CERTIFICATE OF ANALYSIS

Work Order	:	**HA2503218**		
Client	:	**WSP Canada Inc.**	Laboratory	: ALS Environmental - Halifax
Contact	:	Naomi Giles	Account Manager	: Amanda Overholster
Address	:	1 Spectacle Lake Drive Dartmouth Nova Scotia Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth NS Canada B3B 1L2
Telephone	:	----	E-mail	: Amanda.Overholster@ALSGlobal.com
Project	:	CA0050657.1254	Telephone	: 1 416 817 2944
PO	:	P115454CA001	Date Samples Received	: 20-Aug-2025 13:30
C-O-C number	:	----	Date Analysis Commenced	: 20-Aug-2025
Sampler	:	Client	Issue Date	: 28-Aug-2025 14:55
Site	:	----		
Quote number	:	HRM-2025-0160 Water Quality Monitoring (X)		
No. of samples received	:	5		
No. of samples analysed	:	5		

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*
Jiaxi Wang		Inorganics, Dartmouth, Nova Scotia
Jiaxi Wang		Microbiology, Dartmouth, Nova Scotia
Jon Fisher		Inorganics, Waterloo, Ontario
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Lee McTavish		Inorganics, Winnipeg, Manitoba
Robyn MacCormack		Administration, Dartmouth, Nova Scotia
Walt Kippenhuck		Metals, Waterloo, Ontario
Walt Kippenhuck		Inorganics, Waterloo, Ontario

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
%	percent
CU	colour units (1 cu = 1 mg/l pt)
L	litres
meq/L	milliequivalents per litre
mg/L	milligrams per litre
MPN/100mL	most probable number per hundred millilitres
NTU	nephelometric turbidity units
pH units	pH units
µg/L	micrograms per litre
µg/sample	micrograms per sample
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
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	PML-2 ----	KL-6 ----	KL-7 ----	HWY-102-2 ----	PML-1 ----
					Client sampling date / time	20-Aug-2025 12:30	20-Aug-2025 10:35	20-Aug-2025 10:15	20-Aug-2025 11:15	20-Aug-2025 12:00
						HA2503218-001	HA2503218-002	HA2503218-003	HA2503218-004	HA2503218-005
						Result	Result	Result	Result	Result
Sample Preparation										
Volume filtered	----	EF870B/HA	0.001	L		0.100	0.100	0.100	0.100	0.100
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WT	1.2	mg/L		16.5	10.2	9.4	28.1	15.5
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WT	1.0	mg/L		<0.6	<0.6	<0.6	<0.6	<0.6
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WT	1.0	mg/L		<0.3	<0.3	<0.3	<0.3	<0.3
Alkalinity, total (as CaCO3)	----	E290/WT	1.0	mg/L		13.5	8.4	7.7	23.0	12.7
Colour, apparent	----	E330/WT	2.0	CU		21.2	23.2	20.6	79.9	20.7
Conductivity	----	E100/WT	1.0	µS/cm		467	364	348	717	455
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WT	0.50	mg/L		43.5	32.8	31.1	86.2	43.4
Langelier index (@ 20°C)	----	EC105A/WT	0.010	-		-2.01	-2.43	-2.40	-1.58	-1.89
Langelier index (@ 4°C)	----	EC105A/WT	0.010	-		-2.25	-2.68	-2.65	-1.83	-2.14
pH	----	E108/HA	0.10	pH units		7.13	7.02	7.11	7.07	7.27
pH, saturation (@ 20°C)	----	EC105A/WT	0.010	pH units		9.14	9.45	9.51	8.65	9.16
pH, saturation (@ 4°C)	----	EC105A/WT	0.010	pH units		9.38	9.70	9.76	8.90	9.41
Solids, total dissolved [TDS]	----	E162/HA	10	mg/L		261 DLDS	214 DLDS	199 DLDS	452 DLDS	256 DLDS
Solids, total suspended [TSS]	----	E160/HA	3.0	mg/L		<3.0	<3.0	<3.0	<3.0	6.0
Turbidity	----	E121/WT	0.10	NTU		0.38	0.35	0.22	2.14	0.64
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WT	0.0050	mg/L		0.0210	0.0069	0.0077	0.184	0.0323
Chloride	16887-00-6	E235.Cl/WT	0.50	mg/L		113	88.0	84.1	176	111
Fluoride	16984-48-8	E235.F/WT	0.020	mg/L		0.043	0.033	0.032	0.036	0.041

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	PML-2 ----	KL-6 ----	KL-7 ----	HWY-102-2 ----	PML-1 ----
					Client sampling date / time	20-Aug-2025 12:30	20-Aug-2025 10:35	20-Aug-2025 10:15	20-Aug-2025 11:15	20-Aug-2025 12:00
						HA2503218-001	HA2503218-002	HA2503218-003	HA2503218-004	HA2503218-005
						Result	Result	Result	Result	Result
Anions and Nutrients										
Kjeldahl nitrogen, total [TKN]	----	E318/WT	0.050	mg/L		0.241	0.198	0.155	0.504	0.673
Nitrate (as N)	14797-55-8	E235.NO3/WT	0.020	mg/L		0.026	0.113	0.142	0.074	0.036
Nitrate + Nitrite (as N)	----	EC235.N+N/WT	0.0032	mg/L		0.0260	0.113	0.142	0.0740	0.0360
Nitrite (as N)	14797-65-0	E235.NO2/WT	0.010	mg/L		<0.010	<0.010	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/WT	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	7723-14-0	E372-U/WT	0.0020	mg/L		0.0035	0.0036	0.0021	0.0123	0.0452
Silicate (as SiO2)	7631-86-9	E392/WP	0.50	mg/L		0.81	1.98	2.14	8.12	0.80
Sulfate (as SO4)	14808-79-8	E235.SO4/WT	0.30	mg/L		10.8	10.4	10.3	18.4	10.5
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L		4.37	4.32	4.32	7.28	6.15
Microbiological Tests										
Coliforms, total	----	E010/HA	1	MPN/100 mL		>2420	921	179	>2420	2420
Coliforms, Escherichia coli [E. coli]	----	E010/HA	1	MPN/100 mL		1	8	3	129	8
Ion Balance										
Anion sum	----	EC101A/WT	0.10	meq/L		3.69	2.88	2.75	5.81	3.61
Cation sum (total)	----	EC101A/WT	0.10	meq/L		3.76	2.92	2.75	6.15	3.67
Ion balance (cations/anions)	----	EC101A/WT	0.01	%		102	101	100	106	102
Total Metals										
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L		0.0120	0.0326	0.0286	0.0487	0.183
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L		<0.00010	<0.00010	<0.00010	0.00016	0.00014
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L		0.00028	0.00031	0.00027	0.00047	0.00037

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	PML-2 ----	KL-6 ----	KL-7 ----	HWY-102-2 ----	PML-1 ----
					Client sampling date / time	20-Aug-2025 12:30	20-Aug-2025 10:35	20-Aug-2025 10:15	20-Aug-2025 11:15	20-Aug-2025 12:00
						HA2503218-001	HA2503218-002	HA2503218-003	HA2503218-004	HA2503218-005
						Result	Result	Result	Result	Result
Total Metals										
Barium, total	7440-39-3	E420/WT	0.00010	mg/L		0.0238	0.0258	0.0248	0.211	0.0270
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/WT	0.010	mg/L		0.010	<0.010	<0.010	0.013	0.010
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L		<0.0000050	0.0000050	0.0000101	0.0000270	0.0000169
Calcium, total	7440-70-2	E420/WT	0.050	mg/L		13.9	10.4	9.85	28.2	13.9
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L		<0.00010	<0.00010	<0.00010	0.00048	0.00044
Copper, total	7440-50-8	E420/WT	0.00050	mg/L		0.00074	0.00068	0.00069	0.00087	0.00135
Iron, total	7439-89-6	E420/WT	0.010	mg/L		0.103	0.052	0.028	0.869	0.416
Lead, total	7439-92-1	E420/WT	0.000050	mg/L		<0.000050	0.000154	<0.000050	0.000184	0.000348
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L		2.13	1.67	1.57	3.84	2.11
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L		0.0809	0.0324	0.0104	0.219	0.196
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L		0.000181	0.000201	0.000176	0.000225	0.000206
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L		<0.00050	<0.00050	<0.00050	0.00095	0.00056
Potassium, total	7440-09-7	E420/WT	0.050	mg/L		1.58	1.16	1.12	2.44	1.65
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L		0.000062	0.000066	0.000063	0.000064	0.000080
Silicon (as SiO2), total	7631-86-9	EC420.SiO2/WT	0.25	mg/L		0.92	2.01	2.16	8.02	1.05
Silicon, total	7440-21-3	E420/WT	0.10	mg/L		0.43	0.94	1.01	3.75	0.49
Silver, total	7440-22-4	E420/WT	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/WT	0.050	mg/L		65.3	51.1	48.2	99.0	62.5
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L		0.0617	0.0469	0.0447	0.135	0.0625

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	PML-2 ----	KL-6 ----	KL-7 ----	HWY-102-2 ----	PML-1 ----
Client sampling date / time					20-Aug-2025 12:30	20-Aug-2025 10:35	20-Aug-2025 10:15	20-Aug-2025 11:15	20-Aug-2025 12:00
					HA2503218-001	HA2503218-002	HA2503218-003	HA2503218-004	HA2503218-005
					Result	Result	Result	Result	Result
Total Metals									
Thallium, total	7440-28-0	E420/WT	0.000010	mg/L	<0.000010	0.000014	0.000013	<0.000010	0.000011
Tin, total	7440-31-5	E420/WT	0.00010	mg/L	0.00117	<0.00010	<0.00010	<0.00010	0.00303
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L	<0.00030	0.00039	<0.00030	0.00055	0.00330
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L	0.000013	0.000054	0.000059	0.000015	0.000031
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L	<0.0030	<0.0030	<0.0030	0.0079	0.0050
Plant Pigments									
Chlorophyll a	479-61-8	EC870B/WP	0.010	µg/L	0.768	1.73	1.13	1.52	1.59
Chlorophyll a	479-61-8	E870B/WP	0.0020	µg/sample	0.0768	0.173	0.113	0.152	0.159

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

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **HA2503218**	Page	: 1 of 23
Client	: **WSP Canada Inc.**	Laboratory	: ALS Environmental - Halifax
Contact	: Naomi Giles	Account Manager	: Amanda Overholster
Address	: 1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	: ----	Telephone	: 1 416 817 2944
Project	: CA0050657.1254	Date Samples Received	: 20-Aug-2025 13:30
PO	: P115454CA001	Issue Date	: 28-Aug-2025 14:56
C O C number	: ----		
Sampler	: Client		
Site	: ----		
Quote number	: HRM-2025-0160 Water Quality Monitoring (X)		
No of samples received	: 5		
No. of samples analysed	: 5		

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

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers occur - please see following pages for full details.

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								
Physical Tests	QC-MRG3-2178378 001	----	Conductivity	----	E100	2.6 µS/cm B	2 µS/cm	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.*

Duplicate (DUP) RPDs								
Microbiological Tests	Anonymous	Anonymous	Coliforms, Escherichia coli [E. coli]	----	E010	98.8 % DUPM	65%	Duplicate RPD does not meet the DQO for this test.

Result Qualifiers

Qualifier	Description
DUPM	*MPN duplicate results were outside default ALS Data Quality Objective, but within 95% confidence interval for MPN reference method. Sample results are 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) PML-2	E298	20-Aug-2025	26-Aug-2025	28 days	5 days	✓	26-Aug-2025	28 days	5 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) HWY-102-2	E298	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL-6	E298	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL-7	E298	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) PML-1	E298	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE HWY-102-2	E235.Cl	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE KL-6	E235.Cl	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride in Water by IC										
HDPE KL-7	E235.Cl	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE PML-1	E235.Cl	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE PML-2	E235.Cl	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE HWY-102-2	E378-U	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL-6	E378-U	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL-7	E378-U	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE PML-1	E378-U	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE PML-2	E378-U	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE HWY-102-2	E235.F	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL-6	E235.F	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL-7	E235.F	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE PML-1	E235.F	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE PML-2	E235.F	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE HWY-102-2	E235.NO3	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE KL-6	E235.NO3	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE KL-7	E235.NO3	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE PML-1	E235.NO3	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE PML-2	E235.NO3	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrite in Water by IC										
HDPE HWY-102-2	E235.NO2	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE KL-6	E235.NO2	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE KL-7	E235.NO2	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE PML-1	E235.NO2	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE PML-2	E235.NO2	20-Aug-2025	23-Aug-2025	3 days	3 days	✓	25-Aug-2025	3 days	3 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE HWY-102-2	E392	20-Aug-2025	----	----	----		25-Aug-2025	28 days	5 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL-6	E392	20-Aug-2025	----	----	----		25-Aug-2025	28 days	5 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL-7	E392	20-Aug-2025	----	----	----		25-Aug-2025	28 days	5 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE PML-1	E392	20-Aug-2025	----	----	----		25-Aug-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 : Reactive Silica by Colourimetry										
HDPE PML-2	E392	20-Aug-2025	----	----	----		25-Aug-2025	28 days	5 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE HWY-102-2	E235.SO4	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE KL-6	E235.SO4	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE KL-7	E235.SO4	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE PML-1	E235.SO4	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE PML-2	E235.SO4	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) HWY-102-2	E318	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL-6	E318	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL-7	E318	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) PML-1	E318	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) PML-2	E318	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) HWY-102-2	E372-U	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL-6	E372-U	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL-7	E372-U	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) PML-1	E372-U	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) PML-2	E372-U	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) PML-1	E010	20-Aug-2025	----	----	----		21-Aug-2025	30 hrs	25 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) PML-2	E010	20-Aug-2025	----	----	----		21-Aug-2025	30 hrs	25 hrs	✓

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
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) HWY-102-2	E010	20-Aug-2025	----	----	----		21-Aug-2025	30 hrs	26 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL-6	E010	20-Aug-2025	----	----	----		21-Aug-2025	30 hrs	27 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL-7	E010	20-Aug-2025	----	----	----		21-Aug-2025	30 hrs	27 hrs	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) PML-2	E355-L	20-Aug-2025	26-Aug-2025	28 days	5 days	✓	26-Aug-2025	28 days	5 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) HWY-102-2	E355-L	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL-6	E355-L	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL-7	E355-L	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) PML-1	E355-L	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE HWY-102-2	E290	20-Aug-2025	23-Aug-2025	14 days	3 days	✓	25-Aug-2025	14 days	3 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Alkalinity Species by Titration										
HDPE KL-6	E290	20-Aug-2025	23-Aug-2025	14 days	3 days	✓	25-Aug-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE KL-7	E290	20-Aug-2025	23-Aug-2025	14 days	3 days	✓	25-Aug-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE PML-1	E290	20-Aug-2025	23-Aug-2025	14 days	3 days	✓	25-Aug-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE PML-2	E290	20-Aug-2025	23-Aug-2025	14 days	3 days	✓	25-Aug-2025	14 days	3 days	✓
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE PML-2	E330	20-Aug-2025	----	----	----		24-Aug-2025	48 hrs	96 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE HWY-102-2	E330	20-Aug-2025	----	----	----		24-Aug-2025	48 hrs	97 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE PML-1	E330	20-Aug-2025	----	----	----		24-Aug-2025	48 hrs	97 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL-6	E330	20-Aug-2025	----	----	----		24-Aug-2025	48 hrs	98 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL-7	E330	20-Aug-2025	----	----	----		24-Aug-2025	48 hrs	98 hrs	✖ EHT

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 : Conductivity in Water										
HDPE HWY-102-2	E100	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Physical Tests : Conductivity in Water										
HDPE KL-6	E100	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Physical Tests : Conductivity in Water										
HDPE KL-7	E100	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Physical Tests : Conductivity in Water										
HDPE PML-1	E100	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Physical Tests : Conductivity in Water										
HDPE PML-2	E100	20-Aug-2025	23-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Physical Tests : pH by Meter										
HDPE PML-2	E108	20-Aug-2025	22-Aug-2025	0.25 hrs	44 hrs	✖ EHTR-FM	25-Aug-2025	0.25 hrs	44 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE PML-1	E108	20-Aug-2025	22-Aug-2025	0.25 hrs	45 hrs	✖ EHTR-FM	26-Aug-2025	0.25 hrs	45 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE HWY-102-2	E108	20-Aug-2025	22-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM	26-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE KL-6	E108	20-Aug-2025	22-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM	25-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM

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 : pH by Meter										
HDPE KL-7	E108	20-Aug-2025	22-Aug-2025	0.25 hrs	47 hrs	✖ EHTR-FM	26-Aug-2025	0.25 hrs	47 hrs	✖ EHTR-FM
Physical Tests : TDS by Gravimetry										
HDPE HWY-102-2	E162	20-Aug-2025	----	----	----		25-Aug-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE KL-6	E162	20-Aug-2025	----	----	----		25-Aug-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE KL-7	E162	20-Aug-2025	----	----	----		25-Aug-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE PML-1	E162	20-Aug-2025	----	----	----		25-Aug-2025	7 days	5 days	✓
Physical Tests : TDS by Gravimetry										
HDPE PML-2	E162	20-Aug-2025	----	----	----		25-Aug-2025	7 days	5 days	✓
Physical Tests : TSS by Gravimetry										
HDPE HWY-102-2	E160	20-Aug-2025	----	----	----		21-Aug-2025	7 days	1 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL-6	E160	20-Aug-2025	----	----	----		21-Aug-2025	7 days	1 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL-7	E160	20-Aug-2025	----	----	----		21-Aug-2025	7 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 : TSS by Gravimetry										
HDPE PML-1	E160	20-Aug-2025	----	----	----		21-Aug-2025	7 days	1 days	✓
Physical Tests : TSS by Gravimetry										
HDPE PML-2	E160	20-Aug-2025	----	----	----		21-Aug-2025	7 days	1 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE HWY-102-2	E121	20-Aug-2025	----	----	----		22-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL-6	E121	20-Aug-2025	----	----	----		22-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL-7	E121	20-Aug-2025	----	----	----		22-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE PML-1	E121	20-Aug-2025	----	----	----		22-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE PML-2	E121	20-Aug-2025	----	----	----		22-Aug-2025	3 days	2 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube HWY-102-2	E870B	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL-6	E870B	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL-7	E870B	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube PML-1	E870B	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube PML-2	E870B	20-Aug-2025	26-Aug-2025	28 days	6 days	✓	26-Aug-2025	28 days	6 days	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE PML-2	EF870B	20-Aug-2025	----	----	----		20-Aug-2025	48 hrs	4 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE HWY-102-2	EF870B	20-Aug-2025	----	----	----		20-Aug-2025	48 hrs	5 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE PML-1	EF870B	20-Aug-2025	----	----	----		20-Aug-2025	48 hrs	5 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL-6	EF870B	20-Aug-2025	----	----	----		20-Aug-2025	48 hrs	6 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL-7	EF870B	20-Aug-2025	----	----	----		20-Aug-2025	48 hrs	6 hrs	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) HWY-102-2	E420	20-Aug-2025	25-Aug-2025	180 days	5 days	✓	25-Aug-2025	180 days	5 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	*Method*	*Sampling Date*	*Extraction / Preparation*				*Analysis*			
			Preparation Date	*Holding Times*		*Eval*	*Analysis Date*	*Holding Times*		*Eval*
				Rec	*Actual*			*Rec*	*Actual*	
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL-6	E420	20-Aug-2025	25-Aug-2025	180 days	5 days	✓	25-Aug-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL 7	E420	20-Aug-2025	25-Aug-2025	180 days	5 days	✓	25-Aug-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) PML-1	E420	20-Aug-2025	25-Aug-2025	180 days	5 days	✓	25-Aug-2025	180 days	5 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) PML-2	E420	20-Aug-2025	25-Aug-2025	180 days	5 days	✓	25-Aug-2025	180 days	5 days	✓

Legend & Qualifier Definitions

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended

EHT: Exceeded ALS recommended hold time prior to analysis.

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)							
Total Coliforms and E. coli (Enzyme Substrate)	E010	2176467	1	11	9.0	5.0	✓
Conductivity in Water	E100	2177900	2	28	7.1	5.0	✓
pH by Meter	E108	2175442	1	20	5.0	5.0	✓
Turbidity by Nephelometry	E121	2176023	1	20	5.0	5.0	✓
TSS by Gravimetry	E160	2172911	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	2180095	1	18	5.5	5.2	✓
Chloride in Water by IC	E235.Cl	2177898	2	37	5.4	5.0	✓
Fluoride in Water by IC	E235.F	2177895	2	32	6.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2177897	2	39	5.1	5.0	✓
Nitrate in Water by IC	E235.NO3	2177896	2	40	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2177899	2	37	5.4	5.0	✓
Alkalinity Species by Titration	E290	2177901	2	38	5.2	5.0	✓
Ammonia by Fluorescence	E298	2180757	1	14	7.1	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2180753	1	19	5.2	5.0	✓
Colour (Apparent) by Spectrometer	E330	2179166	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2180761	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2180755	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2177904	2	29	6.9	5.0	✓
Reactive Silica by Colourimetry	E392	2180213	1	19	5.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2178989	1	20	5.0	5.0	✓
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B	2182455	0	13	0.0	5.0	✗
Laboratory Control Samples (LCS)							
Conductivity in Water	E100	2177900	2	28	7.1	5.0	✓
pH by Meter	E108	2175442	1	20	5.0	5.0	✓
Turbidity by Nephelometry	E121	2176023	1	20	5.0	5.0	✓
TSS by Gravimetry	E160	2172911	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	2180095	1	18	5.5	5.2	✓
Chloride in Water by IC	E235.Cl	2177898	2	37	5.4	5.0	✓
Fluoride in Water by IC	E235.F	2177895	2	32	6.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2177897	2	39	5.1	5.0	✓
Nitrate in Water by IC	E235.NO3	2177896	2	40	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2177899	2	37	5.4	5.0	✓
Alkalinity Species by Titration	E290	2177901	2	38	5.2	5.0	✓
Ammonia by Fluorescence	E298	2180757	1	14	7.1	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2180753	1	19	5.2	5.0	✓
Colour (Apparent) by Spectrometer	E330	2179166	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 Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2180761	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2180755	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2177904	2	29	6.9	5.0	✓
Reactive Silica by Colourimetry	E392	2180213	1	19	5.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2178989	1	20	5.0	5.0	✓
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B	2182455	1	13	7.6	5.0	✓
Method Blanks (MB)							
Total Coliforms and E. coli (Enzyme Substrate)	E010	2176467	1	11	9.0	5.0	✓
Conductivity in Water	E100	2177900	2	28	7.1	5.0	✓
Turbidity by Nephelometry	E121	2176023	1	20	5.0	5.0	✓
TSS by Gravimetry	E160	2172911	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	2180095	1	18	5.5	5.2	✓
Chloride in Water by IC	E235.Cl	2177898	2	37	5.4	5.0	✓
Fluoride in Water by IC	E235.F	2177895	2	32	6.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2177897	2	39	5.1	5.0	✓
Nitrate in Water by IC	E235.NO3	2177896	2	40	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2177899	2	37	5.4	5.0	✓
Alkalinity Species by Titration	E290	2177901	2	38	5.2	5.0	✓
Ammonia by Fluorescence	E298	2180757	1	14	7.1	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2180753	1	19	5.2	5.0	✓
Colour (Apparent) by Spectrometer	E330	2179166	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2180761	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2180755	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2177904	2	29	6.9	5.0	✓
Reactive Silica by Colourimetry	E392	2180213	1	19	5.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2178989	1	20	5.0	5.0	✓
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B	2182455	1	13	7.6	5.0	✓
Matrix Spikes (MS)							
Chloride in Water by IC	E235.Cl	2177898	2	37	5.4	5.0	✓
Fluoride in Water by IC	E235.F	2177895	2	32	6.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2177897	2	39	5.1	5.0	✓
Nitrate in Water by IC	E235.NO3	2177896	2	40	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2177899	2	37	5.4	5.0	✓
Ammonia by Fluorescence	E298	2180757	1	14	7.1	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2180753	1	19	5.2	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2180761	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2180755	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2177904	2	29	6.9	5.0	✓
Reactive Silica by Colourimetry	E392	2180213	1	19	5.2	5.0	✓

Matrix: **Water**

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

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS) - Continued							
Total Metals in Water by CRC ICPMS	E420	2178989	1	20	5.0	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
Total Coliforms and E. coli (Enzyme Substrate)	E010 ALS Environmental - Halifax	Water	APHA 9223 (mod)	The enzyme substrate test simultaneously detects Total Coliforms and E. coli in a 100 mL sample after incubation at 35.0 ±0.5°C for either 18 or 24 hours (dependent on reagent used).
Conductivity in Water	E100 ALS Environmental - Waterloo	Water	APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a water sample. Conductivity measurements are temperature-compensated to 25°C.
pH by Meter	E108 ALS Environmental - Halifax	Water	APHA 4500-H (mod)	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C). For high accuracy test results, pH should be measured in the field within the recommended 15 minute hold time.
Turbidity by Nephelometry	E121 ALS Environmental - Waterloo	Water	APHA 2130 B (mod)	Turbidity is measured by the nephelometric method, by measuring the intensity of light scatter under defined conditions.
TSS by Gravimetry	E160 ALS Environmental - Halifax	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 - Halifax	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.
Chloride in Water by IC	E235.Cl ALS Environmental - Waterloo	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 - Waterloo	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC	E235.NO2 ALS Environmental - Waterloo	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Nitrate in Water by IC	E235.NO3 ALS Environmental - Waterloo	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 - Waterloo	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 - Waterloo	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.
Ammonia by Fluorescence	E298 ALS Environmental - Waterloo	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)
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318 ALS Environmental - Waterloo	Water	Method Fialab 100, 2018	TKN 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).
Colour (Apparent) by Spectrometer	E330 ALS Environmental - Waterloo	Water	APHA 2120 C (mod)	Colour (Apparent) is measured in an unfiltered sample spectrophotometrically using the single wavelength method. The colour contribution of settleable solids are not included in the result. This method is intended for potable waters. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment.
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L ALS Environmental - Waterloo	Water	APHA 5310 B (mod)	Total Organic Carbon (Non-Purgeable), also known as NPOC (total), is a direct measurement of TOC after an acidified sample has been purged to remove carbonate-based Inorganic Carbon (IC). Analysis is by high temperature combustion with infrared detection of CO2. Forms of carbon associated with inorganic or organic molecules (e.g. SCN and CN) are included in NPOC if they are not removed by purging under acidic conditions. Notably, NPOC excludes most volatile organic compounds and free cyanide. For samples where the majority of Total Carbon is inorganic, this method provides greater accuracy and reliability versus the TOC by subtraction method (TC minus TIC).
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U ALS Environmental - Waterloo	Water	APHA 4500-P F (mod)	Dissolved Orthophosphate is determined colourimetrically on a sample that has been lab or field filtered through a 0.45 micron membrane filter. Field filtration is recommended to ensure test results represent conditions at time of sampling.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Reactive Silica by Colourimetry	E392 ALS Environmental - Winnipeg	Water	APHA 4500-SiO2 E (mod)	Silicate (molybdate-reactive silica) is determined by the molybdosilicate-heteropoly blue colourimetric method using a discrete analyzer. Method Limitation: Arsenic (5+) above 100 mg/L is a negative interference on this test
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Waterloo	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.
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B ALS Environmental - Winnipeg	Water	EPA 445.0 (mod)	Chlorophyll-a is determined by solvent extraction followed with analysis by fluorometry using the non-acidification procedure. Sampling volume not provided by client.
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Waterloo	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed as $CaCO_3$ 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 hardness is a property of water due to dissolved divalent cations. In non-turbid waters, Hardness from total Ca/Mg is normally comparable to Dissolved Hardness, but may be biased high if particulate forms of Ca or Mg are present.
Ion Balance using Total Metals	EC101A ALS Environmental - Waterloo	Water	APHA 1030E	Cation Sum (using total metals), Anion Sum, and Ion Balance are calculated based on guidance from APHA Standard Methods (1030E Checking Correctness of Analysis). Minor ions are included where data is present. Ion Balance cannot be calculated accurately for waters with very low electrical conductivity (EC).
Saturation Index using Laboratory pH (Ca-T)	EC105A ALS Environmental - Waterloo	Water	APHA 2330B	Langelier Index provides an indication of scale formation potential at a given pH and temperature, and is calculated as per APHA 2330B Saturation Index. Positive values indicate oversaturation with respect to $CaCO_3$. Negative values indicate undersaturation of $CaCO_3$. This calculation uses laboratory pH measurements and provides estimates of Langelier Index at temperatures of 4, 15, 20, 25, 66, and 77°C. Ryznar Stability Index is an alternative index used for scale formation and corrosion potential.
Nitrate and Nitrite (as N) (Calculation)	EC235.N+N ALS Environmental - Waterloo	Water	EPA 300.0	Nitrate and Nitrite (as N) is a calculated parameter. Nitrate and Nitrite (as N) = Nitrite (as N) + Nitrate (as N).
Total Silicon as Silica (Calculation)	EC420.SiO2 ALS Environmental - Waterloo	Water	N/A	Total Silicon (as SiO_2) is a calculated parameter. Total Silicon (as SiO_2 mg/L) = 2.139 x Total Silicon (mg/L).
Chlorophyll-a by Fluorometry (Support Lab Filtered µg/L)	EC870B ALS Environmental - Winnipeg	Water	CALC	Convert results to sample concentration based on support lab filter information.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chlorophyll-a Filtration by Support Laboratory	EF870B ALS Environmental - Halifax	Water	EPA 445.0 (mod)	Filtration for chlorophyll-a analysis

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 ALS Environmental - Waterloo	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.
Digestion for TKN in water	EP318 ALS Environmental - Waterloo	Water	APHA 4500-Norg D (mod)	Samples are digested at high temperature using Sulfuric Acid with Copper catalyst, which converts organic nitrogen sources to Ammonia, which is then quantified by the analytical method as TKN. This method is unsuitable for samples containing high levels of nitrate. If nitrate exceeds TKN concentration by ten times or more, results may be biased low.
Preparation for Total Organic Carbon by Combustion	EP355 ALS Environmental - Waterloo	Water		Preparation for Total Organic Carbon by Combustion
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.
Chlorophyll-a Extraction (Support Lab Filtered)	EP870B ALS Environmental - Winnipeg	Water	EPA 445.0 (mod)	Chlorophyll-a solvent extraction.

QUALITY CONTROL REPORT

Work Order	: **HA2503218**	Page	: 1 of 13
Client	: WSP Canada Inc.	Laboratory	: ALS Environmental - Halifax
Contact	: Naomi Giles	Account Manager	: Amanda Overholster
Address	: 1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	: ----	Telephone	: 1 416 817 2944
Project	: CA0050657.1254	Date Samples Received	: 20-Aug-2025 13:30
PO	: P115454CA001	Date Analysis Commenced	: 20-Aug-2025
C-O-C number	: ----	Issue Date	: 28-Aug-2025 14:54
Sampler	: Client		
Site	: ----		
Quote number	: HRM-2025-0160 Water Quality Monitoring (X)		
No. of samples received	: 5		
No. of samples analysed	: 5		

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*
Jiaxi Wang	Supervisor - Water Chemistry	Halifax Inorganics, Dartmouth, Nova Scotia
Jiaxi Wang	Supervisor - Water Chemistry	Halifax Microbiology, Dartmouth, Nova Scotia
Jon Fisher	Laboratory Manager - Environmental	Waterloo Inorganics, Waterloo, Ontario
Kevin Baxter	Supervisor - Inorganic	Winnipeg Inorganics, Winnipeg, Manitoba
Lee McTavish		Winnipeg Inorganics, Winnipeg, Manitoba
Robyn MacCormack	Analyst	Halifax Administration, Dartmouth, Nova Scotia
Walt Kippenhuck	Supervisor - Inorganic	Waterloo Inorganics, Waterloo, Ontario
Walt Kippenhuck	Supervisor - Inorganic	Waterloo Metals, Waterloo, Ontario

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: 2172911)											
HA2503197-001	Anonymous	Solids, total suspended [TSS]	---	E160	3.0	mg/L	13.2	9.8	3.4	Diff <2x LOR	---
Physical Tests (QC Lot: 2175442)											
HA2502940-001	Anonymous	pH	---	E108	0.10	pH units	6.29	6.32	0.460%	4%	---
Physical Tests (QC Lot: 2176023)											
HA2503218-001	PML-2	Turbidity	---	E121	0.10	NTU	0.38	0.40	0.02	Diff <2x LOR	---
Physical Tests (QC Lot: 2177900)											
HA2503203-001	Anonymous	Conductivity	---	E100	1.0	µS/cm	542	535	1.30%	10%	---
Physical Tests (QC Lot: 2177901)											
HA2503203-001	Anonymous	Alkalinity, total (as CaCO3)	---	E290	1.0	mg/L	207	207	0.0676%	20%	---
Physical Tests (QC Lot: 2178378)											
HA2503264-001	Anonymous	Conductivity	---	E100	1.0	µS/cm	49.5	49.4	0.202%	10%	---
Physical Tests (QC Lot: 2178379)											
HA2503264-001	Anonymous	Alkalinity, total (as CaCO3)	---	E290	1.0	mg/L	3.0	3.0	0.08	Diff <2x LOR	---
Physical Tests (QC Lot: 2179166)											
HA2503154-001	Anonymous	Colour, apparent	---	E330	2.0	CU	148	148	0.463%	20%	---
Physical Tests (QC Lot: 2180095)											
HA2503205-005	Anonymous	Solids, total dissolved [TDS]	---	E162	20	mg/L	292	308	5.34%	20%	---
Anions and Nutrients (QC Lot: 2177895)											
HA2503203-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.117	0.110	0.006	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2177896)											
HA2503203-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3	0.020	mg/L	0.055	0.051	0.004	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2177897)											
HA2503203-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2177898)											
HA2503203-001	Anonymous	Chloride	16887-00-6	E235.Cl	0.50	mg/L	6.06	5.84	3.80%	20%	---
Anions and Nutrients (QC Lot: 2177899)											
HA2503203-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	55.3	55.2	0.229%	20%	---
Anions and Nutrients (QC Lot: 2177904)											
HA2503203-001	Anonymous	Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.0010	mg/L	0.0046	0.0044	0.0001	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2178371)											

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*
Anions and Nutrients (QC Lot: 2178371) - continued											
HA2503218-001	PML-2	Nitrate (as N)	14797-55-8	E235.NO3	0.020	mg/L	0.026	0.026	0.0004	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2178372)											
HA2503218-001	PML-2	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.043	0.043	0.0003	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2178373)											
HA2503218-001	PML-2	Nitrite (as N)	14797-65-0	E235.NO2	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2178374)											
HA2503218-001	PML-2	Chloride	16887-00-6	E235.Cl	0.50	mg/L	113	114	0.546%	20%	---
Anions and Nutrients (QC Lot: 2178375)											
HA2503218-001	PML-2	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	10.8	10.8	0.250%	20%	---
Anions and Nutrients (QC Lot: 2178377)											
HA2502313-001	Anonymous	Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.0010	mg/L	0.0063	0.0063	0.00001	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2180213)											
HA2503218-001	PML-2	Silicate (as SiO2)	7631-86-9	E392	0.50	mg/L	0.81	0.82	0.01	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2180753)											
HA2503218-002	KL-6	Kjeldahl nitrogen, total [TKN]	---	E318	0.050	mg/L	0.198	0.206	0.008	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2180755)											
HA2503218-001	PML-2	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.0035	0.0032	0.0003	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2180757)											
HA2502313-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0424	0.0419	0.0005	Diff <2x LOR	---
Organic / Inorganic Carbon (QC Lot: 2180761)											
HA2503218-001	PML-2	Carbon, total organic [TOC]	---	E355-L	0.50	mg/L	4.37	4.43	0.06	Diff <2x LOR	---
Microbiological Tests (QC Lot: 2176467)											
HA2502309-001	Anonymous	Coliforms, Escherichia coli [E. coli]	---	E010	1	MPN/100mL	12	4	98.8%	65%	DUPM
		Coliforms, total	---	E010	1	MPN/100mL	411	308	28.7%	65%	---
Total Metals (QC Lot: 2178989)											
HA2503218-001	PML-2	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0120	0.0120	0.000003	Diff <2x LOR	---
		Antimony, total	7440-36-0	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	---
		Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00028	0.00027	0.00001	Diff <2x LOR	---
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0238	0.0240	1.10%	20%	---
		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	0.0002	Diff <2x LOR	---
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	<0.0000050	0.0000064	0.0000014	Diff <2x LOR	---
		Calcium, total	7440-70-2	E420	0.050	mg/L	13.9	13.9	0.175%	20%	---
		Chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	---

Sub-Matrix: **Water**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Laboratory Duplicate (DUP) Report						
					LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 2178989) - continued											
HA2503218-001	PML-2	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	0.00074	0.00074	0.000006	Diff <2x LOR	—
		Iron, total	7439-89-6	E420	0.010	mg/L	0.103	0.102	0.619%	20%	—
		Lead, total	7439-92-1	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	—
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	2.13	2.11	0.927%	20%	—
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.0809	0.0810	0.146%	20%	—
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000181	0.000177	0.000004	Diff <2x LOR	—
		Nickel, total	7440-02-0	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	—
		Potassium, total	7440-09-7	E420	0.050	mg/L	1.58	1.58	0.236%	20%	—
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.000062	0.000061	0.0000005	Diff <2x LOR	—
		Silicon, total	7440-21-3	E420	0.10	mg/L	0.43	0.42	0.002	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	65.3	64.5	1.16%	20%	—
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.0617	0.0612	0.910%	20%	—
		Thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	—
		Tin, total	7440-31-5	E420	0.00010	mg/L	0.00117	0.00117	0.171%	20%	—
		Titanium, total	7440-32-6	E420	0.00030	mg/L	<0.00030	<0.00030	0	Diff <2x LOR	—
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000013	0.000013	0.0000004	Diff <2x LOR	—
		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	—

Qualifiers

Qualifier	Description
DUPM	*MPN duplicate results were outside default ALS Data Quality Objective, but within 95% confidence interval for MPN reference method. Sample results are reliable.*

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: 2172911)						
Solids, total suspended [TSS]	---	E160	3	mg/L	<3.0	---
Physical Tests (QCLot: 2176023)						
Turbidity	---	E121	0.1	NTU	<0.10	---
Physical Tests (QCLot: 2177900)						
Conductivity	---	E100	1	µS/cm	1.1	---
Physical Tests (QCLot: 2177901)						
Alkalinity, total (as CaCO3)	---	E290	1	mg/L	<1.0	---
Physical Tests (QCLot: 2178378)						
Conductivity	---	E100	1	µS/cm	# 2.6	B
Physical Tests (QCLot: 2178379)						
Alkalinity, total (as CaCO3)	---	E290	1	mg/L	<1.0	---
Physical Tests (QCLot: 2179166)						
Colour, apparent	---	E330	2	CU	<2.0	---
Physical Tests (QCLot: 2180095)						
Solids, total dissolved [TDS]	---	E162	10	mg/L	<10	---
Anions and Nutrients (QCLot: 2177895)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	---
Anions and Nutrients (QCLot: 2177896)						
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	<0.020	---
Anions and Nutrients (QCLot: 2177897)						
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	<0.010	---
Anions and Nutrients (QCLot: 2177898)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	---
Anions and Nutrients (QCLot: 2177899)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	---
Anions and Nutrients (QCLot: 2177904)						
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.001	mg/L	<0.0010	---
Anions and Nutrients (QCLot: 2178371)						
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	<0.020	---
Anions and Nutrients (QCLot: 2178372)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	---
Anions and Nutrients (QCLot: 2178373)						

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Anions and Nutrients (QCLot: 2178373) - continued						
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	<0.010	—
Anions and Nutrients (QCLot: 2178374)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	—
Anions and Nutrients (QCLot: 2178375)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	—
Anions and Nutrients (QCLot: 2178377)						
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.001	mg/L	<0.0010	—
Anions and Nutrients (QCLot: 2180213)						
Silicate (as SiO2)	7631-86-9	E392	0.5	mg/L	<0.50	—
Anions and Nutrients (QCLot: 2180753)						
Kjeldahl nitrogen, total [TKN]	—	E318	0.05	mg/L	<0.050	—
Anions and Nutrients (QCLot: 2180755)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	—
Anions and Nutrients (QCLot: 2180757)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	—
Organic / Inorganic Carbon (QCLot: 2180761)						
Carbon, total organic [TOC]	—	E355-L	0.5	mg/L	<0.50	—
Microbiological Tests (QCLot: 2176467)						
Coliforms, Escherichia coli [E. coli]	—	E010	1	MPN/100mL	<1	—
Coliforms, total	—	E010	1	MPN/100mL	<1	—
Total Metals (QCLot: 2178989)						
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	—
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	—
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	—
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	—

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 2178989) - continued						
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	—
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	—
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	—
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	—
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	—
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	—
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	—
Plant Pigments (QCLot: 2182455)						
Chlorophyll a	479-61-8	E870B	0.002	µg/sample	<0.0020	—

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: 2172911)									
Solids, total suspended [TSS]	—	E160	3	mg/L	150 mg/L	99.3	85.0	115	—
Physical Tests (QCLot: 2175442)									
pH	—	E108	—	pH units	7 pH units	101	98.0	102	—
Physical Tests (QCLot: 2176023)									
Turbidity	—	E121	0.1	NTU	200 NTU	101	85.0	115	—
Physical Tests (QCLot: 2177900)									
Conductivity	—	E100	1	µS/cm	1410 µS/cm	104	90.0	110	—
Physical Tests (QCLot: 2177901)									
Alkalinity, total (as CaCO3)	—	E290	1	mg/L	150 mg/L	101	85.0	115	—
Physical Tests (QCLot: 2178378)									
Conductivity	—	E100	1	µS/cm	1410 µS/cm	103	90.0	110	—
Physical Tests (QCLot: 2178379)									
Alkalinity, total (as CaCO3)	—	E290	1	mg/L	150 mg/L	103	85.0	115	—
Physical Tests (QCLot: 2179166)									
Colour, apparent	—	E330	2	CU	25 CU	95.6	85.0	115	—
Physical Tests (QCLot: 2180095)									
Solids, total dissolved [TDS]	—	E162	10	mg/L	1000 mg/L	97.0	85.0	115	—
Anions and Nutrients (QCLot: 2177895)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	102	90.0	110	—
Anions and Nutrients (QCLot: 2177896)									
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	2.5 mg/L	99.4	90.0	110	—
Anions and Nutrients (QCLot: 2177897)									
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	0.5 mg/L	99.5	90.0	110	—
Anions and Nutrients (QCLot: 2177898)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	99.7	90.0	110	—
Anions and Nutrients (QCLot: 2177899)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	98.6	90.0	110	—
Anions and Nutrients (QCLot: 2177904)									
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.001	mg/L	0.05 mg/L	100	80.0	120	—
Anions and Nutrients (QCLot: 2178371)									
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	2.5 mg/L	99.2	90.0	110	—

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Anions and Nutrients (QCLot: 2178372)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	102	90.0	110	—
Anions and Nutrients (QCLot: 2178373)									
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	0.5 mg/L	99.4	90.0	110	—
Anions and Nutrients (QCLot: 2178374)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	99.5	90.0	110	—
Anions and Nutrients (QCLot: 2178375)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	98.4	90.0	110	—
Anions and Nutrients (QCLot: 2178377)									
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.001	mg/L	0.05 mg/L	99.7	80.0	120	—
Anions and Nutrients (QCLot: 2180213)									
Silicate (as SiO2)	7631-86-9	E392	0.5	mg/L	10 mg/L	109	85.0	115	—
Anions and Nutrients (QCLot: 2180753)									
Kjeldahl nitrogen, total [TKN]	—	E318	0.05	mg/L	4 mg/L	105	75.0	125	—
Anions and Nutrients (QCLot: 2180755)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.333 mg/L	100	80.0	120	—
Anions and Nutrients (QCLot: 2180757)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	106	85.0	115	—
Organic / Inorganic Carbon (QCLot: 2180761)									
Carbon, total organic [TOC]	—	E355-L	0.5	mg/L	8.57 mg/L	102	80.0	120	—
Total Metals (QCLot: 2178989)									
Aluminum, total	7429-90-5	E420	0.003	mg/L	0.1 mg/L	104	80.0	120	—
Antimony, total	7440-36-0	E420	0.0001	mg/L	0.05 mg/L	102	80.0	120	—
Arsenic, total	7440-38-2	E420	0.0001	mg/L	0.05 mg/L	103	80.0	120	—
Barium, total	7440-39-3	E420	0.0001	mg/L	0.012 mg/L	103	80.0	120	—
Bismuth, total	7440-69-9	E420	0.00005	mg/L	0.05 mg/L	102	80.0	120	—
Boron, total	7440-42-8	E420	0.01	mg/L	0.05 mg/L	102	80.0	120	—
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.005 mg/L	99.2	80.0	120	—
Calcium, total	7440-70-2	E420	0.05	mg/L	2.5 mg/L	96.9	80.0	120	—
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.012 mg/L	98.8	80.0	120	—
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.012 mg/L	96.0	80.0	120	—
Copper, total	7440-50-8	E420	0.0005	mg/L	0.012 mg/L	94.4	80.0	120	—
Iron, total	7439-89-6	E420	0.01	mg/L	0.05 mg/L	100	80.0	120	—
Lead, total	7439-92-1	E420	0.00005	mg/L	0.025 mg/L	103	80.0	120	—
Magnesium, total	7439-95-4	E420	0.005	mg/L	2.5 mg/L	110	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: 2178989) - continued									
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.012 mg/L	99.1	80.0	120	—
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.012 mg/L	98.6	80.0	120	—
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.025 mg/L	96.7	80.0	120	—
Potassium, total	7440-09-7	E420	0.05	mg/L	2.5 mg/L	102	80.0	120	—
Selenium, total	7782-49-2	E420	0.00005	mg/L	0.05 mg/L	96.8	80.0	120	—
Silicon, total	7440-21-3	E420	0.1	mg/L	0.5 mg/L	104	80.0	120	—
Silver, total	7440-22-4	E420	0.00001	mg/L	0.005 mg/L	95.9	80.0	120	—
Sodium, total	7440-23-5	E420	0.05	mg/L	2.5 mg/L	101	80.0	120	—
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.012 mg/L	102	80.0	120	—
Thallium, total	7440-28-0	E420	0.00001	mg/L	0.05 mg/L	102	80.0	120	—
Tin, total	7440-31-5	E420	0.0001	mg/L	0.025 mg/L	102	80.0	120	—
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.012 mg/L	97.0	80.0	120	—
Uranium, total	7440-61-1	E420	0.00001	mg/L	0 mg/L	100	80.0	120	—
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.025 mg/L	101	80.0	120	—
Zinc, total	7440-66-6	E420	0.003	mg/L	0.025 mg/L	99.2	80.0	120	—
Plant Pigments (QCLot: 2182455)									
Chlorophyll a	479-61-8	E870B	0.002	µg/sample	1.07 µg/sample	92.8	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: 2177895)										
HA2503203-001	Anonymous	Fluoride	16984-48-8	E235.F	0.972 mg/L	1 mg/L	97.2	75.0	125	—
Anions and Nutrients (QCLot: 2177896)										
HA2503203-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3	2.26 mg/L	2.5 mg/L	90.4	75.0	125	—
Anions and Nutrients (QCLot: 2177897)										
HA2503203-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2	0.470 mg/L	0.5 mg/L	93.9	75.0	125	—
Anions and Nutrients (QCLot: 2177898)										
HA2503203-001	Anonymous	Chloride	16887-00-6	E235.Cl	93.8 mg/L	100 mg/L	93.8	75.0	125	—
Anions and Nutrients (QCLot: 2177899)										
HA2503203-001	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	91.9 mg/L	100 mg/L	91.9	75.0	125	—
Anions and Nutrients (QCLot: 2177904)										
HA2503203-001	Anonymous	Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.0196 mg/L	0.02 mg/L	99.9	70.0	130	—
Anions and Nutrients (QCLot: 2178371)										
HA2503218-001	PML-2	Nitrate (as N)	14797-55-8	E235.NO3	2.37 mg/L	2.5 mg/L	94.9	75.0	125	—
Anions and Nutrients (QCLot: 2178372)										
HA2503218-001	PML-2	Fluoride	16984-48-8	E235.F	1.02 mg/L	1 mg/L	102	75.0	125	—
Anions and Nutrients (QCLot: 2178373)										
HA2503218-001	PML-2	Nitrite (as N)	14797-65-0	E235.NO2	0.460 mg/L	0.5 mg/L	92.0	75.0	125	—
Anions and Nutrients (QCLot: 2178374)										
HA2503218-001	PML-2	Chloride	16887-00-6	E235.Cl	ND mg/L	—	ND	75.0	125	—
Anions and Nutrients (QCLot: 2178375)										
HA2503218-001	PML-2	Sulfate (as SO4)	14808-79-8	E235.SO4	93.3 mg/L	100 mg/L	93.3	75.0	125	—
Anions and Nutrients (QCLot: 2178377)										
HA2502313-001	Anonymous	Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.0204 mg/L	0.02 mg/L	104	70.0	130	—
Anions and Nutrients (QCLot: 2180213)										
HA2503218-002	KL-6	Silicate (as SiO2)	7631-86-9	E392	10.7 mg/L	10 mg/L	107	75.0	125	—
Anions and Nutrients (QCLot: 2180753)										
HA2503218-002	KL-6	Kjeldahl nitrogen, total [TKN]	—	E318	2.89 mg/L	2.5 mg/L	116	70.0	130	—
Anions and Nutrients (QCLot: 2180755)										
HA2503218-001	PML-2	Phosphorus, total	7723-14-0	E372-U	0.0961 mg/L	0.1 mg/L	96.1	70.0	130	—
Anions and Nutrients (QCLot: 2180757)										

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: 2180757) - continued										
HA2502313 001	Anonymous	Ammonia, total (as N)	7664 41 7	E298	0 106 mg/L	0 1 mg/L	106	75 0	125	
Organic / Inorganic Carbon (QCLot: 2180761)										
HA2503218-001	PML-2	Carbon, total organic [TOC]	---	E355-L	5.27 mg/L	5 mg/L	105	70.0	130	---
Total Metals (QCLot: 2178989)										
HA2503218-005	PML-1	Aluminum, total	7429-90-5	E420	ND mg/L	---	ND	70.0	130	---
		Antimony, total	7440-36-0	E420	0.0539 mg/L	0.05 mg/L	108	70.0	130	---
		Arsenic, total	7440-38-2	E420	0.0536 mg/L	0.05 mg/L	107	70.0	130	---
		Barium, total	7440-39-3	E420	ND mg/L	---	ND	70.0	130	---
		Bismuth, total	7440-69-9	E420	0.0505 mg/L	0.05 mg/L	101	70.0	130	---
		Boron, total	7440-42-8	E420	0.054 mg/L	0.05 mg/L	109	70.0	130	---
		Cadmium, total	7440-43-9	E420	0.00511 mg/L	0.005 mg/L	102	70.0	130	---
		Calcium, total	7440-70-2	E420	ND mg/L	---	ND	70.0	130	---
		Chromium, total	7440-47-3	E420	0.0129 mg/L	0.012 mg/L	103	70.0	130	---
		Cobalt, total	7440-48-4	E420	0.0122 mg/L	0.012 mg/L	98.0	70.0	130	---
		Copper, total	7440-50-8	E420	0.0118 mg/L	0.012 mg/L	94.7	70.0	130	---
		Iron, total	7439-89-6	E420	ND mg/L	---	ND	70.0	130	---
		Lead, total	7439-92-1	E420	0.0256 mg/L	0.025 mg/L	102	70.0	130	---
		Magnesium, total	7439-95-4	E420	2.70 mg/L	2.5 mg/L	108	70.0	130	---
		Manganese, total	7439-96-5	E420	ND mg/L	---	ND	70.0	130	---
		Molybdenum, total	7439-98-7	E420	0.0133 mg/L	0.012 mg/L	107	70.0	130	---
		Nickel, total	7440-02-0	E420	0.0245 mg/L	0.025 mg/L	98.0	70.0	130	---
		Potassium, total	7440-09-7	E420	2.66 mg/L	2.5 mg/L	106	70.0	130	---
		Selenium, total	7782-49-2	E420	0.0499 mg/L	0.05 mg/L	99.7	70.0	130	---
		Silicon, total	7440-21-3	E420	0.50 mg/L	0.5 mg/L	99.8	70.0	130	---
		Silver, total	7440-22-4	E420	0.00484 mg/L	0.005 mg/L	96.8	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	---
		Thallium, total	7440-28-0	E420	0.0503 mg/L	0.05 mg/L	100	70.0	130	---
		Tin, total	7440-31-5	E420	0.0266 mg/L	0.025 mg/L	106	70.0	130	---
		Titanium, total	7440-32-6	E420	0.0123 mg/L	0.012 mg/L	98.8	70.0	130	---
		Uranium, total	7440-61-1	E420	0.000260 mg/L	0 mg/L	104	70.0	130	---
		Vanadium, total	7440-62-2	E420	0.0266 mg/L	0.025 mg/L	106	70.0	130	---
		Zinc, total	7440-66-6	E420	0.0247 mg/L	0.025 mg/L	98.9	70.0	130	---

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

COC Number: 22 -

Page of

Environmental Division Halifax

Work Order Reference

HA2503218

Telephone : +1 902 707 4888

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	WSP Canada Inc.	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Naomi Giles	Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:	782-640-1923	☑ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimu
	Company address below will appear on the final report	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimu
Street:	1 Spectable Lake Dr.	Email 1 or Fax Naomi.Giles@wsp.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimu
City/Province:	Dartmouth, Nova Scotia	Email 2 lee.hynes@wsp.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge.
Postal Code:	B3B 1X7	Email 3	Additional fees may apply to rush requests on weekends,
Invoice To	Same as Report To ☑ YES ☐ NO	Invoice Recipients	Date and Time Required for all E&P TATs:
	Copy of Invoice with Report ☑ YES ☐ NO	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	For all tests with rush TATs requested, please cor
Company:	WSP Canada Inc.	Email 1 or Fax Naomi.Giles@wsp.com	
Contact:	Naomi Giles	Email 2 capayablesinvoice@wsp.com	

Project Information		Oil and Gas Required Fields (client use)	
ALS Client Code / QUOTE #:	WSPI100 / HA2025WSPI100004	AFE/Cost Center:	PO#
Job / Project #:	CA0050657.1254	Major/Minor Code:	Routing Code:
PO / AFE:	P115454CA001	Requisitioner:	
LSD:		Location:	

ALS Lab Work Order # (ALS use only): HA2503218 | ALS Contact: Amanda Overholster | Sampler:

Analysis Request

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Summer Sampling Package	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	~~KL-1~~ PML-2	20-Aug-25	12:30		6	X				
	~~KL-2~~									
	~~KL-3~~									
	~~KL-4~~									
	~~KL-5~~									
	KL-6	20-Aug-25	10:35		6	X				
	KL-7	20-Aug-25	10:15		6	X				
	~~HWY-102-1~~									
	HWY-102-2	20-Aug-25	11:15		6	X				
	~~LSD~~									
	~~DUP~~									
	PML-1	20-Aug-25	12:00		6	X				

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)	SAMPLE RECEIPT DETAILS (ALS use only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO		Cooling Method: ☐ NONE ☒ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED
Are samples for human consumption/ use? ☐ YES ☐ NO		Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A
		INITIAL COOLER TEMPERATURES °C: 21 16 — FINAL COOLER TEMPERATURES °C:

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)		FINAL SHIPMENT RECEPTION (ALS use only)		
Released by:	Date:	Time:	Received by: [redacted]	Date:	Time:	Received by:	Date:	Time:
Allison Smith	20-Aug-25	1:30		20 August 2025	1:30			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION — WHITE - LABORATORY COPY — YELLOW - CLIENT COPY — MAY 2023 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.

CERTIFICATE OF ANALYSIS

Work Order	:	**HA2503197**		
Client	:	**WSP Canada Inc.**	Laboratory	: ALS Environmental - Halifax
Contact	:	Naomi Giles	Account Manager	: Amanda Overholster
Address	:	1 Spectacle Lake Drive Dartmouth Nova Scotia Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth NS Canada B3B 1L2
Telephone	:	----	E-mail	: Amanda.Overholster@ALSGlobal.com
Project	:	CA0052759.2572	Telephone	: 1 416 817 2944
PO	:	P115454CA1	Date Samples Received	: 19-Aug-2025 14:50
C-O-C number	:	20-1022524	Date Analysis Commenced	: 20-Aug-2025
Sampler	:	JH / MO	Issue Date	: 28-Aug-2025 14:54
Site	:	----		
Quote number	:	HRM-2025-0160 Water Quality Monitoring (X)		
No. of samples received	:	8		
No. of samples analysed	:	8		

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*
Greg Pokocky		Metals, Waterloo, Ontario
Greg Pokocky		Inorganics, Waterloo, Ontario
Jiaxi Wang		Inorganics, Dartmouth, Nova Scotia
Jiaxi Wang		Microbiology, Dartmouth, Nova Scotia
Jon Fisher		Inorganics, Dartmouth, Nova Scotia
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Lee McTavish		Inorganics, Winnipeg, Manitoba
Robyn MacCormack		Administration, Dartmouth, Nova Scotia

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
%	percent
CU	colour units (1 cu = 1 mg/l pt)
L	litres
meq/L	milliequivalents per litre
mg/L	milligrams per litre
MPN/100mL	most probable number per hundred millilitres
NTU	nephelometric turbidity units
pH units	pH units
µg/L	micrograms per litre
µg/sample	micrograms per sample
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
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.
DLUI	Detection Limit Raised: Unknown interference generated an apparent false positive test result.

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	HWY - 102 - 1 ----	LU ----	KL 3 ----	KL 4 ----	LSD ----
					Client sampling date / time	19-Aug-2025 09:35	19-Aug-2025 10:25	19-Aug-2025 11:10	19-Aug-2025 11:20	19-Aug-2025 12:05
						HA2503197-001	HA2503197-002	HA2503197-003	HA2503197-004	HA2503197-005
						Result	Result	Result	Result	Result
Sample Preparation										
Volume filtered	----	EF870B/HA	0.001	L		0.100	0.100	0.100	0.100	0.100
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WT	1.2	mg/L		29.5	26.5	11.0	18.5	34.8
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WT	1.0	mg/L		<0.6	<0.6	<0.6	<0.6	<0.6
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WT	1.0	mg/L		<0.3	<0.3	<0.3	<0.3	<0.3
Alkalinity, total (as CaCO3)	----	E290/WT	1.0	mg/L		24.2	21.7	9.0	15.2	28.5
Colour, apparent	----	E330/WT	2.0	CU		65.9	39.2	23.0	26.9	113
Conductivity	----	E100/WT	1.0	µS/cm		614	1090	361	432	198
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WT	0.50	mg/L		82.1	117	35.3	50.5	30.8
Langelier index (@ 20°C)	----	EC105A/WT	0.010	-		-1.72	-1.44	-2.38	-2.01	-2.08
Langelier index (@ 4°C)	----	EC105A/WT	0.010	-		-1.97	-1.69	-2.63	-2.26	-2.33
pH	----	E108/HA	0.10	pH units		6.89	7.14	6.99	7.00	6.87
pH, saturation (@ 20°C)	----	EC105A/WT	0.010	pH units		8.61	8.58	9.37	9.01	8.95
pH, saturation (@ 4°C)	----	EC105A/WT	0.010	pH units		8.86	8.83	9.62	9.26	9.20
Solids, total dissolved [TDS]	----	E162/HA	10	mg/L		343	612	194	245	120
Solids, total suspended [TSS]	----	E160/HA	3.0	mg/L		13.2	<3.0	<3.0	<3.0	<3.0
Turbidity	----	E121/WT	0.10	NTU		1.53	1.12	0.43	1.00	23.0
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WT	0.0050	mg/L		0.190	0.0206	0.0161	0.0426	0.498
Chloride	16887-00-6	E235.Cl/WT	0.50	mg/L		152	296 DLDS	90.0	102	32.6
Fluoride	16984-48-8	E235.F/WT	0.020	mg/L		0.038	<0.100 DLDS	0.034	0.034	0.042

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	HWY - 102 - 1 ----	LU ----	KL 3 ----	KL 4 ----	LSD ----
					Client sampling date / time	19-Aug-2025 09:35	19-Aug-2025 10:25	19-Aug-2025 11:10	19-Aug-2025 11:20	19-Aug-2025 12:05
						HA2503197-001	HA2503197-002	HA2503197-003	HA2503197-004	HA2503197-005
						Result	Result	Result	Result	Result
Anions and Nutrients										
Kjeldahl nitrogen, total [TKN]	----	E318/WT	0.050	mg/L		0.902	0.396	0.197	0.344	1.40
Nitrate (as N)	14797-55-8	E235.NO3/WT	0.020	mg/L		0.131	0.207 DLDS	0.073	0.318	0.257
Nitrate + Nitrite (as N)	----	EC235.N+N/WT	0.0032	mg/L		0.131	0.207	0.0730	0.318	0.257
Nitrite (as N)	14797-65-0	E235.NO2/WT	0.010	mg/L		<0.010	<0.050 DLDS	<0.010	<0.010	<0.010
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/WT	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus, total	7723-14-0	E372-U/WT	0.0020	mg/L		0.0288	0.0090	0.0025	0.0054	0.0494
Silicate (as SiO2)	7631-86-9	E392/WP	0.50	mg/L		7.86	0.76	1.83	3.10	1.32
Sulfate (as SO4)	14808-79-8	E235.SO4/WT	0.30	mg/L		15.9	23.7 DLDS	10.5	15.7	8.84
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L		9.71	6.34	4.55	4.13	13.0
Microbiological Tests										
Coliforms, total	----	E010/HA	1	MPN/100 mL		>2420	>2420	>2420	>2420	>2420
Coliforms, Escherichia coli [E. coli]	----	E010/HA	1	MPN/100 mL		548	236	125	272	36
Ion Balance										
Anion sum	----	EC101A/WT	0.10	meq/L		5.11	9.29	2.94	3.53	1.69
Cation sum (total)	----	EC101A/WT	0.10	meq/L		5.26	9.55	3.03	3.68	1.91
Ion balance (cations/anions)	----	EC101A/WT	0.01	%		103	103	103	104	113
Total Metals										
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L		0.0966	0.134	0.0212	0.415	0.601
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L		0.00017	0.00028	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L		0.00051	0.00038	0.00030	0.00070	0.00153

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	HWY - 102 - 1 ----	LU ----	KL 3 ----	KL 4 ----	LSD ----
					Client sampling date / time	19-Aug-2025 09:35	19-Aug-2025 10:25	19-Aug-2025 11:10	19-Aug-2025 11:20	19-Aug-2025 12:05
						HA2503197-001	HA2503197-002	HA2503197-003	HA2503197-004	HA2503197-005
						Result	Result	Result	Result	Result
Total Metals										
Barium, total	7440-39-3	E420/WT	0.00010	mg/L		0.157	0.219	0.0286	0.0691	0.0204
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/WT	0.010	mg/L		0.014	0.017	<0.010	0.011	0.023
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L		0.0000138	0.0000409	0.0000076	0.0000872	0.0000246
Calcium, total	7440-70-2	E420/WT	0.050	mg/L		27.3	37.7	11.4	16.2	8.84
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	0.00078
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L		0.00032	0.00026	<0.00010	0.00155	0.00101
Copper, total	7440-50-8	E420/WT	0.00050	mg/L		0.00144	0.00203	0.00068	0.00148	0.00146
Iron, total	7439-89-6	E420/WT	0.010	mg/L		0.412	0.359	0.077	0.865	1.64
Lead, total	7439-92-1	E420/WT	0.000050	mg/L		0.000320	0.000425	0.000080	0.00102	0.00114
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L		3.38	5.54	1.65	2.44	2.12
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L		0.143	0.0730	0.0800	0.958	0.753
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L		0.000293	0.000437	0.000191	0.000263	0.000265
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L		0.00088	0.00074	<0.00050	0.00178	0.00120
Potassium, total	7440-09-7	E420/WT	0.050	mg/L		2.58	3.64	1.33	1.77	2.41
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L		0.000056	0.000076	0.000052	0.000098	0.000216
Silicon (as SiO2), total	7631-86-9	EC420.SiO2/WT	0.25	mg/L		7.38	1.33	1.82	3.59	2.76
Silicon, total	7440-21-3	E420/WT	0.10	mg/L		3.45	0.62	0.85	1.68	1.29
Silver, total	7440-22-4	E420/WT	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/WT	0.050	mg/L		80.8	163	52.5	57.8	24.0
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L		0.124	0.176	0.0500	0.0713	0.0440

Analytical Results

Sub-Matrix: Surface Water (Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: HWY - 102 - 1 ----	LU ----	KL 3 ----	KL 4 ----	LSD ----
					Client sampling date / time: 19-Aug-2025 09:35	19-Aug-2025 10:25	19-Aug-2025 11:10	19-Aug-2025 11:20	19-Aug-2025 12:05
					HA2503197-001	HA2503197-002	HA2503197-003	HA2503197-004	HA2503197-005
					Result	Result	Result	Result	Result
Total Metals									
Thallium, total	7440-28-0	E420/WT	0.000010	mg/L	<0.000010	0.000019	0.000014	0.000026	0.000011
Tin, total	7440-31-5	E420/WT	0.00010	mg/L	<0.00010	<0.00010	<0.00010	0.00013	0.00015
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L	0.00190	0.00279	<0.00030	<0.00700 DLUI	0.0166
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L	0.000014	0.000031	0.000031	0.000119	0.000045
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L	<0.00050	<0.00050	<0.00050	0.00127	0.00144
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L	0.0118	0.0110	<0.0030	0.0150	0.0054
Plant Pigments									
Chlorophyll a	479-61-8	EC870B/WP	0.010	µg/L	5.27	2.84	1.43	4.25	10.1
Chlorophyll a	479-61-8	E870B/WP	0.0020	µg/sample	0.527	0.284	0.143	0.425	1.01

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

Analytical Results

Sub-Matrix: Surface Water (Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: KL 2 ----	KL 5 ----	KL 1 ----	----	----
					Client sampling date / time: 19-Aug-2025 13:00	19-Aug-2025 13:20	19-Aug-2025 13:50	----	----
					HA2503197-006	HA2503197-007	HA2503197-008	----	----
					Result	Result	Result	----	----
Sample Preparation									
Volume filtered	----	EF870B/HA	0.001	L	0.100	0.100	0.100	----	----
Physical Tests									
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WT	1.2	mg/L	25.6	9.4	9.6	----	----
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WT	1.0	mg/L	<0.6	<0.6	<0.6	----	----
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WT	1.0	mg/L	<0.3	<0.3	<0.3	----	----

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	KL 2 ----	KL 5 ----	KL 1 ----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:20	19-Aug-2025 13:50	----	----
						HA2503197-006	HA2503197-007	HA2503197-008	----	----
						Result	Result	Result	----	----
Physical Tests										
Alkalinity, total (as CaCO3)	----	E290/WT	1.0	mg/L		21.0	7.7	7.9	----	----
Colour, apparent	----	E330/WT	2.0	CU		49.5	18.2	21.1	----	----
Conductivity	----	E100/WT	1.0	µS/cm		252	341	340	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WT	0.50	mg/L		45.6	31.3	32.1	----	----
Langelier index (@ 20°C)	----	EC105A/WT	0.010	-		-2.23	-2.46	-2.40	----	----
Langelier index (@ 4°C)	----	EC105A/WT	0.010	-		-2.48	-2.71	-2.66	----	----
pH	----	E108/HA	0.10	pH units		6.68	7.03	7.06	----	----
pH, saturation (@ 20°C)	----	EC105A/WT	0.010	pH units		8.91	9.49	9.46	----	----
pH, saturation (@ 4°C)	----	EC105A/WT	0.010	pH units		9.16	9.74	9.72	----	----
Solids, total dissolved [TDS]	----	E162/HA	10	mg/L		140	179	181	----	----
Solids, total suspended [TSS]	----	E160/HA	3.0	mg/L		<3.0	<3.0	<3.0	----	----
Turbidity	----	E121/WT	0.10	NTU		1.02	0.22	0.31	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WT	0.0050	mg/L		0.0220	0.0165	0.0087	----	----
Chloride	16887-00-6	E235.Cl/WT	0.50	mg/L		50.9	84.6	85.0	----	----
Fluoride	16984-48-8	E235.F/WT	0.020	mg/L		0.035	0.032	0.033	----	----
Kjeldahl nitrogen, total [TKN]	----	E318/WT	0.050	mg/L		0.263	0.194	0.170	----	----
Nitrate (as N)	14797-55-8	E235.NO3/WT	0.020	mg/L		0.059	0.154	0.134	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/WT	0.0032	mg/L		0.0590	0.154	0.134	----	----
Nitrite (as N)	14797-65-0	E235.NO2/WT	0.010	mg/L		<0.010	<0.010	<0.010	----	----
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U/WT	0.0010	mg/L		<0.0010	<0.0010	<0.0010	----	----

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	KL 2 ----	KL 5 ----	KL 1 ----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:20	19-Aug-2025 13:50	----	----
						HA2503197-006	HA2503197-007	HA2503197-008	----	----
						Result	Result	Result	----	----
Anions and Nutrients										
Phosphorus, total	7723-14-0	E372-U/WT	0.0020	mg/L		0.0074	0.0021	<0.0020	----	----
Silicate (as SiO2)	7631-86-9	E392/WP	0.50	mg/L		3.85	2.18	2.14	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/WT	0.30	mg/L		12.5	10.5	10.5	----	----
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WT	0.50	mg/L		5.67	4.34	4.38	----	----
Microbiological Tests										
Coliforms, total	----	E010/HA	1	MPN/100 mL		>2420	517	649	----	----
Coliforms, Escherichia coli [E. coli]	----	E010/HA	1	MPN/100 mL		15	23	14	----	----
Ion Balance										
Anion sum	----	EC101A/WT	0.10	meq/L		2.12	2.77	2.78	----	----
Cation sum (total)	----	EC101A/WT	0.10	meq/L		2.19	2.81	2.84	----	----
Ion balance (cations/anions)	----	EC101A/WT	0.01	%		103	101	102	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L		0.0484	0.0255	0.0302	----	----
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L		0.00042	0.00026	0.00030	----	----
Barium, total	7440-39-3	E420/WT	0.00010	mg/L		0.0406	0.0243	0.0248	----	----
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L		<0.000050	<0.000050	<0.000050	----	----
Boron, total	7440-42-8	E420/WT	0.010	mg/L		0.018	<0.010	<0.010	----	----
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L		0.0000205	0.0000078	0.0000067	----	----
Calcium, total	7440-70-2	E420/WT	0.050	mg/L		13.5	10.1	10.4	----	----

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	KL 2 ----	KL 5 ----	KL 1 ----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:20	19-Aug-2025 13:50	----	----
						HA2503197-006	HA2503197-007	HA2503197-008	----	----
						Result	Result	Result	----	----
Total Metals										
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L		0.00062	<0.00010	<0.00010	----	----
Copper, total	7440-50-8	E420/WT	0.00050	mg/L		0.00060	0.00073	0.00073	----	----
Iron, total	7439-89-6	E420/WT	0.010	mg/L		0.534	0.025	0.036	----	----
Lead, total	7439-92-1	E420/WT	0.000050	mg/L		0.000182	0.000072	<0.000050	----	----
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L		2.90	1.48	1.49	----	----
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L		0.584	0.00838	0.0196	----	----
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L		0.000102	0.000178	0.000186	----	----
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L		0.00051	<0.00050	<0.00050	----	----
Potassium, total	7440-09-7	E420/WT	0.050	mg/L		1.84	1.20	1.21	----	----
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L		0.000077	0.000057	0.000053	----	----
Silicon (as SiO2), total	7631-86-9	EC420.SiO2/WT	0.25	mg/L		3.87	2.12	2.07	----	----
Silicon, total	7440-21-3	E420/WT	0.10	mg/L		1.81	0.99	0.97	----	----
Silver, total	7440-22-4	E420/WT	0.000010	mg/L		<0.000010	<0.000010	<0.000010	----	----
Sodium, total	7440-23-5	E420/WT	0.050	mg/L		27.2	49.3	49.6	----	----
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L		0.0574	0.0451	0.0453	----	----
Thallium, total	7440-28-0	E420/WT	0.000010	mg/L		0.000024	0.000013	0.000013	----	----
Tin, total	7440-31-5	E420/WT	0.00010	mg/L		<0.00010	<0.00010	<0.00010	----	----
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L		0.00100	<0.00030	0.00031	----	----
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L		0.000020	0.000057	0.000056	----	----
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L		<0.00050	<0.00050	<0.00050	----	----

Analytical Results

Sub-Matrix: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	KL 2 ----	KL 5 ----	KL 1 ----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:20	19-Aug-2025 13:50	----	----
						HA2503197-006	HA2503197-007	HA2503197-008	----	----
						Result	Result	Result	----	----
Total Metals										
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L		<0.0030	<0.0030	0.0031	----	----
Plant Pigments										
Chlorophyll a	479-61-8	EC870B/WP	0.010	µg/L		5.45	1.22	1.16	----	----
Chlorophyll a	479-61-8	E870B/WP	0.0020	µg/sample		0.545	0.122	0.116	----	----

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

ALS Canada Ltd.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **HA2503197**	Page	: 1 of 30
Client	: **WSP Canada Inc.**	Laboratory	: ALS Environmental - Halifax
Contact	: Naomi Giles	Account Manager	: Amanda Overholster
Address	: 1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	: ----	Telephone	: 1 416 817 2944
Project	: CA0052759.2572	Date Samples Received	: 19-Aug-2025 14:50
PO	: P115454CA1	Issue Date	: 28-Aug-2025 14:54
C O C number	: 20-1022524		
Sampler	: JH / MO		
Site	: ----		
Quote number	: HRM-2025-0160 Water Quality Monitoring (X)		
No of samples received	: 8		
No. of samples analysed	: 8		

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
- Matrix Spike 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)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers occur - please see following pages for full details.

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
Matrix Spike (MS) Recoveries								
Total Metals	Anonymous	Anonymous	Nickel, total	7440-02-0	E420	56.2 % K	70.0-130%	Recovery less than lower data quality objective

Result Qualifiers

Qualifier	Description
K	*Matrix Spike recovery outside ALS DQO due to sample matrix effects.*

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) HWY - 102 - 1	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL 1	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL 2	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL 3	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL 4	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) KL 5	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) LSD	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) LU	E298	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE HWY - 102 - 1	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE KL 1	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE KL 2	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE KL 3	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE KL 4	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE KL 5	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE LSD	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE LU	E235.Cl	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-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 : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE HWY - 102 - 1	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL 1	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL 2	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL 3	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL 4	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE KL 5	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE LSD	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)										
HDPE LU	E378-U	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE HWY - 102 - 1	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL 1	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL 2	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL 3	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL 4	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE KL 5	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE LSD	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE LU	E235.F	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE HWY - 102 - 1	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE KL 1	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-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 : Nitrate in Water by IC										
HDPE KL 2	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE KL 3	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE KL 4	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE KL 5	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE LSD	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC										
HDPE LU	E235.NO3	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE HWY - 102 - 1	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE KL 1	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE KL 2	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-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										
HDPE KL 3	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE KL 4	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE KL 5	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE LSD	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC										
HDPE LU	E235.NO2	19-Aug-2025	21-Aug-2025	3 days	2 days	✓	22-Aug-2025	3 days	2 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE HWY - 102 - 1	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL 1	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL 2	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL 3	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL 4	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE KL 5	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE LSD	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Reactive Silica by Colourimetry										
HDPE LU	E392	19-Aug-2025	----	----	----		25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE HWY - 102 - 1	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE KL 1	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE KL 2	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE KL 3	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE KL 4	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-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 : Sulfate in Water by IC										
HDPE KL 5	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE LSD	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE LU	E235.SO4	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) HWY - 102 - 1	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL 1	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL 2	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL 3	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL 4	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) KL 5	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) LSD	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Kjeldahl Nitrogen by Fluorescence (Low Level)										
Amber glass total (sulfuric acid) LU	E318	19-Aug-2025	25-Aug-2025	28 days	6 days	✓	25-Aug-2025	28 days	6 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) HWY - 102 - 1	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL 1	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL 2	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL 3	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL 4	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) KL 5	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) LSD	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓

Matrix: **Water**

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

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) LU	E372-U	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	24-Aug-2025	28 days	3 days	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL 1	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	24 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL 5	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	24 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL 2	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	25 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL 4	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	26 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) LSD	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	26 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) KL 3	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	27 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) LU	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	27 hrs	✓
Microbiological Tests : Total Coliforms and E. coli (Enzyme Substrate)										
Sterile HDPE (sodium thiosulfate) HWY - 102 - 1	E010	19-Aug-2025	----	----	----		20-Aug-2025	30 hrs	28 hrs	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) HWY - 102 - 1	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL 1	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL 2	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL 3	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL 4	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) KL 5	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) LSD	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) LU	E355-L	19-Aug-2025	22-Aug-2025	28 days	3 days	✓	25-Aug-2025	28 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE HWY - 102 - 1	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Alkalinity Species by Titration										
HDPE KL 1	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE KL 2	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE KL 3	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE KL 4	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE KL 5	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE LSD	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE LU	E290	19-Aug-2025	21-Aug-2025	14 days	2 days	✓	22-Aug-2025	14 days	2 days	✓
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL 1	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	70 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL 2	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	71 hrs	✖ EHT

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL 5	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	71 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE LSD	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	72 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL 3	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	73 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE KL 4	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	73 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE LU	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	73 hrs	✖ EHT
Physical Tests : Colour (Apparent) by Spectrometer										
HDPE HWY - 102 - 1	E330	19-Aug-2025	----	----	----		22-Aug-2025	48 hrs	74 hrs	✖ EHT
Physical Tests : Conductivity in Water										
HDPE HWY - 102 - 1	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE KL 1	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE KL 2	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Conductivity in Water										
HDPE KL 3	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE KL 4	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE KL 5	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE LSD	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE LU	E100	19-Aug-2025	21-Aug-2025	28 days	2 days	✓	22-Aug-2025	28 days	2 days	✓
Physical Tests : pH by Meter										
HDPE KL 1	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	43 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	43 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE KL 5	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	43 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	43 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE KL 2	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	44 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	44 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE KL 4	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	45 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	45 hrs	✖ EHTR-FM

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : pH by Meter										
HDPE LSD	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	45 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	45 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE KL 3	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE LU	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	46 hrs	✖ EHTR-FM
Physical Tests : pH by Meter										
HDPE HWY - 102 - 1	E108	19-Aug-2025	21-Aug-2025	0.25 hrs	47 hrs	✖ EHTR-FM	21-Aug-2025	0.25 hrs	47 hrs	✖ EHTR-FM
Physical Tests : TDS by Gravimetry										
HDPE HWY - 102 - 1	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE KL 1	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE KL 2	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE KL 3	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE KL 4	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TDS by Gravimetry										
HDPE KL 5	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE LSD	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TDS by Gravimetry										
HDPE LU	E162	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE HWY - 102 - 1	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL 1	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL 2	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL 3	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL 4	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE KL 5	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓

Matrix: **Water**

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Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TSS by Gravimetry										
HDPE LSD	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : TSS by Gravimetry										
HDPE LU	E160	19-Aug-2025	----	----	----		21-Aug-2025	7 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE HWY - 102 - 1	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL 1	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL 2	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL 3	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL 4	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE KL 5	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Physical Tests : Turbidity by Nephelometry										
HDPE LSD	E121	19-Aug-2025	----	----	----		21-Aug-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
Physical Tests : Turbidity by Nephelometry										
HDPE LU	E121	19-Aug-2025	----	----	----		21-Aug-2025	3 days	2 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube HWY - 102 - 1	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL 1	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL 2	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL 3	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL 4	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube KL 5	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube LSD	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 days	✓
Plant Pigments : Chlorophyll-a by Fluorometry (Support Lab Filtered µg)										
Opaque HDPE tube LU	E870B	19-Aug-2025	26-Aug-2025	28 days	7 days	✓	26-Aug-2025	28 days	7 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
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL 1	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	27 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL 5	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	27 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL 2	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	28 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE LSD	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	28 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL 3	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	29 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE KL 4	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	29 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE LU	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	30 hrs	✓
Sample Preparation : Chlorophyll-a Filtration by Support Laboratory										
Opaque HDPE HWY - 102 - 1	EF870B	19-Aug-2025	----	----	----		20-Aug-2025	48 hrs	31 hrs	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) HWY - 102 - 1	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 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 Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL 1	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL 2	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL 3	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL 4	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) KL 5	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) LSD	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) LU	E420	19-Aug-2025	22-Aug-2025	180 days	3 days	✓	22-Aug-2025	180 days	3 days	✓

Legend & Qualifier Definitions

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended

EHT: Exceeded ALS recommended hold time prior to analysis.

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)							
Total Coliforms and E. coli (Enzyme Substrate)	E010	2170776	1	14	7.1	5.0	✓
Conductivity in Water	E100	2173795	1	19	5.2	5.0	✓
pH by Meter	E108	2172860	1	20	5.0	5.0	✓
Turbidity by Nephelometry	E121	2174056	1	20	5.0	5.0	✓
TSS by Gravimetry	E160	2172911	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	2172906	1	17	5.8	5.2	✓
Chloride in Water by IC	E235.Cl	2173793	1	19	5.2	5.0	✓
Fluoride in Water by IC	E235.F	2173791	1	19	5.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2173792	1	19	5.2	5.0	✓
Nitrate in Water by IC	E235.NO3	2173790	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2173794	1	19	5.2	5.0	✓
Alkalinity Species by Titration	E290	2173796	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	2175517	1	20	5.0	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2175515	1	20	5.0	5.0	✓
Colour (Apparent) by Spectrometer	E330	2175898	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2175518	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2175516	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2173798	1	20	5.0	5.0	✓
Reactive Silica by Colourimetry	E392	2180212	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2175156	1	20	5.0	5.0	✓
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B	2182455	0	13	0.0	5.0	✗
Laboratory Control Samples (LCS)							
Conductivity in Water	E100	2173795	1	19	5.2	5.0	✓
pH by Meter	E108	2172860	1	20	5.0	5.0	✓
Turbidity by Nephelometry	E121	2174056	1	20	5.0	5.0	✓
TSS by Gravimetry	E160	2172911	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	2172906	1	17	5.8	5.2	✓
Chloride in Water by IC	E235.Cl	2173793	1	19	5.2	5.0	✓
Fluoride in Water by IC	E235.F	2173791	1	19	5.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2173792	1	19	5.2	5.0	✓
Nitrate in Water by IC	E235.NO3	2173790	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2173794	1	19	5.2	5.0	✓
Alkalinity Species by Titration	E290	2173796	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	2175517	1	20	5.0	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2175515	1	20	5.0	5.0	✓
Colour (Apparent) by Spectrometer	E330	2175898	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 Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2175518	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2175516	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2173798	1	20	5.0	5.0	✓
Reactive Silica by Colourimetry	E392	2180212	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2175156	1	20	5.0	5.0	✓
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B	2182455	1	13	7.6	5.0	✓
Method Blanks (MB)							
Total Coliforms and E. coli (Enzyme Substrate)	E010	2170776	1	14	7.1	5.0	✓
Conductivity in Water	E100	2173795	1	19	5.2	5.0	✓
Turbidity by Nephelometry	E121	2174056	1	20	5.0	5.0	✓
TSS by Gravimetry	E160	2172911	1	19	5.2	5.0	✓
TDS by Gravimetry	E162	2172906	1	17	5.8	5.2	✓
Chloride in Water by IC	E235.Cl	2173793	1	19	5.2	5.0	✓
Fluoride in Water by IC	E235.F	2173791	1	19	5.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2173792	1	19	5.2	5.0	✓
Nitrate in Water by IC	E235.NO3	2173790	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2173794	1	19	5.2	5.0	✓
Alkalinity Species by Titration	E290	2173796	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	2175517	1	20	5.0	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2175515	1	20	5.0	5.0	✓
Colour (Apparent) by Spectrometer	E330	2175898	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2175518	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2175516	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2173798	1	20	5.0	5.0	✓
Reactive Silica by Colourimetry	E392	2180212	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2175156	1	20	5.0	5.0	✓
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B	2182455	1	13	7.6	5.0	✓
Matrix Spikes (MS)							
Chloride in Water by IC	E235.Cl	2173793	1	19	5.2	5.0	✓
Fluoride in Water by IC	E235.F	2173791	1	19	5.2	5.0	✓
Nitrite in Water by IC	E235.NO2	2173792	1	19	5.2	5.0	✓
Nitrate in Water by IC	E235.NO3	2173790	1	20	5.0	5.0	✓
Sulfate in Water by IC	E235.SO4	2173794	1	19	5.2	5.0	✓
Ammonia by Fluorescence	E298	2175517	1	20	5.0	5.0	✓
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318	2175515	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2175518	1	20	5.0	5.0	✓
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2175516	1	20	5.0	5.0	✓
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U	2173798	1	20	5.0	5.0	✓
Reactive Silica by Colourimetry	E392	2180212	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*
Matrix Spikes (MS) - Continued							
Total Metals in Water by CRC ICPMS	E420	2175156	1	20	5.0	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
Total Coliforms and E. coli (Enzyme Substrate)	E010 ALS Environmental - Halifax	Water	APHA 9223 (mod)	The enzyme substrate test simultaneously detects Total Coliforms and E. coli in a 100 mL sample after incubation at 35.0 ±0.5°C for either 18 or 24 hours (dependent on reagent used).
Conductivity in Water	E100 ALS Environmental - Waterloo	Water	APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a water sample. Conductivity measurements are temperature-compensated to 25°C.
pH by Meter	E108 ALS Environmental - Halifax	Water	APHA 4500-H (mod)	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C). For high accuracy test results, pH should be measured in the field within the recommended 15 minute hold time.
Turbidity by Nephelometry	E121 ALS Environmental - Waterloo	Water	APHA 2130 B (mod)	Turbidity is measured by the nephelometric method, by measuring the intensity of light scatter under defined conditions.
TSS by Gravimetry	E160 ALS Environmental - Halifax	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 - Halifax	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.
Chloride in Water by IC	E235.Cl ALS Environmental - Waterloo	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 - Waterloo	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC	E235.NO2 ALS Environmental - Waterloo	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Nitrate in Water by IC	E235.NO3 ALS Environmental - Waterloo	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 - Waterloo	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 - Waterloo	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.
Ammonia by Fluorescence	E298 ALS Environmental - Waterloo	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)
Total Kjeldahl Nitrogen by Fluorescence (Low Level)	E318 ALS Environmental - Waterloo	Water	Method Fialab 100, 2018	TKN 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).
Colour (Apparent) by Spectrometer	E330 ALS Environmental - Waterloo	Water	APHA 2120 C (mod)	Colour (Apparent) is measured in an unfiltered sample spectrophotometrically using the single wavelength method. The colour contribution of settleable solids are not included in the result. This method is intended for potable waters. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment.
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L ALS Environmental - Waterloo	Water	APHA 5310 B (mod)	Total Organic Carbon (Non-Purgeable), also known as NPOC (total), is a direct measurement of TOC after an acidified sample has been purged to remove carbonate-based Inorganic Carbon (IC). Analysis is by high temperature combustion with infrared detection of CO2. Forms of carbon associated with inorganic or organic molecules (e.g. SCN and CN) are included in NPOC if they are not removed by purging under acidic conditions. Notably, NPOC excludes most volatile organic compounds and free cyanide. For samples where the majority of Total Carbon is inorganic, this method provides greater accuracy and reliability versus the TOC by subtraction method (TC minus TIC).
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.
Dissolved Orthophosphate by Colourimetry (Ultra Trace Level 0.001 mg/L)	E378-U ALS Environmental - Waterloo	Water	APHA 4500-P F (mod)	Dissolved Orthophosphate is determined colourimetrically on a sample that has been lab or field filtered through a 0.45 micron membrane filter. Field filtration is recommended to ensure test results represent conditions at time of sampling.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Reactive Silica by Colourimetry	E392 ALS Environmental - Winnipeg	Water	APHA 4500-SiO2 E (mod)	Silicate (molybdate-reactive silica) is determined by the molybdosilicate-heteropoly blue colourimetric method using a discrete analyzer. Method Limitation: Arsenic (5+) above 100 mg/L is a negative interference on this test
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Waterloo	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.
Chlorophyll-a by Fluorometry (Support Lab Filtered µg)	E870B ALS Environmental - Winnipeg	Water	EPA 445.0 (mod)	Chlorophyll-a is determined by solvent extraction followed with analysis by fluorometry using the non-acidification procedure. Sampling volume not provided by client.
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Waterloo	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed as $CaCO_3$ 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 hardness is a property of water due to dissolved divalent cations. In non-turbid waters, Hardness from total Ca/Mg is normally comparable to Dissolved Hardness, but may be biased high if particulate forms of Ca or Mg are present.
Ion Balance using Total Metals	EC101A ALS Environmental - Waterloo	Water	APHA 1030E	Cation Sum (using total metals), Anion Sum, and Ion Balance are calculated based on guidance from APHA Standard Methods (1030E Checking Correctness of Analysis). Minor ions are included where data is present. Ion Balance cannot be calculated accurately for waters with very low electrical conductivity (EC).
Saturation Index using Laboratory pH (Ca-T)	EC105A ALS Environmental - Waterloo	Water	APHA 2330B	Langelier Index provides an indication of scale formation potential at a given pH and temperature, and is calculated as per APHA 2330B Saturation Index. Positive values indicate oversaturation with respect to $CaCO_3$. Negative values indicate undersaturation of $CaCO_3$. This calculation uses laboratory pH measurements and provides estimates of Langelier Index at temperatures of 4, 15, 20, 25, 66, and 77°C. Ryznar Stability Index is an alternative index used for scale formation and corrosion potential.
Nitrate and Nitrite (as N) (Calculation)	EC235.N+N ALS Environmental - Waterloo	Water	EPA 300.0	Nitrate and Nitrite (as N) is a calculated parameter. Nitrate and Nitrite (as N) = Nitrite (as N) + Nitrate (as N).
Total Silicon as Silica (Calculation)	EC420.SiO2 ALS Environmental - Waterloo	Water	N/A	Total Silicon (as SiO_2) is a calculated parameter. Total Silicon (as SiO_2 mg/L) = 2.139 x Total Silicon (mg/L).
Chlorophyll-a by Fluorometry (Support Lab Filtered µg/L)	EC870B ALS Environmental - Winnipeg	Water	CALC	Convert results to sample concentration based on support lab filter information.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chlorophyll-a Filtration by Support Laboratory	EF870B ALS Environmental - Halifax	Water	EPA 445.0 (mod)	Filtration for chlorophyll-a analysis

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 ALS Environmental - Waterloo	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.
Digestion for TKN in water	EP318 ALS Environmental - Waterloo	Water	APHA 4500-Norg D (mod)	Samples are digested at high temperature using Sulfuric Acid with Copper catalyst, which converts organic nitrogen sources to Ammonia, which is then quantified by the analytical method as TKN. This method is unsuitable for samples containing high levels of nitrate. If nitrate exceeds TKN concentration by ten times or more, results may be biased low.
Preparation for Total Organic Carbon by Combustion	EP355 ALS Environmental - Waterloo	Water		Preparation for Total Organic Carbon by Combustion
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.
Chlorophyll-a Extraction (Support Lab Filtered)	EP870B ALS Environmental - Winnipeg	Water	EPA 445.0 (mod)	Chlorophyll-a solvent extraction.

QUALITY CONTROL REPORT

Work Order	: **HA2503197**	Page	: 1 of 13
Client	: WSP Canada Inc.	Laboratory	: ALS Environmental - Halifax
Contact	: Naomi Giles	Account Manager	: Amanda Overholster
Address	: 1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	: ----	Telephone	: 1 416 817 2944
Project	: CA0052759.2572	Date Samples Received	: 19-Aug-2025 14:50
PO	: P115454CA1	Date Analysis Commenced	: 20-Aug-2025
C-O-C number	: 20-1022524	Issue Date	: 28-Aug-2025 14:56
Sampler	: JH / MO		
Site	: ----		
Quote number	: HRM-2025-0160 Water Quality Monitoring (X)		
No. of samples received	: 8		
No. of samples analysed	: 8		

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*
Greg Pokocky	Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Jiaxi Wang	Supervisor - Water Chemistry	Halifax Inorganics, Dartmouth, Nova Scotia
Jiaxi Wang	Supervisor - Water Chemistry	Halifax Microbiology, Dartmouth, Nova Scotia
Jon Fisher	Production Manager, Environmental	Halifax Inorganics, Dartmouth, Nova Scotia
Kevin Baxter	Supervisor - Inorganic	Winnipeg Inorganics, Winnipeg, Manitoba
Lee McTavish		Winnipeg Inorganics, Winnipeg, Manitoba
Robyn MacCormack	Analyst	Halifax Administration, Dartmouth, Nova Scotia

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: 2172860)											
HA2503197-001	HWY - 102 - 1	pH	---	E108	0.10	pH units	6.89	6.74	2.29%	4%	---
Physical Tests (QC Lot: 2172906)											
HA2503197-001	HWY - 102 - 1	Solids, total dissolved [TDS]	---	E162	20	mg/L	343	354	3.01%	20%	---
Physical Tests (QC Lot: 2172911)											
HA2503197-001	HWY - 102 - 1	Solids, total suspended [TSS]	---	E160	3.0	mg/L	13.2	9.8	3.4	Diff <2x LOR	---
Physical Tests (QC Lot: 2173795)											
HA2503198-001	Anonymous	Conductivity	---	E100	1.0	µS/cm	51.2	51.1	0.196%	10%	---
Physical Tests (QC Lot: 2173796)											
HA2503198-001	Anonymous	Alkalinity, total (as CaCO3)	---	E290	1.0	mg/L	8.2	8.3	0.1	Diff <2x LOR	---
Physical Tests (QC Lot: 2174056)											
HA2503197-001	HWY - 102 - 1	Turbidity	---	E121	0.10	NTU	1.53	1.42	7.45%	15%	---
Physical Tests (QC Lot: 2175898)											
HA2503197-001	HWY - 102 - 1	Colour, apparent	---	E330	2.0	CU	65.9	65.8	0.180%	20%	---
Anions and Nutrients (QC Lot: 2173790)											
HA2503197-001	HWY - 102 - 1	Nitrate (as N)	14797-55-8	E235.NO3	0.020	mg/L	0.131	0.128	0.003	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2173791)											
HA2503197-001	HWY - 102 - 1	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.038	0.038	0.00001	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2173792)											
HA2503197-001	HWY - 102 - 1	Nitrite (as N)	14797-65-0	E235.NO2	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2173793)											
HA2503197-001	HWY - 102 - 1	Chloride	16887-00-6	E235.Cl	0.50	mg/L	152	152	0.0866%	20%	---
Anions and Nutrients (QC Lot: 2173794)											
HA2503197-001	HWY - 102 - 1	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	15.9	15.8	0.474%	20%	---
Anions and Nutrients (QC Lot: 2173798)											
HA2502936-001	Anonymous	Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.0010	mg/L	0.0066	0.0066	0.00003	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2175515)											
HA2503197-001	HWY - 102 - 1	Kjeldahl nitrogen, total [TKN]	---	E318	0.050	mg/L	0.902	0.848	6.19%	20%	---
Anions and Nutrients (QC Lot: 2175516)											
HA2503197-002	LU	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.0090	0.0078	0.0012	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2175517)											

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*
Anions and Nutrients (QC Lot: 2175517) - continued											
HA2503197-003	KL 3	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0161	0.0130	0.0031	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2180212)											
HA2503197-001	HWY - 102 - 1	Silicate (as SiO2)	7631-86-9	E392	0.50	mg/L	7.86	7.77	1.21%	20%	---
Organic / Inorganic Carbon (QC Lot: 2175518)											
HA2503197-004	KL 4	Carbon, total organic [TOC]	---	E355-L	0.50	mg/L	4.13	4.43	0.30	Diff <2x LOR	---
Microbiological Tests (QC Lot: 2170776)											
HA2503186-001	Anonymous	Coliforms, Escherichia coli [E. coli]	---	E010	1	MPN/100mL	172	162	6.52%	65%	---
		Coliforms, total	---	E010	1	MPN/100mL	>2420	>2420	0.00%	65%	---
Total Metals (QC Lot: 2175156)											
HA2503208-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0300	mg/L	<0.0300	<0.0300	0	Diff <2x LOR	---
		Antimony, total	7440-36-0	E420	0.00100	mg/L	0.0303	0.0305	0.661%	20%	---
		Arsenic, total	7440-38-2	E420	0.00100	mg/L	0.0107	0.0111	3.98%	20%	---
		Barium, total	7440-39-3	E420	0.00100	mg/L	0.0388	0.0387	0.209%	20%	---
		Bismuth, total	7440-69-9	E420	0.000500	mg/L	<0.000500	<0.000500	0	Diff <2x LOR	---
		Boron, total	7440-42-8	E420	0.100	mg/L	0.346	0.352	0.006	Diff <2x LOR	---
		Cadmium, total	7440-43-9	E420	0.0000500	mg/L	0.0148	0.0147	0.900%	20%	---
		Calcium, total	7440-70-2	E420	0.500	mg/L	68.8	69.4	0.829%	20%	---
		Chromium, total	7440-47-3	E420	0.00500	mg/L	<0.00500	<0.00500	0	Diff <2x LOR	---
		Cobalt, total	7440-48-4	E420	0.00100	mg/L	<0.00100	<0.00100	0	Diff <2x LOR	---
		Copper, total	7440-50-8	E420	0.00500	mg/L	0.0117	0.0120	0.00034	Diff <2x LOR	---
		Iron, total	7439-89-6	E420	0.100	mg/L	<0.100	<0.100	0	Diff <2x LOR	---
		Lead, total	7439-92-1	E420	0.000500	mg/L	0.00226	0.00227	0.000003	Diff <2x LOR	---
		Magnesium, total	7439-95-4	E420	0.0500	mg/L	1.87	1.96	4.54%	20%	---
		Manganese, total	7439-96-5	E420	0.00100	mg/L	0.00383	0.00456	0.00073	Diff <2x LOR	---
		Molybdenum, total	7439-98-7	E420	0.000500	mg/L	0.00412	0.00402	0.000100	Diff <2x LOR	---
		Nickel, total	7440-02-0	E420	0.00500	mg/L	0.00698	0.0116	0.00460	Diff <2x LOR	---
		Potassium, total	7440-09-7	E420	0.500	mg/L	13.4	13.5	0.609%	20%	---
		Selenium, total	7782-49-2	E420	0.000500	mg/L	0.0147	0.0151	2.77%	20%	---
		Silicon, total	7440-21-3	E420	1.00	mg/L	3.34	3.34	0.005	Diff <2x LOR	---
		Silver, total	7440-22-4	E420	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	---
		Sodium, total	7440-23-5	E420	0.500	mg/L	53.2	53.7	0.997%	20%	---
		Strontium, total	7440-24-6	E420	0.00200	mg/L	0.214	0.214	0.0140%	20%	---
		Thallium, total	7440-28-0	E420	0.000100	mg/L	0.740	0.742	0.331%	20%	---
		Tin, total	7440-31-5	E420	0.00100	mg/L	0.00482	0.00503	0.00021	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: 2175156) - continued											
HA2503208-001	Anonymous	Titanium, total	7440-32-6	E420	0.00300	mg/L	<0.00300	<0.00300	0	Diff <2x LOR	---
		Uranium, total	7440-61-1	E420	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	---
		Vanadium, total	7440-62-2	E420	0.00500	mg/L	<0.00500	<0.00500	0	Diff <2x LOR	---
		Zinc, total	7440-66-6	E420	0.0300	mg/L	0.0354	0.0393	0.0039	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: 2172906)						
Solids, total dissolved [TDS]	—	E162	10	mg/L	<10	—
Physical Tests (QCLot: 2172911)						
Solids, total suspended [TSS]	—	E160	3	mg/L	<3.0	—
Physical Tests (QCLot: 2173795)						
Conductivity	—	E100	1	µS/cm	<1.0	—
Physical Tests (QCLot: 2173796)						
Alkalinity, total (as CaCO3)	—	E290	1	mg/L	<1.0	—
Physical Tests (QCLot: 2174056)						
Turbidity	—	E121	0.1	NTU	<0.10	—
Physical Tests (QCLot: 2175898)						
Colour, apparent	—	E330	2	CU	<2.0	—
Anions and Nutrients (QCLot: 2173790)						
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	<0.020	—
Anions and Nutrients (QCLot: 2173791)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	—
Anions and Nutrients (QCLot: 2173792)						
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	<0.010	—
Anions and Nutrients (QCLot: 2173793)						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	—
Anions and Nutrients (QCLot: 2173794)						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	—
Anions and Nutrients (QCLot: 2173798)						
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.001	mg/L	<0.0010	—
Anions and Nutrients (QCLot: 2175515)						
Kjeldahl nitrogen, total [TKN]	—	E318	0.05	mg/L	<0.050	—
Anions and Nutrients (QCLot: 2175516)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	—
Anions and Nutrients (QCLot: 2175517)						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	—
Anions and Nutrients (QCLot: 2180212)						
Silicate (as SiO2)	7631-86-9	E392	0.5	mg/L	<0.50	—
Organic / Inorganic Carbon (QCLot: 2175518)						

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Organic / Inorganic Carbon (QCLot: 2175518) - continued						
Carbon, total organic [TOC]	---	E355-L	0.5	mg/L	<0.50	---
Microbiological Tests (QCLot: 2170776)						
Coliforms, Escherichia coli [E. coli]	---	E010	1	MPN/100mL	<1	---
Coliforms, total	---	E010	1	MPN/100mL	<1	---
Total Metals (QCLot: 2175156)						
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	---
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	---
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	---
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	---
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	---
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	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	---
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	---
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	---
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	---
Plant Pigments (QCLot: 2182455)						

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Plant Pigments (QCLot: 2182455) - continued						
Chlorophyll a	479-61-8	E870B	0.002	µg/sample	<0.0020	---

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: 2172860)									
pH	---	E108	---	pH units	7 pH units	101	98.0	102	---
Physical Tests (QCLot: 2172906)									
Solids, total dissolved [TDS]	---	E162	10	mg/L	1000 mg/L	96.5	85.0	115	---
Physical Tests (QCLot: 2172911)									
Solids, total suspended [TSS]	---	E160	3	mg/L	150 mg/L	99.3	85.0	115	---
Physical Tests (QCLot: 2173795)									
Conductivity	---	E100	1	µS/cm	1410 µS/cm	102	90.0	110	---
Physical Tests (QCLot: 2173796)									
Alkalinity, total (as CaCO3)	---	E290	1	mg/L	150 mg/L	102	85.0	115	---
Physical Tests (QCLot: 2174056)									
Turbidity	---	E121	0.1	NTU	200 NTU	93.0	85.0	115	---
Physical Tests (QCLot: 2175898)									
Colour, apparent	---	E330	2	CU	25 CU	103	85.0	115	---
Anions and Nutrients (QCLot: 2173790)									
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	2.5 mg/L	100	90.0	110	---
Anions and Nutrients (QCLot: 2173791)									
Fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	106	90.0	110	---
Anions and Nutrients (QCLot: 2173792)									
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	0.5 mg/L	104	90.0	110	---
Anions and Nutrients (QCLot: 2173793)									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	101	90.0	110	---
Anions and Nutrients (QCLot: 2173794)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	101	90.0	110	---
Anions and Nutrients (QCLot: 2173798)									
Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.001	mg/L	0.05 mg/L	100	80.0	120	---
Anions and Nutrients (QCLot: 2175515)									
Kjeldahl nitrogen, total [TKN]	---	E318	0.05	mg/L	4 mg/L	101	75.0	125	---
Anions and Nutrients (QCLot: 2175516)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.333 mg/L	100	80.0	120	---
Anions and Nutrients (QCLot: 2175517)									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	104	85.0	115	---

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
Anions and Nutrients (QCLot: 2180212)									
Silicate (as SiO2)	7631-86-9	E392	0.5	mg/L	10 mg/L	111	85.0	115	—
Organic / Inorganic Carbon (QCLot: 2175518)									
Carbon, total organic [TOC]	—	E355-L	0.5	mg/L	8.57 mg/L	109	80.0	120	—
Total Metals (QCLot: 2175156)									
Aluminum, total	7429-90-5	E420	0.003	mg/L	0.1 mg/L	102	80.0	120	—
Antimony, total	7440-36-0	E420	0.0001	mg/L	0.05 mg/L	97.3	80.0	120	—
Arsenic, total	7440-38-2	E420	0.0001	mg/L	0.05 mg/L	103	80.0	120	—
Barium, total	7440-39-3	E420	0.0001	mg/L	0.012 mg/L	99.8	80.0	120	—
Bismuth, total	7440-69-9	E420	0.00005	mg/L	0.05 mg/L	96.9	80.0	120	—
Boron, total	7440-42-8	E420	0.01	mg/L	0.05 mg/L	99.6	80.0	120	—
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.005 mg/L	96.7	80.0	120	—
Calcium, total	7440-70-2	E420	0.05	mg/L	2.5 mg/L	94.7	80.0	120	—
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.012 mg/L	98.6	80.0	120	—
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.012 mg/L	97.2	80.0	120	—
Copper, total	7440-50-8	E420	0.0005	mg/L	0.012 mg/L	95.8	80.0	120	—
Iron, total	7439-89-6	E420	0.01	mg/L	0.05 mg/L	94.2	80.0	120	—
Lead, total	7439-92-1	E420	0.00005	mg/L	0.025 mg/L	97.2	80.0	120	—
Magnesium, total	7439-95-4	E420	0.005	mg/L	2.5 mg/L	101	80.0	120	—
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.012 mg/L	98.4	80.0	120	—
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.012 mg/L	95.3	80.0	120	—
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.025 mg/L	96.0	80.0	120	—
Potassium, total	7440-09-7	E420	0.05	mg/L	2.5 mg/L	99.9	80.0	120	—
Selenium, total	7782-49-2	E420	0.00005	mg/L	0.05 mg/L	96.6	80.0	120	—
Silicon, total	7440-21-3	E420	0.1	mg/L	0.5 mg/L	98.7	80.0	120	—
Silver, total	7440-22-4	E420	0.00001	mg/L	0.005 mg/L	86.7	80.0	120	—
Sodium, total	7440-23-5	E420	0.05	mg/L	2.5 mg/L	101	80.0	120	—
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.012 mg/L	96.1	80.0	120	—
Thallium, total	7440-28-0	E420	0.00001	mg/L	0.05 mg/L	97.6	80.0	120	—
Tin, total	7440-31-5	E420	0.0001	mg/L	0.025 mg/L	95.7	80.0	120	—
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.012 mg/L	98.6	80.0	120	—
Uranium, total	7440-61-1	E420	0.00001	mg/L	0 mg/L	95.3	80.0	120	—
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.025 mg/L	98.4	80.0	120	—
Zinc, total	7440-66-6	E420	0.003	mg/L	0.025 mg/L	98.0	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
Plant Pigments (QCLot: 2182455)									
Chlorophyll a	479-61-8	E870B	0.002	µg/sample	1.07 µg/sample	92.8	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: 2173790)										
HA2503197-001	HWY - 102 - 1	Nitrate (as N)	14797-55-8	E235.NO3	2.50 mg/L	2.5 mg/L	100	75.0	125	—
Anions and Nutrients (QCLot: 2173791)										
HA2503197-001	HWY - 102 - 1	Fluoride	16984-48-8	E235.F	1.06 mg/L	1 mg/L	106	75.0	125	—
Anions and Nutrients (QCLot: 2173792)										
HA2503197-001	HWY - 102 - 1	Nitrite (as N)	14797-65-0	E235.NO2	0.498 mg/L	0.5 mg/L	99.7	75.0	125	—
Anions and Nutrients (QCLot: 2173793)										
HA2503197-001	HWY - 102 - 1	Chloride	16887-00-6	E235.Cl	ND mg/L	—	ND	75.0	125	—
Anions and Nutrients (QCLot: 2173794)										
HA2503197-001	HWY - 102 - 1	Sulfate (as SO4)	14808-79-8	E235.SO4	99.6 mg/L	100 mg/L	99.6	75.0	125	—
Anions and Nutrients (QCLot: 2173798)										
HA2502936-001	Anonymous	Phosphate, ortho-, dissolved (as P)	14265-44-2	E378-U	0.0188 mg/L	0.02 mg/L	95.8	70.0	130	—
Anions and Nutrients (QCLot: 2175515)										
HA2503197-001	HWY - 102 - 1	Kjeldahl nitrogen, total [TKN]	—	E318	2.72 mg/L	2.5 mg/L	109	70.0	130	—
Anions and Nutrients (QCLot: 2175516)										
HA2503197-002	LU	Phosphorus, total	7723-14-0	E372-U	0.0934 mg/L	0.1 mg/L	93.4	70.0	130	—
Anions and Nutrients (QCLot: 2175517)										
HA2503197-003	KL 3	Ammonia, total (as N)	7664-41-7	E298	0.104 mg/L	0.1 mg/L	104	75.0	125	—
Anions and Nutrients (QCLot: 2180212)										
HA2503197-002	LU	Silicate (as SiO2)	7631-86-9	E392	11.8 mg/L	10 mg/L	118	75.0	125	—
Organic / Inorganic Carbon (QCLot: 2175518)										
HA2503197-004	KL 4	Carbon, total organic [TOC]	—	E355-L	5.32 mg/L	5 mg/L	106	70.0	130	—
Total Metals (QCLot: 2175156)										
HA2503209-001	Anonymous	Aluminum, total	7429-90-5	E420	ND mg/L	—	ND	70.0	130	—
		Antimony, total	7440-36-0	E420	0.0501 mg/L	0.05 mg/L	100	70.0	130	—
		Arsenic, total	7440-38-2	E420	ND mg/L	—	ND	70.0	130	—
		Barium, total	7440-39-3	E420	ND mg/L	—	ND	70.0	130	—
		Bismuth, total	7440-69-9	E420	0.0518 mg/L	0.05 mg/L	104	70.0	130	—
		Boron, total	7440-42-8	E420	ND mg/L	—	ND	70.0	130	—
		Cadmium, total	7440-43-9	E420	ND mg/L	—	ND	70.0	130	—
		Calcium, total	7440-70-2	E420	ND mg/L	—	ND	70.0	130	—
		Chromium, total	7440-47-3	E420	0.0136 mg/L	0.012 mg/L	109	70.0	130	—
		Cobalt, total	7440-48-4	E420	0.0125 mg/L	0.012 mg/L	100	70.0	130	—
		Copper, total	7440-50-8	E420	ND mg/L	—	ND	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: 2175156) - continued										
HA2503209-001	Anonymous	Iron, total	7439-89-6	E420	ND mg/L	---	ND	70.0	130	---
		Lead, total	7439-92-1	E420	ND mg/L	---	ND	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	0.0122 mg/L	0.012 mg/L	97.9	70.0	130	---
		Nickel, total	7440-02-0	E420	0.0140 mg/L	0.025 mg/L	56.2	70.0	130	K
		Potassium, total	7440-09-7	E420	ND mg/L	---	ND	70.0	130	---
		Selenium, total	7782-49-2	E420	0.0520 mg/L	0.05 mg/L	104	70.0	130	---
		Silicon, total	7440-21-3	E420	ND mg/L	---	ND	70.0	130	---
		Silver, total	7440-22-4	E420	0.00457 mg/L	0.005 mg/L	91.4	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	---
		Thallium, total	7440-28-0	E420	ND mg/L	---	ND	70.0	130	---
		Tin, total	7440-31-5	E420	0.0250 mg/L	0.025 mg/L	100	70.0	130	---
		Titanium, total	7440-32-6	E420	0.0116 mg/L	0.012 mg/L	93.0	70.0	130	---
		Uranium, total	7440-61-1	E420	0.000254 mg/L	0 mg/L	102	70.0	130	---
		Vanadium, total	7440-62-2	E420	0.0269 mg/L	0.025 mg/L	108	70.0	130	---
		Zinc, total	7440-66-6	E420	ND mg/L	---	ND	70.0	130	---

Qualifiers

Qualifier	Description
K	*Matrix Spike recovery outside ALS DQO due to sample matrix effects.*

ALS www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

COC Number: 20 - 1022524

Page of

Environmental Division
Halifax
Work Order Reference
HA2503197

Telephone : +1 902 707 4888

Report To	Contact and company name below will appear on the final report
Company:	WSP Canada Inc.
Contact:	Naomi Giles
Phone:	782-640-1923
	Company address below will appear on the final report
Street:	1 Spectacle Lake Dr
City/Province:	Dartmouth, NS
Postal Code:	B3B 1X7
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: Naomi.Giles@wsp.com
- Email 2: Matthew.Oelschlagel@wsp.com
- Email 3: Lee.Hynes@wsp.com

Invoice Recipients

- Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
- Email 1 or Fax: Naomi.Giles@wsp.com
- Email 2: CAPayables Invoice@wsp.com

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 non-routine

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contac

Project Information

ALS Account # / Quote #:	WSP I 100 / HA2025WSP I 10000 4
Job #:	CA0052759.2572
PO / AFE:	P115454CA1
LSD:	
ALS Lab Work Order # (ALS use only):	HA2503197

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	
ALS Contact: Amanda Overholster	Sampler: JH + MO

Analysis Request — Indicate Filtered (F), Preserved (P) or Filtered and Preserved

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	Metals (P)	Gen. Chem	Total Phos.	Chlorophyll-a	E. coli (CFU/100ml)	Total coliform (CFU/100ml)	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	HWY-102-1	19-08-25	09:35	SW	6	✓	✓	✓	✓	✓	✓	X 1		
	1D	↓	10:25	↓	↓	✓	✓	✓	✓	✓	✓	↓		
	KL3	↓	11:10	↓	↓	✓	✓	✓	✓	✓	✓	↓		
	KL4	↓	11:20	↓	↓	✓	✓	✓	✓	✓	✓	↓		
	LSD	↓	12:05	↓	↓	✓	✓	✓	✓	✓	✓	↓		
	KL2	↓	13:00	↓	↓	✓	✓	✓	✓	✓	✓	↓		
	KL5	↓	13:20	↓	↓	✓	✓	✓	✓	✓	✓	↓		
	KL1	↓	13:50	↓	↓	✓	✓	✓	✓	✓	✓	↓		

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)

~~extra phosphorus bottle hold~~ ~~↳ sample 1D + H for these samples~~

→ * summer sampling package parameters *

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
15	21	

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: [redacted]	Date: 19/08/25	Time: 2:45	Received by: [redacted]	Date: 19 August 2025	Time: 2:50	Received by:	Date:	Time:

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

AUG2020 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.

GENERAL TERMS AND CONDITIONS:

These terms and conditions are incorporated in and form part of the Agreement between ALS Group's Environmental Division and the party named in the Offer (the "Client").

1. Definitions. Capitalized Terms not defined in these Terms and Conditions have the definitions set out in the other Agreement documents.
2. The Services. ALS will provide the Services to the Client as described in the Offer and in any chain of custody form provided with any sample. Unless otherwise agreed, ALS may elect to re-allocate testing, without prior notice, to other ALS Canada laboratories with equivalent services and applicable accreditations and licenses, if required to prevent hold time or due date exceedance due to unanticipated over-capacity situations.
3. Prices. ALS may review and change all prices, fees, surcharges or other charges set out in the Agreement if there are changes to ALS's cost beyond ALS's control, including changes in legislative requirements, Client variations of sample numbers and Client requests for changes to standard reporting requirements. Notwithstanding Condition 3, all quotations expire after three years.
4. Payment Terms. The Client shall pay ALS within 30 days of the invoice date OAC. ALS may, for reasonable business reasons, require the Client to arrange for payment in advance.
5. Quotation Numbers. The Client shall provide the quotation number to ALS (where applicable) to ensure correct pricing.
6. Taxes. Applicable taxes are not included in prices. Applicable surcharges and additional fees will be added at the time of invoicing.
7. Quality Control. ALS has an extensive QA/QC program. Clients' samples are analyzed using approved, referenced procedures followed by thorough data validation prior to reporting of the analytical results.
8. Test Results. Results are obtained from analytical measurements that are subject to inherent variability. Measurement results reflect characteristics of submitted test samples at time of analysis. The Client is responsible for informing itself on the limitation of test results and acknowledges that test results are not guaranteed. When statements of conformity are requested on test reports (e.g. within Criteria Reports), measurement uncertainty is not applied to test results prior to the evaluation.
9. Standard of Care. ALS will use reasonable care and diligence as required by the laws of the province or territory where the sample is tested.
10. Storage. Where possible, ALS will store; soil and water samples for 45 days from date of receipt, tissue/biota samples for 6 months from date of receipt, air samples or re-usable media for 14 days from date of receipt, and microbiological samples for 3 days from date of receipt.
11. Holds. If the Client requests a sample to be placed on hold, ALS will store the samples according to paragraph 10, after which ALS will invoice the Client and discard the sample. Each sample is subject to a minimum $5.00 hold fee. Longer hold periods are available upon request. See paragraph 12.
12. Archives. If the Client requests for a sample to be archived, ALS will invoice in advance and will store the sample for the period requested, after which ALS may discard the sample.
13. Legal Sample Handling Protocol. Legal sample handling protocol must be arranged before samples are collected. ALS charges a surcharge on the list price plus the hourly technologist or chemist rates for legal sample protocol. Additional charges will apply for samples that require storage by ALS.
14. Samples. The quality, condition, content, and source of samples stored and tested are not known to ALS except as declared and described on the chain of custody form completed and submitted by the Client and accompanying the sample.
15. Risk of Loss. ALS will use reasonable care to protect samples during storage, however all samples are stored at the Client's risk and the Client is responsible for obtaining appropriate insurance, if desired. The Client acknowledges that during the performance of the Services samples may be altered, lost, damaged, or destroyed and the Client releases ALS from any claim the Client may have for any loss or damage to the sample.
16. Environmental. The Client must comply with all applicable environment legislation, including labeling all hazardous samples to comply with GHS and TDG regulations, and must provide appropriate Safety Data that include the nature of the hazard and a contact name and phone number to call for information. The Client will indemnify ALS for all loss or damages, including any fine or cost of complying with an order of any government authority, resulting from the Client's breach of this paragraph.
17. Hazardous Materials Disposal. ALS may return, at the Client's cost, hazardous material to the Client for disposal.
18. Hazardous Materials Surcharge. ALS may apply an additional surcharge for handling of hazardous samples or samples with Naturally Occurring Radioactive Materials (NORM), H2S, cyanide, etc.
19. Sample Containers. ALS may ship sample containers to the Client's location by the most cost effective means using ALS preferred courier suppliers, within the specified project timeline.
20. Additional Charges. ALS may charge the Client (a) its cost for emergency bottle shipments and shipments to and from a remote site, and (b) where pickup and delivery services are provided, subject in each instance to a minimum charge of $25.00.
21. Holding Times. Samples and chain of custody forms should be submitted to ALS as soon as possible after sampling, with a minimum of half the analytical hold time remaining, unless prior arrangements are made.
22. Re-Tests. ALS reserves the right to re-test any samples that remain in its possession. Re-tests requested by the Client may be subject to charges.
23. Waiver. The Client is responsible for making any assessment regarding the suitability of the Services and the intended results for the Client's purposes and waives any claims against ALS it may have as a result of the interpretation of the results. The Client shall indemnify ALS for all claims made by any third party against ALS in respect of all losses however arising from the performance of the Services or the use of any report provided in the performance of the Services.
24. Limitation of Liability. In no event shall ALS be liable for any consequential, indirect, incidental, special, exemplary, or punitive damages, whether foreseeable or unforeseeable (including claims for loss of profits or revenue or losses caused by stoppage of other work or impairment of other assets), incurred by the Client arising out of breach or failure of express or implied warranty, breach of contract, breach of warranty, misrepresentation, negligence, strict liability in tort or otherwise. In any event, the liability of ALS to the Client shall be limited to the cost of testing the sample as requested in the chain of custody form under which the sample was originally deposited. For the purposes of this paragraph and paragraphs 8, 15, 16, 23 and 25, as applicable, "ALS" includes without limitations its directors, officers, employees and affiliates and the "Client" includes without limitation any third party that may have a claim against ALS through the Client.
25. Notice of Liability. Notwithstanding paragraph 24, ALS shall not be liable to the Client unless the Client provides notice in writing to ALS of such loss or damage, together with full particulars thereof, within 30 days of the Client's receipt of the report of the analysis of the sample giving rise to such liability. The provisions of this paragraph allocate the risk under the Agreement between the Client and ALS, and the fees to be paid by the Client to ALS reflect this allocation of risks and the limitations of liability in this Agreement.
26. Third Party Service Provider Indemnity. For testing not performed at ALS, and where the Client requires ALS to forward samples to a third party service provider, the Client indemnifies ALS against any breach of this Agreement, all liabilities or losses incurred in connection with the third party service provider, including but not limited to courier services, testing turn-around time, and any additional costs associated with such third party.
27. Third Party Service Provider Indemnity. If ALS is required to engage a third party service provider for whatever reason, the Client indemnifies ALS against any breach of this Agreement, liabilities, or losses incurred in connection with the third party service provider, including but not limited to courier services, testing turn-around time, and any additional costs associated with such third party.
28. Entire Agreement. The Agreement is the entire agreement between the parties and supersedes and takes precedence over any terms and conditions contained in any documentation provided by the Client. ALS's execution of any subsequent documentation from the Client only acknowledges receipt and not acceptance of any terms or conditions therein. If there is a conflict between these terms and conditions and any other Agreement document, these terms and conditions prevail.
29. Term. Providing the first batch of samples to which this tender refers is submitted within three months of the starting date of this quotation, the following prices, terms and conditions will remain firm until the closing date. This offer, and its terms and conditions will automatically lapse if the offer has not been accepted and samples not delivered to ALS by the Closing Date.
30. Termination. (a) Either party may terminate this Agreement for any reason by giving the other party thirty (30) days written notice (Notice Period). (b) If the Agreement is terminated pursuant to clause (a), then the Client must pay ALS for all Services performed up to the expiry of the Notice Period.

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CERTIFICATE OF ANALYSIS

Work Order	:	**HA2503196**			
Client	:	**WSP Canada Inc.**	Laboratory	:	ALS Environmental - Halifax
Contact	:	Naomi Giles	Account Manager	:	Amanda Overholster
Address	:	1 Spectacle Lake Drive Dartmouth Nova Scotia Canada B3B 1X7	Address	:	13-100 Wright Ave Dartmouth NS Canada B3B 1L2
Telephone	:	----	E-mail	:	Amanda.Overholster@ALSGlobal.com
Project	:	CA0052759.2572	Telephone	:	1 416 817 2944
PO	:	P115454CA1	Date Samples Received	:	19-Aug-2025 14:50
C-O-C number	:	20-1022525	Date Analysis Commenced	:	08-Sep-2025
Sampler	:	MO / JH	Issue Date	:	08-Sep-2025 17:48
Site	:	----			
Quote number	:	HRM-2025-0160 Water Quality Monitoring (X)			
No. of samples received	:	8			
No. of samples analysed	:	8			

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*
Jon Fisher		Inorganics, Waterloo, Ontario

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*
mg/L	milligrams per litre

<: 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: Surface Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	HWY - 102 - 1 (H) ----	LSD (H) ----	----	----	----
					Client sampling date / time	19-Aug-2025 09:35	19-Aug-2025 12:05	----	----	----
						HA2503196-001	HA2503196-005	----	----	----
						Result	Result	----	----	----
Anions and Nutrients										
Phosphorus, total	7723-14-0	E372-U/WT	0.0020	mg/L		0.0200	0.0492	----	----	----

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

ALS Canada Ltd.

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **HA2503196**	Page	: 1 of 5
Client	: **WSP Canada Inc.**	Laboratory	: ALS Environmental - Halifax
Contact	: Naomi Giles	Account Manager	: Amanda Overholster
Address	: 1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	: ----	Telephone	: 1 416 817 2944
Project	: CA0052759.2572	Date Samples Received	: 19-Aug-2025 14:50
PO	: P115454CA1	Issue Date	: 08-Sep-2025 17:48
C O C number	: 20-1022525		
Sampler	: MO / JH		
Site	: ----		
Quote number	: HRM-2025-0160 Water Quality Monitoring (X)		
No of samples received	: 8		
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*
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) HWY - 102 - 1 (H)	E372-U	19-Aug-2025	06-Sep-2025	28 days	18 days	✓	08-Sep-2025	28 days	18 days	✓
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) LSD (H)	E372-U	19-Aug-2025	06-Sep-2025	28 days	18 days	✓	08-Sep-2025	28 days	18 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)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	5.0	✓
Method Blanks (MB)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	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
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.

QUALITY CONTROL REPORT

Work Order	:**HA2503196**	Page	: 1 of 3
Client	:WSP Canada Inc.	Laboratory	:ALS Environmental - Halifax
Contact	:Naomi Giles	Account Manager	:Amanda Overholster
Address	:1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	:13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	:----	Telephone	:1 416 817 2944
Project	:CA0052759.2572	Date Samples Received	:19-Aug-2025 14:50
PO	:P115454CA1	Date Analysis Commenced	:06-Sep-2025
C-O-C number	:20-1022525	Issue Date	:08-Sep-2025 17:48
Sampler	:MO / JH		
Site	:----		
Quote number	:HRM-2025-0160 Water Quality Monitoring (X)		
No. of samples received	:8		
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*
Jon Fisher	Laboratory Manager - Environmental	Waterloo Inorganics, Waterloo, Ontario

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
Anions and Nutrients (QC Lot: 2201895)											
HA2503196-001	HWY - 102 - 1 (H)	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.0200	0.0165	0.0035	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
Anions and Nutrients (QCLot: 2201895)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	---

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
Anions and Nutrients (QCLot: 2201895)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.333 mg/L	101	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: 2201895)										
HA2503196-001	HWY - 102 - 1 (H)	Phosphorus, total	7723-14-0	E372-U	0.0947 mg/L	0.1 mg/L	94.7	70.0	130	—

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1022525

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Page of

Environmental Division Halifax
Work Order Reference
HA2503196

Telephone : +1 902 707 4888

Report To	Contact and company name below will appear on the final report	Reports / Recipients	Turnaround Time (TAT) Requested
Company:	WSP Canada Inc.	Select Report Format: ☒ PDF ☒ EXCEL ☐ EDD (DIGITAL)	☒ Routine [R] if received by 3pm M-F - no surcharges apply
Contact:	Naomi Giles	Merge QC/QCI Reports with COA ☒ YES ☐ NO ☐ N/A	☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
Phone:	782-640-1923	☐ Compare Results to Criteria on Report - provide details below if box checked	☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
	Company address below will appear on the final report	Select Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
Street:	1 Spectacle Lake Drive	Email 1 or Fax naomi.giles@wsp.com	☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
City/Province:	Dartmouth, NS	Email 2 lee.hynes@wsp.com	☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional
Postal Code:	B3B 1X7	Email 3 matthew.oelschlagel@wsp.com	may apply to rush requests on weekends, statutory holidays and non-routin
Invoice To	Same as Report To ☒ YES ☐ NO	Invoice Recipients	Date and Time Required for all E&P TATs:
	Copy of Invoice with Report ☒ YES ☐ NO	Select Invoice Distribution: ☒ EMAIL ☐ MAIL ☐ FAX	For all tests with rush TATs requested, please con
Company:	WSP Canada Inc.	Email 1 or Fax naomi.giles@wsp.com	Analysis Requ
Contact:	Naomi Giles	Email 2 capayables invoice@wsp.com	

Project Information		Oil and Gas Required Fields (client use)	
ALS Account # / Quote #:	WSPI100/HA2025WSPI10004	AFE/Cost Center:	PO#
Job #:	CA0052759.2572	Major/Minor Code:	Routing Code:
PO / AFE:	P115454CA7	Requisitioner:	
LSD:		Location:	

ALS Lab Work Order # (ALS use only): HA2503196 | ALS Contact: Amanda Overholster | Sampler: MO / JH

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	Metals	Gen. Chem.	Total Phosp.	Chlorophyll A	E. Coli	Total Coliform	SAMPLES ON HOLD	EXTENDED STORAGE REQUI	SUSPECTED HAZARD (see n
	HWY-102-1 (H)	19-08-25	0935	SW	1	✓	✓	✓	✓	✓	✓	✓		
	LU (H)		1025			✓	✓	✓	✓	✓	✓	✓		
	KL3 (H)		1110			✓	✓	✓	✓	✓	✓	✓		
	KL4 (H)		1170			✓	✓	✓	✓	✓	✓	✓		
	LSD (H)		1205			✓	✓	✓	✓	✓	✓	✓		
	KL2 (H)		1300			✓	✓	✓	✓	✓	✓	✓		
	~~AAAAA~~ KL5 (H)		1320			✓	✓	✓	✓	✓	✓	✓		
	KL1 (H)		1350			✓	✓	✓	✓	✓	✓	✓		

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	* Summer sampling package parameters *
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

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

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

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

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
1.5	2.1						

RELEASE (client use)			SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
[redacted]	Date: 19-08-25	Time: 1445	[redacted]	Date: 19 August 2025	Time: 2:50	Received by:	Date:	Time:

REF [redacted]NS AND SAMPLING INFORMATION — WHITE - LABORATORY COPY — YELLOW - CLIENT COPY — AUG 2020 FRONT

Fail[redacted]y 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**.

GENERAL TERMS AND CONDITIONS:

These terms and conditions are incorporated in and form part of the Agreement between ALS Group's Environmental Division and the party named in the Offer (the "Client").

1. Definitions. Capitalized Terms not defined in these Terms and Conditions have the definitions set out in the other Agreement documents.
2. The Services. ALS will provide the Services to the Client as described in the Offer and in any chain of custody form provided with any sample. Unless otherwise agreed, ALS may elect to re-allocate testing, without prior notice, to other ALS Canada laboratories with equivalent services and applicable accreditations and licenses, if required to prevent hold time or due date exceedance due to unanticipated over-capacity situations.
3. Prices. ALS may review and change all prices, fees, surcharges or other charges set out in the Agreement if there are changes to ALS's cost beyond ALS's control, including changes in legislative requirements, Client variations of sample numbers and Client requests for changes to standard reporting requirements. Notwithstanding Condition 3, all quotations expire after three years.
4. Payment Terms. The Client shall pay ALS within 30 days of the invoice date OAC. ALS may, for reasonable business reasons, require the Client to arrange for payment in advance.
5. Quotation Numbers. The Client shall provide the quotation number to ALS (where applicable) to ensure correct pricing.
6. Taxes. Applicable taxes are not included in prices. Applicable surcharges and additional fees will be added at the time of invoicing.
7. Quality Control. ALS has an extensive QA/QC program. Clients' samples are analyzed using approved, referenced procedures followed by thorough data validation prior to reporting of the analytical results.
8. Test Results. Results are obtained from analytical measurements that are subject to inherent variability. Measurement results reflect characteristics of submitted test samples at time of analysis. The Client is responsible for informing itself on the limitation of test results and acknowledges that test results are not guaranteed. When statements of conformity are requested on test reports (e.g. within Criteria Reports), measurement uncertainty is not applied to test results prior to the evaluation.
9. Standard of Care. ALS will use reasonable care and diligence as required by the laws of the province or territory where the sample is tested.
10. Storage. Where possible, ALS will store; soil and water samples for 45 days from date of receipt, tissue/biota samples for 6 months from date of receipt, air samples or re-usable media for 14 days from date of receipt, and microbiological samples for 3 days from date of receipt.
11. Holds. If the Client requests a sample to be placed on hold, ALS will store the samples according to paragraph 10, after which ALS will invoice the Client and discard the sample. Each sample is subject to a minimum $5.00 hold fee. Longer hold periods are available upon request. See paragraph 12.
12. Archives. If the Client requests for a sample to be archived, ALS will invoice in advance and will store the sample for the period requested, after which ALS may discard the sample.
13. Legal Sample Handling Protocol. Legal sample handling protocol must be arranged before samples are collected. ALS charges a surcharge on the list price plus the hourly technologist or chemist rates for legal sample protocol. Additional charges will apply for samples that require storage by ALS.
14. Samples. The quality, condition, content, and source of samples stored and tested are not known to ALS except as declared and described on the chain of custody form completed and submitted by the Client and accompanying the sample.
15. Risk of Loss. ALS will use reasonable care to protect samples during storage, however all samples are stored at the Client's risk and the Client is responsible for obtaining appropriate insurance, if desired. The Client acknowledges that during the performance of the Services samples may be altered, lost, damaged, or destroyed and the Client releases ALS from any claim the Client may have for any loss or damage to the sample.
16. Environmental. The Client must comply with all applicable environment legislation, including labeling all hazardous samples to comply with GHS and TDG regulations, and must provide appropriate Safety Data that include the nature of the hazard and a contact name and phone number to call for information. The Client will indemnify ALS for all loss or damages, including any fine or cost of complying with an order of any government authority, resulting from the Client's breach of this paragraph.
17. Hazardous Materials Disposal. ALS may return, at the Client's cost, hazardous material to the Client for disposal.
18. Hazardous Materials Surcharge. ALS may apply an additional surcharge for handling of hazardous samples or samples with Naturally Occurring Radioactive Materials (NORM), H2S, cyanide, etc.
19. Sample Containers. ALS may ship sample containers to the Client's location by the most cost effective means using ALS preferred courier suppliers, within the specified project timeline.
20. Additional Charges. ALS may charge the Client (a) its cost for emergency bottle shipments and shipments to and from a remote site, and (b) where pickup and delivery services are provided, subject in each instance to a minimum charge of $25.00.
21. Holding Times. Samples and chain of custody forms should be submitted to ALS as soon as possible after sampling, with a minimum of half the analytical hold time remaining, unless prior arrangements are made.
22. Re-Tests. ALS reserves the right to re-test any samples that remain in its possession. Re-tests requested by the Client may be subject to charges.
23. Waiver. The Client is responsible for making any assessment regarding the suitability of the Services and the intended results for the Client's purposes and waives any claims against ALS it may have as a result of the interpretation of the results. The Client shall indemnify ALS for all claims made by any third party against ALS in respect of all losses however arising from the performance of the Services or the use of any report provided in the performance of the Services.
24. Limitation of Liability. In no event shall ALS be liable for any consequential, indirect, incidental, special, exemplary, or punitive damages, whether foreseeable or unforeseeable (including claims for loss of profits or revenue or losses caused by stoppage of other work or impairment of other assets), incurred by the Client arising out of breach or failure of express or implied warranty, breach of contract, breach of warranty, misrepresentation, negligence, strict liability in tort or otherwise. In any event, the liability of ALS to the Client shall be limited to the cost of testing the sample as requested in the chain of custody form under which the sample was originally deposited. For the purposes of this paragraph and paragraphs 8, 15, 16, 23 and 25, as applicable, "ALS" includes without limitations its directors, officers, employees and affiliates and the "Client" includes without limitation any third party that may have a claim against ALS through the Client.
25. Notice of Liability. Notwithstanding paragraph 24, ALS shall not be liable to the Client unless the Client provides notice in writing to ALS of such loss or damage, together with full particulars thereof, within 30 days of the Client's receipt of the report of the analysis of the sample giving rise to such liability. The provisions of this paragraph allocate the risk under the Agreement between the Client and ALS, and the fees to be paid by the Client to ALS reflect this allocation of risks and the limitations of liability in this Agreement.
26. Third Party Service Provider Indemnity. For testing not performed at ALS, and where the Client requires ALS to forward samples to a third party service provider, the Client indemnifies ALS against any breach of this Agreement, all liabilities or losses incurred in connection with the third party service provider, including but not limited to courier services, testing turn-around time, and any additional costs associated with such third party.
27. Third Party Service Provider Indemnity. If ALS is required to engage a third party service provider for whatever reason, the Client indemnifies ALS against any breach of this Agreement, liabilities, or losses incurred in connection with the third party service provider, including but not limited to courier services, testing turn-around time, and any additional costs associated with such third party.
28. Entire Agreement. The Agreement is the entire agreement between the parties and supersedes and takes precedence over any terms and conditions contained in any documentation provided by the Client. ALS's execution of any subsequent documentation from the Client only acknowledges receipt and not acceptance of any terms or conditions therein. If there is a conflict between these terms and conditions and any other Agreement document, these terms and conditions prevail.
29. Term. Providing the first batch of samples to which this tender refers is submitted within three months of the starting date of this quotation, the following prices, terms and conditions will remain firm until the closing date. This offer, and its terms and conditions will automatically lapse if the offer has not been accepted and samples not delivered to ALS by the Closing Date.
30. Termination. (a) Either party may terminate this Agreement for any reason by giving the other party thirty (30) days written notice (Notice Period). (b) If the Agreement is terminated pursuant to clause (a), then the Client must pay ALS for all Services performed up to the expiry of the Notice Period.

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CERTIFICATE OF ANALYSIS

Work Order	:	**HA2503220**			
Client	:	**WSP Canada Inc.**	Laboratory	:	ALS Environmental - Halifax
Contact	:	Naomi Giles	Account Manager	:	Amanda Overholster
Address	:	1 Spectacle Lake Drive Dartmouth Nova Scotia Canada B3B 1X7	Address	:	13-100 Wright Ave Dartmouth NS Canada B3B 1L2
Telephone	:	----	E-mail	:	Amanda.Overholster@ALSGlobal.com
Project	:	CA0050657.1254	Telephone	:	1 416 817 2944
PO	:	P115454CA001	Date Samples Received	:	20-Aug-2025 13:30
C-O-C number	:	----	Date Analysis Commenced	:	08-Sep-2025
Sampler	:	Client	Issue Date	:	08-Sep-2025 17:49
Site	:	----			
Quote number	:	HRM-2025-0160 Water Quality Monitoring (X)			
No. of samples received	:	5			
No. of samples analysed	:	5			

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*
Jon Fisher		Inorganics, Waterloo, Ontario

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*
mg/L	milligrams per litre

<: 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)					Client sample ID	PML - 1 (H) ----	----	----	----	----
					Client sampling date / time	20-Aug-2025 12:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		HA2503220-005	----	----	----	----
						Result	----	----	----	----
Anions and Nutrients										
Phosphorus, total	7723-14-0	E372-U/WT	0.0020	mg/L		0.0225	----	----	----	----

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

ALS Canada Ltd.

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QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **HA2503220**	Page	: 1 of 5
Client	: **WSP Canada Inc.**	Laboratory	: ALS Environmental - Halifax
Contact	: Naomi Giles	Account Manager	: Amanda Overholster
Address	: 1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	: 13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	: ----	Telephone	: 1 416 817 2944
Project	: CA0050657.1254	Date Samples Received	: 20-Aug-2025 13:30
PO	: P115454CA001	Issue Date	: 08-Sep-2025 17:48
C O C number	: ----		
Sampler	: Client		
Site	: ----		
Quote number	: HRM-2025-0160 Water Quality Monitoring (X)		
No of samples received	: 5		
No. of samples analysed	: 1		

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*		*Eval*	*Analysis Date*	*Holding Times*		*Eval*
				Rec	*Actual*			*Rec*	*Actual*	
Anions and Nutrients : Total Phosphorus by Colourimetry (0.002 mg/L)										
Amber glass total (sulfuric acid) PML - 1 (H)	E372-U	20-Aug-2025	06-Sep-2025	28 days	17 days	✓	08-Sep-2025	28 days	17 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)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	5.0	✓
Laboratory Control Samples (LCS)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	5.0	✓
Method Blanks (MB)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U	2201895	1	20	5.0	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
Total Phosphorus by Colourimetry (0.002 mg/L)	E372-U ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Waterloo	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.

QUALITY CONTROL REPORT

Work Order	:**HA2503220**	Page	: 1 of 3
Client	:WSP Canada Inc.	Laboratory	:ALS Environmental - Halifax
Contact	:Naomi Giles	Account Manager	:Amanda Overholster
Address	:1 Spectacle Lake Drive Dartmouth NS Canada B3B 1X7	Address	:13-100 Wright Ave Dartmouth, Nova Scotia Canada B3B 1L2
Telephone	:----	Telephone	:1 416 817 2944
Project	:CA0050657.1254	Date Samples Received	:20-Aug-2025 13:30
PO	:P115454CA001	Date Analysis Commenced	:06-Sep-2025
C-O-C number	:----	Issue Date	:08-Sep-2025 17:48
Sampler	:Client		
Site	:----		
Quote number	:HRM-2025-0160 Water Quality Monitoring (X)		
No. of samples received	:5		
No. of samples analysed	:1		

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*
Jon Fisher	Laboratory Manager - Environmental	Waterloo Inorganics, Waterloo, Ontario

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
Anions and Nutrients (QC Lot: 2201895)											
HA2503196-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0020	mg/L	0.0200	0.0165	0.0035	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
Anions and Nutrients (QCLot: 2201895)						
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	<0.0020	---

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
Anions and Nutrients (QCLot: 2201895)									
Phosphorus, total	7723-14-0	E372-U	0.002	mg/L	0.333 mg/L	101	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: 2201895)										
HA2503196-001	Anonymous	Phosphorus, total	7723-14-0	E372-U	0.0947 mg/L	0.1 mg/L	94.7	70.0	130	—

Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

COC Number: 22 -

Page of

Environmental Division Halifax

Work Order Reference

HA2503220

Telephone : +1 902 707 4888

Report To	Contact and company name below will appear on the final report
Company:	WSP Canada Inc.
Contact:	Naomi Giles
Phone:	782-640-1923
	Company address below will appear on the final report
Street:	1 Spectable Lake Dr.
City/Province:	Dartmouth, Nova Scotia
Postal Code:	B3B 1X7
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	WSP Canada Inc.
Contact:	Naomi Giles

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	Naomi.Giles@wsp.com
Email 2	lee.hynes@wsp.com
Email 3	

Invoice Recipients	
Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	Naomi.Giles@wsp.com
Email 2	capayablesinvoice@wsp.com

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, s
Date and Time Required for all E&P TATs:
For all tests with rush TATs requested, please cont

Project Information		Oil and Gas Required Fields (client use)	
ALS Client Code / QUOTE #:	WSPI100 / HA2025WSPI100004	AFE/Cost Center:	PO#
Job / Project #:	CA0050657.1254	Major/Minor Code:	Routing Code:
PO / AFE:	P115454CA001	Requisitioner:	
LSD:		Location:	
ALS Lab Work Order # (ALS use only):	HA2503220	ALS Contact: Amanda Overholster	Sampler:

Analysis Request

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

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Total Phosphorous	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	~~KL-1 (H)~~						Y		
	~~KL-2 (H)~~						Y		
	~~KL-3 (H)~~						Y		
	~~KL-4 (H)~~						Y		
	~~KL-5 (H)~~						Y		
	KL-6 (H) KL-6 (H)		10:35	SW	1	✓	Y		
	~~KL-7 (H)~~ KL-7 (H)		10:15	SW	1	✓	Y		
	~~HWY-102-1 (H)~~						Y		
	~~HWY-102-2 (H)~~ HWY-102-2 (H)		11:15	SW	1	✓	Y		
	~~LSD (H)~~						Y		
	~~PML-2 (H)~~ PML-2 (H)		12:30	SW	1	✓	Y		
	~~PML-1 (H)~~ PML-1 (H)		12:00	SW	1	✓	Y		

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	Hold one (1) Total Phosphorous bottle pending client instruction.
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE RECEIPT DETAILS (ALS use only)

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

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

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
21	16						

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by: [redacted]	Date: 20/08/25	Time: 1:30	Received by: [redacted]	Date: 20 August 2025	Time: 1:30	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

MAY 2023 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.