

**ANNUAL REPORT  
FOR THE HAMLET OF RANKIN INLET**

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**YEAR BEING REPORTED: 2025**

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence No. **3BM-RAN2025** issued to the **Hamlet of Rankin Inlet**.

Below are tabular summaries of data generated under the “Monitoring Program”.

**I. Monthly and annual quantities of freshwater obtained by daily logs for all freshwater sources and estimated sewage waste discharged.**

**Table 1:** Summary of water obtained from all sources combined and estimated sewage water discharge in m<sup>3</sup>.

<b>Month Reported</b>	<b>Non-Hazardous Waste Accepted (m<sup>3</sup>)</b>	<b>Hazardous Waste Accepted (m<sup>3</sup>)</b>
<b>January</b>	3002.79	3.318
<b>February</b>	3002.79	3.318
<b>March</b>	3002.79	3.318
<b>April</b>	3002.79	3.318
<b>May</b>	3002.79	3.318
<b>June</b>	3002.79	3.318
<b>July</b>	3002.79	3.318
<b>August</b>	3002.79	3.318
<b>September</b>	3002.79	3.318
<b>October</b>	3002.79	3.318
<b>November</b>	3002.79	3.318
<b>December</b>	3002.79	3.318
<b>ANNUAL TOTAL</b>	36033.48	39.816

**Note:** The purpose of this License is the deposit of waste; there is no authorized water use.

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**II. A summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities:**

Batteries, empty propane tanks and waste oil are stored in shipping containers in designated areas. The Municipality works closely with Agnico Eagle to ship out hazardous waste, Agnico Eagle sent out approximately 6-8 sea cans full of tires fall 2025. However, due to mixed materials in sea cans, hazardous waste was not shipped out in 2025. Agnico plans to come to the community this summer for 2-3 weeks to load up hazardous waste to ship to a licenced disposal facility fall 2026.

**III. A list of unauthorized discharges and summary of follow-up action taken:**

No unauthorized discharges for the infrastructure under licence 3BM-RAN2025 occurred in 2025.

**IV. A summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year:**

None.

**VII. Updates or revisions to the approved Operation and Maintenance Plans:**

None in 2025. Updated Operation and Maintenance Plans will be submitted in 2026 along with the application for amendment and renewal of the water licence.

**V. A summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned:**

The initial planning study for a new solid waste site was completed in Fiscal Year 2020/21. The cost estimates have indicated that the current funding cannot support the construction of a new 20-year design life landfill. The focus of the project shifted to making improvements to the current site. A second planning project was established to assess and prioritize the improvements to the current site that will meet the water licence requirements began in 2022 and was completed in 2025. The recommendations from the study for the design concept include improved waste containment and segregation through berming and lighting, upgraded onsite and offsite stormwater management through grading and ditching, the repair of derelict fencing, and the installation of new site fencing around the expanded footprint. Detailed design of the solid waste site is anticipated to commence in 2027 depending on available funding.

**VI. Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported:**

None.

**ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:**

None.

**FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:**

2024 Annual Report submitted.

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**Appendices:**

**Appendix A: Water Licence Sampling Points**

**Appendix B: Summary of Monitoring Data**

**Appendix B: Monitoring Program Sample Results**

- Certificate of Analysis – 25-06-05

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**Appendix A: Water Licensing Sampling Points**



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**Appendix B: Summary of Monitoring Data**

**RAN-2 Effluent Quality Limits as per Part D, Item 8.**

<b>Parameter</b>	<b>Maximum Concentration of any Grab Sample for RAN-2</b>	<b>Units</b>	<b>July 14, 2025 RAN-2</b>
pH	6 to 9	units	8.23
Total Suspended Solids	50	mg/L	<3
Oil and grease	15 and no visible sheen <sup>6</sup>	mg/L	<5
Benzene	0.37	mg/L	<0.005
Toluene	0.002	mg/L	<0.0005
Ethylbenzene	0.09	mg/L	<0.0005

**Note:** The RAN2025 water licence currently indicates EQL at RAN-4; however, as this station is no longer active, so the EQL are applied to RAN-2. Results show that all parameters are within effluent quality limits.

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**Appendix C: Monitoring Program Sample Results**



**CERTIFICATE OF ANALYSIS**

<b>Work Order</b>	: <b>WP2511022</b>	<b>Laboratory</b>	: ALS Environmental - Winnipeg
<b>Client</b>	: <b>Hamlet of Rankin Inlet</b>	<b>Account Manager</b>	: Daniel Rocha
<b>Contact</b>	: S	<b>Address</b>	: 1329 Niakwa Road East, Unit 12
<b>Address</b>	: PO Box 310 Rankin Inlet Nunavut Canada X0C 0G0		: Winnipeg MB Canada R2J 3T4
<b>Telephone</b>	: 867 645 2895	<b>E-mail</b>	: daniel.rocha@alsglobal.com
<b>Project</b>	: ----	<b>Telephone</b>	: +1 204 255 9720
<b>PO</b>	: ----	<b>Date Samples Received</b>	: 15-Jul-2025 09:45
<b>C-O-C number</b>	: ----	<b>Date Analysis Commenced</b>	: 15-Jul-2025
<b>Sampler</b>	: ----	<b>Issue Date</b>	: 22-Jul-2025 15:31
<b>Site</b>	: ----		
<b>Quote number</b>	: 2025 Analytical Testing		
<b>No. of samples received</b>	: 1		
<b>No. of samples analysed</b>	: 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 Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

**Signatories**

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

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Andrew Beckett		Organics, Winnipeg, Manitoba
Brennan Dugas		Microbiology, Winnipeg, Manitoba
Danielle Gravel		Organics, Waterloo, Ontario
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Lee McTavish		Metals, Winnipeg, Manitoba
Lee McTavish		Inorganics, Winnipeg, Manitoba
Livia Ciolan		Organics, Winnipeg, Manitoba
Manjit Brar		Organics, Winnipeg, Manitoba
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).

<i>Unit</i>	<i>Description</i>
mg/L	milligrams per litre
MPN/100mL	most probable number per hundred millilitres
pH units	pH units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre

<: less than.

>: greater than.

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

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

## Qualifiers

<i>Qualifier</i>	<i>Description</i>
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).



**Analytical Results**

Sub-Matrix: Water (Matrix: Water)					Client sample ID	RAN-Z	----	----	----	----
					Client sampling date / time	14-Jul-2025 13:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WP2511022-001	----	----	----	----	
					Result	----	----	----	----	
<b>Physical Tests</b>										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WP	1.2	mg/L	180	----	----	----	----	
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WP	1.0	mg/L	<0.6	----	----	----	----	
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WP	1.0	mg/L	<0.3	----	----	----	----	
Conductivity	----	E100/WP	2.0	µS/cm	1160	----	----	----	----	
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WP	0.50	mg/L	562	----	----	----	----	
pH	----	E108/WP	0.10	pH units	8.23	----	----	----	----	
Solids, total suspended [TSS]	----	E160/WP	3.0	mg/L	<3.0	----	----	----	----	
<b>Anions and Nutrients</b>										
Ammonia, total (as N)	7664-41-7	E298/WP	0.0050	mg/L	0.0222	----	----	----	----	
Chloride	16887-00-6	E235.Cl/WP	0.50	mg/L	56.4	----	----	----	----	
Nitrate (as N)	14797-55-8	E235.NO3/WP	0.020	mg/L	0.524	----	----	----	----	
Nitrate + Nitrite (as N)	----	EC235.N+N/WP	0.0050	mg/L	0.524	----	----	----	----	
Nitrite (as N)	14797-65-0	E235.NO2/WP	0.010	mg/L	<0.020 <sup>DLM</sup>	----	----	----	----	
Phosphorus, total	7723-14-0	E372/WP	0.020	mg/L	<0.020	----	----	----	----	
Sulfate (as SO4)	14808-79-8	E235.SO4/WP	0.30	mg/L	432	----	----	----	----	
<b>Organic / Inorganic Carbon</b>										
Carbon, total organic [TOC]	----	E355-L/WP	0.50	mg/L	12.4	----	----	----	----	
<b>Microbiological Tests</b>										
Coliforms, thermotolerant [fecal]	----	E010.FC-H/WP	10	MPN/100 mL	120	----	----	----	----	
<b>Total Metals</b>										
Aluminum, total	7429-90-5	E420/WP	0.0030	mg/L	0.0174	----	----	----	----	



**Analytical Results**

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	RAN-Z	----	----	----	----
					Client sampling date / time	14-Jul-2025 13:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WP2511022-001	----	----	----	----	----
					Result	----	----	----	----	----
<b>Total Metals</b>										
Antimony, total	7440-36-0	E420/WP	0.00010	mg/L	0.00095	----	----	----	----	----
Arsenic, total	7440-38-2	E420/WP	0.00010	mg/L	0.00125	----	----	----	----	----
Barium, total	7440-39-3	E420/WP	0.00010	mg/L	0.0507	----	----	----	----	----
Beryllium, total	7440-41-7	E420/WP	0.000020	mg/L	0.0000044	----	----	----	----	----
Bismuth, total	7440-69-9	E420/WP	0.000050	mg/L	0.0000023	----	----	----	----	----
Boron, total	7440-42-8	E420/WP	0.010	mg/L	0.607	----	----	----	----	----
Cadmium, total	7440-43-9	E420/WP	0.0000050	mg/L	0.0000586	----	----	----	----	----
Calcium, total	7440-70-2	E420/WP	0.050	mg/L	192	----	----	----	----	----
Cesium, total	7440-46-2	E420/WP	0.000010	mg/L	0.000037	----	----	----	----	----
Chromium, total	7440-47-3	E420/WP	0.00050	mg/L	0.00036	----	----	----	----	----
Cobalt, total	7440-48-4	E420/WP	0.00010	mg/L	0.00058	----	----	----	----	----
Copper, total	7440-50-8	E420/WP	0.00050	mg/L	0.0229	----	----	----	----	----
Iron, total	7439-89-6	E420/WP	0.010	mg/L	0.132	----	----	----	----	----
Lead, total	7439-92-1	E420/WP	0.000050	mg/L	0.000120	----	----	----	----	----
Lithium, total	7439-93-2	E420/WP	0.0010	mg/L	0.0097	----	----	----	----	----
Magnesium, total	7439-95-4	E420/WP	0.0050	mg/L	20.1	----	----	----	----	----
Manganese, total	7439-96-5	E420/WP	0.00010	mg/L	0.0332	----	----	----	----	----
Mercury, total	7439-97-6	E508/WP	0.0000050	mg/L	<0.0000050	----	----	----	----	----
Molybdenum, total	7439-98-7	E420/WP	0.000050	mg/L	0.00170	----	----	----	----	----
Nickel, total	7440-02-0	E420/WP	0.00050	mg/L	0.0135	----	----	----	----	----
Phosphorus, total	7723-14-0	E420/WP	0.050	mg/L	0.019	----	----	----	----	----



### Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	RAN-Z	----	----	----	----
					Client sampling date / time	14-Jul-2025 13:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WP2511022-001	----	----	----	----	
					Result	----	----	----	----	
<b>Total Metals</b>										
Potassium, total	7440-09-7	E420/WP	0.050	mg/L	12.1	----	----	----	----	
Rubidium, total	7440-17-7	E420/WP	0.00020	mg/L	0.00912	----	----	----	----	
Selenium, total	7782-49-2	E420/WP	0.000050	mg/L	0.000281	----	----	----	----	
Silicon, total	7440-21-3	E420/WP	0.10	mg/L	1.21	----	----	----	----	
Silver, total	7440-22-4	E420/WP	0.000010	mg/L	0.0000064	----	----	----	----	
Sodium, total	7440-23-5	E420/WP	0.050	mg/L	37.9	----	----	----	----	
Strontium, total	7440-24-6	E420/WP	0.00020	mg/L	0.800	----	----	----	----	
Sulfur, total	7704-34-9	E420/WP	0.50	mg/L	154	----	----	----	----	
Tellurium, total	13494-80-9	E420/WP	0.00020	mg/L	0.00011	----	----	----	----	
Thallium, total	7440-28-0	E420/WP	0.000010	mg/L	0.000019	----	----	----	----	
Thorium, total	7440-29-1	E420/WP	0.00010	mg/L	0.000013	----	----	----	----	
Tin, total	7440-31-5	E420/WP	0.00010	mg/L	0.000040	----	----	----	----	
Titanium, total	7440-32-6	E420/WP	0.00030	mg/L	0.00078	----	----	----	----	
Tungsten, total	7440-33-7	E420/WP	0.00010	mg/L	0.000012	----	----	----	----	
Uranium, total	7440-61-1	E420/WP	0.000010	mg/L	0.00287	----	----	----	----	
Vanadium, total	7440-62-2	E420/WP	0.00050	mg/L	0.00021	----	----	----	----	
Zinc, total	7440-66-6	E420/WP	0.0030	mg/L	0.0156	----	----	----	----	
Zirconium, total	7440-67-7	E420/WP	0.00020	mg/L	0.00014	----	----	----	----	
<b>Aggregate Organics</b>										
Biochemical oxygen demand [BOD]	----	E550/WP	2.0	mg/L	<6.0	----	----	----	----	
Carbonaceous biochemical oxygen demand [CBOD]	----	E555/WP	2.0	mg/L	<6.0	----	----	----	----	



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	RAN-Z	----	----	----	----
					Client sampling date / time	14-Jul-2025 13:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WP2511022-001	----	----	----	----	----
					Result	----	----	----	----	----
<b>Aggregate Organics</b>										
Oil & grease (gravimetric)	----	E567/WT	5.0	mg/L	<5.0	----	----	----	----	----
Phenols, total (4AAP)	----	E562/WT	0.0010	mg/L	0.0011	----	----	----	----	----
<b>Volatile Organic Compounds</b>										
Benzene	71-43-2	E611A/WP	0.00050	mg/L	<0.00050	----	----	----	----	----
Ethylbenzene	100-41-4	E611A/WP	0.00050	mg/L	<0.00050	----	----	----	----	----
Toluene	108-88-3	E611A/WP	0.00050	mg/L	<0.00050	----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/WP	0.00040	mg/L	<0.00040	----	----	----	----	----
Xylene, o-	95-47-6	E611A/WP	0.00030	mg/L	<0.00030	----	----	----	----	----
Xylenes, total	1330-20-7	E611A/WP	0.00050	mg/L	<0.00050	----	----	----	----	----
BTEX, total	----	E611A/WP	0.0010	mg/L	<0.0010	----	----	----	----	----
<b>Hydrocarbons</b>										
F1 (C6-C10)	----	E581.F1/WP	0.10	mg/L	<0.10	----	----	----	----	----
F1-BTEX	----	EC580/WP	0.100	mg/L	<0.100	----	----	----	----	----
F2 (C10-C16)	----	E601/WP	0.10	mg/L	<0.10	----	----	----	----	----
F3 (C16-C34)	----	E601/WP	0.25	mg/L	<0.25	----	----	----	----	----
F4 (C34-C50)	----	E601/WP	0.25	mg/L	<0.25	----	----	----	----	----
TEH (C10-C50)	n/a	E601/WP	0.40	mg/L	<0.40	----	----	----	----	----
TEH (C16-C50)	----	E601/WP	0.40	mg/L	<0.40	----	----	----	----	----
<b>Hydrocarbons Surrogates</b>										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/WP	1.0	%	119	----	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WP	1.0	%	104	----	----	----	----	----



**Analytical Results**

**Sub-Matrix: Water**  
**(Matrix: Water)**

					Client sample ID	RAN-Z	----	----	----	----
					Client sampling date / time	14-Jul-2025 13:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WP2511022-001	----	----	----	----	----
					Result	----	----	----	----	----
<b>Volatile Organic Compounds Surrogates</b>										
<b>Bromofluorobenzene, 4-</b>	460-00-4	E611A/WP	1.0	%	104	----	----	----	----	----
<b>Difluorobenzene, 1,4-</b>	540-36-3	E611A/WP	1.0	%	106	----	----	----	----	----

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




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## QUALITY CONTROL INTERPRETIVE REPORT

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<p><b>Work Order</b> : <b>WP2511022</b></p> <p><b>Client</b> : <b>Hamlet of Rankin Inlet</b></p> <p><b>Contact</b> : S</p> <p><b>Address</b> : PO Box 310 Rankin Inlet NU Canada X0C 0G0</p> <p><b>Telephone</b> : 867 645 2895</p> <p><b>Project</b> : ----</p> <p><b>PO</b> : ----</p> <p><b>C-O-C number</b> : ----</p> <p><b>Sampler</b> : ----</p> <p><b>Site</b> : ----</p> <p><b>Quote number</b> : 2025 Analytical Testing</p> <p><b>No. of samples received</b> : 1</p> <p><b>No. of samples analysed</b> : 1</p>	<p><b>Page</b> : 1 of 11</p> <p><b>Laboratory</b> : ALS Environmental - Winnipeg</p> <p><b>Account Manager</b> : Daniel Rocha</p> <p><b>Address</b> : 1329 Niakwa Road East, Unit 12 Winnipeg, Manitoba Canada R2J 3T4</p> <p><b>Telephone</b> : +1 204 255 9720</p> <p><b>Date Samples Received</b> : 15-Jul-2025 09:45</p> <p><b>Issue Date</b> : 22-Jul-2025 15:29</p>
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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.

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### ***Workorder Comments***

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

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### ***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)***

- 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.



## 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	
<b>Aggregate Organics : Biochemical Oxygen Demand - 5 day</b>										
HDPE [BOD HT-48h] RAN-Z	E550	14-Jul-2025	----	----	----		16-Jul-2025	48 hrs	50 hrs	* EHT
<b>Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day</b>										
HDPE [BOD HT-48h] RAN-Z	E555	14-Jul-2025	----	----	----		16-Jul-2025	48 hrs	50 hrs	* EHT
<b>Aggregate Organics : Oil &amp; Grease by Gravimetry</b>										
Amber glass (hydrochloric acid) RAN-Z	E567	14-Jul-2025	17-Jul-2025	28 days	3 days	✓	22-Jul-2025	28 days	3 days	✓
<b>Aggregate Organics : Phenols (4AAP) in Water by Colorimetry</b>										
Amber glass total (sulfuric acid) RAN-Z	E562	14-Jul-2025	17-Jul-2025	28 days	3 days	✓	18-Jul-2025	28 days	3 days	✓
<b>Anions and Nutrients : Ammonia by Fluorescence</b>										
Amber glass total (sulfuric acid) RAN-Z	E298	14-Jul-2025	15-Jul-2025	28 days	1 days	✓	16-Jul-2025	28 days	1 days	✓
<b>Anions and Nutrients : Chloride in Water by IC</b>										
HDPE RAN-Z	E235.Cl	14-Jul-2025	15-Jul-2025	28 days	1 days	✓	15-Jul-2025	28 days	1 days	✓
<b>Anions and Nutrients : Nitrate in Water by IC</b>										
HDPE RAN-Z	E235.NO3	14-Jul-2025	15-Jul-2025	3 days	1 days	✓	15-Jul-2025	3 days	1 days	✓



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

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Anions and Nutrients : Nitrite in Water by IC</b>											
HDPE RAN-Z	E235.NO2	14-Jul-2025	15-Jul-2025	3 days	1 days	✓	15-Jul-2025	3 days	1 days	✓	
<b>Anions and Nutrients : Sulfate in Water by IC</b>											
HDPE RAN-Z	E235.SO4	14-Jul-2025	15-Jul-2025	28 days	1 days	✓	15-Jul-2025	28 days	1 days	✓	
<b>Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L)</b>											
Amber glass total (sulfuric acid) RAN-Z	E372	14-Jul-2025	17-Jul-2025	28 days	3 days	✓	17-Jul-2025	28 days	3 days	✓	
<b>Hydrocarbons : CCME PHC - F1 by Headspace GC-FID</b>											
Glass vial (sodium bisulfate) RAN-Z	E581.F1	14-Jul-2025	17-Jul-2025	14 days	3 days	✓	17-Jul-2025	14 days	3 days	✓	
<b>Hydrocarbons : CCME PHCs - F2-F4 by GC-FID</b>											
Amber glass/Teflon lined cap (sodium bisulfate) RAN-Z	E601	14-Jul-2025	18-Jul-2025	14 days	4 days	✓	18-Jul-2025	40 days	0 days	✓	
<b>Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10</b>											
Sterile HDPE (sodium thiosulfate) RAN-Z	E010.FC-H	14-Jul-2025	----	----	----		15-Jul-2025	30 hrs	25 hrs	✓	
<b>Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)</b>											
Amber glass total (sulfuric acid) RAN-Z	E355-L	14-Jul-2025	15-Jul-2025	28 days	1 days	✓	15-Jul-2025	28 days	1 days	✓	
<b>Physical Tests : Alkalinity Species by Titration</b>											
HDPE RAN-Z	E290	14-Jul-2025	16-Jul-2025	14 days	2 days	✓	16-Jul-2025	14 days	2 days	✓	
<b>Physical Tests : Conductivity in Water</b>											
HDPE RAN-Z	E100	14-Jul-2025	16-Jul-2025	28 days	2 days	✓	16-Jul-2025	28 days	2 days	✓	



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

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval	
				Rec	Actual			Rec	Actual		
<b>Physical Tests : pH by Meter</b>											
HDPE RAN-Z	E108	14-Jul-2025	16-Jul-2025	0.25 hrs	53 hrs	*	16-Jul-2025	0.25 hrs	53 hrs	*	EHTR-FM
<b>Physical Tests : TSS by Gravimetry</b>											
HDPE RAN-Z	E160	14-Jul-2025	----	----	----		16-Jul-2025	7 days	2 days	✓	
<b>Total Metals : Total Mercury in Water by CVAAS</b>											
Glass vial total (hydrochloric acid) RAN-Z	E508	14-Jul-2025	18-Jul-2025	28 days	4 days	✓	18-Jul-2025	28 days	4 days	✓	
<b>Total Metals : Total Metals in Water by CRC ICPMS</b>											
HDPE total (nitric acid) RAN-Z	E420	14-Jul-2025	17-Jul-2025	180 days	3 days	✓	17-Jul-2025	180 days	3 days	✓	
<b>Volatile Organic Compounds : BTEX by Headspace GC-MS</b>											
Glass vial (sodium bisulfate) RAN-Z	E611A	14-Jul-2025	17-Jul-2025	14 days	3 days	✓	17-Jul-2025	14 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	Method	QC Lot #	Count		Frequency (%)		
			QC	Regular	Actual	Expected	Evaluation
<b>Analytical Methods</b>							
<b>Laboratory Duplicates (DUP)</b>							
Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10	E010.FC-H	2107868	1	6	16.6	5.0	✔
Conductivity in Water	E100	2110877	1	14	7.1	5.0	✔
pH by Meter	E108	2110876	1	17	5.8	5.0	✔
TSS by Gravimetry	E160	2107707	1	19	5.2	5.0	✔
Chloride in Water by IC	E235.Cl	2107224	0	8	0.0	5.0	✖
Nitrite in Water by IC	E235.NO2	2107226	0	8	0.0	5.0	✖
Nitrate in Water by IC	E235.NO3	2107225	0	8	0.0	5.0	✖
Sulfate in Water by IC	E235.SO4	2107219	1	17	5.8	5.0	✔
Ammonia by Fluorescence	E298	2108667	1	20	5.0	5.0	✔
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2107427	1	9	11.1	5.0	✔
Total Phosphorus by Colourimetry (0.02 mg/L)	E372	2109520	1	20	5.0	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2109856	0	12	0.0	5.0	✖
Total Mercury in Water by CVAAS	E508	2113533	1	20	5.0	5.0	✔
Biochemical Oxygen Demand - 5 day	E550	2110957	1	20	5.0	5.0	✔
Biochemical Oxygen Demand (Carbonaceous) - 5 day	E555	2110958	1	14	7.1	5.0	✔
Phenols (4AAP) in Water by Colorimetry	E562	2112211	1	20	5.0	5.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2111041	1	18	5.5	5.0	✔
BTEX by Headspace GC-MS	E611A	2111042	1	18	5.5	5.0	✔
<b>Laboratory Control Samples (LCS)</b>							
Conductivity in Water	E100	2110877	1	14	7.1	5.0	✔
pH by Meter	E108	2110876	1	17	5.8	5.0	✔
TSS by Gravimetry	E160	2107707	1	19	5.2	5.0	✔
Chloride in Water by IC	E235.Cl	2107224	1	8	12.5	5.0	✔
Nitrite in Water by IC	E235.NO2	2107226	1	8	12.5	5.0	✔
Nitrate in Water by IC	E235.NO3	2107225	1	8	12.5	5.0	✔
Sulfate in Water by IC	E235.SO4	2107219	1	17	5.8	5.0	✔
Ammonia by Fluorescence	E298	2108667	1	20	5.0	5.0	✔
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2107427	1	9	11.1	5.0	✔
Total Phosphorus by Colourimetry (0.02 mg/L)	E372	2109520	1	20	5.0	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2109856	1	12	8.3	5.0	✔
Total Mercury in Water by CVAAS	E508	2113533	1	20	5.0	5.0	✔
Biochemical Oxygen Demand - 5 day	E550	2110957	1	20	5.0	5.0	✔
Biochemical Oxygen Demand (Carbonaceous) - 5 day	E555	2110958	1	14	7.1	5.0	✔
Phenols (4AAP) in Water by Colorimetry	E562	2112211	1	20	5.0	5.0	✔
Oil & Grease by Gravimetry	E567	2110819	1	18	5.5	5.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2111041	1	18	5.5	5.0	✔



Matrix: **Water** Evaluation: ✖ = QC frequency outside specification; ✔ = QC frequency within specification.

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		
			QC	Regular	Actual	Expected	Evaluation
<b>Analytical Methods</b>							
<b>Laboratory Control Samples (LCS) - Continued</b>							
CCME PHCs - F2-F4 by GC-FID	E601	2114097	1	20	5.0	5.0	✔
BTEX by Headspace GC-MS	E611A	2111042	1	18	5.5	5.0	✔
<b>Method Blanks (MB)</b>							
Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10	E010.FC-H	2107868	1	6	16.6	5.0	✔
Conductivity in Water	E100	2110877	1	14	7.1	5.0	✔
TSS by Gravimetry	E160	2107707	1	19	5.2	5.0	✔
Chloride in Water by IC	E235.Cl	2107224	1	8	12.5	5.0	✔
Nitrite in Water by IC	E235.NO2	2107226	1	8	12.5	5.0	✔
Nitrate in Water by IC	E235.NO3	2107225	1	8	12.5	5.0	✔
Sulfate in Water by IC	E235.SO4	2107219	1	17	5.8	5.0	✔
Ammonia by Fluorescence	E298	2108667	1	20	5.0	5.0	✔
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2107427	1	9	11.1	5.0	✔
Total Phosphorus by Colourimetry (0.02 mg/L)	E372	2109520	1	20	5.0	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2109856	1	12	8.3	5.0	✔
Total Mercury in Water by CVAAS	E508	2113533	1	20	5.0	5.0	✔
Biochemical Oxygen Demand - 5 day	E550	2110957	1	20	5.0	5.0	✔
Biochemical Oxygen Demand (Carbonaceous) - 5 day	E555	2110958	1	14	7.1	5.0	✔
Phenols (4AAP) in Water by Colorimetry	E562	2112211	1	20	5.0	5.0	✔
Oil & Grease by Gravimetry	E567	2110819	1	18	5.5	5.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2111041	1	18	5.5	5.0	✔
CCME PHCs - F2-F4 by GC-FID	E601	2114097	1	20	5.0	5.0	✔
BTEX by Headspace GC-MS	E611A	2111042	1	18	5.5	5.0	✔
<b>Matrix Spikes (MS)</b>							
Chloride in Water by IC	E235.Cl	2107224	0	8	0.0	5.0	✖
Nitrite in Water by IC	E235.NO2	2107226	0	8	0.0	5.0	✖
Nitrate in Water by IC	E235.NO3	2107225	0	8	0.0	5.0	✖
Sulfate in Water by IC	E235.SO4	2107219	1	17	5.8	5.0	✔
Ammonia by Fluorescence	E298	2108667	1	20	5.0	5.0	✔
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2107427	1	9	11.1	5.0	✔
Total Phosphorus by Colourimetry (0.02 mg/L)	E372	2109520	1	20	5.0	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2109856	0	12	0.0	5.0	✖
Total Mercury in Water by CVAAS	E508	2113533	1	20	5.0	5.0	✔
Phenols (4AAP) in Water by Colorimetry	E562	2112211	1	20	5.0	5.0	✔
CCME PHC - F1 by Headspace GC-FID	E581.F1	2111041	1	18	5.5	5.0	✔
BTEX by Headspace GC-MS	E611A	2111042	1	18	5.5	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
Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10	E010.FC-H ALS Environmental - Winnipeg	Water	APHA 9223 (mod)	The enzyme substrate test detects Thermotolerant Coliforms in a 100 mL sample after an 18 hour incubation at 44.5 ± 0.2°C.  Sample dilution performed.
Conductivity in Water	E100 ALS Environmental - Winnipeg	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 - Winnipeg	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.
TSS by Gravimetry	E160 ALS Environmental - Winnipeg	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.
Chloride in Water by IC	E235.Cl ALS Environmental - Winnipeg	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 - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC	E235.NO3 ALS Environmental - Winnipeg	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 - Winnipeg	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 - Winnipeg	Water	APHA 2320 B (mod)	Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.



Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Ammonia by Fluorescence	E298 ALS Environmental - Winnipeg	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 Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L ALS Environmental - Winnipeg	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 CO <sub>2</sub> . 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 (0.02 mg/L)	E372 ALS Environmental - Winnipeg	Water	APHA 4500-P E (mod).	Total Phosphorus is determined colourimetrically using a discrete analyzer after heated persulfate digestion of the sample.
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Winnipeg	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.
Total Mercury in Water by CVAAS	E508 ALS Environmental - Winnipeg	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Biochemical Oxygen Demand - 5 day	E550 ALS Environmental - Winnipeg	Water	APHA 5210 B (mod)	Samples are diluted and incubated for a specified time period, after which the oxygen depletion is measured using a dissolved oxygen meter.  Free chlorine is a negative interference in the BOD method; please advise ALS when free chlorine is present in samples.
Biochemical Oxygen Demand (Carbonaceous) - 5 day	E555 ALS Environmental - Winnipeg	Water	APHA 5210 B (mod)	Samples are diluted and incubated for a specified time period, after which the oxygen depletion is measured using a dissolved oxygen meter. Nitrification inhibitor is added to samples to prevent nitrogenous compounds from consuming oxygen resulting in only carbonaceous oxygen demand being reported by this method.  Free chlorine is a negative interference in the BOD method; please advise ALS when free chlorine is present in samples.
Phenols (4AAP) in Water by Colorimetry	E562 ALS Environmental - Waterloo	Water	EPA 9066	This automated method is based on the distillation of phenol and subsequent reaction of the distillate with alkaline ferricyanide (K <sub>3</sub> Fe(CN) <sub>6</sub> ) and 4-amino-antipyryne (4-AAP) to form a red complex which is measured colorimetrically.



Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Oil & Grease by Gravimetry	E567 ALS Environmental - Waterloo	Water	BC MOE Lab Manual (Oil & Grease) (mod)	The entire water sample is extracted with hexane and the extract is evaporated to dryness. The residue is then weighed to determine Oil and Grease.
CCME PHC - F1 by Headspace GC-FID	E581.F1 ALS Environmental - Winnipeg	Water	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.  Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
CCME PHCs - F2-F4 by GC-FID	E601 ALS Environmental - Winnipeg	Water	CCME PHC in Soil - Tier 1	Sample extracts are analyzed by GC-FID for CCME hydrocarbon fractions (F2-F4).  Analytical methods for CCME Petroleum Hydrocarbons (PHCs) are validated to comply fully with the Reference Method for the Canada-Wide Standard for PHC. Unless qualified, all required quality control criteria of the CCME PHC method have been met, including response factor and linearity requirements.
BTEX by Headspace GC-MS	E611A ALS Environmental - Winnipeg	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Winnipeg	Water	APHA 2340B	"Hardness (as CaCO <sub>3</sub> ), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed as CaCO <sub>3</sub> 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.
Nitrate and Nitrite (as N) (Calculation)	EC235.N+N ALS Environmental - Winnipeg	Water	EPA 300.0	Nitrate and Nitrite (as N) is a calculated parameter. Nitrate and Nitrite (as N) = Nitrite (as N) + Nitrate (as N).
F1-BTEX	EC580 ALS Environmental - Winnipeg	Water	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 ALS Environmental - Winnipeg	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.



<i>Preparation Methods</i>	<i>Method / Lab</i>	<i>Matrix</i>	<i>Method Reference</i>	<i>Method Descriptions</i>
Preparation for Total Organic Carbon by Combustion	EP355 ALS Environmental - Winnipeg	Water		Preparation for Total Organic Carbon by Combustion
Digestion for Total Phosphorus in water	EP372 ALS Environmental - Winnipeg	Water	APHA 4500-P E (mod).	Samples are heated with a persulfate digestion reagent.
Oil & Grease Extraction for Gravimetry	EP567 ALS Environmental - Waterloo	Water	BC MOE Lab Manual (Oil & Grease) (mod)	The entire water sample is extracted with hexane by liquid-liquid extraction.
VOCs Preparation for Headspace Analysis	EP581 ALS Environmental - Winnipeg	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into a GC-MS-FID.
PHCs and PAHs Hexane Extraction	EP601 ALS Environmental - Winnipeg	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.



## QUALITY CONTROL REPORT

<p><b>Work Order</b> : <b>WP2511022</b></p> <p>Client : Hamlet of Rankin Inlet</p> <p>Contact : S</p> <p>Address : PO Box 310 Rankin Inlet NU Canada X0C 0G0</p> <p>Telephone : 867 645 2895</p> <p>Project : ----</p> <p>PO : ----</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : ----</p> <p>Quote number : 2025 Analytical Testing</p> <p>No. of samples received : 1</p> <p>No. of samples analysed : 1</p>	<p>Page : 1 of 11</p> <p>Laboratory : ALS Environmental - Winnipeg</p> <p>Account Manager : Daniel Rocha</p> <p>Address : 1329 Niakwa Road East, Unit 12 Winnipeg, Manitoba Canada R2J 3T4</p> <p>Telephone : +1 204 255 9720</p> <p>Date Samples Received : 15-Jul-2025 09:45</p> <p>Date Analysis Commenced : 15-Jul-2025</p> <p>Issue Date : 22-Jul-2025 15:29</p>
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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.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Andrew Beckett		Winnipeg Organics, Winnipeg, Manitoba
Brennan Dugas	Analyst	Winnipeg Microbiology, Winnipeg, Manitoba
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Waterloo Organics, Waterloo, Ontario
Kevin Baxter	Supervisor - Inorganic	Winnipeg Inorganics, Winnipeg, Manitoba
Lee McTavish		Winnipeg Inorganics, Winnipeg, Manitoba
Lee McTavish		Winnipeg Metals, Winnipeg, Manitoba
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Manjit Brar	Analyst	Winnipeg Organics, Winnipeg, Manitoba
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Page : 2 of 11  
Work Order : WP2511022  
Client : Hamlet of Rankin Inlet  
Project : ----



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## 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

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

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### 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: <b>Water</b>					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
<b>Physical Tests (QC Lot: 2107707)</b>											
WP2511022-001	RAN-Z	Solids, total suspended [TSS]	----	E160	3.0	mg/L	<3.0	<3.0	0	Diff <2x LOR	----
<b>Physical Tests (QC Lot: 2110876)</b>											
WP2511010-001	Anonymous	pH	----	E108	0.10	pH units	7.74	7.88	1.79%	4%	----
<b>Physical Tests (QC Lot: 2110877)</b>											
WP2511010-001	Anonymous	Conductivity	----	E100	2.0	µS/cm	2080	2050	1.45%	10%	----
<b>Anions and Nutrients (QC Lot: 2107219)</b>											
WP2511010-007	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	7.48	7.45	0.475%	20%	----
<b>Anions and Nutrients (QC Lot: 2108667)</b>											
WP2511022-001	RAN-Z	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0222	0.0205	0.0017	Diff <2x LOR	----
<b>Anions and Nutrients (QC Lot: 2109520)</b>											
WP2510871-002	Anonymous	Phosphorus, total	7723-14-0	E372	0.100	mg/L	2.52	2.48	1.28%	20%	----
<b>Organic / Inorganic Carbon (QC Lot: 2107427)</b>											
WP2510855-001	Anonymous	Carbon, total organic [TOC]	----	E355-L	0.50	mg/L	12.6	12.5	0.602%	20%	----
<b>Microbiological Tests (QC Lot: 2107868)</b>											
WP2511063-001	Anonymous	Coliforms, thermotolerant [fecal]	----	E010.FC-H	10	MPN/100mL	30	20	10	Diff <2x LOR	----
<b>Total Metals (QC Lot: 2113533)</b>											
WP2511022-001	RAN-Z	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
<b>Aggregate Organics (QC Lot: 2110957)</b>											
WP2510999-001	Anonymous	Biochemical oxygen demand [BOD]	----	E550	2.0	mg/L	<2.0	<2.0	0.0%	30%	----
<b>Aggregate Organics (QC Lot: 2110958)</b>											
WP2511022-001	RAN-Z	Carbonaceous biochemical oxygen demand [CBOD]	----	E555	6.0	mg/L	<6.0	<6.0	0.0%	30%	----
<b>Aggregate Organics (QC Lot: 2112211)</b>											
BF2500159-009	Anonymous	Phenols, total (4AAP)	----	E562	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
<b>Volatile Organic Compounds (QC Lot: 2111042)</b>											
WP2510902-001	Anonymous	Benzene	71-43-2	E611A	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	----
		Ethylbenzene	100-41-4	E611A	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	----
		Toluene	108-88-3	E611A	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	----
		Xylene, m+p-	179601-23-1	E611A	0.40	µg/L	<0.00040 mg/L	<0.40	0	Diff <2x LOR	----

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 Work Order : WP2511022  
 Client : Hamlet of Rankin Inlet  
 Project : ----



Sub-Matrix: <b>Water</b>					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
<b>Volatile Organic Compounds (QC Lot: 2111042) - continued</b>											
WP2510902-001	Anonymous	Xylene, o-	95-47-6	E611A	0.30	µg/L	<0.00030 mg/L	<0.30	0	Diff <2x LOR	----
<b>Hydrocarbons (QC Lot: 2111041)</b>											
WP2510902-001	Anonymous	F1 (C6-C10)	----	E581.F1	100	µg/L	<0.10 mg/L	<100	0	Diff <2x LOR	----



## Method Blank (MB) Report

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

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
<b>Physical Tests (QCLot: 2107707)</b>						
Solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
<b>Physical Tests (QCLot: 2110877)</b>						
Conductivity	----	E100	1	µS/cm	<1.0	----
<b>Anions and Nutrients (QCLot: 2107219)</b>						
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
<b>Anions and Nutrients (QCLot: 2107224)</b>						
Chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
<b>Anions and Nutrients (QCLot: 2107225)</b>						
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	<0.020	----
<b>Anions and Nutrients (QCLot: 2107226)</b>						
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	<0.010	----
<b>Anions and Nutrients (QCLot: 2108667)</b>						
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
<b>Anions and Nutrients (QCLot: 2109520)</b>						
Phosphorus, total	7723-14-0	E372	0.02	mg/L	<0.020	----
<b>Organic / Inorganic Carbon (QCLot: 2107427)</b>						
Carbon, total organic [TOC]	----	E355-L	0.5	mg/L	<0.50	----
<b>Microbiological Tests (QCLot: 2107868)</b>						
Coliforms, thermotolerant [fecal]	----	E010.FC-H	10	MPN/100mL	<10	----
<b>Total Metals (QCLot: 2109856)</b>						
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	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----



Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
<b>Total Metals (QCLot: 2109856) - continued</b>						
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	---
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	---
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	---
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	---
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	---
Manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	---
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	---
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	---
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	---
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	---
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	---
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	---
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	---
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	---
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	---
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	---
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	---
Tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	---
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	---
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	---
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	---
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	---
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	---
Vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	---
Zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	---
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	---
<b>Total Metals (QCLot: 2113533)</b>						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	---
<b>Aggregate Organics (QCLot: 2110819)</b>						
Oil & grease (gravimetric)	---	E567	5	mg/L	<5.0	---
<b>Aggregate Organics (QCLot: 2110957)</b>						
Biochemical oxygen demand [BOD]	---	E550	2	mg/L	<2.0	---
<b>Aggregate Organics (QCLot: 2110958)</b>						
Carbonaceous biochemical oxygen demand [CBOD]	---	E555	2	mg/L	<2.0	---



Sub-Matrix: **Water**

<i>Analyte</i>	<i>CAS Number</i>	<i>Method</i>	<i>LOR</i>	<i>Unit</i>	<i>Result</i>	<i>Qualifier</i>
<b>Aggregate Organics (QCLot: 2112211)</b>						
Phenols, total (4AAP)	----	E562	0.001	mg/L	<0.0010	----
<b>Volatile Organic Compounds (QCLot: 2111042)</b>						
Benzene	71-43-2	E611A	0.5	µg/L	<0.50	----
Ethylbenzene	100-41-4	E611A	0.5	µg/L	<0.50	----
Toluene	108-88-3	E611A	0.5	µg/L	<0.50	----
Xylene, m+p-	179601-23-1	E611A	0.4	µg/L	<0.40	----
Xylene, o-	95-47-6	E611A	0.3	µg/L	<0.30	----
<b>Hydrocarbons (QCLot: 2111041)</b>						
F1 (C6-C10)	----	E581.F1	100	µg/L	<100	----
<b>Hydrocarbons (QCLot: 2114097)</b>						
F2 (C10-C16)	----	E601	100	µg/L	<100	----
F3 (C16-C34)	----	E601	250	µg/L	<250	----
F4 (C34-C50)	----	E601	250	µg/L	<250	----



## 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
<b>Physical Tests (QCLot: 2107707)</b>									
Solids, total suspended [TSS]	---	E160	3	mg/L	150 mg/L	92.5	85.0	115	---
<b>Physical Tests (QCLot: 2110876)</b>									
pH	---	E108	---	pH units	7 pH units	100	98.0	102	---
<b>Physical Tests (QCLot: 2110877)</b>									
Conductivity	---	E100	1	µS/cm	1410 µS/cm	98.2	90.0	110	---
<b>Anions and Nutrients (QCLot: 2107219)</b>									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	102	90.0	110	---
<b>Anions and Nutrients (QCLot: 2107224)</b>									
Chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	102	90.0	110	---
<b>Anions and Nutrients (QCLot: 2107225)</b>									
Nitrate (as N)	14797-55-8	E235.NO3	0.02	mg/L	2.5 mg/L	102	90.0	110	---
<b>Anions and Nutrients (QCLot: 2107226)</b>									
Nitrite (as N)	14797-65-0	E235.NO2	0.01	mg/L	0.5 mg/L	103	90.0	110	---
<b>Anions and Nutrients (QCLot: 2108667)</b>									
Ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	107	85.0	115	---
<b>Anions and Nutrients (QCLot: 2109520)</b>									
Phosphorus, total	7723-14-0	E372	0.02	mg/L	0.5 mg/L	93.6	80.0	120	---
<b>Organic / Inorganic Carbon (QCLot: 2107427)</b>									
Carbon, total organic [TOC]	---	E355-L	0.5	mg/L	8.57 mg/L	101	80.0	120	---
<b>Total Metals (QCLot: 2109856)</b>									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	103	80.0	120	---
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	98.8	80.0	120	---
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	105	80.0	120	---
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	95.2	80.0	120	---
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	101	80.0	120	---
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	99.4	80.0	120	---
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	105	80.0	120	---
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	103	80.0	120	---
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	97.3	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
<b>Total Metals (QCLot: 2109856) - continued</b>									
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	95.7	80.0	120	---
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	104	80.0	120	---
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	103	80.0	120	---
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	105	80.0	120	---
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	100	80.0	120	---
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	99.8	80.0	120	---
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	94.6	80.0	120	---
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	103	80.0	120	---
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	97.3	80.0	120	---
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	97.4	80.0	120	---
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	104	80.0	120	---
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	100	80.0	120	---
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	96.7	80.0	120	---
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	99.4	80.0	120	---
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	102	80.0	120	---
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	102	80.0	120	---
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	89.8	80.0	120	---
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	106	80.0	120	---
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	95.5	80.0	120	---
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	101	80.0	120	---
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	98.2	80.0	120	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	100	80.0	120	---
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	98.1	80.0	120	---
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	98.8	80.0	120	---
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	98.5	80.0	120	---
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	101	80.0	120	---
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	100	80.0	120	---
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	104	80.0	120	---
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	102	80.0	120	---
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	95.2	80.0	120	---
<b>Total Metals (QCLot: 2113533)</b>									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	93.5	80.0	120	---
<b>Aggregate Organics (QCLot: 2110819)</b>									
Oil & grease (gravimetric)	---	E567	5	mg/L	200 mg/L	91.1	70.0	130	---
<b>Aggregate Organics (QCLot: 2110957)</b>									



Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
<b>Aggregate Organics (QCLot: 2110957) - continued</b>									
Biochemical oxygen demand [BOD]	----	E550	2	mg/L	198 mg/L	101	85.0	115	----
<b>Aggregate Organics (QCLot: 2110958)</b>									
Carbonaceous biochemical oxygen demand [CBOD]	----	E555	2	mg/L	198 mg/L	96.1	85.0	115	----
<b>Aggregate Organics (QCLot: 2112211)</b>									
Phenols, total (4AAP)	----	E562	0.001	mg/L	0.02 mg/L	103	85.0	115	----
<b>Volatile Organic Compounds (QCLot: 2111042)</b>									
Benzene	71-43-2	E611A	0.5	µg/L	100 µg/L	95.2	70.0	130	----
Ethylbenzene	100-41-4	E611A	0.5	µg/L	100 µg/L	88.4	70.0	130	----
Toluene	108-88-3	E611A	0.5	µg/L	100 µg/L	87.2	70.0	130	----
Xylene, m+p-	179601-23-1	E611A	0.4	µg/L	200 µg/L	99.6	70.0	130	----
Xylene, o-	95-47-6	E611A	0.3	µg/L	100 µg/L	93.7	70.0	130	----
<b>Hydrocarbons (QCLot: 2111041)</b>									
F1 (C6-C10)	----	E581.F1	100	µg/L	5280 µg/L	91.9	70.0	130	----
<b>Hydrocarbons (QCLot: 2114097)</b>									
F2 (C10-C16)	----	E601	100	µg/L	3400 µg/L	100	70.0	130	----
F3 (C16-C34)	----	E601	250	µg/L	6780 µg/L	87.9	70.0	130	----
F4 (C34-C50)	----	E601	250	µg/L	5840 µg/L	103	70.0	130	----



### Matrix Spike (MS) Report

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

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
<b>Anions and Nutrients (QCLot: 2107219)</b>										
WP2511010-007	Anonymous	Sulfate (as SO4)	14808-79-8	E235.SO4	104 mg/L	100 mg/L	104	75.0	125	----
<b>Anions and Nutrients (QCLot: 2108667)</b>										
WP2511022-001	RAN-Z	Ammonia, total (as N)	7664-41-7	E298	0.0991 mg/L	0.1 mg/L	99.1	75.0	125	----
<b>Anions and Nutrients (QCLot: 2109520)</b>										
WP2510871-003	Anonymous	Phosphorus, total	7723-14-0	E372	ND mg/L	----	ND	70.0	130	----
<b>Organic / Inorganic Carbon (QCLot: 2107427)</b>										
WP2510855-002	Anonymous	Carbon, total organic [TOC]	----	E355-L	ND mg/L	----	ND	70.0	130	----
<b>Total Metals (QCLot: 2113533)</b>										
WP2511030-001	Anonymous	Mercury, total	7439-97-6	E508	0.0000979 mg/L	0 mg/L	97.9	70.0	130	----
<b>Aggregate Organics (QCLot: 2112211)</b>										
BF2500159-009	Anonymous	Phenols, total (4AAP)	----	E562	0.0225 mg/L	0.02 mg/L	113	75.0	125	----
<b>Volatile Organic Compounds (QCLot: 2111042)</b>										
WP2510902-001	Anonymous	Benzene	71-43-2	E611A	102 µg/L	100 µg/L	102	60.0	140	----
		Ethylbenzene	100-41-4	E611A	90.8 µg/L	100 µg/L	90.8	60.0	140	----
		Toluene	108-88-3	E611A	86.8 µg/L	100 µg/L	86.8	60.0	140	----
		Xylene, m+p-	179601-23-1	E611A	213 µg/L	200 µg/L	106	60.0	140	----
		Xylene, o-	95-47-6	E611A	97.1 µg/L	100 µg/L	97.1	60.0	140	----
<b>Hydrocarbons (QCLot: 2111041)</b>										
WP2510902-001	Anonymous	F1 (C6-C10)	----	E581.F1	4680 µg/L	5280 µg/L	88.7	60.0	140	----

