Date	: 12-Mar-2025 13:33
C-O-C number	: ----		
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 2		
No. of samples analysed	: 2		

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								
Dissolved Metals	QC-1896769-001	----	Potassium, dissolved	7440-09-7	E421	0.053 mg/L B	0.05 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
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG DS 1	E298	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	09-Mar-2025	28 days	5 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) WLNG US 1	E298	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	09-Mar-2025	28 days	5 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG DS 1	E235.Br-L	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE WLNG US 1	E235.Br-L	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG DS 1	E235.Cl	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE WLNG US 1	E235.Cl	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE WLNG DS 1	E235.F	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-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
Anions and Nutrients : Fluoride in Water by IC										
HDPE										
WLNG US 1	E235.F	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
WLNG DS 1	E235.NO3-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE										
WLNG US 1	E235.NO3-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
WLNG DS 1	E235.NO2-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE										
WLNG US 1	E235.NO2-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	3 days	1 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
WLNG DS 1	E235.SO4	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
WLNG US 1	E235.SO4	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
WLNG DS 1	E366	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	09-Mar-2025	28 days	5 days	✓
Anions and Nutrients : Total Nitrogen by Colourimetry										
Amber glass total (sulfuric acid)										
WLNG US 1	E366	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	09-Mar-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 DS 1	E372-U	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid)										
WLNG US 1	E372-U	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-2025	28 days	1 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial - dissolved (lab preserved)										
WLNG DS 1	E509	04-Mar-2025	06-Mar-2025	28 days	2 days	✓	06-Mar-2025	28 days	2 days	✓
Dissolved Metals : Dissolved Mercury in Water by CVAAS										
Glass vial dissolved (hydrochloric acid)										
WLNG US 1	E509	04-Mar-2025	07-Mar-2025	28 days	3 days	✓	07-Mar-2025	28 days	3 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE dissolved (nitric acid)										
WLNG US 1	E421	04-Mar-2025	06-Mar-2025	180 days	2 days	✓	07-Mar-2025	180 days	3 days	✓
Dissolved Metals : Dissolved Metals in Water by CRC ICPMS										
HDPE - dissolved (lab preserved)										
WLNG DS 1	E421	04-Mar-2025	07-Mar-2025	180 days	3 days	✓	07-Mar-2025	180 days	3 days	✓
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
Glass vial - dissolved (lab preserved)										
WLNG DS 1	EF001	04-Mar-2025	----	----	----		07-Mar-2025	----	3 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	04-Mar-2025	----	----	----		07-Mar-2025	----	3 days	
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid)										
WLNG US 1	E358-L	04-Mar-2025	05-Mar-2025	28 days	1 days	✓	05-Mar-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
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (unpreserved)										
WLNG DS 1	E358-L	04-Mar-2025	05-Mar-2025	3 days	1 days	✓	05-Mar-2025	28 days	0 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG DS 1	E290	04-Mar-2025	05-Mar-2025	14 days	1 days	✓	05-Mar-2025	14 days	1 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE										
WLNG US 1	E290	04-Mar-2025	05-Mar-2025	14 days	1 days	✓	05-Mar-2025	14 days	1 days	✓
Physical Tests : TDS by Gravimetry										
HDPE										
WLNG US 1	E162	04-Mar-2025	----	----	----		10-Mar-2025	7 days	6 days	✓
Physical Tests : TDS by Gravimetry										
HDPE										
WLNG DS 1	E162	04-Mar-2025	----	----	----		10-Mar-2025	7 days	7 days	✓
Physical Tests : TSS by Gravimetry										
HDPE										
WLNG DS 1	E160	04-Mar-2025	----	----	----		11-Mar-2025	7 days	7 days	✓
Physical Tests : TSS by Gravimetry										
HDPE										
WLNG US 1	E160	04-Mar-2025	----	----	----		11-Mar-2025	7 days	7 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG US 1	E532	04-Mar-2025	----	----	----		04-Mar-2025	28 days	0 days	✓
Speciated Metals : Total Hexavalent Chromium (Cr VI) by IC										
Opaque HDPE - total (sodium hydroxide)										
WLNG DS 1	E532	04-Mar-2025	----	----	----		04-Mar-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)										
WLNG DS 1	E508	04-Mar-2025	07-Mar-2025	28 days	3 days	✓	07-Mar-2025	28 days	3 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
WLNG US 1	E508	04-Mar-2025	07-Mar-2025	28 days	3 days	✓	07-Mar-2025	28 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG DS 1	E420	04-Mar-2025	05-Mar-2025	180 days	1 days	✓	06-Mar-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid)										
WLNG US 1	E420	04-Mar-2025	05-Mar-2025	180 days	1 days	✓	06-Mar-2025	180 days	2 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG DS 1	E395	04-Mar-2025	----	----	----		10-Mar-2025	7 days	6 days	✓
Total Sulfides : Total Sulfide by Colourimetry (Automated Flow)										
HDPE total (zinc acetate+sodium hydroxide)										
WLNG US 1	E395	04-Mar-2025	----	----	----		10-Mar-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	1903518	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1903511	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895556	1	16	6.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895555	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	1895554	1	17	5.8	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895558	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895557	1	17	5.8	5.0	✓
Sulfate in Water by IC	E235.SO4	1895559	1	18	5.5	5.0	✓
Alkalinity Species by Titration	E290	1895551	1	13	7.6	5.0	✓
Ammonia by Fluorescence	E298	1895452	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895455	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895456	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895457	1	9	11.1	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895971	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1896769	2	32	6.2	5.0	✓
Total Mercury in Water by CVAAS	E508	1900519	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1898568	2	25	8.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Laboratory Control Samples (LCS)							
TSS by Gravimetry	E160	1903518	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1903511	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895556	1	16	6.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895555	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	1895554	1	17	5.8	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895558	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895557	1	17	5.8	5.0	✓
Sulfate in Water by IC	E235.SO4	1895559	1	18	5.5	5.0	✓
Alkalinity Species by Titration	E290	1895551	1	13	7.6	5.0	✓
Ammonia by Fluorescence	E298	1895452	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895455	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895456	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895457	1	9	11.1	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895971	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1896769	2	32	6.2	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							
Total Mercury in Water by CVAAS	E508	1900519	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1898568	2	25	8.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Method Blanks (MB)							
TSS by Gravimetry	E160	1903518	1	20	5.0	5.0	✓
TDS by Gravimetry	E162	1903511	1	20	5.0	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	1895556	1	16	6.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895555	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	1895554	1	17	5.8	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895558	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895557	1	17	5.8	5.0	✓
Sulfate in Water by IC	E235.SO4	1895559	1	18	5.5	5.0	✓
Alkalinity Species by Titration	E290	1895551	1	13	7.6	5.0	✓
Ammonia by Fluorescence	E298	1895452	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895455	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895456	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895457	1	9	11.1	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895971	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1896769	2	32	6.2	5.0	✓
Total Mercury in Water by CVAAS	E508	1900519	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1898568	2	25	8.0	5.0	✓
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Bromide in Water by IC (Low Level)	E235.Br-L	1895556	1	16	6.2	5.0	✓
Chloride in Water by IC	E235.Cl	1895555	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	1895554	1	17	5.8	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	1895558	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	1895557	1	17	5.8	5.0	✓
Sulfate in Water by IC	E235.SO4	1895559	1	18	5.5	5.0	✓
Ammonia by Fluorescence	E298	1895452	1	19	5.2	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	1895455	1	13	7.6	5.0	✓
Total Nitrogen by Colourimetry	E366	1895456	1	6	16.6	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	1895457	1	9	11.1	5.0	✓
Total Sulfide by Colourimetry (Automated Flow)	E395	1903075	1	15	6.6	5.0	✓
Total Metals in Water by CRC ICPMS	E420	1895971	1	18	5.5	5.0	✓
Dissolved Metals in Water by CRC ICPMS	E421	1896769	2	32	6.2	5.0	✓
Total Mercury in Water by CVAAS	E508	1900519	1	20	5.0	5.0	✓
Dissolved Mercury in Water by CVAAS	E509	1898568	2	25	8.0	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							
Total Hexavalent Chromium (Cr VI) by IC	E532	1895459	1	15	6.6	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.
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.
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.

QUALITY CONTROL REPORT

Work Order	: **VA25A4729**	Page	: 1 of 21
Client	: Triton Environmental Consultants Ltd.	Laboratory	: ALS Environmental - Vancouver
Contact		Account Manager	
Address		Address	
Telephone	: ----	Telephone	
Project	: 11964	Date Samples Received	: 04-Mar-2025 17:45
PO	: 11964-Task 20-Phase 3C-4C	Date Analysis Commenced	: 04-Mar-2025
C-O-C number	: ----	Issue Date	: 12-Mar-2025 13:33
Sampler	: ----		
Site	: Water Analysis		
Quote number	: VA25-TRIT100-001		
No. of samples received	: 2		
No. of samples analysed	: 2		

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*
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Inorganics, Burnaby, British Columbia
		Vancouver Metals, Burnaby, British Columbia
		Vancouver Administration, 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: 1895551)											
VA25A4739-001	Anonymous	Alkalinity, total (as CaCO3)	----	E290	1.0	mg/L	110	110	0.0914%	20%	----
Physical Tests (QC Lot: 1903511)											
KS2500762-003	Anonymous	Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	<10	0	Diff <2x LOR	----
Physical Tests (QC Lot: 1903518)											
KS2500735-001	Anonymous	Solids, total suspended [TSS]	----	E160	3.0	mg/L	15.5	14.9	0.6	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895452)											
KS2500683-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.500	mg/L	43.3	42.3	2.44%	20%	----
Anions and Nutrients (QC Lot: 1895456)											
VA25A4718-001	Anonymous	Nitrogen, total	7727-37-9	E366	0.600	mg/L	23.8	24.0	1.02%	20%	----
Anions and Nutrients (QC Lot: 1895457)											
KS2500683-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.200	mg/L	10.2	9.38	8.61%	20%	----
Anions and Nutrients (QC Lot: 1895554)											
VA25A4560-001	Anonymous	Fluoride	16984-48-8	E235.F	0.100	mg/L	<0.100	<0.100	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895555)											
VA25A4560-001	Anonymous	Chloride	16887-00-6	E235.Cl	2.50	mg/L	<2.50	<2.50	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895556)											
VA25A4560-001	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: 1895557)											
VA25A4560-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0250	mg/L	0.245	0.244	0.0005	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895558)											
VA25A4560-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 1895559)											
VA25A4560-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	1.50	mg/L	876	870	0.666%	20%	----
Organic / Inorganic Carbon (QC Lot: 1895455)											
VA25A4251-001	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	0.50	mg/L	2.80	2.99	0.18	Diff <2x LOR	----
Total Sulfides (QC Lot: 1903075)											
VA25A4672-001	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.0075	mg/L	0.0242	0.0235	0.0007	Diff <2x LOR	----
Total Metals (QC Lot: 1895971)											
VA25A4666-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0189	0.0179	0.0010	Diff <2x LOR	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00058	0.00057	0.00001	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: 1895971) - continued											
VA25A4666-001	Anonymous	Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00429	0.00436	1.65%	20%	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0547	0.0544	0.404%	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	0.0000340	0.0000378	0.0000038	Diff <2x LOR	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	64.8	65.4	0.922%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.000023	0.000024	0.0000005	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	0.0247	0.0242	2.07%	20%	----
		Copper, total	7440-50-8	E420	0.00050	mg/L	0.00063	0.00062	0.00001	Diff <2x LOR	----
		Iron, total	7439-89-6	E420	0.010	mg/L	0.113	0.114	0.531%	20%	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	0.000124	0.000123	0.000001	Diff <2x LOR	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	0.0194	0.0194	0.392%	20%	----
		Magnesium, total	7439-95-4	E420	0.100	mg/L	22.3	22.0	1.39%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.178	0.176	1.56%	20%	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000472	0.000475	0.000002	Diff <2x LOR	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	0.00805	0.00800	0.551%	20%	----
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		Potassium, total	7440-09-7	E420	0.100	mg/L	2.23	2.18	2.33%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00243	0.00218	10.7%	20%	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.000580	0.000603	3.96%	20%	----
		Silicon, total	7440-21-3	E420	0.10	mg/L	4.38	4.44	1.33%	20%	----
		Silver, total	7440-22-4	E420	0.000010	mg/L	0.000035	0.000038	0.000003	Diff <2x LOR	----
		Sodium, total	7440-23-5	E420	0.050	mg/L	12.1	11.6	4.10%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.461	0.452	2.12%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	38.5	38.8	0.759%	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	<0.000010	<0.000010	0	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	0.00068	0.00065	0.00003	Diff <2x LOR	----
		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	0.00249	0.00246	1.16%	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: 1895971) - continued											
VA25A4666-001	Anonymous	Vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	0.0102	0.0100	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: 1900519)											
VA25A4685-002	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	0.0000054	<0.0000050	0.0000004	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1896769)											
KS2500717-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	0.0065	0.0069	0.0004	Diff <2x LOR	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00018	0.00016	0.00002	Diff <2x LOR	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.0103	0.0101	1.88%	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	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	15.7	15.8	0.746%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	<0.000010	<0.000010	0	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	0.00062	0.00061	0.00001	Diff <2x LOR	----
		Iron, dissolved	7439-89-6	E421	0.010	mg/L	0.014	0.015	0.0003	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	<0.0010	<0.0010	0	Diff <2x LOR	----
		Magnesium, dissolved	7439-95-4	E421	0.100	mg/L	3.37	3.15	6.81%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.00016	0.00016	0.000002	Diff <2x LOR	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.000818	0.000836	2.22%	20%	----
		Nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.00050	0.00050	0.000001	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	2.00	mg/L	<2.00	<2.00	0	Diff <2x LOR	----
		Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	0.00141	0.00148	0.00007	Diff <2x LOR	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.000124	0.000116	0.000009	Diff <2x LOR	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	3.02	3.05	0.942%	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	2.00	mg/L	3.44	3.26	0.179	Diff <2x LOR	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	0.0935	0.0936	0.0667%	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: 1896769) - continued											
KS2500717-001	Anonymous	Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	3.31	3.59	0.28	Diff <2x LOR	----
		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	0.000406	0.000420	3.48%	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	<0.0010	<0.0010	0	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: 1896774)											
VA25A4749-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.0010	mg/L	0.0014	0.0014	0.00004	Diff <2x LOR	----
		Antimony, dissolved	7440-36-0	E421	0.00010	mg/L	0.0185	0.0188	1.35%	20%	----
		Arsenic, dissolved	7440-38-2	E421	0.00010	mg/L	0.00165	0.00169	1.91%	20%	----
		Barium, dissolved	7440-39-3	E421	0.00010	mg/L	0.0269	0.0273	1.62%	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	0.398	0.402	0.968%	20%	----
		Cadmium, dissolved	7440-43-9	E421	0.0000150	mg/L	<0.0000150	<0.0000150	0	Diff <2x LOR	----
		Calcium, dissolved	7440-70-2	E421	0.050	mg/L	85.6	86.8	1.38%	20%	----
		Cesium, dissolved	7440-46-2	E421	0.000010	mg/L	0.0106	0.0113	6.08%	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	0.00113	0.00114	1.16%	20%	----
		Copper, dissolved	7440-50-8	E421	0.00020	mg/L	0.00029	0.00029	0.000003	Diff <2x LOR	----
		Iron, dissolved	7439-89-6	E421	0.010	mg/L	0.015	0.016	0.0003	Diff <2x LOR	----
		Lead, dissolved	7439-92-1	E421	0.000050	mg/L	0.000068	0.000068	0.00000004	Diff <2x LOR	----
		Lithium, dissolved	7439-93-2	E421	0.0010	mg/L	0.488	0.494	1.20%	20%	----
		Magnesium, dissolved	7439-95-4	E421	0.0050	mg/L	7.53	7.67	1.83%	20%	----
		Manganese, dissolved	7439-96-5	E421	0.00010	mg/L	0.0888	0.0887	0.182%	20%	----
		Molybdenum, dissolved	7439-98-7	E421	0.000050	mg/L	0.0472	0.0467	1.14%	20%	----
		Nickel, dissolved	7440-02-0	E421	0.00050	mg/L	0.00138	0.00138	0.000006	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	60.6	60.5	0.142%	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: 1896774) - continued											
VA25A4749-001	Anonymous	Rubidium, dissolved	7440-17-7	E421	0.00020	mg/L	0.0844	0.0828	1.99%	20%	----
		Selenium, dissolved	7782-49-2	E421	0.000050	mg/L	0.00325	0.00306	6.10%	20%	----
		Silicon, dissolved	7440-21-3	E421	0.050	mg/L	1.45	1.43	1.01%	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	225	226	0.536%	20%	----
		Strontium, dissolved	7440-24-6	E421	0.00020	mg/L	1.12	1.14	1.57%	20%	----
		Sulfur, dissolved	7704-34-9	E421	0.50	mg/L	187	185	0.882%	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	0.000149	0.000151	1.30%	20%	----
		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	0.00703	0.00702	0.151%	20%	----
		Uranium, dissolved	7440-61-1	E421	0.000010	mg/L	0.00118	0.00116	1.66%	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	<0.0010	0.0010	0.00004	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: 1898568)											
VA25A4604-001	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Dissolved Metals (QC Lot: 1899322)											
VA25A4666-005	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Speciated Metals (QC Lot: 1895459)											
VA25A4610-001	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.00050	mg/L	<0.00050	<0.00050	0	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: 1895551)						
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	<1.0	----
Physical Tests (QCLot: 1903511)						
Solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Physical Tests (QCLot: 1903518)						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Anions and Nutrients (QCLot: 1895452)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1895456)						
Nitrogen, total	7727-37-9	E366	0.03	mg/L	<0.030	----
Anions and Nutrients (QCLot: 1895457)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	----
Anions and Nutrients (QCLot: 1895554)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 1895555)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 1895556)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 1895557)						
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 1895558)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 1895559)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Organic / Inorganic Carbon (QCLot: 1895455)						
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	<0.50	----
Total Sulfides (QCLot: 1903075)						
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	<0.0015	----
Total Metals (QCLot: 1895971)						
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: 1895971) - 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: 1900519)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1896769)						
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	# 0.053	B
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: 1896769) - 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: 1896774)						
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	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Dissolved Metals (QCLot: 1896774) - continued						
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	----
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: 1898568)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Dissolved Metals (QCLot: 1899322)						
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	<0.0000050	----
Speciated Metals (QCLot: 1895459)						
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	<0.00050	----

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: 1895551)									
Alkalinity, total (as CaCO3)	----	E290	1	mg/L	500 mg/L	105	85.0	115	----
Physical Tests (QCLot: 1903511)									
Solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	104	85.0	115	----
Physical Tests (QCLot: 1903518)									
Solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	92.2	85.0	115	----
Anions and Nutrients (QCLot: 1895452)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	99.5	85.0	115	----
Anions and Nutrients (QCLot: 1895456)									
Nitrogen, total	7727-37-9	E366	0.03	mg/L	0.5 mg/L	98.2	75.0	125	----
Anions and Nutrients (QCLot: 1895457)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.05 mg/L	89.2	80.0	120	----
Anions and Nutrients (QCLot: 1895554)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	99.2	90.0	110	----
Anions and Nutrients (QCLot: 1895555)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	101	90.0	110	----
Anions and Nutrients (QCLot: 1895556)									
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	104	85.0	115	----
Anions and Nutrients (QCLot: 1895557)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	101	90.0	110	----
Anions and Nutrients (QCLot: 1895558)									
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	99.6	90.0	110	----
Anions and Nutrients (QCLot: 1895559)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	101	90.0	110	----
Organic / Inorganic Carbon (QCLot: 1895455)									
Carbon, dissolved organic [DOC]	----	E358-L	0.5	mg/L	8.57 mg/L	109	80.0	120	----
Total Sulfides (QCLot: 1903075)									
Sulfide, total (as S)	18496-25-8	E395	0.0015	mg/L	0.08 mg/L	108	80.0	120	----
Total Metals (QCLot: 1895971)									

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: 1895971) - continued									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	97.3	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	106	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	109	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	104	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	106	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	110	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	106	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	101	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	107	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	105	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	104	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	102	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	108	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	104	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	100	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	107	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	101	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	113	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	101	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	105	80.0	120	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	105	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	101	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	104	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	109	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	103	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	114	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	111	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	104	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	103	80.0	120	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	102	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	106	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	107	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: 1895971) - continued									
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	102	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	105	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	107	80.0	120	----
Total Metals (QCLot: 1900519)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	94.9	80.0	120	----
Dissolved Metals (QCLot: 1896769)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	98.3	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	102	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	95.7	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	98.0	80.0	120	----
Bismuth, dissolved	7440-69-9	E421	0.00005	mg/L	1 mg/L	95.9	80.0	120	----
Boron, dissolved	7440-42-8	E421	0.01	mg/L	1 mg/L	98.0	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	99.7	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	99.0	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	102	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	96.5	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	97.5	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	98.1	80.0	120	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	1 mg/L	96.6	80.0	120	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.5 mg/L	93.6	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	98.9	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	102	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	97.3	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	99.3	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	97.8	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	99.9	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	94.4	80.0	120	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	0.1 mg/L	103	80.0	120	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	1 mg/L	103	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	116	80.0	120	----
Silver, dissolved	7440-22-4	E421	0.00001	mg/L	0.1 mg/L	92.3	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	102	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	89.9	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: 1896769) - 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	95.6	80.0	120	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	0.1 mg/L	94.3	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	101	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	96.9	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	97.2	80.0	120	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.005 mg/L	99.4	80.0	120	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.5 mg/L	97.1	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	97.0	80.0	120	----
Dissolved Metals (QCLot: 1896774)									
Aluminum, dissolved	7429-90-5	E421	0.001	mg/L	2 mg/L	104	80.0	120	----
Antimony, dissolved	7440-36-0	E421	0.0001	mg/L	1 mg/L	98.1	80.0	120	----
Arsenic, dissolved	7440-38-2	E421	0.0001	mg/L	1 mg/L	103	80.0	120	----
Barium, dissolved	7440-39-3	E421	0.0001	mg/L	0.25 mg/L	100	80.0	120	----
Beryllium, dissolved	7440-41-7	E421	0.00002	mg/L	0.1 mg/L	103	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	93.0	80.0	120	----
Cadmium, dissolved	7440-43-9	E421	0.000005	mg/L	0.1 mg/L	103	80.0	120	----
Calcium, dissolved	7440-70-2	E421	0.05	mg/L	50 mg/L	99.0	80.0	120	----
Cesium, dissolved	7440-46-2	E421	0.00001	mg/L	0.05 mg/L	102	80.0	120	----
Chromium, dissolved	7440-47-3	E421	0.0005	mg/L	0.25 mg/L	102	80.0	120	----
Cobalt, dissolved	7440-48-4	E421	0.0001	mg/L	0.25 mg/L	98.6	80.0	120	----
Copper, dissolved	7440-50-8	E421	0.0002	mg/L	0.25 mg/L	101	80.0	120	----
Iron, dissolved	7439-89-6	E421	0.01	mg/L	1 mg/L	97.7	80.0	120	----
Lead, dissolved	7439-92-1	E421	0.00005	mg/L	0.5 mg/L	98.8	80.0	120	----
Lithium, dissolved	7439-93-2	E421	0.001	mg/L	0.25 mg/L	104	80.0	120	----
Magnesium, dissolved	7439-95-4	E421	0.005	mg/L	50 mg/L	101	80.0	120	----
Manganese, dissolved	7439-96-5	E421	0.0001	mg/L	0.25 mg/L	98.9	80.0	120	----
Molybdenum, dissolved	7439-98-7	E421	0.00005	mg/L	0.25 mg/L	100	80.0	120	----
Nickel, dissolved	7440-02-0	E421	0.0005	mg/L	0.5 mg/L	99.9	80.0	120	----
Phosphorus, dissolved	7723-14-0	E421	0.05	mg/L	10 mg/L	111	80.0	120	----
Potassium, dissolved	7440-09-7	E421	0.05	mg/L	50 mg/L	101	80.0	120	----
Rubidium, dissolved	7440-17-7	E421	0.0002	mg/L	0.1 mg/L	96.0	80.0	120	----
Selenium, dissolved	7782-49-2	E421	0.00005	mg/L	1 mg/L	99.8	80.0	120	----
Silicon, dissolved	7440-21-3	E421	0.05	mg/L	10 mg/L	104	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: 1896774) - continued									
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	108	80.0	120	----
Strontium, dissolved	7440-24-6	E421	0.0002	mg/L	0.25 mg/L	94.2	80.0	120	----
Sulfur, dissolved	7704-34-9	E421	0.5	mg/L	50 mg/L	93.1	80.0	120	----
Tellurium, dissolved	13494-80-9	E421	0.0002	mg/L	0.1 mg/L	99.6	80.0	120	----
Thallium, dissolved	7440-28-0	E421	0.00001	mg/L	1 mg/L	98.6	80.0	120	----
Thorium, dissolved	7440-29-1	E421	0.0001	mg/L	0.1 mg/L	98.8	80.0	120	----
Tin, dissolved	7440-31-5	E421	0.0001	mg/L	0.5 mg/L	98.7	80.0	120	----
Titanium, dissolved	7440-32-6	E421	0.0003	mg/L	0.25 mg/L	96.3	80.0	120	----
Tungsten, dissolved	7440-33-7	E421	0.0001	mg/L	0.1 mg/L	96.8	80.0	120	----
Uranium, dissolved	7440-61-1	E421	0.00001	mg/L	0.005 mg/L	97.5	80.0	120	----
Vanadium, dissolved	7440-62-2	E421	0.0005	mg/L	0.5 mg/L	102	80.0	120	----
Zinc, dissolved	7440-66-6	E421	0.001	mg/L	0.5 mg/L	94.9	80.0	120	----
Zirconium, dissolved	7440-67-7	E421	0.0002	mg/L	0.1 mg/L	97.2	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	93.5	80.0	120	----
Mercury, dissolved	7439-97-6	E509	0.000005	mg/L	0 mg/L	95.1	80.0	120	----
Speciated Metals (QCLot: 1895459)									
Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.0005	mg/L	0.25 mg/L	99.2	80.0	120	----

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: 1895452)										
KS2500683-002	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0893 mg/L	0.1 mg/L	89.3	75.0	125	----
Anions and Nutrients (QCLot: 1895456)										
VA25A4720-001	Anonymous	Nitrogen, total	7727-37-9	E366	ND mg/L	----	ND	70.0	130	----
Anions and Nutrients (QCLot: 1895457)										
KS2500683-002	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0497 mg/L	0.05 mg/L	99.5	70.0	130	----
Anions and Nutrients (QCLot: 1895554)										
VA25A4685-001	Anonymous	Fluoride	16984-48-8	E235.F	49.6 mg/L	50 mg/L	99.2	75.0	125	----
Anions and Nutrients (QCLot: 1895555)										
VA25A4685-001	Anonymous	Chloride	16887-00-6	E235.Cl	4960 mg/L	5000 mg/L	99.2	75.0	125	----
Anions and Nutrients (QCLot: 1895556)										
VA25A4685-001	Anonymous	Bromide	24959-67-9	E235.Br-L	25.6 mg/L	25 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 1895557)										
VA25A4685-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	124 mg/L	125 mg/L	99.2	75.0	125	----
Anions and Nutrients (QCLot: 1895558)										
VA25A4685-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	24.6 mg/L	25 mg/L	98.6	75.0	125	----
Anions and Nutrients (QCLot: 1895559)										
VA25A4685-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	ND mg/L	----	ND	75.0	125	----
Organic / Inorganic Carbon (QCLot: 1895455)										
VA25A4251-002	Anonymous	Carbon, dissolved organic [DOC]	----	E358-L	5.30 mg/L	5 mg/L	106	70.0	130	----
Total Sulfides (QCLot: 1903075)										
VA25A4672-002	Anonymous	Sulfide, total (as S)	18496-25-8	E395	0.236 mg/L	0.2 mg/L	118	75.0	125	----
Total Metals (QCLot: 1895971)										
VA25A4666-002	Anonymous	Aluminum, total	7429-90-5	E420	0.183 mg/L	0.2 mg/L	91.6	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0193 mg/L	0.02 mg/L	96.4	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0197 mg/L	0.02 mg/L	98.5	70.0	130	----
		Barium, total	7440-39-3	E420	ND mg/L	----	ND	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0408 mg/L	0.04 mg/L	102	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.00954 mg/L	0.01 mg/L	95.4	70.0	130	----
		Boron, total	7440-42-8	E420	0.105 mg/L	0.1 mg/L	105	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00364 mg/L	0.004 mg/L	90.9	70.0	130	----
		Calcium, total	7440-70-2	E420	ND mg/L	----	ND	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	0.0398 mg/L	0.04 mg/L	99.4	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: 1895971) - continued										
VA25A4666-002	Anonymous	Cobalt, total	7440-48-4	E420	ND mg/L	----	ND	70.0	130	----
		Copper, total	7440-50-8	E420	0.0174 mg/L	0.02 mg/L	86.8	70.0	130	----
		Iron, total	7439-89-6	E420	1.90 mg/L	2 mg/L	95.3	70.0	130	----
		Lead, total	7439-92-1	E420	0.0186 mg/L	0.02 mg/L	93.2	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0999 mg/L	0.1 mg/L	99.9	70.0	130	----
		Magnesium, total	7439-95-4	E420	ND mg/L	----	ND	70.0	130	----
		Manganese, total	7439-96-5	E420	ND mg/L	----	ND	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0203 mg/L	0.02 mg/L	102	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0361 mg/L	0.04 mg/L	90.2	70.0	130	----
		Phosphorus, total	7723-14-0	E420	10.2 mg/L	10 mg/L	102	70.0	130	----
		Potassium, total	7440-09-7	E420	ND mg/L	----	ND	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0186 mg/L	0.02 mg/L	93.1	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0422 mg/L	0.04 mg/L	105	70.0	130	----
		Silicon, total	7440-21-3	E420	9.32 mg/L	10 mg/L	93.2	70.0	130	----
		Silver, total	7440-22-4	E420	0.00394 mg/L	0.004 mg/L	98.6	70.0	130	----
		Sodium, total	7440-23-5	E420	ND mg/L	----	ND	70.0	130	----
		Strontium, total	7440-24-6	E420	ND mg/L	----	ND	70.0	130	----
		Sulfur, total	7704-34-9	E420	19.4 mg/L	20 mg/L	97.0	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0403 mg/L	0.04 mg/L	101	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00371 mg/L	0.004 mg/L	92.7	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	0.0190 mg/L	0.02 mg/L	94.9	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0400 mg/L	0.04 mg/L	100	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0196 mg/L	0.02 mg/L	98.0	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00390 mg/L	0.004 mg/L	97.4	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0985 mg/L	0.1 mg/L	98.5	70.0	130	----
		Zinc, total	7440-66-6	E420	0.363 mg/L	0.4 mg/L	90.7	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0412 mg/L	0.04 mg/L	103	70.0	130	----
Total Metals (QCLot: 1900519)										
VA25A4685-003	Anonymous	Mercury, total	7439-97-6	E508	0.0000880 mg/L	0 mg/L	88.0	70.0	130	----
Dissolved Metals (QCLot: 1896769)										
KS2500718-001	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.193 mg/L	0.2 mg/L	96.5	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0196 mg/L	0.02 mg/L	98.2	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0201 mg/L	0.02 mg/L	101	70.0	130	----
		Barium, dissolved	7440-39-3	E421	0.0192 mg/L	0.02 mg/L	96.1	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0406 mg/L	0.04 mg/L	102	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.00920 mg/L	0.01 mg/L	92.0	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.100 mg/L	0.1 mg/L	99.9	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00382 mg/L	0.004 mg/L	95.4	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	ND mg/L	----	ND	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.0102 mg/L	0.01 mg/L	102	70.0	130	----
		Chromium, dissolved	7440-47-3	E421	0.0382 mg/L	0.04 mg/L	95.4	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0194 mg/L	0.02 mg/L	97.0	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: 1896769) - continued										
KS2500718-001	Anonymous	Copper, dissolved	7440-50-8	E421	0.0194 mg/L	0.02 mg/L	96.9	70.0	130	----
		Iron, dissolved	7439-89-6	E421	1.92 mg/L	2 mg/L	95.9	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0185 mg/L	0.02 mg/L	92.4	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.101 mg/L	0.1 mg/L	101	70.0	130	----
		Magnesium, dissolved	7439-95-4	E421	ND mg/L	----	ND	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	0.0194 mg/L	0.02 mg/L	96.9	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	0.0194 mg/L	0.02 mg/L	97.0	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0388 mg/L	0.04 mg/L	97.0	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	9.66 mg/L	10 mg/L	96.6	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	3.84 mg/L	4 mg/L	96.1	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0196 mg/L	0.02 mg/L	97.8	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0413 mg/L	0.04 mg/L	103	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	9.68 mg/L	10 mg/L	96.8	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00386 mg/L	0.004 mg/L	96.4	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	19.4 mg/L	20 mg/L	96.9	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0410 mg/L	0.04 mg/L	102	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00370 mg/L	0.004 mg/L	92.6	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0200 mg/L	0.02 mg/L	99.9	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0191 mg/L	0.02 mg/L	95.5	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0393 mg/L	0.04 mg/L	98.3	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0192 mg/L	0.02 mg/L	95.9	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00387 mg/L	0.004 mg/L	96.8	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.0954 mg/L	0.1 mg/L	95.4	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.403 mg/L	0.4 mg/L	101	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0410 mg/L	0.04 mg/L	102	70.0	130	----
Dissolved Metals (QCLot: 1896774)										
VA25A4749-007	Anonymous	Aluminum, dissolved	7429-90-5	E421	0.180 mg/L	0.2 mg/L	90.3	70.0	130	----
		Antimony, dissolved	7440-36-0	E421	0.0194 mg/L	0.02 mg/L	97.3	70.0	130	----
		Arsenic, dissolved	7440-38-2	E421	0.0188 mg/L	0.02 mg/L	94.1	70.0	130	----
		Barium, dissolved	7440-39-3	E421	0.0192 mg/L	0.02 mg/L	95.9	70.0	130	----
		Beryllium, dissolved	7440-41-7	E421	0.0385 mg/L	0.04 mg/L	96.2	70.0	130	----
		Bismuth, dissolved	7440-69-9	E421	0.0102 mg/L	0.01 mg/L	102	70.0	130	----
		Boron, dissolved	7440-42-8	E421	0.093 mg/L	0.1 mg/L	93.3	70.0	130	----
		Cadmium, dissolved	7440-43-9	E421	0.00408 mg/L	0.004 mg/L	102	70.0	130	----
		Calcium, dissolved	7440-70-2	E421	3.84 mg/L	4 mg/L	96.1	70.0	130	----
		Cesium, dissolved	7440-46-2	E421	0.00969 mg/L	0.01 mg/L	96.9	70.0	130	----
		Chromium, dissolved	7440-47-3	E421	0.0381 mg/L	0.04 mg/L	95.2	70.0	130	----
		Cobalt, dissolved	7440-48-4	E421	0.0188 mg/L	0.02 mg/L	94.1	70.0	130	----
		Copper, dissolved	7440-50-8	E421	0.0192 mg/L	0.02 mg/L	95.9	70.0	130	----
		Iron, dissolved	7439-89-6	E421	1.82 mg/L	2 mg/L	91.2	70.0	130	----
		Lead, dissolved	7439-92-1	E421	0.0198 mg/L	0.02 mg/L	99.1	70.0	130	----
		Lithium, dissolved	7439-93-2	E421	0.0935 mg/L	0.1 mg/L	93.5	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: 1896774) - continued										
VA25A4749-007	Anonymous	Magnesium, dissolved	7439-95-4	E421	0.939 mg/L	1 mg/L	93.9	70.0	130	----
		Manganese, dissolved	7439-96-5	E421	0.0192 mg/L	0.02 mg/L	95.8	70.0	130	----
		Molybdenum, dissolved	7439-98-7	E421	0.0194 mg/L	0.02 mg/L	96.8	70.0	130	----
		Nickel, dissolved	7440-02-0	E421	0.0382 mg/L	0.04 mg/L	95.6	70.0	130	----
		Phosphorus, dissolved	7723-14-0	E421	9.83 mg/L	10 mg/L	98.3	70.0	130	----
		Potassium, dissolved	7440-09-7	E421	3.68 mg/L	4 mg/L	92.0	70.0	130	----
		Rubidium, dissolved	7440-17-7	E421	0.0190 mg/L	0.02 mg/L	94.8	70.0	130	----
		Selenium, dissolved	7782-49-2	E421	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
		Silicon, dissolved	7440-21-3	E421	9.04 mg/L	10 mg/L	90.4	70.0	130	----
		Silver, dissolved	7440-22-4	E421	0.00399 mg/L	0.004 mg/L	99.7	70.0	130	----
		Sodium, dissolved	7440-23-5	E421	2.00 mg/L	2 mg/L	99.8	70.0	130	----
		Strontium, dissolved	7440-24-6	E421	0.0192 mg/L	0.02 mg/L	96.1	70.0	130	----
		Sulfur, dissolved	7704-34-9	E421	18.8 mg/L	20 mg/L	93.9	70.0	130	----
		Tellurium, dissolved	13494-80-9	E421	0.0393 mg/L	0.04 mg/L	98.2	70.0	130	----
		Thallium, dissolved	7440-28-0	E421	0.00385 mg/L	0.004 mg/L	96.3	70.0	130	----
		Thorium, dissolved	7440-29-1	E421	0.0204 mg/L	0.02 mg/L	102	70.0	130	----
		Tin, dissolved	7440-31-5	E421	0.0194 mg/L	0.02 mg/L	97.2	70.0	130	----
		Titanium, dissolved	7440-32-6	E421	0.0368 mg/L	0.04 mg/L	91.9	70.0	130	----
		Tungsten, dissolved	7440-33-7	E421	0.0189 mg/L	0.02 mg/L	94.5	70.0	130	----
		Uranium, dissolved	7440-61-1	E421	0.00384 mg/L	0.004 mg/L	96.1	70.0	130	----
		Vanadium, dissolved	7440-62-2	E421	0.0920 mg/L	0.1 mg/L	92.0	70.0	130	----
		Zinc, dissolved	7440-66-6	E421	0.373 mg/L	0.4 mg/L	93.2	70.0	130	----
		Zirconium, dissolved	7440-67-7	E421	0.0384 mg/L	0.04 mg/L	96.1	70.0	130	----
Dissolved Metals (QCLot: 1898568)										
VA25A4624-001	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000940 mg/L	0 mg/L	94.0	70.0	130	----
Dissolved Metals (QCLot: 1899322)										
VA25A4666-006	Anonymous	Mercury, dissolved	7439-97-6	E509	0.0000947 mg/L	0 mg/L	94.7	70.0	130	----
Speciated Metals (QCLot: 1895459)										
VA25A4610-002	Anonymous	Chromium, hexavalent [Cr VI], total	18540-29-9	E532	0.256 mg/L	0.25 mg/L	102	70.0	130	----

Chain of Custody (COC) / Analytical Request Form

COC Number: 17 -

Affix ALS barcode label here (lab use only)

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ALS Environmental

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	Triton Environmental
Contact:	
Phone:	
	the final report
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

Email 1 or Fax

Email 2

Project Information

ALS Account # / Quote #:	VA25-TRIT100-001
Job #:	11964
PO / AFE:	11964 - Task 20 - Phase 3C-4C
LSD:	
ALS Lab Work Order # (lab use only):	
AFE/Cost Center:	
Major/Minor Code:	
Requisitioner:	
Location:	
ALS Contact:	

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: 12-03-25

For tests that can not be performed according to the service level selected, you will be contacted.

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 (F)	Dissolved metals + mercury (F)	Total hexavalent chromium	Total trivalent chromium	TSS	TDS	Nutrients (ammonia, ammonium, total nitrogen, total phosphorus) (P)	Total sulfide (low) (as H2S), Unionized Sulfide (low) (P)	Anions scan (Br, Cl, F, NO2, NO3, SO4)	General parameters (alkalinity)	DOC (F/P)	SAMPLES ON HOLD	Sample is hazardous (please provide further details)	NUMBER OF CONTAINERS
	WLNG US 1	04-03-25	11:03	Water	R	R	R	R	R	R	R	R	R	R	R		N	9
	pH: 7.57 cond: 16 µs/cm temp: 7.1 °C																	
	WLNG DS 1	04-03-25	10:01	Water	R	R	R	R	R	R	R	R	R	R	R		N	9
	pH: 7.66 cond: 80 µs/cm temp: 8.8 °C																	

Environmental Division
Vancouver
Work Order Reference
VA25A4729

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 to add on report by clicking on the drop-down list below (electronic COC only)

WLNG DS 1: dissolved nutrients not filtered, and both nutrients were rinsed of preservative. Dissolved mercury rinsed of preserv + not filtered

Triton project # 11964

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ | Ice Packs ☑ | Ice Cubes ☐ | Custody seal intact: Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
				9°C			

SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)	
Released by:	Date: 04-03-25 Time:	Received by:	Date:	Time:	Received by:	Date: 4/3/25 Time: 5:45 PM

SEPT 2017 FRONT

TIONS AND SAMPLING INFORMATION — WHITE - LABORATORY COPY — YELLOW - CLIENT C

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

2025-3-4-Chycoski-B5172

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Downstream of Discharge
Inspection Date:	03/04/2025	**Location:**	WLNG
Triton QP:	Lily Chycoski	**Latitude/Longitude:**	49.669072 -123.248134
Temperature(c):	Low 2 High 7	**Permit:**	PE 110136
Weather Conditions:	Light Rain	**Ground Conditions:**	Wet

Observations

Time: 10:01:47 **Flow Volume (visual):** moderate

Notes: Unable to filter dissolved nutrients and mercury, so preservatives was rinsed out prior to filing with unfiltered sample. Preservative was also rinsed out of total nutrients accidentally.

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

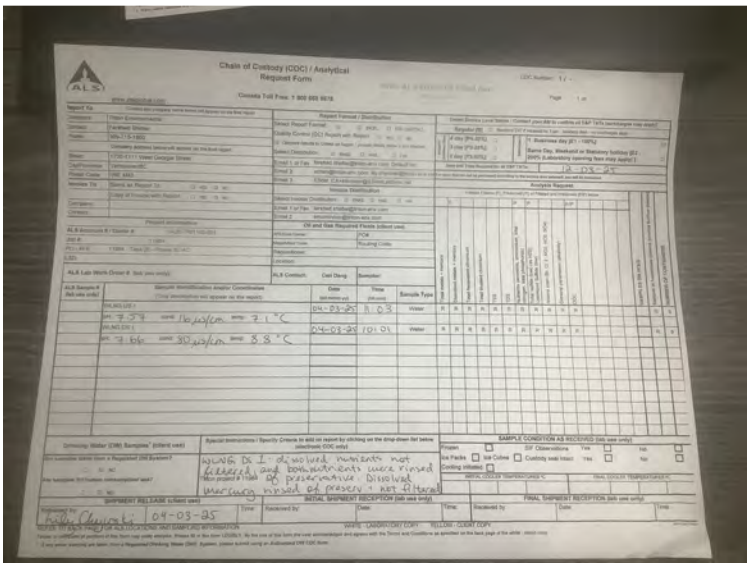


Photo: 4

Location: WLNG DS

Description: Lab COC

Sign Off

Report Prepared By:	Lily Chycoski	**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

2025-3-4-Chycoski-F4865

Project Component:	Tunnel	**Site Name:**	Receiving Environment - Upstream of Discharge
Inspection Date:	03/04/2025	**Location:**	WLNG
Triton QP:	Lily Chycoski	**Latitude/Longitude:**	49.669455 -123.25087
Temperature(c):	Low 2 High 7	**Permit:**	PE 110136
Weather Conditions:	Light Rain	**Ground Conditions:**	Wet

Observations

Time: 11:03:00 **Flow Volume (visual):** moderate

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 US

Description: Upstream view

Photo: 2

Location: WLNG US

Description: Across view

Photos

Photo: 3

Location: WLNG US

Description: Downstream view

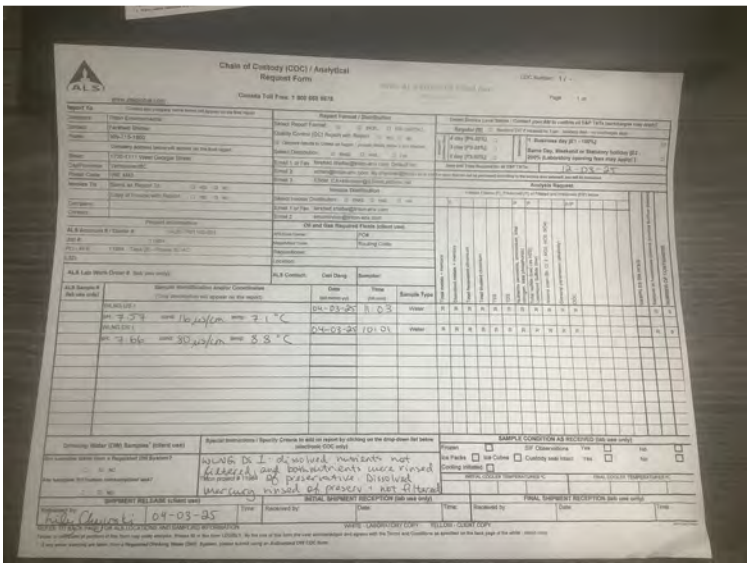


Photo: 4

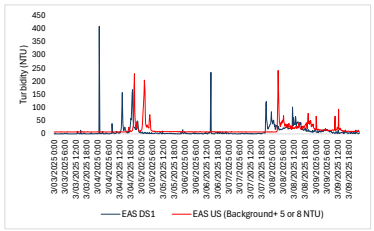
Location: WLNG US

Description: Lab COC

Sign Off

Report Prepared By:	Lily Chycoski	**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)
3/03/2025 0:00	7.2	27.2	0.0	7.1	11.0	0.0		3/03/2025 0:00	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 0:15	6.9	21.1	0.0	6.9	11.2	0.0		3/03/2025 0:15	6.8	12.0	0.0	7.0	11.0	0.0	8.0
3/03/2025 0:30	7.7	73.2	0.0	7.1	11.1	1.8		3/03/2025 0:30	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 0:45	8.2	78.1	0.0	7.4	10.8	0.0		3/03/2025 0:45	6.8	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 1:00	8.3	87.9	0.0	7.3	10.8	0.0		3/03/2025 1:00	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 1:15	8.4	89.5	0.0	7.3	10.8	0.0		3/03/2025 1:15	6.8	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 1:30	8.4	90.5	0.0	7.4	10.8	0.0		3/03/2025 1:30	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 1:45	8.4	89.0	0.0	7.4	10.8	0.0		3/03/2025 1:45	6.8	12.0	0.0	7.0	11.0	0.0	8.0
3/03/2025 2:00	8.4	87.8	0.0	7.4	10.8	0.0		3/03/2025 2:00	6.8	12.0	0.0	7.0	11.0	0.0	8.0
3/03/2025 2:15	7.3	32.4	0.0	7.2	11.0	0.0		3/03/2025 2:15	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 2:30	6.9	21.3	0.0	6.9	11.2	0.0		3/03/2025 2:30	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 2:45	8.3	99.0	0.0	7.4	10.8	0.0		3/03/2025 2:45	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 3:00	8.4	97.2	0.0	7.4	10.8	0.0		3/03/2025 3:00	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 3:15	7.1	21.2	0.0	6.9	11.2	0.0		3/03/2025 3:15	6.8	12.1	0.0	7.1	11.0	0.0	8.0
3/03/2025 3:30	8.1	92.6	0.0	7.3	11.0	0.6		3/03/2025 3:30	6.8	12.0	0.0	7.0	11.0	0.0	8.0
3/03/2025 3:45	8.4	93.4	0.0	7.4	10.8	0.0		3/03/2025 3:45	6.8	12.1	0.0	7.0	11.0	0.3	8.3
3/03/2025 4:00	8.5	92.3	0.0	7.4	10.8	0.8		3/03/2025 4:00	6.8	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 4:15	8.6	88.7	0.0	7.4	10.8	0.0		3/03/2025 4:15	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 4:30	8.6	87.6	0.0	7.4	10.8	0.0		3/03/2025 4:30	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 4:45	8.1	55.1	0.0	7.3	10.9	0.0		3/03/2025 4:45	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 5:00	7.8	30.6	0.0	7.2	10.9	0.0		3/03/2025 5:00	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 5:15	7.4	19.7	0.0	6.9	11.1	0.0		3/03/2025 5:15	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 5:30	8.7	87.5	0.0	7.4	10.7	1.8		3/03/2025 5:30	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 5:45	8.8	88.6	0.0	7.3	10.7	0.6		3/03/2025 5:45	6.8	12.1	0.0	7.0	11.0	0.0	8.0
3/03/2025 6:00	8.8	88.9	0.0	7.4	10.7	0.9		3/03/2025 6:00	6.8	12.1	0.0	7.1	11.0	0.0	8.0
3/03/2025 6:15	8.8	88.8	0.0	7.4	10.7	0.6		3/03/2025 6:15	6.8	12.2	0.0	7.0	11.0	0.0	8.0
3/03/2025 6:30	8.2	37.9	0.0	7.3	10.8	0.0		3/03/2025 6:30	6.8	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 6:45	8.3	41.9	0.0	7.2	10.8	2.6		3/03/2025 6:45	6.8	12.1	0.0	7.1	11.0	0.0	8.0
3/03/2025 7:00	9.1	92.4	0.0	7.4	10.6	0.6		3/03/2025 7:00	6.8	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 7:15	8.2	25.3	0.0	7.1	10.8	0.0		3/03/2025 7:15	6.8	12.1	0.0	7.0	11.1	0.5	8.5
3/03/2025 7:30	8.2	19.5	0.0	6.9	10.9	0.0		3/03/2025 7:30	6.8	12.1	0.0	7.1	11.0	0.0	8.0
3/03/2025 7:45	9.3	91.7	0.0	7.4	10.6	0.3		3/03/2025 7:45	6.8	12.2	0.0	7.0	11.0	0.0	8.0
3/03/2025 8:00	9.3	93.2	0.0	7.4	10.5	0.0		3/03/2025 8:00	6.8	12.0	0.0	7.0	11.0	0.0	8.0
3/03/2025 8:15	9.3	91.3	0.0	7.4	10.6	0.0		3/03/2025 8:15	6.8	12.2	0.0	7.1	11.1	0.0	8.0
3/03/2025 8:30	9.2	92.5	0.0	7.4	10.6	0.0		3/03/2025 8:30	6.8	12.0	0.0	7.1	11.1	0.0	8.0
3/03/2025 8:45	9.2	91.5	0.0	7.4	10.6	0.0		3/03/2025 8:45	6.8	12.2	0.0	7.1	11.1	0.0	8.0
3/03/2025 9:00	8.5	35.7	0.0	7.3	10.7	0.0		3/03/2025 9:00	6.8	12.1	0.0	7.0	11.1	0.0	8.0
3/03/2025 9:15	9.0	88.9	0.0	7.4	10.6	0.0		3/03/2025 9:15	6.8	12.1	0.0	7.1	11.1	0.0	8.0
3/03/2025 9:30	9.0	82.8	0.0	7.4	10.7	0.0		3/03/2025 9:30	6.8	12.1	0.0	7.1	11.1	0.0	8.0
3/03/2025 9:45	8.9	87.4	0.0	7.4	10.7	0.0		3/03/2025 9:45	6.8	12.1	0.0	7.1	11.1	0.0	8.0
3/03/2025 10:00	8.9	93.5	0.0	7.4	10.7	0.0		3/03/2025 10:00	6.9	11.9	0.0	7.1	11.1	0.0	8.0
3/03/2025 10:15	8.8	80.9	0.0	7.4	10.7	0.0		3/03/2025 10:15	6.9	12.1	0.0	7.1	11.1	0.0	8.0
3/03/2025 10:30	8.8	82.5	0.0	7.4	10.7	0.0		3/03/2025 10:30	6.9	12.0	0.0	7.1	11.1	0.0	8.0
3/03/2025 10:45	8.8	92.0	0.0	7.4	10.7	0.0		3/03/2025 10:45	7.1	12.1	0.0	7.1	11.1	0.0	8.0
3/03/2025 11:00	8.6	60.6	0.0	7.4	10.7	0.0		3/03/2025 11:00	7.0	12.0	0.0	7.2	11.0	0.0	8.0
3/03/2025 11:15	7.7	22.3	0.0	7.0	11.0	0.0		3/03/2025 11:15	7.1	12.1	0.0	7.1	11.0	0.0	8.0
3/03/2025 11:30	7.7	23.0	0.0	7.0	11.0	0.0		3/03/2025 11:30	7.2	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 11:45	8.8	79.7	0.0	7.3	10.7	0.0		3/03/2025 11:45	7.1	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 12:00	8.8	90.4	0.0	7.3	10.7	0.0		3/03/2025 12:00	7.1	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 12:15	8.7	77.7	0.0	7.3	10.7	0.0		3/03/2025 12:15	7.2	12.0	0.0	7.1	11.0	0.2	8.2
3/03/2025 12:30	8.7	80.0	0.0	7.4	10.7	0.1		3/03/2025 12:30	7.2	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 12:45	8.9	89.3	0.0	7.4	10.7	9.8		3/03/2025 12:45	7.2	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 13:00	8.3	62.7	0.0	7.3	10.9	2.4		3/03/2025 13:00	7.2	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 13:15	9.1	94.0	0.0	7.5	10.6	2.6		3/03/2025 13:15	7.3	12.0	0.0	7.1	11.0	0.0	8.0
3/03/2025 13:30	9.1	95.7	0.0	7.4	10.6	0.7		3/03/2025 13:30	7.5	11.9	0.0	7.1	11.0	0.0	8.0
3/03/2025 13:45	8.3	58.8	0.0	7.2	10.8	0.2		3/03/2025 13:45	7.6	12.0	0.0	7.1	10.9	0.0	8.0
3/03/2025 14:00	9.0	86.2	0.0	7.3	10.6	0.1		3/03/2025 14:00	7.6	11.9	0.0	7.1	10.9	0.0	8.0
3/03/2025 14:15	7.8	29.9	0.0	7.1	10.9	0.0		3/03/2025 14:15	7.8	12.0	0.0	7.1	10.9	0.0	8.0
3/03/2025 14:30	8.7	82.6	0.0	7.3	10.8	12.9		3/03/2025 14:30	7.8	11.8	0.0	7.1	10.9	0.0	8.0
3/03/2025 14:45	7.8	35.5	0.0	7.1	11.0	0.0		3/03/2025 14:45	7.8	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 15:00	7.7	34.7	0.0	7.1	11.0	0.0		3/03/2025 15:00	7.8	11.9	0.0	7.1	10.9	0.0	8.0
3/03/2025 15:15	9.0	88.2	0.0	7.3	10.6	0.1		3/03/2025 15:15	7.8	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 15:30	9.0	87.8	0.0	7.3	10.6	0.0		3/03/2025 15:30	7.8	11.9	0.0	7.1	10.8	0.0	8.0
3/03/2025 15:45	9.0	88.8	0.0	7.3	10.6	0.6		3/03/2025 15:45	7.8	12.0	0.0	7.1	10.8	0.5	8.5
3/03/2025 16:00	8.2	52.0	0.0	7.4	10.8	3.1		3/03/2025 16:00	7.8	11.9	0.0	7.1	10.8	0.0	8.0
3/03/2025 16:15	7.5	24.3	0.0	7.0	11.1	0.0		3/03/2025 16:15	7.8	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 16:30	8.2	59.4	0.0	7.3	10.9	2.4		3/03/2025 16:30	7.7	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 16:45	8.9	92.8	0.0	7.4	10.6	0.0		3/03/2025 16:45	7.7	12.0	0.0	7.1	10.8	0.4	8.4
3/03/2025 17:00	8.8	83.4	0.0	7.3	10.7	1.4		3/03/2025 17:00	7.7	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 17:15	7.9	36.9	0.0	7.2	10.9	0.0		3/03/2025 17:15	7.7	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 17:30	7.4	25.1	0.0	6.9	11.1	0.0		3/03/2025 17:30	7.6	12.0	0.0	7.1	10.9	0.0	8.0
3/03/2025 17:45	8.7	89.9	0.0	7.4	10.7	0.0		3/03/2025 17:45	7.6	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 18:00	8.7	82.1	0.0	7.4	10.7	0.0		3/03/2025 18:00	7.6	12.0	0.0	7.1	10.9	0.0	8.0
3/03/2025 18:15	8.9	92.1	0.0	7.4	10.7	0.0		3/03/2025 18:15	7.6	12.1	0.0	7.1	10.8	0.0	8.0
3/03/2025 18:30	8.9	92.0	0.0	7.4	10.7	0.0		3/03/2025 18:30	7.5	12.0	0.0	7.1	10.8	0.0	8.0
3/03/2025 18:45	8.8	90.8	0.0	7.4	10.7	0.0		3/03/2025 18:45	7.5	12.1	0.0	7.0	10.9	0.0	8.0
3/03/2025 19:00	8.5	71.6	0.0	7.4	10.7	0.0		3/03/2025 19:00	7.5	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 19:15	7.3	25.2	0.0	7.0	11.1	0.0		3/03/2025 19:15	7.5	12.1	0.0	7.0	10.9	0.0	8.0
3/03/2025 19:30	7.9	51.3	0.0	7.3	10.9	0.7		3/03/2025 19:30	7.4	12.0	0.0	7.0	10.9	0.0	8.0
3/03/2025 19:45	8.8	94.5	0.0	7.4	10.7	0.0		3/03/2025 19:45	7.4	12.2	0.0	7.0	10.9	0.0	8.0
3/03/2025 20:00	8.8	95.0	0.0	7.4	10.7	0.3		3/03/2025 20:00	7.4	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 20:15	8.7	84.9	0.0	7.4	10.7	5.1		3/03/2025 20:15	7.4	12.1	0.0	7.0	10.9	0.0	8.0
3/03/2025 20:30	7.6	36.1	0.0	7.2	11.0	0.0		3/03/2025 20:30	7.4	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 20:45	8.8	95.5	0.0	7.4	10.7	0.8		3/03/2025 20:45	7.4	12.2	0.0	7.1	10.9	0.0	8.0
3/03/2025 21:00	8.4	72.0	0.0	7.4	10.7	0.1		3/03/2025 21:00	7.3	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 21:15	7.4	31.5	0.0	7.1	11.1	0.0		3/03/2025 21:15	7.3	12.2	0.0	7.0	10.9	0.0	8.0
3/03/2025 21:30	7.3	28.7	0.0	7.1	11.1	0.0		3/03/2025 21:30	7.3	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 21:45	8.7	94.9	0.0	7.4	10.7	0.0		3/03/2025 21:45	7.3	12.2	0.0	7.0	10.9	0.0	8.0
3/03/2025 22:00	8.3	73.6	0.0	7.3	10.8	0.3		3/03/2025 22:00	7.3	12.2	0.0	7.1	10.9	0.0	8.0
3/03/2025 22:15	8.8	92.9	0.0	7.4	10.7	1.1		3/03/2025 22:15	7.3	12.2	0.0	7.0	10.9	0.0	8.0
3/03/2025 22:30	8.8	92.9	0.0	7.4	10.7	0.9		3/03/2025 22:30	7.3	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 22:45	8.8	92.2	0.0	7.4	10.7	1.0		3/03/2025 22:45	7.3	12.2	0.0	7.1	10.9	0.0	8.0
3/03/2025 23:00	7.6	35.7	0.0	7.2	11.0	0.0		3/03/2025 23:00	7.2	12.0	0.0	7.1	10.9	0.0	8.0
3/03/2025 23:15	8.4	68.8	0.0	7.4	10.7	0.6		3/03/2025 23:15	7.2	12.2	0.0	7.1	10.9	0.0	8.0
3/03/2025 23:30	8.7	88.9	0.0	7.4	10.7	0.8		3/03/2025 23:30	7.2	12.1	0.0	7.1	10.9	0.0	8.0
3/03/2025 23:45	8.7	89.5	0.0	7.5	10.7	0.3		3/03/2025 23:45	7.2	12.2	0.0	7.0	10.9	0.0	8.0
3/04/2025 0:00	8.7	87.6	0.0	7.5	10.7	0.8		3/04/2025 0:00	7.2	12.0	0.0	7.1	10.9	0.2	8.2
3/04/2025 0:15	8.7	84.8	0.0	7.5	10.7	1.3		3/04/2025 0:15	7.2	12.2	0.0	7.0	10.9	0.0	8.0
3/04/2025 0:30	8.7	86.4	0.0	7.5	10.7	1.5		3/04/2025 0:30	7.2	12.1	0.0	7.1	10.9	0.0	8.0
3/04/2025 0:45	7.6	49.2	0.0	7.2	11.1	410.2		3/04/2025 0:45	7.1	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 1:00	7.4	35.1	0.0	7.2	11.0	0.2		3/04/2025 1:00	7.1	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 1:15	8.6	87.3	0.0	7.5	10.7	1.5		3/04/2025 1:15	7.1	12.2	0.0	7.1	10.9	0.0	8.0
3/04/2025 1:30	8.5	85.3	0.0	7.5	10.8	1.5		3/04/2025 1:30	7.1	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 1:45	8.6	86.0	0.0	7.5	10.7	2.7		3/04/2025 1:45	7.1	11.0	0.0	7.1	10.9	0.0	8.0
3/04/2025 2:00	8.6	85.0	0.0	7.5	10.7	0.3		3/04/2025 2:00	7.1	12.2	0.0	7.0	11.0	0.0	8.0
3/04/2025 2:15	8.6	84.4	0.0	7.5	10.7	0.8		3/04/2025 2:15	7.1	12.2	0.0	7.1	11.0	0.3	8.3
3/04/2025 2:30	8.4	85.1	0.0	7.4	10.8	9.8		3/04/2025 2:30	7.1	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 2:45	8.1	65.0	0.0	7.4	10.8	4.0		3/04/2025 2:45	7.1	12.2	0.0	7.0	11.0	0.7	8.7
3/04/2025 3:00	8.4	80.2	0.0	7.5	10.8	0.0		3/04/2025 3:00	7.1	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 3:15	8.4	88.9	0.0	7.4	10.8	0.3		3/04/2025 3:15	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 3:30	8.4	89.3	0.0	7.4	10.8	0.0		3/04/2025 3:30	7.0	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 3:45	8.5	89.2	0.0	7.4	10.8	0.1		3/04/2025 3:45	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 4:00	8.5	88.7	0.0	7.4	10.8	2.3		3/04/2025 4:00	7.0	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 4:15	8.5	88.3	0.0	7.4	10.8	0.0		3/04/2025 4:15	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 4:30	8.3	78.7	0.0	7.4	10.8	3.9		3/04/2025 4:30	7.0	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 4:45	8.1	70.0	0.0	7.3	10.9	0.6		3/04/2025 4:45	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 5:00	8.1	70.1	0.0	7.4	10.9	0.1		3/04/2025 5:00	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 5:15	8.7	98.8	0.0	7.4	10.7	1.3		3/04/2025 5:15	7.0	11.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 5:30	7.8	43.9	0.0	7.3	10.9	1.5		3/04/2025 5:30	6.9	12.2	0.0	7.0	11.0	0.0	8.0
3/04/2025 5:45	8.6	89.8	0.0	7.4	10.7	0.0		3/04/2025 5:45	6.9	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 6:00	8.8	96.5	0.0	7.4	10.7	0.3		3/04/2025 6:00	6.9	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 6:15	8.8	94.3	0.0	7.5	10.7	0.2		3/04/2025 6:15	6.9	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 6:30	8.7	94.6	0.0	7.4	10.7	1.3		3/04/2025 6:30	6.9	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 6:45	8.7	90.3	0.0	7.4	10.7	0.8		3/04/2025 6:45	6.9	12.4	0.0	7.1	11.0	0.0	8.0
3/04/2025 7:00	8.7	90.2	0.0	7.4	10.7	0.8		3/04/2025 7:00	6.9	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 7:15	8.7	89.3	0.0	7.4	10.7	0.8		3/04/2025 7:15	6.9	12.4	0.0	7.1	11.0	0.0	8.0
3/04/2025 7:30	8.5	82.2	0.0	7.4	10.7	2.4		3/04/2025 7:30	6.9	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 7:45	8.0	54.0	0.0	7.3	10.9	38.3		3/04/2025 7:45	6.8	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 8:00	8.7	89.6	0.0	7.4	10.7	2.2		3/04/2025 8:00	6.8	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 8:15	8.9	105.1	0.0	7.4	10.6	4.5		3/04/2025 8:15	6.8	12.4	0.0	7.1	11.0	0.0	8.0
3/04/2025 8:30	8.9	105.4	0.0	7.5	10.6	6.0		3/04/2025 8:30	6.8	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 8:45	8.2	56.5	0.0	7.4	10.7	1.8		3/04/2025 8:45	6.8	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 9:00	7.6	34.6	0.0	7.2	11.0	1.3		3/04/2025 9:00	6.8	12.1	0.0	7.1	11.1	0.0	8.0



3/04/2025 9:15	8.6	96.7	0.0	7.4	10.7	1.5
3/04/2025 9:30	8.6	96.2	0.0	7.4	10.7	2.1
3/04/2025 9:45	8.4	93.1	0.0	7.4	10.8	0.8
3/04/2025 10:00	8.5	96.5	0.0	7.4	10.7	2.5
3/04/2025 10:15	8.5	98.4	0.0	7.4	10.7	10.0
3/04/2025 10:30	8.4	97.5	0.0	7.4	10.7	6.9
3/04/2025 10:45	8.4	96.5	0.0	7.4	10.8	5.8
3/04/2025 11:00	8.4	95.2	0.0	7.4	10.7	3.6
3/04/2025 11:15	8.4	93.4	0.0	7.4	10.8	3.4
3/04/2025 11:30	8.4	91.5	0.0	7.4	10.8	2.8
3/04/2025 11:45	8.2	87.1	0.0	7.4	10.9	7.2
3/04/2025 12:00	8.3	89.5	0.0	7.4	10.8	3.2
3/04/2025 12:15	7.2	46.2	0.0	7.2	11.1	5.3
3/04/2025 12:30	8.1	88.9	0.0	7.4	10.9	10.3
3/04/2025 12:45	7.6	68.5	0.0	7.3	11.0	20.1
3/04/2025 13:00	7.9	88.8	0.0	7.4	10.9	56.2
3/04/2025 13:15	7.9	97.4	0.0	7.5	10.9	156.7
3/04/2025 13:30	7.9	90.9	0.0	7.5	10.9	88.9
3/04/2025 13:45	7.6	77.8	0.0	7.4	11.0	36.9
3/04/2025 14:00	7.8	87.9	0.0	7.4	11.0	14.4
3/04/2025 14:15	7.8	87.5	0.0	7.4	11.0	12.0
3/04/2025 14:30	7.1	63.0	0.0	7.2	11.2	22.4
3/04/2025 14:45	7.6	83.5	0.0	7.4	11.0	25.3
3/04/2025 15:00	7.9	98.9	0.0	7.4	10.9	20.3
3/04/2025 15:15	8.0	97.6	0.0	7.4	10.9	13.3
3/04/2025 15:30	7.9	96.7	0.0	7.4	10.9	8.6
3/04/2025 15:45	6.9	57.1	0.0	7.2	11.2	6.9
3/04/2025 16:00	6.6	43.4	0.0	7.1	11.3	4.1
3/04/2025 16:15	8.0	98.6	0.0	7.4	10.9	4.8
3/04/2025 16:30	8.0	97.5	0.0	7.4	10.9	3.5
3/04/2025 16:45	8.0	96.1	0.0	7.4	10.9	10.3
3/04/2025 17:00	7.9	89.8	0.0	7.4	10.9	5.5
3/04/2025 17:15	8.1	100.5	0.0	7.4	10.9	6.0
3/04/2025 17:30	8.2	100.1	0.0	7.5	10.9	20.4
3/04/2025 17:45	6.7	45.8	0.0	7.2	11.3	29.4
3/04/2025 18:00	6.5	48.6	0.0	7.2	11.4	59.0
3/04/2025 18:15	7.7	101.4	0.0	7.4	11.0	53.4
3/04/2025 18:30	7.4	85.4	0.0	7.4	11.1	85.9
3/04/2025 18:45	7.7	105.8	0.0	7.5	11.0	156.6
3/04/2025 19:00	7.0	83.4	0.0	7.5	11.2	168.6
3/04/2025 19:15	7.8	103.4	0.0	7.4	11.0	52.8
3/04/2025 19:30	7.6	90.6	0.0	7.4	11.0	29.0
3/04/2025 19:45	7.8	99.9	0.0	7.4	11.0	25.7
3/04/2025 20:00	7.8	102.4	0.0	7.4	11.0	22.6
3/04/2025 20:15	7.9	103.8	0.0	7.4	11.0	24.5
3/04/2025 20:30	7.9	102.0	0.0	7.5	11.0	17.3
3/04/2025 20:45	6.6	53.0	0.0	7.2	11.3	24.4
3/04/2025 21:00	6.5	53.8	0.0	7.2	11.4	16.0
3/04/2025 21:15	7.7	98.9	0.0	7.4	11.0	20.4
3/04/2025 21:30	7.5	88.7	0.0	7.4	11.0	48.6
3/04/2025 21:45	7.7	100.6	0.0	7.4	11.0	48.7
3/04/2025 22:00	6.6	60.9	0.0	7.3	11.3	40.3
3/04/2025 22:15	7.7	97.1	0.0	7.3	11.0	12.3
3/04/2025 22:30	7.7	94.9	0.0	7.4	11.0	7.5
3/04/2025 22:45	7.7	93.6	0.0	7.4	11.0	5.4
3/04/2025 23:00	7.7	93.0	0.0	7.3	11.0	6.9
3/04/2025 23:15	6.4	44.6	0.0	7.1	11.4	4.8
3/04/2025 23:30	6.4	45.6	0.0	7.1	11.4	3.7
3/04/2025 23:45	7.6	89.4	0.0	7.3	11.1	4.4
3/05/2025 0:00	7.6	88.1	0.0	7.4	11.1	3.2
3/05/2025 0:15	7.6	87.7	0.0	7.3	11.1	3.9
3/05/2025 0:30	6.6	42.6	0.0	7.2	11.3	7.7
3/05/2025 0:45	6.3	39.5	0.0	7.1	11.4	1.6
3/05/2025 1:00	7.5	83.6	0.0	7.3	11.1	2.6
3/05/2025 1:15	6.6	44.8	0.0	7.2	11.3	2.1
3/05/2025 1:30	7.4	84.5	0.0	7.3	11.2	3.5
3/05/2025 1:45	7.6	86.7	0.0	7.4	11.1	5.5
3/05/2025 2:00	7.6	86.5	0.0	7.3	11.0	1.9
3/05/2025 2:15	7.4	74.7	0.0	7.3	11.1	3.1
3/05/2025 2:30	7.7	85.6	0.0	7.3	11.0	1.8
3/05/2025 2:45	7.7	84.2	0.0	7.4	11.0	1.0
3/05/2025 3:00	7.7	82.8	0.0	7.4	11.0	4.2
3/05/2025 3:15	6.6	31.6	0.0	7.0	11.4	2.1
3/05/2025 3:30	7.2	56.8	0.0	7.1	11.3	1.8
3/05/2025 3:45	8.0	84.9	0.0	7.3	11.0	1.5
3/05/2025 4:00	8.1	84.4	0.0	7.4	10.9	2.0
3/05/2025 4:15	7.2	33.3	0.0	7.1	11.1	5.9
3/05/2025 4:30	8.0	82.4	0.0	7.3	11.0	1.7
3/05/2025 4:45	8.4	86.6	0.0	7.4	10.9	1.5
3/05/2025 5:00	8.4	86.6	0.0	7.4	10.8	2.4
3/05/2025 5:15	8.4	84.7	0.0	7.4	10.8	1.7
3/05/2025 5:30	8.3	83.0	0.0	7.4	10.9	4.5
3/05/2025 5:45	7.2	30.1	0.0	7.0	11.2	0.7
3/05/2025 6:00	7.7	48.7	0.0	7.2	11.0	1.6
3/05/2025 6:15	8.7	85.3	0.0	7.4	10.8	1.5
3/05/2025 6:30	8.8	84.3	0.0	7.4	10.7	2.1
3/05/2025 6:45	8.9	84.5	0.0	7.4	10.7	2.8
3/05/2025 7:00	8.8	83.0	0.0	7.4	10.7	0.6
3/05/2025 7:15	8.9	87.3	0.0	7.4	10.7	1.8
3/05/2025 7:30	8.9	86.3	0.0	7.4	10.7	3.5
3/05/2025 7:45	8.5	56.1	0.0	7.3	10.8	4.1
3/05/2025 8:00	9.0	90.2	0.0	7.4	10.6	2.3
3/05/2025 8:15	9.0	89.1	0.0	7.4	10.6	2.1
3/05/2025 8:30	8.6	65.9	0.0	7.3	10.8	4.1
3/05/2025 8:45	8.9	87.5	0.0	7.4	10.7	2.8
3/05/2025 9:00	8.8	86.8	0.0	7.4	10.7	2.3
3/05/2025 9:15	7.8	26.8	0.0	7.0	11.0	0.9
3/05/2025 9:30	7.7	25.3	0.0	6.9	11.0	0.1
3/05/2025 9:45	8.7	86.8	0.0	7.4	10.7	2.6
3/05/2025 10:00	8.7	85.6	0.0	7.4	10.7	3.1
3/05/2025 10:15	8.7	88.2	0.0	7.4	10.8	5.5
3/05/2025 10:30	8.7	89.1	0.0	7.4	10.7	2.1
3/05/2025 10:45	8.6	88.2	0.0	7.4	10.7	3.5
3/05/2025 11:00	7.4	28.2	0.0	7.1	11.0	0.3
3/05/2025 11:15	7.3	27.2	0.0	7.0	11.1	0.4
3/05/2025 11:30	8.0	68.3	0.0	7.3	10.9	11.3
3/05/2025 11:45	8.4	89.3	0.0	7.4	10.8	1.3
3/05/2025 12:00	8.3	88.9	0.0	7.4	10.8	1.4
3/05/2025 12:15	8.3	88.2	0.0	7.4	10.8	0.7
3/05/2025 12:30	8.1	81.5	0.0	7.4	10.8	1.0
3/05/2025 12:45	7.2	32.5	0.0	7.2	11.1	0.5
3/05/2025 13:00	7.0	31.2	0.0	7.0	11.2	0.5
3/05/2025 13:15	8.1	90.3	0.0	7.4	10.9	1.7
3/05/2025 13:30	8.1	89.2	0.0	7.4	10.9	1.2
3/05/2025 13:45	6.9	32.0	0.0	7.2	11.2	0.8
3/05/2025 14:00	7.9	90.3	0.0	7.4	10.9	2.3
3/05/2025 14:15	7.0	50.6	0.0	7.0	11.2	1.7
3/05/2025 14:30	6.8	30.6	0.0	7.2	11.2	0.7
3/05/2025 14:45	7.9	89.9	0.0	7.3	10.9	0.7
3/05/2025 15:00	7.9	89.8	0.0	7.4	10.9	0.8
3/05/2025 15:15	7.8	89.3	0.0	7.4	10.9	1.0
3/05/2025 15:30	7.8	88.6	0.0	7.4	11.0	3.3
3/05/2025 15:45	7.9	92.6	0.0	7.4	10.9	1.4
3/05/2025 16:00	7.3	62.8	0.0	7.3	11.1	1.4
3/05/2025 16:15	6.5	29.7	0.0	7.1	11.3	1.8
3/05/2025 16:30	7.5	88.2	0.0	7.3	11.1	2.2
3/05/2025 16:45	7.6	89.3	0.0	7.4	11.0	0.4
3/05/2025 17:00	7.6	89.6	0.0	7.4	11.0	0.8
3/05/2025 17:15	7.6	91.1	0.0	7.4	11.0	1.5
3/05/2025 17:30	7.6	91.7	0.0	7.4	11.0	2.5
3/05/2025 17:45	7.6	92.5	0.0	7.4	11.0	0.5
3/05/2025 18:00	7.6	91.4	0.0	7.4	11.0	0.1
3/05/2025 18:15	7.5	90.2	0.0	7.4	11.0	0.6
3/05/2025 18:30	7.5	89.5	0.0	7.4	11.0	0.4
3/05/2025 18:45	7.5	90.5	0.0	7.4	11.0	0.8
3/05/2025 19:00	6.2	27.6	0.0	7.1	11.4	0.1
3/05/2025 19:15	6.0	27.6	0.0	7.0	11.5	0.0
3/05/2025 19:30	7.3	90.7	0.0	7.3	11.1	0.3

3/04/2025 9:15	6.8	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 9:30	6.8	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 9:45	6.8	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 10:00	6.9	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 10:15	6.9	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 10:30	6.9	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 10:45	7.0	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 11:00	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 11:15	7.0	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 11:30	7.0	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 11:45	7.0	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 12:00	7.0	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 12:15	7.0	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 12:30	7.1	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 12:45	7.1	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 13:00	7.1	12.1	0.0	7.1	11.0	0.0	8.0
3/04/2025 13:15	7.1	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 13:30	7.1	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 13:45	7.1	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 14:00	7.2	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 14:15	7.2	12.3	0.0	7.1	10.9	0.0	8.0
3/04/2025 14:30	7.2	12.2	0.0	7.1	11.0	0.0	8.0
3/04/2025 14:45	7.2	12.3	0.0	7.1	11.0	0.0	8.0
3/04/2025 15:00	7.2	12.3	0.0	7.1	10.9	0.0	8.0
3/04/2025 15:15	7.2	12.4	0.0	7.1	10.9	0.0	8.0
3/04/2025 15:30	7.2	12.4	0.0	7.1	10.9	0.4	8.4
3/04/2025 15:45	7.1	12.6	0.0	7.1	10.9	0.9	8.9
3/04/2025 16:00	7.1	12.5	0.0	7.1	11.0	0.0	8.0
3/04/2025 16:15	7.1	13.3	0.0	7.1	10.9	0.0	8.0
3/04/2025 16:30	7.1	17.1	0.0	7.2	10.9	0.5	8.5
3/04/2025 16:45	7.1	24.3	0.0	7.3	11.0	7.3	15.3
3/04/2025 17:00	7.1	26.1	0.0	7.4	10.9	20.3	25.3
3/04/2025 17:15	7.0	23.5	0.0	7.4	11.0	10.4	15.4
3/04/2025 17:30	7.0	21.6	0.0	7.3	11.0	4.5	12.5
3/04/2025 17:45	7.0	20.9	0.0	7.3	11.0	3.6	11.6
3/04/2025 18:00	6.9	20.0	0.0	7.3	11.0	0.9	8.9
3/04/2025 18:15	6.9	20.2	0.0	7.2	11.0	0.6	8.6
3/04/2025 18:30	6.9	21.7	0.0	7.3	11.0	2.2	10.2
3/04/2025 18:45	6.9	23.8	0.0	7.3	11.0	3.8	11.8
3/04/2025 19:00	6.9	25.9	0.0	7.4	11.0	10.9	15.9
3/04/2025 19:15	6.9	30.0	0.0	7.5	11.0	23.2	28.2
3/04/2025 19:30	6.8	29.8	0.0	7.5	11.0	29.5	34.5
3/04/2025 19:45	6.8	39.2	0.0	7.9	11.0	140.1	145.1
3/04/2025 20:00	6.8	44.9	0.0	8.5	11.0	224.6	229.6
3/04/2025 20:15	6.8	38.9	0.0	8.0	11.1	81.4	86.4
3/04/2025 20:30	6.7	32.7	0.0	7.6	11.1	28.6	33.6
3/04/2025 20:45	6.6	31.0	0.0	7.5	11.1	16.9	21.9
3/04/2025 21:00	6.6	31.3	0.0	7.5	11.1	17.8	22.8
3/04/2025 21:15	6.5	34.7	0.0	7.5	11.1	37.5	42.5
3/04/2025 21:30	6.5	36.9	0.0	7.6	11.1	32.0	37.0
3/04/2025 21:45	6.5	36.5	0.0	7.5	11.1	18.6	23.6
3/04/2025 22:00		35.0	0.0	7.5	11.1	16.1	21.1
3/04/2025 22:15	6.5	32.2	0.0	7.5	11.1	8.0	13.0
3/04/2025 22:30	6.4	33.1	0.0	7.4	11.2	3.3	11.3
3/04/2025 22:45	6.4	32.5	0.0	7.4	11.2	2.8	10.8
3/04/2025 23:00		31.4	0.0	7.4	11.2	1.6	9.6
3/04/2025 23:15	6.4	31.0	0.0	7.4	11.2	1.0	9.0
3/04/2025 23:30	6.4	32.2	0.0	7.4	11.1	5.7	13.7
3/04/2025 23:45	6.4	33.3	0.0	7.5	11.1	8.1	13.1
3/05/2025 0:00	6.4	33.8	0.0	7.5	11.1	7.1	15.1
3/05/2025 0:15	6.5	35.1	0.0	7.5	11.1	19.7	24.7
3/05/2025 0:30	6.4	36.7	0.0	7.6	11.2	33.9	38.9
3/05/2025 0:45	6.4	42.6	0.0	7.7	11.2	82.1	87.1
3/05/2025 1:00	6.4	42.5	0.0	7.8	11.2	99.5	104.5
3/05/2025 1:15	6.4	43.7	0.0	8.1	11.2	150.3	155.3
3/05/2025 1:30	6.3	57.8	0.0	8.6	11.2	199.4	204.4
3/05/2025 1:45	6.4	54.9	0.0	8.3	11.2	157.6	162.6
3/05/2025 2:00	6.4	48.3	0.0	7.9	11.2	69.0	74.0
3/05/2025 2:15	6.4	45.7	0.0	7.7	11.2	33.3	38.3
3/05/2025 2:30	6.4	46.9	0.0	7.7	11.2	23.6	28.6
3/05/2025 2:45	6.4	46.6	0.0	7.7	11.2	20.1	25.1
3/05/2025 3:00	6.4	43.1	0.0	7.7	11.2	28.5	33.5
3/05/2025 3:15	6.4	45.2	0.0	7.6	11.2	21.3	26.3
3/05/2025 3:30	6.4	43.6	0.0	7.6	11.2	19.1	24.1
3/05/2025 3:45	6.4	42.7	0.0	7.6	11.2	18.3	23.3
3/05/2025 4:00		42.1	0.0	7.6	11.2	17.2	22.2
3/05/2025 4:15	6.4	49.1	0.0	7.8	11.2	58.8	63.8
3/05/2025 4:30	6.3	47.2	0.0	7.8	11.2	67.5	72.5
3/05/2025 4:45	6.3	39.4	0.0	7.7	11.2	41.5	46.5
3/05/2025 5:00	6.3	41.7	0.0	7.6	11.2	12.9	17.9
3/05/2025 5:15	6.3	36.3	0.0	7.6	11.2	5.8	13.8
3/05/2025 5:30	6.3	39.2	0.0	7.5	11.2	3.6	11.6
3/05/2025 5:45	6.3	37.6	0.0	7.5	11.2	3.5	11.5
3/05/2025 6:00	6.3	35.8	0.0	7.5	11.2	1.9	9.9
3/05/2025 6:15	6.3	34.7	0.0	7.5	11.2	1.8	9.8
3/05/2025 6:30	6.3	33.3	0.0	7.5	11.2	1.2	9.2
3/05/2025 6:45	6.3	32.6	0.0	7.4	11.2	1.1	9.1
3/05/2025 7:00	6.3	31.0	0.0	7.4	11.2	1.6	9.6
3/05/2025 7:15	6.3	30.5	0.0	7.4	11.2	2.7	10.7
3/05/2025 7:30	6.3	29.3	0.0	7.4	11.2	0.3	8.3
3/05/2025 7:45	6.3	28.9	0.0	7.4	11.2	0.7	8.7
3/05/2025 8:00	6.2	27.7	0.0	7.4	11.2	0.4	8.4
3/05/2025 8:15	6.2	27.3	0.0	7.3	11.2	0.5	8.5
3/05/2025 8:30	6.3	26.3	0.0	7.4	11.2	0.4	8.4
3/05/2025 8:45	6.3	26.1	0.0	7.3	11.2	0.5	8.5
3/05/2025 9:00	6.3	25.3	0.0	7.3	11.2	0.5	8.5
3/05/2025 9:15	6.3	24.9	0.0	7.3	11.3	0.5	8.5
3/05/2025 9:30	6.3	24.2	0.0	7.3	11.2	0.2	8.2
3/05/2025 9:45	6.4	24.0	0.0	7.3	11.2	1.1	9.1
3/05/2025 10:00	6.4	23.3	0.0	7.3	11.2	0.1	8.1
3/05/2025 10:15	6.5	20.7	0.0	7.3	11.2	0.3	8.3
3/05/2025 10:30	6.7	22.7	0.0	7.2	11.2	0.9	8.9
3/05/2025 10:45	6.7	22.3	0.0	7.3	11.2	0.1	8.1
3/05/2025 11:00	6.8	22.4	0.0	7.3	11.2	0.9	8.9
3/05/2025 11:15	7.0	23.1	0.0	7.3	11.1	0.3	8.3
3/05/2025 11:30	7.0	23.0	0.0	7.3	11.1	0.8	8.8
3/05/2025 11:45	6.9	22.5	0.0	7.3	11.1	0.4	8.4
3/05/2025 12:00	7.0	22.0	0.0	7.3	11.1	0.4	8.4
3/05/2025 12:15	7.0	21.2	0.0	7.3	11.0	0.2	8.2
3/05/2025 12:30	6.9	21.2	0.0	7.2	11.1	0.2	8.2
3/05/2025 12:45	7.1	20.7	0.0	7.2	11.1	0.1	8.1
3/05/2025 13:00	7.2	20.9	0.0	7.3	11.0	0.1	8.1
3/05/2025 13:15	7.4	20.2	0.0	7.3	11.0	0.2	8.2
3/05/2025 13:30	7.5	20.4	0.0	7.3	10.9	0.0	8.0
3/05/2025 13:45	7.5	19.9	0.0	7.3	10.9	0.0	8.0
3/05/2025 14:00	7.5	19.9	0.0	7.2	10.9	0.2	8.2
3/05/2025 14:15	7.6	19.5	0.0	7.2	10.9	0.5	8.5
3/05/2025 14:30	7.6	19.4	0.0	7.2	10.9	0.2	8.2
3/05/2025 14:45	7.6	19.2	0.0	7.2	10.9	0.1	8.1
3/05/2025 15:00	7.7	19.1	0.0	7.2	10.9	0.1	8.1
3/05/2025 15:15	7.6	18.8	0.0	7.2	10.9	0.2	8.2
3/05/2025 15:30	7.6	17.0	0.0	7.2	10.9	0.1	8.1
3/05/2025 15:45	7.5	18.4	0.0	7.2	10.9	0.0	8.0
3/05/2025 16:00	7.5	18.5	0.0	7.2	10.9	0.1	8.1
3/05/2025 16:15	7.5	18.1	0.0	7.2	10.8	0.1	8.1
3/05/2025 16:30	7.5	18.2	0.0	7.2	10.9	0.2	8.2
3/05/2025 16:45	7.5	18.0	0.0	7.2	10.9	0.2	8.2
3/05/2025 17:00	7.4	17.9	0.0	7.2	10.9	0.0	8.0
3/05/2025 17:15	7.4	17.4	0.0	7.2	10.9	0.4	8.4
3/05/2025 17:30	7.4	16.0	0.0	7.2	10.9	0.2	8.2
3/05/2025 17:45	7.3	17.6	0.0	7.2	10.9	0.1	8.1
3/05/2025 18:00	7.3	17.5	0.0	7.1	10.9	0.2	8.2
3/05/2025 18:15	7.2	17.1	0.0	7.1	10.9	0.0	8.0
3/05/2025 18:30	7.1	17.4	0.0	7.1	10.9	0.1	8.1
3/05/2025 18:45	7.1	17.2	0.0	7.2	10.9	0.0	8.0
3/05/2025 19:00	7.0	17.3	0.0	7.1	10.9	0.1	8.1
3/05/2025 19:15	7.0	16.9	0.0	7.1	11.0	0.1	8.1
3/05/2025 19:30	6.9	17.1	0.0	7.1	11.0	0.0	8.0

3/05/2025 19:45	6.0	26.6	0.0	7.1	11.5	1.4	3/05/2025 19:45	6.9	16.8	0.0	7.1	11.0	0.0	8.0
3/05/2025 20:00	7.4	94.5	0.0	7.3	11.1	0.1	3/05/2025 20:00	6.8	17.0	0.0	7.1	11.0	0.3	8.3
3/05/2025 20:15	7.4	94.2	0.0	7.4	11.1	0.1	3/05/2025 20:15	6.8	16.7	0.0	7.1	11.0	0.0	8.0
3/05/2025 20:30	7.4	92.8	0.0	7.4	11.1	0.3	3/05/2025 20:30	6.7	17.0	0.0	7.1	11.0	0.0	8.0
3/05/2025 20:45	7.4	92.0	0.0	7.4	11.1	0.4	3/05/2025 20:45	6.7	16.9	0.0	7.1	11.0	0.1	8.1
3/05/2025 21:00	5.9	28.3	0.0	7.1	11.5	0.0	3/05/2025 21:00	6.6	16.9	0.0	7.1	11.1	0.0	8.0
3/05/2025 21:15	5.8	28.3	0.0	7.0	11.6	0.0	3/05/2025 21:15	6.6	16.5	0.0	7.1	11.1	0.0	8.0
3/05/2025 21:30	5.9	36.2	0.0	7.0	11.6	4.7	3/05/2025 21:30	6.6	16.8	0.0	7.1	11.1	0.2	8.2
3/05/2025 21:45	7.3	94.4	0.0	7.4	11.1	0.0	3/05/2025 21:45	6.5	16.5	0.0	7.1	11.1	0.1	8.1
3/05/2025 22:00	7.4	93.1	0.0	7.4	11.1	3.6	3/05/2025 22:00	6.5	16.5	0.0	7.1	11.1	0.4	8.4
3/05/2025 22:15	7.3	92.4	0.0	7.4	11.1	3.7	3/05/2025 22:15	6.4	16.3	0.0	7.1	11.1	0.1	8.1
3/05/2025 22:30	6.2	40.9	0.0	7.3	11.4	16.2	3/05/2025 22:30	6.4	16.5	0.0	7.1	11.1	0.1	8.1
3/05/2025 22:45	7.2	92.0	0.0	7.3	11.1	1.6	3/05/2025 22:45	6.4	16.3	0.0	7.1	11.1	0.0	8.0
3/05/2025 23:00	7.3	91.4	0.0	7.4	11.1	0.9	3/05/2025 23:00	6.3	16.3	0.0	7.1	11.1	0.0	8.0
3/05/2025 23:15	7.2	90.2	0.0	7.4	11.1	0.7	3/05/2025 23:15	6.3	16.2	0.0	7.1	11.2	0.0	8.0
3/05/2025 23:30	7.3	88.9	0.0	7.4	11.1	3.7	3/05/2025 23:30	6.2	16.3	0.0	7.1	11.2	0.4	8.4
3/05/2025 23:45	7.3	91.5	0.0	7.4	11.1	7.2	3/05/2025 23:45	6.2	16.0	0.0	7.1	11.2	0.0	8.0
3/06/2025 0:00	5.9	31.1	0.0	7.2	11.5	3.1	3/06/2025 0:00	6.2	16.1	0.0	7.1	11.2	0.0	8.0
3/06/2025 0:15	6.7	80.3	0.0	7.2	11.4	0.5	3/06/2025 0:15	6.2	16.0	0.0	7.1	11.2	0.0	8.0
3/06/2025 0:30	7.0	87.1	0.0	7.3	11.2	1.8	3/06/2025 0:30	6.1	16.0	0.0	7.1	11.2	0.0	8.0
3/06/2025 0:45	7.3	91.5	0.0	7.4	11.1	0.6	3/06/2025 0:45	6.1	15.9	0.0	7.1	11.2	0.0	8.0
3/06/2025 1:00	7.2	86.6	0.0	7.4	11.1	0.0	3/06/2025 1:00	6.1	15.9	0.0	7.1	11.2	0.0	8.0
3/06/2025 1:15	7.0	82.9	0.0	7.4	11.2	1.6	3/06/2025 1:15	6.0	15.8	0.0	7.1	11.3	0.0	8.0
3/06/2025 1:30	7.1	86.4	0.0	7.4	11.2	1.6	3/06/2025 1:30	6.0	15.8	0.0	7.1	11.2	0.0	8.0
3/06/2025 1:45	7.1	85.6	0.0	7.4	11.2	1.2	3/06/2025 1:45	6.0	15.6	0.0	7.1	11.3	0.0	8.0
3/06/2025 2:00	7.1	85.7	0.0	7.4	11.2	0.5	3/06/2025 2:00	6.0	15.7	0.0	7.1	11.3	0.0	8.0
3/06/2025 2:15	7.1	86.1	0.0	7.4	11.2	1.0	3/06/2025 2:15	5.9	15.5	0.0	7.1	11.3	0.2	8.2
3/06/2025 2:30	5.6	24.8	0.0	7.0	11.6	0.0	3/06/2025 2:30	5.9	15.6	0.0	7.1	11.3	0.0	8.0
3/06/2025 2:45	6.2	62.6	0.0	7.1	11.6	1.3	3/06/2025 2:45	5.9	15.5	0.0	7.1	11.3	0.0	8.0
3/06/2025 3:00	7.1	87.2	0.0	7.4	11.2	0.2	3/06/2025 3:00	5.8	15.6	0.0	7.1	11.3	0.5	8.5
3/06/2025 3:15	7.2	86.9	0.0	7.4	11.1	0.5	3/06/2025 3:15	5.8	15.4	0.0	7.1	11.3	0.1	8.1
3/06/2025 3:30	7.3	86.0	0.0	7.4	11.1	0.6	3/06/2025 3:30	5.8	14.2	0.0	7.1	11.3	0.0	8.0
3/06/2025 3:45	7.0	75.4	0.0	7.3	11.3	2.5	3/06/2025 3:45	5.7	15.4	0.0	7.1	11.3	0.0	8.0
3/06/2025 4:00	7.6	92.9	0.0	7.5	11.0	0.8	3/06/2025 4:00	5.7	15.3	0.0	7.0	11.3	0.2	8.2
3/06/2025 4:15	7.7	93.1	0.0	7.4	11.0	2.0	3/06/2025 4:15	5.7	15.3	0.0	7.1	11.3	0.0	8.0
3/06/2025 4:30	7.8	93.1	0.0	7.4	11.0	1.1	3/06/2025 4:30	5.7	15.1	0.0	7.1	11.4	0.0	8.0
3/06/2025 4:45	7.7	80.5	0.0	7.4	11.0	4.8	3/06/2025 4:45	5.6	15.2	0.0	7.1	11.4	0.0	8.0
3/06/2025 5:00	8.0	93.9	0.0	7.4	10.9	1.8	3/06/2025 5:00	5.6	14.9	0.0	7.1	11.4	0.0	8.0
3/06/2025 5:15	6.9	32.4	0.0	7.2	11.2	0.4	3/06/2025 5:15	5.6	15.1	0.0	7.1	11.4	0.1	8.1
3/06/2025 5:30	8.2	92.6	0.0	7.4	10.8	0.5	3/06/2025 5:30	5.6	15.0	0.0	7.1	11.4	0.0	8.0
3/06/2025 5:45	8.1	82.0	0.0	7.4	10.8	3.5	3/06/2025 5:45	5.6	15.0	0.0	7.1	11.4	0.0	8.0
3/06/2025 6:00	8.5	95.3	0.0	7.4	10.8	1.2	3/06/2025 6:00	5.5	14.8	0.0	7.1	11.4	0.0	8.0
3/06/2025 6:15	8.6	94.3	0.0	7.4	10.7	0.5	3/06/2025 6:15	5.5	14.9	0.0	7.1	11.4	0.0	8.0
3/06/2025 6:30	8.6	92.2	0.0	7.5	10.7	1.0	3/06/2025 6:30	5.5	14.7	0.0	7.1	11.4	0.0	8.0
3/06/2025 6:45	8.6	90.3	0.0	7.4	10.7	0.1	3/06/2025 6:45	5.4	14.8	0.0	7.1	11.4	0.3	8.3
3/06/2025 7:00	8.8	94.3	0.0	7.4	10.7	1.0	3/06/2025 7:00	5.4	14.7	0.0	7.1	11.4	0.0	8.0
3/06/2025 7:15	8.8	91.8	0.0	7.4	10.6	0.8	3/06/2025 7:15	5.4	14.7	0.0	7.1	11.4	0.0	8.0
3/06/2025 7:30	7.6	26.8	0.0	7.1	11.0	0.4	3/06/2025 7:30	5.4	14.5	0.0	7.1	11.4	0.0	8.0
3/06/2025 7:45	8.6	89.3	0.0	7.4	10.8	1.0	3/06/2025 7:45	5.4	14.6	0.0	7.1	11.4	0.1	8.1
3/06/2025 8:00	8.9	95.1	0.0	7.5	10.6	1.1	3/06/2025 8:00	5.3	14.5	0.0	7.1	11.5	0.0	8.0
3/06/2025 8:15	8.9	94.5	0.0	7.4	10.6	0.8	3/06/2025 8:15	5.3	14.6	0.0	7.1	11.5	0.1	8.1
3/06/2025 8:30	8.9	92.3	0.0	7.5	10.6	0.7	3/06/2025 8:30	5.3	14.3	0.0	7.1	11.5	0.0	8.0
3/06/2025 8:45	8.9	92.0	0.0	7.4	10.6	1.8	3/06/2025 8:45	5.3	14.4	0.0	7.1	11.5	0.0	8.0
3/06/2025 9:00	8.9	93.1	0.0	7.5	10.7	1.2	3/06/2025 9:00	5.3	14.3	0.0	7.1	11.5	0.0	8.0
3/06/2025 9:15	8.8	93.0	0.0	7.5	10.6	0.4	3/06/2025 9:15	5.4	14.4	0.0	7.1	11.5	0.0	8.0
3/06/2025 9:30	8.8	92.3	0.0	7.4	10.7	1.0	3/06/2025 9:30	5.4	14.2	0.0	7.1	11.5	0.0	8.0
3/06/2025 9:45	7.7	31.9	0.0	7.3	10.9	0.1	3/06/2025 9:45	5.5	14.4	0.0	7.1	11.5	0.0	8.0
3/06/2025 10:00	7.3	25.5	0.0	7.0	11.1	0.0	3/06/2025 10:00	5.6	14.4	0.0	7.1	11.5	0.0	8.0
3/06/2025 10:15	8.4	87.7	0.0	7.4	10.8	0.7	3/06/2025 10:15	5.6	14.5	0.0	7.1	11.5	0.0	8.0
3/06/2025 10:30	8.5	92.2	0.0	7.4	10.7	1.6	3/06/2025 10:30	5.7	14.6	0.0	7.1	11.5	0.0	8.0
3/06/2025 10:45	8.4	90.8	0.0	7.4	10.8	1.1	3/06/2025 10:45	5.7	14.7	0.0	7.1	11.4	0.0	8.0
3/06/2025 11:00	8.4	94.8	0.0	7.4	10.8	6.1	3/06/2025 11:00	5.8	14.6	0.0	7.1	11.4	0.0	8.0
3/06/2025 11:15	8.5	95.9	0.0	7.5	10.7	1.4	3/06/2025 11:15	5.9	14.7	0.0	7.1	11.4	0.0	8.0
3/06/2025 11:30	8.5	96.4	0.0	7.4	10.8	3.0	3/06/2025 11:30	6.0	14.6	0.0	7.2	11.4	0.0	8.0
3/06/2025 11:45	8.1	74.3	0.0	7.4	10.8	2.4	3/06/2025 11:45	6.1	14.6	0.0	7.1	11.3	0.1	8.1
3/06/2025 12:00	6.8	24.8	0.0	7.0	11.2	0.0	3/06/2025 12:00	6.2	14.4	0.0	7.2	11.3	0.0	8.0
3/06/2025 12:15	6.8	28.9	0.0	7.0	11.2	0.0	3/06/2025 12:15	6.3	14.4	0.0	7.1	11.2	0.0	8.0
3/06/2025 12:30	8.2	93.0	0.0	7.4	10.8	4.3	3/06/2025 12:30	6.4	14.3	0.0	7.1	11.2	0.0	8.0
3/06/2025 12:45	8.4	98.4	0.0	7.5	10.8	4.2	3/06/2025 12:45	6.5	14.3	0.0	7.1	11.2	0.0	8.0
3/06/2025 13:00	8.3	91.5	0.0	7.5	10.8	2.6	3/06/2025 13:00	6.6	14.1	0.0	7.1	11.2	0.0	8.0
3/06/2025 13:15	8.3	90.5	0.0	7.5	10.8	4.3	3/06/2025 13:15	6.7	14.1	0.0	7.1	11.1	0.0	8.0
3/06/2025 13:30	8.2	90.0	0.0	7.5	10.8	4.1	3/06/2025 13:30	6.8	13.9	0.0	7.2	11.1	0.0	8.0
3/06/2025 13:45	8.0	87.1	0.0	7.4	10.9	9.6	3/06/2025 13:45	6.9	13.9	0.0	7.1	11.1	0.0	8.0
3/06/2025 14:00	8.2	92.4	0.0	7.5	10.8	234.2	3/06/2025 14:00	7.0	13.8	0.0	7.1	11.1	0.0	8.0
3/06/2025 14:15	7.7	77.0	0.0	7.4	10.9	6.2	3/06/2025 14:15	7.0	13.7	0.0	7.1	11.0	0.0	8.0
3/06/2025 14:30	6.5	25.8	0.0	7.1	11.2	0.8	3/06/2025 14:30	7.0	13.5	0.0	7.1	11.0	0.0	8.0
3/06/2025 14:45	6.6	29.8	0.0	7.2	11.2	0.8	3/06/2025 14:45	7.0	13.6	0.0	7.1	11.0	0.2	8.2
3/06/2025 15:00	6.4	28.5	0.0	7.0	11.4	0.6	3/06/2025 15:00		13.5	0.0	7.1	11.0	0.0	8.0
3/06/2025 15:15	7.8	90.0	0.0	7.4	11.0	0.5	3/06/2025 15:15	7.1	13.6	0.0	7.1	11.0	0.0	8.0
3/06/2025 15:30	7.7	84.9	0.0	7.4	10.9	0.5	3/06/2025 15:30	7.0	13.3	0.0	7.1	11.0	0.0	8.0
3/06/2025 15:45	6.6	31.4	0.0	7.2	11.1	0.8	3/06/2025 15:45	7.0	13.5	0.0	7.1	11.0	0.2	8.2
3/06/2025 16:00	6.2	22.3	0.0	6.9	11.4	0.5	3/06/2025 16:00	7.0	13.4	0.0	7.1	11.0	0.0	8.0
3/06/2025 16:15	6.8	51.6	0.0	7.3	11.2	0.0	3/06/2025 16:15	7.0	13.4	0.0	7.1	11.0	0.0	8.0
3/06/2025 16:30	8.0	99.0	0.0	7.5	10.9	3.3	3/06/2025 16:30	7.0	13.1	0.0	7.1	11.0	0.0	8.0
3/06/2025 16:45	8.1	101.0	0.0	7.4	10.9	5.6	3/06/2025 16:45	7.0	13.4	0.0	7.1	11.0	0.0	8.0
3/06/2025 17:00	8.1	100.0	0.0	7.4	10.9	6.6	3/06/2025 17:00		13.4	0.0	7.1	11.0	0.0	8.0
3/06/2025 17:15	7.7	104.0	0.0	7.4	11.1	2.3	3/06/2025 17:15	7.0	13.5	0.0	7.1	11.0	0.0	8.0
3/06/2025 17:30	7.7	88.7	0.0	7.3	11.0	6.7	3/06/2025 17:30	6.9	13.3	0.0	7.1	11.0	0.0	8.0
3/06/2025 17:45	7.2	58.4	0.0	7.4	10.9	1.5	3/06/2025 17:45	6.8	13.4	0.0	7.1	11.0	0.0	8.0
3/06/2025 18:00	7.8	90.0	0.0	7.4	10.9	2.5	3/06/2025 18:00	6.8	13.3	0.0	7.1	11.0	0.1	8.1
3/06/2025 18:15	7.6	90.0	0.0	7.4	11.1	5.7	3/06/2025 18:15	6.8	13.4	0.0	7.1	11.0	0.0	8.0
3/06/2025 18:30	7.9	99.0	0.0	7.4	10.9	2.2	3/06/2025 18:30	6.7	13.2	0.0	7.0	11.0	0.0	8.0
3/06/2025 18:45	7.9	94.2	0.0	7.4	10.9	5.4	3/06/2025 18:45	6.7	13.4	0.0	7.1	11.0	0.1	8.1
3/06/2025 19:00	7.0	55.0	0.0	7.4	11.0	1.3	3/06/2025 19:00	6.6	13.2	0.0	7.1	11.1	0.0	8.0
3/06/2025 19:15	7.6	93.7	0.0	7.4	11.1	7.1	3/06/2025 19:15	6.6	13.3	0.0	7.0	11.1	0.0	8.0
3/06/2025 19:30	7.7	100.3	0.0	7.4	11.1	4.6	3/06/2025 19:30	6.5	13.3	0.0	7.1	11.1	0.0	8.0
3/06/2025 19:45	7.7	99.1	0.0	7.4	11.0	2.0	3/06/2025 19:45	6.5	13.4	0.0	7.1	11.1	0.0	8.0
3/06/2025 20:00	7.7	98.6	0.0	7.4	11.0	1.8	3/06/2025 20:00	6.5	13.1	0.0	7.1	11.1	0.0	8.0
3/06/2025 20:15	6.5	46.2	0.0	7.4	11.1	0.1	3/06/2025 20:15	6.5	12.1	0.0	7.1	11.1	0.2	8.2
3/06/2025 20:30	7.6	99.2	0.0	7.4	11.1	5.8	3/06/2025 20:30	6.4	13.3	0.0	7.0	11.1	0.0	8.0
3/06/2025 20:45	7.6	99.1	0.0	7.4	11.0	3.8	3/06/2025 20:45	6.4	12.2	0.0	7.0	11.1	0.0	8.0
3/06/2025 21:00	6.8	72.7	0.0	7.3	11.3	0.6	3/06/2025 21:00	6.4	13.4	0.0	7.0	11.1	0.0	8.0
3/06/2025 21:15	7.1	82.6	0.0	7.5	11.1	0.5	3/06/2025 21:15	6.3	13.4	0.0	7.1	11.1	0.0	8.0
3/06/2025 21:30	7.5	103.0	0.0	7.4	11.1	0.8	3/06/2025 21:30	6.3	13.4	0.0	7.0	11.2	0.0	8.0
3/06/2025 21:45	7.6	100.8	0.0	7.5	11.0	3.3	3/06/2025 21:45	6.3	13.5	0.0	7.0	11.2	0.0	8.0
3/06/2025 22:00	6.3	53.8	0.0	7.2	11.4	2.5	3/06/2025 22:00	6.2	13.2	0.0	7.1	11.2	0.0	8.0
3/06/2025 22:15	7.5	98.5	0.0	7.4	11.1	7.4	3/06/2025 22:15	6.2	13.5	0.0	7.0	11.2	0.6	8.6
3/06/2025 22:30	7.5	97.8	0.0	7.4	11.1	1.6	3/06/2025 22:30	6.1	13.3	0.0	7.1	11.2	0.0	8.0
3/06/2025 22:45	7.5	97.3	0.0	7.4	11.0	0.4	3/06/2025 22:45	6.1	13.5	0.0	7.1	11.2	0.0	8.0
3/06/2025 23:00	7.3	90.4	0.0	7.4	11.1	3.3	3/06/2025 23:00	6.1	13.4	0.0	7.1	11.2	0.0	8.0
3/06/2025 23:15	7.5	95.1	0.0	7.5	11.1	3.9	3/06/2025 23:15	6.0	13.5	0.0	7.0	11.3	0.0	8.0
3/06/2025 23:30	7.5	92.5	0.0	7.5	11.1	3.3	3/06/2025 23:30	6.0	13.4	0.0	7.1	11.2	0.0	8.0
3/06/2025 23:45	5.6	24.8	0.0	7.0	11.5	0.0	3/06/2025 23:45	6.0	13.5	0.0	7.0	11.3	0.0	8.0
3/07/2025 0:00	5.5	21.9	0.0	6.9	11.6	0.0	3/07/2025 0:00	6.0	13.4	0.0	7.0	11.2	0.0	8.0
3/07/2025 0:15	7.2	92.5	0.0	7.4	11.2	0.5	3/07/2025 0:15	5.9	13.5	0.0	7.0	11.3	0.0	8.0
3/07/2025 0:30	7.4	91.8	0.0	7.4	11.1	0.8	3/07/2025 0:30	5.9	13.4	0.0	7.1	11.3	0.0	8.0
3/07/2025 0:45	7.6	98.9	0.0	7.4	11.1	1.9	3/07/2025 0:45	5.9	13.5	0.0	7.0	11.3	0.0	8.0
3/07/2025 1:00	7.4	94.5	0.0	7.4	11.1	3.7	3/07/2025 1:00	5.8	13.4	0.0	7.0	11.3	0.0	8.0
3/07/2025 1:15	7.6	98.8	0.0	7.4	11.0	2.7	3/07/2025 1:15	5.8	13.5	0.0	7.1	11.3	0.8	8.8
3/07/2025 1:30	7.5	95.9	0.0	7.5	11.1	2.5	3/07/2025 1:30	5.8	13.2	0.0	7.0	11.3	0.0	8.0
3/07/2025 1:45	7.5	95.2	0.0	7.4	11.1	0.7	3/07/2025 1:45	5.7	13.4	0.0	7.0	11.3	0.0	8.0
3/07/2025 2:00	7.5	94.7	0.0	7.4	11.1	0.5	3/07/2025 2:00	5.7	13.4	0.0	7.1	11.3	0.0	8.0
3/07/2025 2:15	7.5	93.0	0.0	7.5	11.1	0.4	3/07/2025 2:15	5.7	13.5	0.0	7.0	11.3	0.0	8.0
3/07/2025 2:30	6.6	48.1	0.0	7.4	11.2	0.2	3/07/2025 2:30	5.6	13.2	0.0	7.1	11.4	0.0	8.0
3/07/2025 2:45	5.6	23.1	0.0	7.0	11.5	0.5	3/07/2025 2:45	5.6	13.4	0.0	7.0	11.4	0.0	8.0
3/07/2025 3:00	7.4	93.1	0.0	7.4	11.1	1.2	3/07/2025 3:00	5.6	13.2	0.0	7.0	11.4	0.0	8.0
3/07/2025 3:15	7.6	94.4	0.0	7.5	11.1	1.2	3/07/2025 3:15	5.6	13.4	0.0	7.0	11.4	0.0	8.0
3/07/2025 3:30	7.7	94.9	0.0	7.4	11.0	0.5	3/07/2025 3:30	5.5	13.3	0.0	7.0	11.4	0.0	8.0
3/07/2025 3:45	7.8	94.3	0.0	7.5	11.0	0.4	3/07/2025 3:45	5.5	13.3	0.0	7.0	11.4	0.0	8.0
3/07/2025 4:00	7.9	95.5	0.0	7.5	11.0	0.4	3/07/2025 4:00	5.5	13.3	0.0	7.1	11.4	0.0	8.0
3/07/2025 4:15	7.0	61.7	0.0	7.3	11.2	0.0	3/07/2025 4:15	5.4	13.3	0.0	7.0	11.4	0.0	8.0
3/07/2025 4:30	6.2	26.7	0.0	7.1	11.3	0.0	3/07/2025 4:30	5.4	13.2	0.0	7.1	11.4	0.0	8.0
3/07/2025 4:45	7.8	95.0	0.0	7.4	11.0	0.0	3/07/2025 4:45	5.4	13.3	0.0	7.1	11.4	0.0	8.0
3/07/2025 5:00	8.0	96.6	0.0	7.4	11.0	0.0	3/07/2025 5:00	5.4	13.1	0.0	7.1	11.4	0.0	8.0
3/07/2025 5:15	8.1	96.9	0.0	7.4	10.9	0.0	3/07/2025 5:15	5.4	13.2	0.0	7.0	11.4	0.1	8.1
3/07/2025 5:30	8.1	96.5	0.0	7.5	10.9	0.7	3/07/2025 5:30	5.4	13.1	0.0	7.1	11.4	0.0	8.0
3/07/2025 5:45	8.2	97.1	0.0	7.5	10.9	0.0	3/07/2025 5:45	5.4	13.2	0.0	7.1	11.4	0.0	8.0
3/07/2025 6:00	8.2	96.6	0.0	7.4	10.9	0.4	3/07/2025 6:00		13.1	0.0	7.1	11.4	0.0	8.0

3/07/2025 6:15	8.2	94.0	0.0	7.5	10.9	0.8
3/07/2025 6:30	6.7	24.5	0.0	7.1	11.1	0.0
3/07/2025 6:45	8.1	95.0	0.0	7.4	11.0	0.6
3/07/2025 7:00	8.3	95.1	0.0	7.4	10.9	2.3
3/07/2025 7:15	8.4	98.1	0.0	7.5	10.8	1.7
3/07/2025 7:30	8.4	98.5	0.0	7.4	10.8	1.5
3/07/2025 7:45	8.4	98.3	0.0	7.5	10.8	1.9
3/07/2025 8:00	8.2	84.8	0.0	7.5	10.8	1.0
3/07/2025 8:15	6.9	23.6	0.0	7.0	11.1	0.0
3/07/2025 8:30	8.0	92.4	0.0	7.3	11.1	0.7
3/07/2025 8:45	8.4	103.2	0.0	7.5	10.8	0.1
3/07/2025 9:00	8.2	89.3	0.0	7.5	10.9	1.3
3/07/2025 9:15	8.4	101.4	0.0	7.5	10.8	1.5
3/07/2025 9:30	8.4	103.2	0.0	7.6	10.8	2.4
3/07/2025 9:45	8.4	100.4	0.0	7.7	10.8	1.9
3/07/2025 10:00	7.6	52.0	0.0	7.5	10.9	0.4
3/07/2025 10:15	8.4	102.0	0.0	7.5	10.9	1.2
3/07/2025 10:30	8.4	100.3	0.0	7.5	10.8	1.6
3/07/2025 10:45	6.8	24.5	0.0	7.0	11.0	0.0
3/07/2025 11:00	8.3	98.9	0.0	7.5	10.9	0.7
3/07/2025 11:15	8.3	97.9	0.0	7.5	10.8	1.6
3/07/2025 11:30	8.3	95.8	0.0	7.5	10.8	0.3
3/07/2025 11:45	8.3	94.1	0.0	7.5	10.9	0.8
3/07/2025 12:00	8.2	92.5	0.0	7.5	10.9	0.5
3/07/2025 12:15	8.2	90.8	0.0	7.5	10.9	0.5
3/07/2025 12:30	8.2	89.4	0.0	7.5	10.9	0.5
3/07/2025 12:45	8.2	88.5	0.0	7.5	10.9	0.6
3/07/2025 13:00	8.1	87.8	0.0	7.5	10.9	0.5
3/07/2025 13:15	7.5	57.9	0.0	7.4	11.0	0.8
3/07/2025 13:30	6.5	23.0	0.0	7.0	11.2	0.0
3/07/2025 13:45	8.0	94.1	0.0	7.4	11.0	0.1
3/07/2025 14:00	8.2	96.1	0.0	7.5	10.9	0.4
3/07/2025 14:15	8.2	96.5	0.0	7.5	10.9	0.1
3/07/2025 14:30	8.2	95.8	0.0	7.5	10.9	1.3
3/07/2025 14:45	8.1	95.3	0.0	7.5	10.9	1.2
3/07/2025 15:00	6.6	27.2	0.0	7.1	11.1	0.0
3/07/2025 15:15	6.5	27.5	0.0	7.1	11.3	0.1
3/07/2025 15:30	8.1	98.9	0.0	7.4	10.9	2.7
3/07/2025 15:45	8.2	100.1	0.0	7.5	10.9	2.1
3/07/2025 16:00	8.2	100.2	0.0	7.5	10.9	1.2
3/07/2025 16:15	7.1	50.2	0.0	7.3	11.0	1.2
3/07/2025 16:30	7.6	87.7	0.0	7.3	11.1	2.5
3/07/2025 16:45	8.3	101.6	0.0	7.4	10.8	1.1
3/07/2025 17:00	8.3	100.3	0.0	7.5	10.8	1.9
3/07/2025 17:15	7.7	67.1	0.0	7.4	10.9	0.3
3/07/2025 17:30	8.0	97.1	0.0	7.4	11.1	0.6
3/07/2025 17:45	8.2	100.5	0.0	7.4	10.8	0.0
3/07/2025 18:00	8.2	100.9	0.0	7.5	10.8	0.6
3/07/2025 18:15	8.3	107.9	0.0	7.5	10.9	1.7
3/07/2025 18:30	8.4	106.3	0.0	7.5	10.8	3.2
3/07/2025 18:45	8.3	105.1	0.0	7.6	10.8	3.1
3/07/2025 19:00	8.3	101.4	0.0	7.6	10.8	3.6
3/07/2025 19:15	8.3	101.6	0.0	7.6	10.8	4.3
3/07/2025 19:30	8.2	97.3	0.0	7.6	10.8	5.3
3/07/2025 19:45	6.3	26.4	0.0	7.0	11.2	2.6
3/07/2025 20:00	6.2	33.2	0.0	7.0	11.4	13.8
3/07/2025 20:15	7.9	110.0	0.1	7.6	11.0	116.4
3/07/2025 20:30	8.0	110.5	0.1	7.7	10.9	123.0
3/07/2025 20:45	7.9	108.3	0.1	7.7	11.0	54.5
3/07/2025 21:00	8.0	113.6	0.1	7.1	10.9	37.5
3/07/2025 21:15	7.9	104.4	0.0	7.5	10.9	19.7
3/07/2025 21:30	7.8	104.7	0.0	7.2	11.0	17.9
3/07/2025 21:45	6.3	49.6	0.0	7.3	11.3	26.1
3/07/2025 22:00	7.7	102.3	0.0	7.3	11.0	26.5
3/07/2025 22:15	7.6	101.5	0.0	7.4	11.0	28.0
3/07/2025 22:30	7.3	99.5	0.0	7.2	11.2	35.1
3/07/2025 22:45	7.6	103.9	0.0	7.4	11.0	35.9
3/07/2025 23:00	7.5	108.4	0.1	7.1	11.0	40.7
3/07/2025 23:15	7.4	103.7	0.0	7.4	11.1	84.0
3/07/2025 23:30	7.1	94.1	0.0	7.4	11.2	53.0
3/07/2025 23:45	6.2	68.6	0.0	7.4	11.3	49.4
3/08/2025 0:00	5.9	65.2	0.0	7.3	11.6	38.3
3/08/2025 0:15	7.2	101.7	0.0	7.2	11.1	48.5
3/08/2025 0:30	7.2	97.8	0.0	7.4	11.2	52.3
3/08/2025 0:45	7.0	96.4	0.0	7.4	11.2	41.6
3/08/2025 1:00	7.1	92.0	0.0	7.4	11.2	28.2
3/08/2025 1:15	6.7	82.0	0.0	7.3	11.3	34.8
3/08/2025 1:30	7.0	86.4	0.0	7.4	11.2	16.9
3/08/2025 1:45	6.9	85.2	0.0	7.4	11.3	22.6
3/08/2025 2:00	6.8	82.7	0.0	7.1	11.3	30.8
3/08/2025 2:15	6.8	81.1	0.0	7.3	11.3	31.5
3/08/2025 2:30	6.7	77.2	0.0	7.1	11.3	33.0
3/08/2025 2:45	6.6	72.3	0.0	7.3	11.3	19.5
3/08/2025 3:00	6.6	67.9	0.0	7.3	11.4	18.7
3/08/2025 3:15	6.8	73.8	0.0	7.3	11.3	28.9
3/08/2025 3:30	6.8	70.5	0.0	7.3	11.3	15.5
3/08/2025 3:45	6.7	69.8	0.0	7.3	11.3	14.3
3/08/2025 4:00	6.7	66.7	0.0	7.3	11.3	18.6
3/08/2025 4:15	6.7	68.6	0.0	7.2	11.3	17.5
3/08/2025 4:30	6.7	65.8	0.0	7.3	11.3	17.4
3/08/2025 4:45	6.6	64.6	0.0	7.2	11.3	17.5
3/08/2025 5:00	6.6	64.4	0.0	7.1	11.4	15.7
3/08/2025 5:15	6.6	62.6	0.0	7.2	11.4	17.9
3/08/2025 5:30	6.6	61.4	0.0	7.2	11.4	18.6
3/08/2025 5:45	6.1	39.9	0.0	7.1	11.5	21.7
3/08/2025 6:00	5.9	36.7	0.0	7.0	11.6	20.1
3/08/2025 6:15	5.9	35.6	0.0	7.1	11.5	23.6
3/08/2025 6:30	6.0	35.7	0.0	7.1	11.5	20.8
3/08/2025 6:45	6.4	54.1	0.0	7.1	11.4	22.1
3/08/2025 7:00	6.4	54.2	0.0	6.9	11.4	23.1
3/08/2025 7:15	6.2	40.6	0.0	7.1	11.5	25.4
3/08/2025 7:30	6.5	50.9	0.0	7.2	11.4	32.2
3/08/2025 7:45	6.5	50.0	0.0	7.1	11.4	34.0
3/08/2025 8:00	6.5	48.4	0.0	7.0	11.4	22.7
3/08/2025 8:15	6.3	40.5	0.0	7.0	11.5	35.0
3/08/2025 8:30	6.5	47.3	0.0	7.1	11.4	18.1
3/08/2025 8:45	6.5	46.0	0.0	7.1	11.4	19.9
3/08/2025 9:00	6.5	45.2	0.0	6.9	11.4	20.7
3/08/2025 9:15	6.4	39.4	0.0	7.0	11.4	20.0
3/08/2025 9:30	6.5	44.0	0.0	7.1	11.4	22.3
3/08/2025 9:45	6.4	41.2	0.0	6.9	11.4	22.0
3/08/2025 10:00	6.4	40.7	0.0	7.0	11.4	21.1
3/08/2025 10:15	6.2	31.9	0.0	7.0	11.5	26.3
3/08/2025 10:30	6.5	42.8	0.0	7.0	11.4	18.0
3/08/2025 10:45	6.5	41.8	0.0	7.0	11.4	26.5
3/08/2025 11:00	6.4	40.5	0.0	7.0	11.4	102.5
3/08/2025 11:15	6.3	34.2	0.0	6.9	11.5	31.1
3/08/2025 11:30	6.4	39.7	0.0	7.0	11.4	60.4
3/08/2025 11:45	6.1	27.5	0.0	6.9	11.5	35.6
3/08/2025 12:00	6.3	34.6	0.0	7.0	11.4	37.4
3/08/2025 12:15	6.3	33.2	0.0	7.0	11.5	34.9
3/08/2025 12:30	6.3	31.6	0.0	7.0	11.5	65.6
3/08/2025 12:45	6.3	32.7	0.0	7.0	11.5	63.1
3/08/2025 13:00	6.3	31.0	0.0	6.9	11.4	31.7
3/08/2025 13:15	6.2	30.2	0.0	6.9	11.4	41.0
3/08/2025 13:30	6.2	26.6	0.0	6.9	11.3	41.9
3/08/2025 13:45	6.3	30.2	0.0	6.8	11.5	42.7
3/08/2025 14:00	6.2	29.8	0.0	6.7	11.5	45.9
3/08/2025 14:15	6.1	22.7	0.0	6.8	11.5	33.0
3/08/2025 14:30	6.2	24.0	0.0	6.7	11.5	37.8
3/08/2025 14:45	6.3	29.1	0.0	6.8	11.5	38.9
3/08/2025 15:00	6.3	28.2	0.0	6.7	11.5	43.3
3/08/2025 15:15	6.2	20.4	0.0	6.7	11.5	36.0
3/08/2025 15:30	6.1	19.5	0.0	6.7	11.5	42.5
3/08/2025 15:45	6.4	27.2	0.0	6.8	11.5	21.7
3/08/2025 16:00	6.4	27.1	0.0	6.8	11.5	15.5
3/08/2025 16:15	6.2	22.8	0.0	6.6	11.5	27.8
3/08/2025 16:30	6.3	25.6	0.0	6.7	11.5	19.2

3/07/2025 6:15	5.4	13.2	0.0	7.0	11.4	0.0	8.0
3/07/2025 6:30	5.4	12.9	0.0	7.0	11.5	0.0	8.0
3/07/2025 6:45	5.4	13.2	0.0	7.0	11.5	0.0	8.0
3/07/2025 7:00	5.4	13.0	0.0	7.1	11.4	0.3	8.3
3/07/2025 7:15	5.4	13.2	0.0	7.0	11.4	0.0	8.0
3/07/2025 7:30	5.4	13.1	0.0	7.1	11.5	0.0	8.0
3/07/2025 7:45	5.4	13.2	0.0	7.0	11.5	0.0	8.0
3/07/2025 8:00	5.4	13.1	0.0	7.0	11.5	0.0	8.0
3/07/2025 8:15	5.4	13.2	0.0	7.0	11.5	0.0	8.0
3/07/2025 8:30	5.4	13.0	0.0	7.1	11.5	0.0	8.0
3/07/2025 8:45	5.4	13.1	0.0	7.1	11.5	0.0	8.0
3/07/2025 9:00	5.4	13.0	0.0	7.1	11.5	0.0	8.0
3/07/2025 9:15	5.4	13.1	0.0	7.0	11.5	0.2	8.2
3/07/2025 9:30	5.5	13.0	0.0	7.0	11.5	0.0	8.0
3/07/2025 9:45	5.5	13.1	0.0	7.0	11.5	0.0	8.0
3/07/2025 10:00	5.5	13.0	0.0	7.1	11.5	0.0	8.0
3/07/2025 10:15	5.6	13.0	0.0	7.1	11.5	0.0	8.0
3/07/2025 10:30	5.8	12.9	0.0	7.1	11.5	0.0	8.0
3/07/2025 10:45	5.9	13.1	0.0	7.1	11.4	0.0	8.0
3/07/2025 11:00	5.8	12.9	0.0	7.1	11.4	0.0	8.0
3/07/2025 11:15	5.8	13.1	0.0	7.1	11.4	0.0	8.0
3/07/2025 11:30	5.9	13.0	0.0	7.1	11.4	0.0	8.0
3/07/2025 11:45	5.9	13.0	0.0	7.1	11.4	0.0	8.0
3/07/2025 12:00	6.0	12.9	0.0	7.1	11.4	0.0	8.0
3/07/2025 12:15	6.1	13.0	0.0	7.1	11.4	0.0	8.0
3/07/2025 12:30	6.2	12.8	0.0	7.1	11.3	0.0	8.0
3/07/2025 12:45	6.3	12.9	0.0	7.1	11.3	0.0	8.0
3/07/2025 13:00	6.3	12.9	0.0	7.1	11.3	0.0	8.0
3/07/2025 13:15	6.4	12.9	0.0	7.1	11.3	0.0	8.0
3/07/2025 13:30	6.4	12.8	0.0	7.1	11.3	0.0	8.0
3/07/2025 13:45	6.5	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 14:00	6.5	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 14:15	6.6	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 14:30	6.6	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 14:45	6.6	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 15:00	6.7	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 15:15	6.7	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 15:30	6.7	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 15:45	6.7	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 16:00	6.7	12.7	0.0	7.1	11.1	0.0	8.0
3/07/2025 16:15	6.6	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 16:30	6.6	12.7	0.0	7.1	11.1	0.0	8.0
3/07/2025 16:45	6.6	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 17:00		12.6	0.0	7.0	11.2	0.0	8.0
3/07/2025 17:15	6.6	12.8	0.0	7.1	11.1	0.0	8.0
3/07/2025 17:30	6.6	12.5	0.0	7.1	11.1	0.0	8.0
3/07/2025 17:45	6.6	12.8	0.0	7.0	11.1	0.0	8.0
3/07/2025 18:00	6.6	12.6	0.0	7.0	11.1	0.0	8.0
3/07/2025 18:15	6.6	12.8	0.0	7.1	11.1	0.0	8.0
3/07/2025 18:30	6.5	12.6	0.0	7.1	11.1	0.0	8.0
3/07/2025 18:45	6.5	12.8	0.0	7.1	11.1	0.0	8.0
3/07/2025 19:00	6.5	12.7	0.0	7.1	11.1	0.0	8.0
3/07/2025 19:15	6.5	12.8	0.0	7.1	11.1	0.0	8.0
3/07/2025 19:30	6.4	12.7	0.0	7.1	11.1	0.0	8.0
3/07/2025 19:45	6.4	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 20:00	6.4	12.7	0.0	7.0	11.2	0.0	8.0
3/07/2025 20:15	6.4	12.8	0.0	7.0	11.2	0.0	8.0
3/07/2025 20:30	6.3	12.6	0.0	7.1	11.2	0.0	8.0
3/07/2025 20:45	6.3	12.8	0.0	7.1	11.2	0.0	8.0
3/07/2025 21:00	6.3	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 21:15	6.3	12.8	0.0	7.0	11.2	0.0	8.0
3/07/2025 21:30	6.3	12.7	0.0	7.1	11.2	0.0	8.0
3/07/2025 21:45	6.3	11.4	0.0	7.0	11.2	0.0	8.0
3/07/2025 22:00	6.3	12.7	0.0	7.0	11.2	0.0	8.0
3/07/2025 22:15	6.2	12.8	0.0	7.1	11.2	0.3	8.3
3/07/2025 22:30	6.2	12.7	0.0	7.0	11.2	0.0	8.0
3/07/2025 22:45	6.2	12.8	0.0	7.0	11.2	0.0	8.0
3/07/2025 23:00	6.2	12.5	0.0	7.0	11.2	0.0	8.0
3/07/2025 23:15	6.2	12.7	0.0	7.0	11.2	0.0	8.0
3/07/2025 23:30	6.2	12.7	0.0	7.1	11.2	0.2	8.2
3/07/2025 23:45	6.2	11.4	0.0	7.0	11.2	0.0	8.0
3/08/2025 0:00	6.2	12.7	0.0	7.0	11.2	0.0	8.0
3/08/2025 0:15	6.2	12.8	0.0	7.1	11.2	0.0	8.0
3/08/2025 0:30	6.1	12.8	0.0	7.0	11.2	0.0	8.0
3/08/2025 0:45	6.1	12.8	0.0	7.0	11.2	0.0	8.0
3/08/2025 1:00	6.1	12.7	0.0	7.1	11.2	0.0	8.0
3/08/2025 1:15	6.1	12.9	0.0	7.0	11.2	0.0	8.0
3/08/2025 1:30	6.1	12.8	0.0	7.1	11.2	0.0	8.0
3/08/2025 1:45	6.1	13.2	0.0	7.1	11.2	0.0	8.0
3/08/2025 2:00	6.1	13.8	0.0	7.1	11.3	0.1	8.1
3/08/2025 2:15	6.1	15.3	0.0	7.1	11.2	0.2	8.2
3/08/2025 2:30	6.1	21.7	0.0	7.2	11.2	2.6	10.6
3/08/2025 2:45	6.1	42.3	0.0	7.9	11.3	133.8	138.8
3/08/2025 3:00	6.0	51.2	0.0	8.8	11.3	236.7	241.7
3/08/2025 3:15	6.0	47.3	0.0	8.6	11.3	176.9	181.9
3/08/2025 3:30	5.9	39.6	0.0	8.0	11.3	71.4	76.4
3/08/2025 3:45	5.9	38.2	0.0	7.8	11.3	40.8	45.8
3/08/2025 4:00	5.9	37.5	0.0	7.7	11.3	28.1	33.1
3/08/2025 4:15	5.9	38.5	0.0	7.7	11.3	22.7	27.7
3/08/2025 4:30	5.9	40.0	0.0	7.7	11.3	35.4	40.4
3/08/2025 4:45	5.9	38.5	0.0	7.7	11.3	39.9	44.9
3/08/2025 5:00	5.9	46.7	0.0	7.7	11.3	32.1	37.1
3/08/2025 5:15	5.9	50.3	0.0	7.7	11.3	45.1	50.1
3/08/2025 5:30	5.9	54.2	0.0	7.8	11.3	39.2	44.2
3/08/2025 5:45	5.9	58.5	0.0	7.9	11.3	49.9	54.9
3/08/2025 6:00	5.9	60.8	0.0	7.9	11.3	64.3	69.3
3/08/2025 6:15	5.8	60.8	0.0	7.9	11.4	42.7	47.7
3/08/2025 6:30	5.8	59.7	0.0	7.8	11.4	29.7	34.7
3/08/2025 6:45	5.8	60.7	0.0	7.8	11.3	24.5	29.5
3/08/2025 7:00	5.8	59.8	0.0	7.8	11.4	28.8	33.8
3/08/2025 7:15	5.8	61.3	0.0	7.8	11.4	32.9	37.9
3/08/2025 7:30	5.8	59.1	0.0	7.8	11.4	29.0	34.0
3/08/2025 7:45	5.8	50.9	0.0	7.8	11.4	19.4	24.4
3/08/2025 8:00	5.8	54.0	0.0	7.8	11.4	18.7	23.7
3/08/2025 8:15	5.8	52.8	0.0	7.7	11.4	20.2	25.2
3/08/2025 8:30	5.9	53.0	0.0	7.7	11.4	19.2	24.2
3/08/2025 8:45	5.8	52.1	0.0	7.8	11.4	31.3	36.3
3/08/2025 9:00	5.9	51.0	0.0	7.7	11.4	34.9	39.9
3/08/2025 9:15	5.9	50.4	0.0	7.7	11.4	24.6	29.6
3/08/2025 9:30	5.9	45.7	0.0	7.6	11.4	21.7	26.7
3/08/2025 9:45	5.9	38.1	0.0	7.6	11.4	15.8	20.8
3/08/2025 10:00	5.9	41.8	0.0	7.6	11.4	26.1	31.1
3/08/2025 10:15	6.0	43.9	0.0	7.5	11.4	11.8	16.8
3/08/2025 10:30	6.0	40.3	0.0	7.6	11.4	18.9	23.9
3/08/2025 10:45	6.0	40.6	0.0	7.5	11.4	14.3	19.3
3/08/2025 11:00	6.0	38.7	0.0	7.6	11.4	25.3	30.3
3/08/2025 11:15	6.0	37.7	0.0	7.5	11.4	15.2	20.2
3/08/2025 11:30	6.0	35.4	0.0	7.6	11.4	16.6	21.6
3/08/2025 11:45	6.0	29.8	0.0	7.5	11.4	14.8	19.8
3/08/2025 12:00	6.0	34.1	0.0	7.5	11.4	18.0	23.0
3/08/2025 12:15	6.0	34.1	0.0	7.5	11.4	16.4	21.4
3/08/2025 12:30	6.0	33.6	0.0	7.5	11.4	21.8	26.8
3/08/2025 12:45	6.0	28.6	0.0	7.4	11.3	18.7	23.7
3/08/2025 13:00	6.0	31.5	0.0	7.5	11.4	23.0	28.0
3/08/2025 13:15	6.0	31.2	0.0	7.5	11.3	16.0	21.0
3/08/2025 13:30	6.0	29.7	0.0	7.5	11.3	19.4	24.4
3/08/2025 13:45	6.0	29.5	0.0	7.5	11.3	23.9	28.9
3/08/2025 14:00	6.0	28.4	0.0	7.4	11.3	17.3	22.3
3/08/2025 14:15	6.0	25.8	0.0	7.4	11.3	20.2	25.2
3/08/2025 14:30	6.1	28.1	0.0	7.5	11.3	36.5	41.5
3/08/2025 14:45	6.1	27.4	0.0	7.4	11.3	27.5	32.5
3/08/2025 15:00	6.1	26.1	0.0	7.4	11.3	20.4	25.4
3/08/2025 15:15	6.1	24.3	0.0	7.3	11.3	13.2	18.2
3/08/2025 15:30	6.1	24.8	0.0	7.3	11.3	13.2	18.2
3/08/2025 15:45	6.2	24.6	0.0	7.3	11.3	13.3	18.3
3/08/2025 16:00	6.2	22.0	0.0	7.3	11.3	14.6	19.6
3/08/2025 16:15	6.2	24.4	0.0	7.3	11.3	13.5	18.5
3/08/2025 16:30	6.2	24.4	0.0	7.4	11.3	24.3	29.3

3/08/2025 16:45	6.4	27.4	0.0	6.9	11.4	14.6	3/08/2025 16:45	6.2	24.4	0.0	7.3	11.3	21.3	26.3
3/08/2025 17:00	6.4	22.1	0.0	6.8	11.4	12.8	3/08/2025 17:00	6.2	24.0	0.0	7.3	11.3	17.4	22.4
3/08/2025 17:15	6.6	28.1	0.0	6.8	11.4	13.7	3/08/2025 17:15	6.2	24.0	0.0	7.3	11.3	25.1	30.1
3/08/2025 17:30	6.7	27.5	0.0	6.8	11.4	18.1	3/08/2025 17:30	6.2	23.4	0.0	7.3	11.3	20.8	25.8
3/08/2025 17:45	6.7	27.3	0.0	6.9	11.3	17.5	3/08/2025 17:45	6.2	24.3	0.0	7.4	11.3	25.6	30.6
3/08/2025 18:00	6.7	26.3	0.0	6.8	11.3	23.4	3/08/2025 18:00	6.2	23.7	0.0	7.3	11.4	30.6	35.6
3/08/2025 18:15	6.7	23.7	0.0	6.6	11.3	12.7	3/08/2025 18:15	6.2	21.7	0.0	7.4	11.3	30.1	35.1
3/08/2025 18:30	6.8	26.8	0.0	6.8	11.3	9.6	3/08/2025 18:30	6.2	23.7	0.0	7.3	11.3	37.5	42.5
3/08/2025 18:45	6.8	26.6	0.0	6.6	11.3	16.4	3/08/2025 18:45	6.2	22.6	0.0	7.3	11.3	25.4	30.4
3/08/2025 19:00	6.9	27.6	0.0	6.8	11.3	10.8	3/08/2025 19:00	6.2	22.7	0.0	7.3	11.3	13.6	18.6
3/08/2025 19:15	6.9	27.5	0.0	6.8	11.3	10.5	3/08/2025 19:15	6.2	21.8	0.0	7.2	11.3	33.5	38.5
3/08/2025 19:30	6.9	28.4	0.0	6.6	11.3	9.8	3/08/2025 19:30	6.2	22.8	0.0	7.3	11.3	72.6	77.6
3/08/2025 19:45	6.9	27.9	0.0	6.7	11.3	16.0	3/08/2025 19:45	6.2	21.0	0.0	7.2	11.3	33.4	38.4
3/08/2025 20:00	6.8	24.0	0.0	6.7	11.3	9.9	3/08/2025 20:00	6.2	19.1	0.0	7.2	11.3	43.3	48.3
3/08/2025 20:15	6.9	28.5	0.0	6.7	11.3	9.2	3/08/2025 20:15	6.2	19.7	0.0	7.1	11.3	31.3	36.3
3/08/2025 20:30	6.9	28.2	0.0	6.8	11.2	11.2	3/08/2025 20:30	6.2	19.2	0.0	7.1	11.3	32.2	37.2
3/08/2025 20:45	6.8	23.2	0.0	6.6	11.3	8.0	3/08/2025 20:45	6.2	19.5	0.0	7.2	11.3	45.8	50.8
3/08/2025 21:00	6.9	28.5	0.0	6.8	11.2	7.1	3/08/2025 21:00	6.2	16.3	0.0	7.2	11.3	44.9	49.9
3/08/2025 21:15	6.9	27.5	0.0	6.8	11.2	9.6	3/08/2025 21:15	6.2	18.7	0.0	7.1	11.3	22.0	27.0
3/08/2025 21:30	6.9	29.2	0.0	6.8	11.2	7.7	3/08/2025 21:30	6.2	17.8	0.0	7.1	11.3	28.7	33.7
3/08/2025 21:45	6.9	28.0	0.0	6.8	11.2	6.0	3/08/2025 21:45	6.2	18.9	0.0	7.1	11.3	30.3	35.3
3/08/2025 22:00	6.9	27.6	0.0	6.8	11.2	13.5	3/08/2025 22:00	6.2	18.0	0.0	7.0	11.3	24.0	29.0
3/08/2025 22:15	6.9	27.8	0.0	6.8	11.2	7.0	3/08/2025 22:15	6.2	18.1	0.0	7.1	11.3	33.3	38.3
3/08/2025 22:30	6.9	28.2	0.0	6.8	11.2	7.4	3/08/2025 22:30	6.2	17.2	0.0	7.0	11.3	18.7	23.7
3/08/2025 22:45	6.9	26.9	0.0	6.8	11.3	10.7	3/08/2025 22:45	6.3	14.6	0.0	7.0	11.2	16.0	21.0
3/08/2025 23:00	7.0	31.4	0.0	6.8	11.2	10.2	3/08/2025 23:00	6.3	16.0	0.0	6.9	11.2	15.5	20.5
3/08/2025 23:15	7.0	31.3	0.0	6.9	11.2	15.8	3/08/2025 23:15	6.3	16.4	0.0	7.0	11.2	11.2	16.2
3/08/2025 23:30	7.0	31.0	0.0	6.9	11.2	13.3	3/08/2025 23:30	6.3	16.7	0.0	7.1	11.3	11.2	16.2
3/08/2025 23:45	7.0	31.4	0.0	6.9	11.2	10.4	3/08/2025 23:45	6.3	17.1	0.0	7.0	11.2	10.0	15.0
3/09/2025 0:00	6.7	20.4	0.0	6.7	11.3	5.7	3/09/2025 0:00	6.4	16.4	0.0	7.0	11.2	62.5	67.5
3/09/2025 0:15	7.0	31.8	0.0	6.9	11.2	6.6	3/09/2025 0:15	6.5	16.4	0.0	7.0	11.2	11.3	16.3
3/09/2025 0:30	6.8	22.1	0.0	6.7	11.3	5.4	3/09/2025 0:30	6.6	17.7	0.0	7.1	11.2	10.1	15.1
3/09/2025 0:45	7.0	31.5	0.0	6.8	11.2	6.5	3/09/2025 0:45	6.6	16.9	0.0	6.9	11.1	8.5	13.5
3/09/2025 1:00	6.9	31.2	0.0	6.8	11.2	10.5	3/09/2025 1:00		16.8	0.0	7.1	11.2	12.7	17.7
3/09/2025 1:15	6.9	29.8	0.0	6.8	11.2	4.9	3/09/2025 1:15	6.7	14.5	0.0	7.1	11.1	7.4	15.4
3/09/2025 1:30	6.9	29.2	0.0	6.8	11.2	6.9	3/09/2025 1:30	6.7	16.9	0.0	7.1	11.1	10.7	15.7
3/09/2025 1:45	6.9	30.8	0.0	6.8	11.2	11.6	3/09/2025 1:45	6.7	16.9	0.0	6.9	11.1	6.7	14.7
3/09/2025 2:00	6.9	30.0	0.0	6.9	11.2	11.5	3/09/2025 2:00	6.7	15.3	0.0	7.1	11.1	7.9	15.9
3/09/2025 2:15	6.9	29.3	0.0	6.8	11.2	10.2	3/09/2025 2:15	6.7	9.2	0.0	6.9	11.1	7.5	15.5
3/09/2025 2:30	6.9	29.3	0.0	6.8	11.2	6.3	3/09/2025 2:30	6.7	16.4	0.0	7.0	11.1	4.9	12.9
3/09/2025 2:45	6.9	29.4	0.0	6.7	11.2	9.9	3/09/2025 2:45	6.7	14.9	0.0	7.1	11.1	5.1	13.1
3/09/2025 3:00	6.9	28.5	0.0	6.8	11.2	14.4	3/09/2025 3:00	6.7	16.2	0.0	7.1	11.1	4.4	12.4
3/09/2025 3:15	6.9	28.3	0.0	6.8	11.3	15.9	3/09/2025 3:15	6.7	14.7	0.0	7.1	11.1	4.5	12.5
3/09/2025 3:30	6.9	28.0	0.0	6.9	11.2	8.4	3/09/2025 3:30	6.7	16.2	0.0	7.1	11.1	5.6	13.6
3/09/2025 3:45	6.9	26.6	0.0	6.8	11.2	13.5	3/09/2025 3:45	6.7	14.9	0.0	7.1	11.1	4.9	12.9
3/09/2025 4:00	6.9	26.5	0.0	6.8	11.2	9.9	3/09/2025 4:00	6.7	17.0	0.0	7.1	11.1	7.9	15.9
3/09/2025 4:15	6.9	26.2	0.0	6.8	11.3	13.2	3/09/2025 4:15	6.7	16.8	0.0	7.1	11.1	7.6	15.6
3/09/2025 4:30	6.9	25.8	0.0	6.6	11.2	13.3	3/09/2025 4:30	6.7	15.4	0.0	7.2	11.1	7.6	15.6
3/09/2025 4:45	6.9	25.7	0.0	6.8	11.2	15.4	3/09/2025 4:45	6.7	18.1	0.0	7.1	11.1	6.1	14.1
3/09/2025 5:00	6.9	25.6	0.0	6.7	11.2	12.2	3/09/2025 5:00	6.7	17.9	0.0	7.2	11.1	15.6	20.6
3/09/2025 5:15	6.9	24.9	0.0	6.7	11.3	17.1	3/09/2025 5:15	6.7	17.7	0.0	7.2	11.1	6.0	14.0
3/09/2025 5:30	6.9	24.1	0.0	6.8	11.3	15.2	3/09/2025 5:30	6.7	18.3	0.0	7.2	11.1	5.2	13.2
3/09/2025 5:45	6.9	24.3	0.0	6.8	11.2	13.9	3/09/2025 5:45	6.7	13.7	0.0	7.2	11.1	8.2	13.2
3/09/2025 6:00	6.9	24.0	0.0	6.6	11.3	17.1	3/09/2025 6:00	6.7	18.8	0.0	7.2	11.1	10.5	15.5
3/09/2025 6:15	6.9	23.5	0.0	6.7	11.3	13.4	3/09/2025 6:15	6.7	16.2	0.0	7.2	11.1	6.7	14.7
3/09/2025 6:30	6.9	23.4	0.0	6.7	11.3	10.5	3/09/2025 6:30	6.7	19.2	0.0	7.2	11.1	6.0	14.0
3/09/2025 6:45	6.8	22.3	0.0	6.5	11.3	10.3	3/09/2025 6:45	6.7	16.8	0.0	7.2	11.1	4.4	12.4
3/09/2025 7:00	6.9	24.6	0.0	6.6	11.2	11.0	3/09/2025 7:00	6.8	19.1	0.0	7.2	11.1	4.6	12.6
3/09/2025 7:15	6.9	24.1	0.0	6.7	11.2	7.0	3/09/2025 7:15	6.8	16.3	0.0	7.2	11.1	5.1	13.1
3/09/2025 7:30	6.9	24.2	0.0	6.7	11.2	7.5	3/09/2025 7:30	6.8	19.5	0.0	7.3	11.1	6.3	14.3
3/09/2025 7:45	6.7	19.4	0.0	6.6	11.3	9.8	3/09/2025 7:45	6.7	14.0	0.0	7.2	11.1	4.2	12.2
3/09/2025 8:00	6.9	25.2	0.0	6.7	11.2	9.8	3/09/2025 8:00	6.7	19.3	0.0	7.2	11.1	3.7	11.7
3/09/2025 8:15	6.9	25.0	0.0	6.7	11.2	9.2	3/09/2025 8:15	6.7	15.0	0.0	7.2	11.1	4.4	12.4
3/09/2025 8:30	6.9	25.1	0.0	6.7	11.3	4.2	3/09/2025 8:30	6.7	18.9	0.0	7.2	11.1	6.3	14.3
3/09/2025 8:45	6.8	22.5	0.0	6.7	11.3	5.9	3/09/2025 8:45	6.7	12.1	0.0	7.2	11.1	6.0	14.0
3/09/2025 9:00	6.9	25.5	0.0	6.7	11.2	2.7	3/09/2025 9:00	6.7	17.9	0.0	7.1	11.0	7.7	15.7
3/09/2025 9:15	6.9	25.7	0.0	6.7	11.2	4.3	3/09/2025 9:15	6.7	12.4	0.0	7.2	11.1	6.6	14.6
3/09/2025 9:30	6.8	25.6	0.0	6.7	11.2	7.2	3/09/2025 9:30	6.7	16.6	0.0	7.2	11.1	5.8	13.8
3/09/2025 9:45	6.8	25.3	0.0	6.7	11.2	5.1	3/09/2025 9:45	6.7	17.9	0.0	7.1	11.1	5.4	13.4
3/09/2025 10:00	6.9	26.7	0.0	6.7	11.2	2.9	3/09/2025 10:00	6.7	17.6	0.0	7.1	11.1	9.6	14.6
3/09/2025 10:15	6.8	25.9	0.0	6.7	11.2	1.7	3/09/2025 10:15	6.7	17.0	0.0	7.1	11.1	62.4	67.4
3/09/2025 10:30	6.8	26.7	0.0	6.7	11.2	3.5	3/09/2025 10:30	6.7	16.9	0.0	7.1	11.1	8.1	13.1
3/09/2025 10:45	6.8	26.8	0.0	6.7	11.2	6.8	3/09/2025 10:45	6.7	15.9	0.0	7.1	11.1	10.4	15.4
3/09/2025 11:00	6.8	27.4	0.0	6.8	11.2	8.3	3/09/2025 11:00	6.7	14.4	0.0	7.0	11.1	9.3	14.3
3/09/2025 11:15	6.8	27.1	0.0	6.8	11.2	3.2	3/09/2025 11:15	6.7	17.4	0.0	7.1	11.0	10.2	15.2
3/09/2025 11:30	6.8	27.4	0.0	6.8	11.2	1.2	3/09/2025 11:30	6.8	16.6	0.0	7.0	11.1	20.6	25.6
3/09/2025 11:45	6.8	27.7	0.0	6.7	11.2	6.0	3/09/2025 11:45	6.8	17.0	0.0	7.1	11.0	13.1	18.1
3/09/2025 12:00	6.8	28.3	0.0	6.8	11.2	14.7	3/09/2025 12:00	6.8	15.8	0.0	7.0	11.1	20.1	25.1
3/09/2025 12:15	6.8	28.4	0.0	6.8	11.2	4.8	3/09/2025 12:15	6.8	11.9	0.0	7.0	11.0	88.3	93.3
3/09/2025 12:30	6.5	17.4	0.0	6.7	11.3	1.6	3/09/2025 12:30	6.8	15.6	0.0	7.1	11.0	12.4	17.4
3/09/2025 12:45	6.4	17.1	0.0	6.7	11.3	1.1	3/09/2025 12:45	6.8	15.2	0.0	6.9	11.1	14.2	19.2
3/09/2025 13:00	6.8	30.9	0.0	6.6	11.2	5.0	3/09/2025 13:00	6.8	16.6	0.0	7.0	11.1	9.6	14.6
3/09/2025 13:15	6.8	30.8	0.0	6.8	11.2	3.7	3/09/2025 13:15	6.8	15.3	0.0	7.0	11.1	16.3	21.3
3/09/2025 13:30	6.7	30.0	0.0	6.8	11.3	3.0	3/09/2025 13:30	6.8	14.6	0.0	7.1	11.1	6.6	14.6
3/09/2025 13:45	6.8	30.9	0.0	6.9	11.3	5.1	3/09/2025 13:45	6.8	12.0	0.0	6.9	11.1	6.4	14.4
3/09/2025 14:00	6.7	31.3	0.0	6.8	11.3	4.4	3/09/2025 14:00	6.8	15.1	0.0	6.9	11.1	4.7	12.7
3/09/2025 14:15	6.5	27.1	0.0	6.7	11.4	6.2	3/09/2025 14:15	6.8	14.7	0.0	6.9	11.1	8.4	13.4
3/09/2025 14:30	6.7	31.7	0.0	6.8	11.3	4.8	3/09/2025 14:30	6.8	14.2	0.0	6.9	11.1	2.0	10.0
3/09/2025 14:45	6.6	30.9	0.0	6.8	11.3	2.5	3/09/2025 14:45	6.8	14.3	0.0	6.9	11.1	3.3	11.3
3/09/2025 15:00	6.6	31.2	0.0	6.9	11.3	11.1	3/09/2025 15:00	6.8	13.6	0.0	6.9	11.0	2.5	10.5
3/09/2025 15:15	6.5	29.6	0.0	6.8	11.3	1.2	3/09/2025 15:15	6.8	13.2	0.0	6.9	11.0	1.8	9.8
3/09/2025 15:30	6.5	28.5	0.0	6.8	11.4	7.1	3/09/2025 15:30	6.7	11.3	0.0	6.9	11.0	2.8	10.8
3/09/2025 15:45	6.4	28.2	0.0	6.8	11.4	5.3	3/09/2025 15:45	6.7	13.4	0.0	7.0	11.1	1.6	9.6
3/09/2025 16:00	6.6	33.2	0.0	6.9	11.3	14.7	3/09/2025 16:00	6.7	13.1	0.0	7.0	11.1	3.9	11.9
3/09/2025 16:15	6.5	32.4	0.0	7.0	11.3	7.2	3/09/2025 16:15	6.7	12.7	0.0	6.9	11.1	2.5	10.5
3/09/2025 16:30	6.5	33.2	0.0	7.0	11.3	5.3	3/09/2025 16:30	6.7	11.9	0.0	7.0	11.1	1.0	9.0
3/09/2025 16:45	6.5	33.4	0.0	6.9	11.3	4.2	3/09/2025 16:45	6.7	11.6	0.0	6.9	11.1	1.4	9.4
3/09/2025 17:00	6.6	37.4	0.0	7.0	11.3	3.9	3/09/2025 17:00	6.7	11.3	0.0	7.1	11.1	1.7	9.7
3/09/2025 17:15	6.6	38.6	0.0	7.0	11.3	4.7	3/09/2025 17:15	6.7	11.0	0.0	7.0	11.1	1.1	9.1
3/09/2025 17:30	6.1	20.9	0.0	7.0	11.4	0.7	3/09/2025 17:30	6.6	10.6	0.0	7.1	11.1	1.8	9.8
3/09/2025 17:45	6.5	36.7	0.0	6.8	11.4	3.1	3/09/2025 17:45	6.6	10.4	0.0	7.1	11.1	2.9	10.9
3/09/2025 18:00	6.4	32.1	0.0	6.9	11.4	2.9	3/09/2025 18:00	6.6	10.4	0.0	7.2	11.1	2.0	10.0
3/09/2025 18:15	6.5	37.8	0.0	6.9	11.3	3.1	3/09/2025 18:15	6.6	12.5	0.0	7.1	11.1	1.0	9.0
3/09/2025 18:30	6.0	21.2	0.0	6.8	11.5	3.2	3/09/2025 18:30	6.6	12.5	0.0	7.1	11.1	0.8	8.8
3/09/2025 18:45	6.5	39.6	0.0	6.9	11.3	4.2	3/09/2025 18:45	6.6	11.9	0.0	7.1	11.1	1.0	9.0
3/09/2025 19:00	6.3	35.1	0.0	7.0	11.4	1.6	3/09/2025 19:00	6.6	12.0	0.0	7.1	11.1	1.1	9.1
3/09/2025 19:15	6.5	40.3	0.0	7.0	11.4	7.7	3/09/2025 19:15	6.6	11.7	0.0	7.1	11.1	1.7	9.7
3/09/2025 19:30	6.2	29.4	0.0	7.0	11.4	4.3	3/09/2025 19:30	6.6	11.9	0.0	7.1	11.1	1.0	9.0
3/09/2025 19:45	5.8	19.0	0.0	6.8	11.6	0.6	3/09/2025 19:45	6.5	11.3	0.0	7.1	11.2	2.1	10.1
3/09/2025 20:00	6.3	38.3	0.0	6.8	11.4	3.4	3/09/2025 20:00	6.5	12.4	0.0	7.1	11.2	2.0	10.0
3/09/2025 20:15	6.4	39.2	0.0	6.9	11.4	2.8	3/09/2025 20:15	6.4	11.8	0.0	7.1	11.2	0.8	8.8
3/09/2025 20:30	6.4	40.4	0.0	7.0	11.4	2.4	3/09/2025 20:30	6.4	12.8	0.0	7.2	11.2	2.1	10.1
3/09/2025 20:45	6.4	40.1	0.0	7.0	11.4	5.5	3/09/2025 20:45	6.4	13.4	0.0	7.1	11.2	1.7	9.7
3/09/2025 21:00	5.8	20.9	0.0	6.9	11.6	0.8	3/09/2025 21:00	6.4	12.8	0.0	7.2	11.2	0.4	8.4
3/09/2025 21:15	5.7	20.9	0.0	6.8	11.6	0.6	3/09/2025 21:15	6.3	13.2	0.0	7.2	11.2	3.3	11.3
3/09/2025 21:30	6.3	42.0	0.0	6.8	11.4	1.6	3/09/2025 21:30	6.3	12.6	0.0	7.2	11.2	0.2	8.2
3/09/2025 21:45	6.0	34.0	0.0	6.8	11.5	14.5	3/09/2025 21:45	6.2	13.1	0.0	7.2	11.2	0.2	8.2
3/09/2025 22:00	6.2	38.6	0.0	6.9	11.4	4.3	3/09/2025 22:00	6.2	12.1	0.0	7.1	11.2	0.5	8.5
3/09/2025 22:15	6.2	37.6	0.0	6.9	11.5	3.0	3/09/2025 22:15	6.2	12.6	0.0	7.2	11.2	1.5	9.5
3/09/2025 22:30	6.2	37.1	0.0	7.0	11.4	3.6	3/09/2025 22:30	6.2	12.1	0.0	7.1	11.2	0.8	8.8
3/09/2025 22:45	6.2	37.2	0.0	6.9	11.4	3.5	3/09/2025 22:45	6.1	12.4	0.0	7.1	11.2	0.1	8.1
3/09/2025 23:00	6.1	35.2	0.0	6.9	11.5	0.2	3/09/2025 23:00	6.1	12.0	0.0	7.1	11.3	6.3	14.3
3/09/2025 23:15	6.1	37.6	0.0	6.9	11.5	1.2	3/09/2025 23:15	6.1	12.0	0.0	7.1	11.3	0.0	8.0
3/09/2025 23:30	6.1	36.6	0.0	6.9	11.5	1.6	3/09/2025 23:30	6.0	11.0	0.0	7.1	11.3	0.1	8.1
3/09/2025 23:45	6.1	36.8	0.0	6.9	11.5	4.9	3/09/2025 23:45	6.0	11.4	0.0	7.1	11.3	0.6	8.6