

2025 ANNUAL REPORT

FOR THE MUNICIPALITY OF BAKER LAKE

YEAR BEING REPORTED: 2025

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence No. **3BM-BAK 1526** issued to the **Municipality of Baker Lake**.

Below are tabular summaries of all 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 the lake and estimated sewage water discharge in m³

| Month Reported | Quantity of Water Obtained from all sources (m ³) | Quantity of Sewage Waste Discharged (m ³) |
|---------------------|---|---|
| January | 5,843 | Same |
| February | 5,499 | Same |
| March | 6,098 | Same |
| April | 6,300 | Same |
| May | 6,011 | Same |
| June | 6,362 | Same |
| July | 6,668 | Same |
| August | 6,587 | Same |
| September | 6,095 | Same |
| October | 6,945 | Same |
| November | 5,961 | Same |
| December | 1,769 | Same |
| ANNUAL TOTAL | 70,138 | Same |

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Note: There is no meter existing at the end of the Sewage Truck discharge pipe. Therefore, the monthly sewage discharge volume is assumed to be equal to the monthly water consumption volume.

- 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:
 - None
- III. A list of unauthorized discharges and summary of follow-up action taken:
 - No unauthorized discharges for the infrastructure under licence 3BM-BAK1526 occurred in 2025.
 - List of spills reported to the NT-NU Spill Report Line as listed on the Hazardous Materials Spills Database for Baker Lake in 2025 available in Appendix A.
- 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
- 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 planning study for the wastewater treatment system (sewage lagoon and wetlands) upgrade was finalized in September 2025. The design has not commenced yet.
 - Consultant currently working on the business case of the upgraded water treatment system, expected to be completed by the end of 2026.
- VI. Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and
 - None
- VII. updates or revisions to the approved Operation and Maintenance Plans:
 - None

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ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

Water Licencing Sampling Points:



BAK-2: Runoff from the Sewage and Solid Waste Disposal Facilities just prior to the inlet to Airplane Lake, prior to the culvert

BAK-3: Outlet of Airplane Lake at water's edge

BAK-4: Runoff from the Solid Waste Disposal Facilities prior to Finger Lake

BAK-5: At the outlet of the sewage treatment tundra wetland, immediately prior to Finger Lake

- Annual sampling (during periods of flow) conducted at BAK-3 and BAK-5. Monthly sampling (during periods of flow) conducted at BAK-2 and BAK-4. Results in Appendix C with comparison to effluent quality limits in Appendix D.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

- CIRNAC Inspection did not take place in 2025.

Appendices

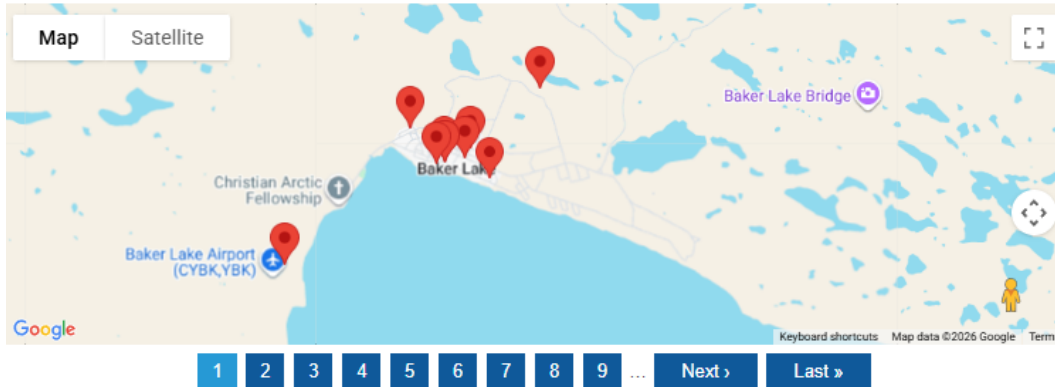
Appendix A: Hazardous Materials Spills Database for Baker Lake in 2025

Appendix B: BAK-5 Effluent Quality Limits

Appendix C: Certificate of Analysis

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Appendix A: Hazardous Materials Spills Database for Baker Lake in 2025



| Spill | Occurance Date | Spill Region | Location | Location Description | Product Spilled | Quantity | Measurement | Spill Cause | Lead Agency |
|---------------|--------------------|--------------|--------------------------------|----------------------|---|------------------|-------------|---------------|--|
| spill-2025409 | | Kivalliq | Baker Lake | Baker Lake | Petroleum - unknown | Unknown Quantity | | Unknown Cause | GN - Government of Nunavut |
| spill-2025406 | | Kivalliq | Baker Lake | Baker Lake | Petroleum - fuel oil (jet A, diesel, turbo A, heat) | 272.77 | Liters | Tank Leak | GN - Government of Nunavut |
| spill-2025380 | September 14, 2025 | Kivalliq | Baker Lake, Community, Nunavut | Baker Lake | Petroleum - fuel oil (jet A, diesel, turbo A, heat) | 94.00 | Liters | | GN - Government of Nunavut |
| spill-2025330 | | Kivalliq | Baker Lake | Baker Lake | Petroleum - fuel oil (jet A, diesel, turbo A, heat) | Unknown Quantity | | Tank Leak | GN - Government of Nunavut |
| spill-2025238 | May 29, 2025 | Kivalliq | Baker Lake, Community, Nunavut | Hamlet of Baker Lake | Petroleum - lubricating oil (lube, hydraulic) | Unknown Quantity | | Tank Leak | CIRNAC - Crown-Indigenous Relations and Northern Affairs |

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| | | | | | | | | | |
|---------------|-----------------|----------|--------------------------------|-----------------|---|------------------|--------|-----------|----------------------------|
| spill-2025237 | | Kivalliq | Baker Lake | 4021 4 crescent | Petroleum - fuel oil (jet A, diesel, turbo A, heat) | Unknown Quantity | | Tank Leak | GN - Government of Nunavut |
| spill-2025228 | May 24, 2025 | Kivalliq | Baker Lake | Unit 1137 | Petroleum - fuel oil (jet A, diesel, turbo A, heat) | 400.00 | Liters | Tank Leak | GN - Government of Nunavut |
| spill-2025168 | October 3, 2025 | Kivalliq | Baker Lake, Community, Nunavut | Baker Lake | Petroleum - fuel oil (jet A, diesel, turbo A, heat) | Unknown Quantity | | Other | GN - Government of Nunavut |
| spill-2025123 | March 9, 2025 | Kivalliq | Baker Lake | Baker Lake | Unknown | Unknown Quantity | | Other | GN - Government of Nunavut |

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Appendix B: BAK-5 Effluent Quality Limits

BAK-5 Effluent Quality Limits as per Part D, Item 2

| Parameter | Maximum Concentration of any grab sample | BAK-5 |
|------------------------|---|------------------|
| | | 03-Jul-25 |
| BOD ₅ | 80 mg/L | 11.3 |
| Total Suspended Solids | 100 mg/L | 28.1 |
| Fecal Coliforms | 1 x 10 ⁴ CFU/100mL | 110 |
| Oil & Grease | no visible sheen | <5.0 |
| pH | between 6 and 9 | 8.05 |

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Appendix C: Certificate of Analysis

- WP2510321_July-03-2025_COA
- WP2510324_July-03-2025_COA
- WP2514418_August-26-2025_COA



CERTIFICATE OF ANALYSIS

| | | | |
|--------------------------------|---|--------------------------------|----------------------------------|
| Work Order | : WP2510321 | Laboratory | : ALS Environmental - Winnipeg |
| Client | : Hamlet of Baker Lake | Account Manager | : Daniel Rocha |
| Contact | : Sheldon Dorey | Address | : 1329 Niakwa Road East, Unit 12 |
| Address | : PO BOX 149 Baker Lake Nunavut Canada X0C 0A0 | | : Winnipeg MB Canada R2J 3T4 |
| Telephone | : 867 793 2874 | E-mail | : daniel.rocha@alsglobal.com |
| Project | : Baker Lake | Telephone | : +1 204 255 9720 |
| PO | : ---- | Date Samples Received | : 04-Jul-2025 11:44 |
| C-O-C number | : ---- | Date Analysis Commenced | : 04-Jul-2025 |
| Sampler | : ---- | Issue Date | : 11-Jul-2025 14:25 |
| Site | : ---- | | |
| Quote number | : 2024 Analytical Testing | | |
| No. of samples received | : 1 | | |
| 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 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.

| <i>Signatories</i> | <i>Position</i> | <i>Laboratory Department</i> |
|--------------------|-----------------|----------------------------------|
| Gianna Wiebe | | Organics, Winnipeg, Manitoba |
| Kevin Baxter | | Metals, Winnipeg, Manitoba |
| Kevin Baxter | | Inorganics, Winnipeg, Manitoba |
| Leila Conyard | | Metals, Winnipeg, Manitoba |
| Nik Perkio | | Inorganics, Waterloo, Ontario |
| Olivia Yuen | | Microbiology, Winnipeg, Manitoba |



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> |
|-------------|--|
| - | no units |
| mg/L | milligrams per litre |
| MPN/100mL | most probable number per hundred millilitres |
| pH units | pH units |
| µS/cm | microsiemens per centimetre |

<: less than.

>: greater than.

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

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

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

Qualifiers

| <i>Qualifier</i> | <i>Description</i> |
|------------------|--|
| SFP | Sample was filtered and preserved at the laboratory. |



Analytical Results

| Sub-Matrix: Water (Matrix: Water) | | | | | Client sample ID | BAK-5 | --- | --- | --- | --- |
|---------------------------------------|------------|--------------|--------|------------|-----------------------------|-------------------|-----|-----|-----|-----|
| | | | | | Client sampling date / time | 03-Jul-2025 13:00 | --- | --- | --- | --- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510321-001 | --- | --- | --- | --- | |
| | | | | | Result | --- | --- | --- | --- | |
| Physical Tests | | | | | | | | | | |
| Alkalinity, bicarbonate (as CaCO3) | --- | E290/WP | 1.0 | mg/L | 42.2 | --- | --- | --- | --- | |
| Alkalinity, bicarbonate (as HCO3) | 71-52-3 | E290/WP | 1.2 | mg/L | 51.5 | --- | --- | --- | --- | |
| Alkalinity, carbonate (as CaCO3) | --- | E290/WP | 1.0 | mg/L | <1.0 | --- | --- | --- | --- | |
| Alkalinity, carbonate (as CO3) | 3812-32-6 | E290/WP | 1.0 | mg/L | <0.6 | --- | --- | --- | --- | |
| Alkalinity, hydroxide (as CaCO3) | --- | E290/WP | 1.0 | mg/L | <1.0 | --- | --- | --- | --- | |
| Alkalinity, hydroxide (as OH) | 14280-30-9 | E290/WP | 1.0 | mg/L | <0.3 | --- | --- | --- | --- | |
| Alkalinity, total (as CaCO3) | --- | E290/WP | 1.0 | mg/L | 42.2 | --- | --- | --- | --- | |
| Conductivity | --- | E100/WP | 2.0 | µS/cm | 179 | --- | --- | --- | --- | |
| Hardness (as CaCO3), from total Ca/Mg | --- | EC100A/WP | 0.50 | mg/L | 32.9 | --- | --- | --- | --- | |
| pH | --- | E108/WP | 0.10 | pH units | 8.05 | --- | --- | --- | --- | |
| Solids, total suspended [TSS] | --- | E160/WP | 3.0 | mg/L | 28.1 | --- | --- | --- | --- | |
| Anions and Nutrients | | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298/WP | 0.0050 | mg/L | 4.03 | --- | --- | --- | --- | |
| Chloride | 16887-00-6 | E235.Cl/WP | 0.50 | mg/L | 22.3 | --- | --- | --- | --- | |
| Nitrate (as N) | 14797-55-8 | E235.NO3/WP | 0.020 | mg/L | 0.396 | --- | --- | --- | --- | |
| Nitrate + Nitrite (as N) | --- | EC235.N+N/WP | 0.0050 | mg/L | 0.612 | --- | --- | --- | --- | |
| Nitrite (as N) | 14797-65-0 | E235.NO2/WP | 0.010 | mg/L | 0.216 | --- | --- | --- | --- | |
| Phosphorus, total | 7723-14-0 | E372/WP | 0.020 | mg/L | 1.10 | --- | --- | --- | --- | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4/WP | 0.30 | mg/L | 4.28 | --- | --- | --- | --- | |
| Microbiological Tests | | | | | | | | | | |
| Coliforms, thermotolerant [fecal] | --- | E010.FC-H/WP | 10 | MPN/100 mL | 110 | --- | --- | --- | --- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-5 | ---- | ---- | ---- | ---- |
|---------------------|------------|------------|-----------|------|-----------------------------|-------------------|------|------|------|------|
| | | | | | Client sampling date / time | 03-Jul-2025 13:00 | ---- | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510321-001 | ---- | ---- | ---- | ---- | ---- |
| | | | | | Result | ---- | ---- | ---- | ---- | ---- |
| Total Metals | | | | | | | | | | |
| Aluminum, total | 7429-90-5 | E420/WP | 0.0030 | mg/L | 0.122 | ---- | ---- | ---- | ---- | ---- |
| Antimony, total | 7440-36-0 | E420/WP | 0.00010 | mg/L | 0.000085 | ---- | ---- | ---- | ---- | ---- |
| Arsenic, total | 7440-38-2 | E420/WP | 0.00010 | mg/L | 0.00104 | ---- | ---- | ---- | ---- | ---- |
| Barium, total | 7440-39-3 | E420/WP | 0.00010 | mg/L | 0.0262 | ---- | ---- | ---- | ---- | ---- |
| Beryllium, total | 7440-41-7 | E420/WP | 0.000020 | mg/L | 0.0000057 | ---- | ---- | ---- | ---- | ---- |
| Bismuth, total | 7440-69-9 | E420/WP | 0.000050 | mg/L | 0.000116 | ---- | ---- | ---- | ---- | ---- |
| Boron, total | 7440-42-8 | E420/WP | 0.010 | mg/L | 0.045 | ---- | ---- | ---- | ---- | ---- |
| Cadmium, total | 7440-43-9 | E420/WP | 0.0000050 | mg/L | 0.0000056 | ---- | ---- | ---- | ---- | ---- |
| Calcium, total | 7440-70-2 | E420/WP | 0.050 | mg/L | 9.56 | ---- | ---- | ---- | ---- | ---- |
| Cesium, total | 7440-46-2 | E420/WP | 0.000010 | mg/L | 0.000023 | ---- | ---- | ---- | ---- | ---- |
| Chromium, total | 7440-47-3 | E420/WP | 0.00050 | mg/L | 0.00021 | ---- | ---- | ---- | ---- | ---- |
| Cobalt, total | 7440-48-4 | E420/WP | 0.00010 | mg/L | 0.00034 | ---- | ---- | ---- | ---- | ---- |
| Copper, total | 7440-50-8 | E420/WP | 0.00050 | mg/L | 0.00542 | ---- | ---- | ---- | ---- | ---- |
| Iron, total | 7439-89-6 | E420/WP | 0.010 | mg/L | 0.936 | ---- | ---- | ---- | ---- | ---- |
| Lead, total | 7439-92-1 | E420/WP | 0.000050 | mg/L | 0.000246 | ---- | ---- | ---- | ---- | ---- |
| Lithium, total | 7439-93-2 | E420/WP | 0.0010 | mg/L | 0.00077 | ---- | ---- | ---- | ---- | ---- |
| Magnesium, total | 7439-95-4 | E420/WP | 0.0050 | mg/L | 2.19 | ---- | ---- | ---- | ---- | ---- |
| Manganese, total | 7439-96-5 | E420/WP | 0.00010 | mg/L | 0.0849 | ---- | ---- | ---- | ---- | ---- |
| Molybdenum, total | 7439-98-7 | E420/WP | 0.000050 | mg/L | 0.000289 | ---- | ---- | ---- | ---- | ---- |
| Nickel, total | 7440-02-0 | E420/WP | 0.00050 | mg/L | 0.00105 | ---- | ---- | ---- | ---- | ---- |
| Phosphorus, total | 7723-14-0 | E420/WP | 0.050 | mg/L | 1.21 | ---- | ---- | ---- | ---- | ---- |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-5 | ---- | ---- | ---- | ---- |
|---------------------------------------|------------|------------|-----------|------|-----------------------------|-------------------|------|------|------|------|
| | | | | | Client sampling date / time | 03-Jul-2025 13:00 | ---- | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510321-001 | ---- | ---- | ---- | ---- | ---- |
| | | | | | Result | ---- | ---- | ---- | ---- | ---- |
| Total Metals | | | | | | | | | | |
| Potassium, total | 7440-09-7 | E420/WP | 0.050 | mg/L | 3.73 | ---- | ---- | ---- | ---- | ---- |
| Rubidium, total | 7440-17-7 | E420/WP | 0.00020 | mg/L | 0.00372 | ---- | ---- | ---- | ---- | ---- |
| Selenium, total | 7782-49-2 | E420/WP | 0.000050 | mg/L | 0.000139 | ---- | ---- | ---- | ---- | ---- |
| Silicon, total | 7440-21-3 | E420/WP | 0.10 | mg/L | 0.95 | ---- | ---- | ---- | ---- | ---- |
| Silver, total | 7440-22-4 | E420/WP | 0.000010 | mg/L | 0.000024 | ---- | ---- | ---- | ---- | ---- |
| Sodium, total | 7440-23-5 | E420/WP | 0.050 | mg/L | 15.2 | ---- | ---- | ---- | ---- | ---- |
| Strontium, total | 7440-24-6 | E420/WP | 0.00020 | mg/L | 0.0394 | ---- | ---- | ---- | ---- | ---- |
| Sulfur, total | 7704-34-9 | E420/WP | 0.50 | mg/L | 2.27 | ---- | ---- | ---- | ---- | ---- |
| Tellurium, total | 13494-80-9 | E420/WP | 0.00020 | mg/L | Not Detected | ---- | ---- | ---- | ---- | ---- |
| Thallium, total | 7440-28-0 | E420/WP | 0.000010 | mg/L | 0.0000015 | ---- | ---- | ---- | ---- | ---- |
| Thorium, total | 7440-29-1 | E420/WP | 0.00010 | mg/L | 0.000061 | ---- | ---- | ---- | ---- | ---- |
| Tin, total | 7440-31-5 | E420/WP | 0.00010 | mg/L | 0.00015 | ---- | ---- | ---- | ---- | ---- |
| Titanium, total | 7440-32-6 | E420/WP | 0.00030 | mg/L | 0.00309 | ---- | ---- | ---- | ---- | ---- |
| Tungsten, total | 7440-33-7 | E420/WP | 0.00010 | mg/L | 0.000020 | ---- | ---- | ---- | ---- | ---- |
| Uranium, total | 7440-61-1 | E420/WP | 0.000010 | mg/L | 0.000133 | ---- | ---- | ---- | ---- | ---- |
| Vanadium, total | 7440-62-2 | E420/WP | 0.00050 | mg/L | 0.00099 | ---- | ---- | ---- | ---- | ---- |
| Zinc, total | 7440-66-6 | E420/WP | 0.0030 | mg/L | 0.0112 | ---- | ---- | ---- | ---- | ---- |
| Zirconium, total | 7440-67-7 | E420/WP | 0.00020 | mg/L | 0.00040 | ---- | ---- | ---- | ---- | ---- |
| Dissolved Metals | | | | | | | | | | |
| Mercury, dissolved | 7439-97-6 | E509/WP | 0.0000050 | mg/L | <0.0000050 ^{SFP} | ---- | ---- | ---- | ---- | ---- |
| Dissolved mercury filtration location | ---- | EP509/WP | - | - | Laboratory | ---- | ---- | ---- | ---- | ---- |



Analytical Results

Sub-Matrix: Water
(Matrix: Water)

| | | | | | Client sample ID | BAK-5 | ---- | ---- | ---- | ---- |
|---|------------|------------|--------|------|-----------------------------|-------------------|------|------|------|------|
| | | | | | Client sampling date / time | 03-Jul-2025 13:00 | ---- | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510321-001 | ---- | ---- | ---- | ---- | ---- |
| | | | | | Result | ---- | ---- | ---- | ---- | ---- |
| Aggregate Organics | | | | | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550/WP | 2.0 | mg/L | 11.3 | ---- | ---- | ---- | ---- | ---- |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L/WP | 1.0 | mg/L | 7.6 | ---- | ---- | ---- | ---- | ---- |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555/WP | 2.0 | mg/L | 7.7 | ---- | ---- | ---- | ---- | ---- |
| Oil & grease (gravimetric) | ---- | E567/WP | 5.0 | mg/L | <5.0 | ---- | ---- | ---- | ---- | ---- |
| Phenols, total (4AAP) | ---- | E562/WT | 0.0010 | mg/L | 0.0030 | ---- | ---- | ---- | ---- | ---- |

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



QUALITY CONTROL INTERPRETIVE REPORT

| | |
|--|---|
| <p>Work Order : WP2510321</p> <p>Client : Hamlet of Baker Lake</p> <p>Contact : Sheldon Dorey</p> <p>Address : PO BOX 149 Baker Lake NU Canada X0C 0A0</p> <p>Telephone : 867 793 2874</p> <p>Project : Baker Lake</p> <p>PO : ----</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : ----</p> <p>Quote number : 2024 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 : 04-Jul-2025 11:44</p> <p>Issue Date : 11-Jul-2025 14:23</p> |
|--|---|

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 Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- 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 |
|-----------------------------|----------------------|----------------------|-----------------------------------|------------|-----------|-----------------------|-----------|--|
| Duplicate (DUP) RPDs | | | | | | | | |
| Microbiological Tests | Anonymous | Anonymous | Coliforms, thermotolerant [fecal] | ---- | E010.FC-H | 116 % ^{DUPM} | 64.99999% | 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 | | Eval | Analysis Date | Holding Times | | Eval | |
| | | | | Rec | Actual | | | Rec | Actual | | |
| Aggregate Organics : Biochemical Oxygen Demand - 5 day | | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-5 | E550 | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 48 hrs | 28 hrs | ✔ | |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-5 | E555-L | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 48 hrs | 28 hrs | ✔ | |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day | | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-5 | E555 | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 48 hrs | 28 hrs | ✔ | |
| Aggregate Organics : Oil & Grease by Gravimetry | | | | | | | | | | | |
| Amber glass (hydrochloric acid) BAK-5 | E567 | 03-Jul-2025 | 08-Jul-2025 | 28 days | 5 days | ✔ | 09-Jul-2025 | 28 days | 5 days | ✔ | |
| Aggregate Organics : Phenols (4AAP) in Water by Colorimetry | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-5 | E562 | 03-Jul-2025 | 07-Jul-2025 | 28 days | 4 days | ✔ | 08-Jul-2025 | 28 days | 4 days | ✔ | |
| Anions and Nutrients : Ammonia by Fluorescence | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-5 | E298 | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✔ | 04-Jul-2025 | 28 days | 1 days | ✔ | |
| Anions and Nutrients : Chloride in Water by IC | | | | | | | | | | | |
| HDPE BAK-5 | E235.Cl | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✔ | 04-Jul-2025 | 28 days | 1 days | ✔ | |



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

| Analyte Group : Analytical Method Container / Client Sample ID(s) | Method | Sampling Date | Extraction / Preparation | | | | Analysis | | | | |
|--|-----------|---------------|--------------------------|---------------|---------|--------------|---------------|---------------|---------|--------------|--|
| | | | Preparation Date | Holding Times | | Eval | Analysis Date | Holding Times | | Eval | |
| | | | | Rec | Actual | | | Rec | Actual | | |
| Anions and Nutrients : Nitrate in Water by IC | | | | | | | | | | | |
| HDPE BAK-5 | E235.NO3 | 03-Jul-2025 | 04-Jul-2025 | 3 days | 1 days | ✓ | 04-Jul-2025 | 3 days | 1 days | ✓ | |
| Anions and Nutrients : Nitrite in Water by IC | | | | | | | | | | | |
| HDPE BAK-5 | E235.NO2 | 03-Jul-2025 | 04-Jul-2025 | 3 days | 1 days | ✓ | 04-Jul-2025 | 3 days | 1 days | ✓ | |
| Anions and Nutrients : Sulfate in Water by IC | | | | | | | | | | | |
| HDPE BAK-5 | E235.SO4 | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ | |
| Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L) | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-5 | E372 | 03-Jul-2025 | 05-Jul-2025 | 28 days | 2 days | ✓ | 05-Jul-2025 | 28 days | 2 days | ✓ | |
| Dissolved Metals : Dissolved Mercury in Water by CVAAS | | | | | | | | | | | |
| Glass vial dissolved (hydrochloric acid) BAK-5 | E509 | 03-Jul-2025 | 10-Jul-2025 | 28 days | 7 days | ✓ | 10-Jul-2025 | 28 days | 7 days | ✓ | |
| Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | | | | | | | | | | | |
| Sterile HDPE (sodium thiosulfate) BAK-5 | E010.FC-H | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 30 hrs | 25 hrs | ✓ | |
| Physical Tests : Alkalinity Species by Titration | | | | | | | | | | | |
| HDPE BAK-5 | E290 | 03-Jul-2025 | 07-Jul-2025 | 14 days | 4 days | ✓ | 07-Jul-2025 | 14 days | 4 days | ✓ | |
| Physical Tests : Conductivity in Water | | | | | | | | | | | |
| HDPE BAK-5 | E100 | 03-Jul-2025 | 07-Jul-2025 | 28 days | 4 days | ✓ | 07-Jul-2025 | 28 days | 4 days | ✓ | |
| Physical Tests : pH by Meter | | | | | | | | | | | |
| HDPE BAK-5 | E108 | 03-Jul-2025 | 07-Jul-2025 | 0.25 hrs | 102 hrs | * EHTR-FM | 07-Jul-2025 | 0.25 hrs | 102 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 | | Eval | Analysis Date | Holding Times | | Eval |
| | | | | Rec | Actual | | | Rec | Actual | |
| Physical Tests : TSS by Gravimetry | | | | | | | | | | |
| HDPE BAK-5 | E160 | 03-Jul-2025 | ---- | ---- | ---- | | 08-Jul-2025 | 7 days | 5 days | ✓ |
| Total Metals : Total Metals in Water by CRC ICPMS | | | | | | | | | | |
| HDPE total (nitric acid) BAK-5 | E420 | 03-Jul-2025 | 09-Jul-2025 | 180 days | 6 days | ✓ | 09-Jul-2025 | 180 days | 6 days | ✓ |

Legend & Qualifier Definitions

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended
 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 |
| Analytical Methods | | | | | | | |
| Laboratory Duplicates (DUP) | | | | | | | |
| Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | E101.FC-H | 2089979 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Conductivity in Water | E100 | 2094220 | 1 | 13 | 7.6 | 5.0 | ✔ |
| pH by Meter | E108 | 2094219 | 1 | 19 | 5.2 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2095182 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2090011 | 0 | 7 | 0.0 | 5.0 | ✖ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2094221 | 1 | 9 | 11.1 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2090325 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2090322 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2092397 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Laboratory Control Samples (LCS) | | | | | | | |
| Conductivity in Water | E100 | 2094220 | 1 | 13 | 7.6 | 5.0 | ✔ |
| pH by Meter | E108 | 2094219 | 1 | 19 | 5.2 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2095182 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2090011 | 1 | 7 | 14.2 | 5.0 | ✔ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2094221 | 1 | 9 | 11.1 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2090325 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2090322 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L | 2090326 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2092397 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Oil & Grease by Gravimetry | E567 | 2095502 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Method Blanks (MB) | | | | | | | |



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 |
| Analytical Methods | | | | | | | |
| Method Blanks (MB) - Continued | | | | | | | |
| Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | E010.FC-H | 2089979 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Conductivity in Water | E100 | 2094220 | 1 | 13 | 7.6 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2095182 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2090011 | 1 | 7 | 14.2 | 5.0 | ✔ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2094221 | 1 | 9 | 11.1 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2090325 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2090322 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L | 2090326 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2092397 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Oil & Grease by Gravimetry | E567 | 2095502 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Matrix Spikes (MS) | | | | | | | |
| Chloride in Water by IC | E235.Cl | 2090011 | 0 | 7 | 0.0 | 5.0 | ✖ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2092397 | 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 |
|---|---|--------|-------------------|---|
| 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 $44.5 \pm 0.2^\circ\text{C}$. 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 $20 \pm 5^\circ\text{C}$). 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 $104 \pm 1^\circ\text{C}$, 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 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. |
| Dissolved Mercury in Water by CVAAS | E509 ALS Environmental - Winnipeg | Water | APHA 3030B/EPA 1631E (mod) | Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS. |
| 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. |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L 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 ₃ Fe(CN) ₆) and 4-amino-antipyrine (4-AAP) to form a red complex which is measured colorimetrically. |
| Oil & Grease by Gravimetry | E567 ALS Environmental - Winnipeg | 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. |



| Analytical Methods | Method / Lab | Matrix | Method Reference | Method Descriptions |
|--|--|--------|------------------|---|
| Hardness (Calculated) from Total Ca/Mg | EC100A ALS Environmental - Winnipeg | Water | APHA 2340B | "Hardness (as CaCO ₃), 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. |
| 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). |

| 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. |
| Digestion for Total Phosphorus in water | EP372 ALS Environmental - Winnipeg | Water | APHA 4500-P E (mod). | Samples are heated with a persulfate digestion reagent. |
| Dissolved Mercury Water Filtration | EP509 ALS Environmental - Winnipeg | Water | APHA 3030B | Water samples are filtered (0.45 um), and preserved with HCl. |
| Oil & Grease Extraction for Gravimetry | EP567 ALS Environmental - Winnipeg | Water | BC MOE Lab Manual (Oil & Grease) (mod) | The entire water sample is extracted with hexane by liquid-liquid extraction. |



QUALITY CONTROL REPORT

| | | | |
|--------------------------------|--|--------------------------------|---|
| Work Order | : WP2510321 | Page | : 1 of 9 |
| Client | : Hamlet of Baker Lake | Laboratory | : ALS Environmental - Winnipeg |
| Contact | : Sheldon Dorey | Account Manager | : Daniel Rocha |
| Address | : PO BOX 149 Baker Lake NU Canada X0C 0A0 | Address | : 1329 Niakwa Road East, Unit 12 Winnipeg, Manitoba Canada R2J 3T4 |
| Telephone | : 867 793 2874 | Telephone | : +1 204 255 9720 |
| Project | : Baker Lake | Date Samples Received | : 04-Jul-2025 11:44 |
| PO | : ---- | Date Analysis Commenced | : 04-Jul-2025 |
| C-O-C number | : ---- | Issue Date | : 11-Jul-2025 14:24 |
| Sampler | : ---- | | |
| Site | : ---- | | |
| Quote number | : 2024 Analytical Testing | | |
| No. of samples received | : 1 | | |
| 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.

| <i>Signatories</i> | <i>Position</i> | <i>Laboratory Department</i> |
|--------------------|------------------------|---|
| Gianna Wiebe | | Winnipeg Organics, Winnipeg, Manitoba |
| Kevin Baxter | Supervisor - Inorganic | Winnipeg Inorganics, Winnipeg, Manitoba |
| Kevin Baxter | Supervisor - Inorganic | Winnipeg Metals, Winnipeg, Manitoba |
| Leila Conyard | Lab Assistant | Winnipeg Metals, Winnipeg, Manitoba |
| Nik Perkio | Senior Analyst | Waterloo Inorganics, Waterloo, Ontario |
| Olivia Yuen | | Winnipeg Microbiology, Winnipeg, Manitoba |

Page : 2 of 9
Work Order : WP2510321
Client : Hamlet of Baker Lake
Project : Baker Lake



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: 2094219) | | | | | | | | | | | |
| WP2510321-001 | BAK-5 | pH | ---- | E108 | 0.10 | pH units | 8.05 | 7.89 | 2.01% | 4% | ---- |
| Physical Tests (QC Lot: 2094220) | | | | | | | | | | | |
| WP2510321-001 | BAK-5 | Conductivity | ---- | E100 | 2.0 | µS/cm | 179 | 178 | 0.560% | 10% | ---- |
| Physical Tests (QC Lot: 2094221) | | | | | | | | | | | |
| WP2510321-001 | BAK-5 | Alkalinity, total (as CaCO ₃) | ---- | E290 | 1.0 | mg/L | 42.2 | 40.7 | 3.62% | 20% | ---- |
| Physical Tests (QC Lot: 2095182) | | | | | | | | | | | |
| WP2510317-001 | Anonymous | Solids, total suspended [TSS] | ---- | E160 | 3.0 | mg/L | <3.0 | <3.0 | 0 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2089989) | | | | | | | | | | | |
| WP2510289-013 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.0050 | mg/L | <0.0050 | 0.0055 | 0.0005 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2090004) | | | | | | | | | | | |
| WP2510293-007 | Anonymous | Sulfate (as SO ₄) | 14808-79-8 | E235.SO4 | 0.30 | mg/L | 0.56 | 0.54 | 0.02 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2090961) | | | | | | | | | | | |
| WP2510222-001 | Anonymous | Phosphorus, total | 7723-14-0 | E372 | 0.020 | mg/L | 0.348 | 0.354 | 1.92% | 20% | ---- |
| Anions and Nutrients (QC Lot: 2093279) | | | | | | | | | | | |
| WP2510364-002 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.0100 | mg/L | 0.485 | 0.490 | 1.04% | 20% | ---- |
| Microbiological Tests (QC Lot: 2089979) | | | | | | | | | | | |
| WP2510309-001 | Anonymous | Coliforms, thermotolerant [fecal] | ---- | E010.FC-H | 10 | MPN/100mL | 80 | 20 | 116% | 65% | DUPM |
| Dissolved Metals (QC Lot: 2098914) | | | | | | | | | | | |
| WP2510289-015 | Anonymous | Mercury, dissolved | 7439-97-6 | E509 | 0.0000050 | mg/L | <0.0000050 | <0.0000050 | 0 | Diff <2x LOR | ---- |
| Aggregate Organics (QC Lot: 2090322) | | | | | | | | | | | |
| WP2510203-001 | Anonymous | Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2.0 | mg/L | <2.0 | <2.0 | 0.0% | 30% | ---- |
| Aggregate Organics (QC Lot: 2090325) | | | | | | | | | | | |
| WP2510282-002 | Anonymous | Biochemical oxygen demand [BOD] | ---- | E550 | 2.0 | mg/L | 2.4 | 2.9 | 18.9% | 30% | ---- |
| Aggregate Organics (QC Lot: 2092397) | | | | | | | | | | | |
| TY2506928-001 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0010 | mg/L | <0.0010 | <0.0010 | 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: 2094220) | | | | | | |
| Conductivity | --- | E100 | 1 | µS/cm | <1.0 | --- |
| Physical Tests (QCLot: 2094221) | | | | | | |
| Alkalinity, total (as CaCO3) | --- | E290 | 1 | mg/L | <1.0 | --- |
| Physical Tests (QCLot: 2095182) | | | | | | |
| Solids, total suspended [TSS] | --- | E160 | 3 | mg/L | <3.0 | --- |
| Anions and Nutrients (QCLot: 2089989) | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | <0.0050 | --- |
| Anions and Nutrients (QCLot: 2090004) | | | | | | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 0.3 | mg/L | <0.30 | --- |
| Anions and Nutrients (QCLot: 2090009) | | | | | | |
| Nitrate (as N) | 14797-55-8 | E235.NO3 | 0.02 | mg/L | <0.020 | --- |
| Anions and Nutrients (QCLot: 2090010) | | | | | | |
| Nitrite (as N) | 14797-65-0 | E235.NO2 | 0.01 | mg/L | <0.010 | --- |
| Anions and Nutrients (QCLot: 2090011) | | | | | | |
| Chloride | 16887-00-6 | E235.Cl | 0.5 | mg/L | <0.50 | --- |
| Anions and Nutrients (QCLot: 2090961) | | | | | | |
| Phosphorus, total | 7723-14-0 | E372 | 0.02 | mg/L | <0.020 | --- |
| Anions and Nutrients (QCLot: 2093279) | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | <0.0050 | --- |
| Microbiological Tests (QCLot: 2089979) | | | | | | |
| Coliforms, thermotolerant [fecal] | --- | E010.FC-H | 10 | MPN/100mL | <10 | --- |
| Total Metals (QCLot: 2095364) | | | | | | |
| 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 | --- |



Sub-Matrix: **Water**

| Analyte | CAS Number | Method | LOR | Unit | Result | Qualifier |
|--|------------|--------|----------|------|------------|-----------|
| Total Metals (QCLot: 2095364) - continued | | | | | | |
| Cesium, total | 7440-46-2 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Chromium, total | 7440-47-3 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Cobalt, total | 7440-48-4 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Copper, total | 7440-50-8 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Iron, total | 7439-89-6 | E420 | 0.01 | mg/L | <0.010 | ---- |
| Lead, total | 7439-92-1 | E420 | 0.00005 | mg/L | <0.000050 | ---- |
| Lithium, total | 7439-93-2 | E420 | 0.001 | mg/L | <0.0010 | ---- |
| Magnesium, total | 7439-95-4 | E420 | 0.005 | mg/L | <0.0050 | ---- |
| Manganese, total | 7439-96-5 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Molybdenum, total | 7439-98-7 | E420 | 0.00005 | mg/L | <0.000050 | ---- |
| Nickel, total | 7440-02-0 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Phosphorus, total | 7723-14-0 | E420 | 0.05 | mg/L | <0.050 | ---- |
| Potassium, total | 7440-09-7 | E420 | 0.05 | mg/L | <0.050 | ---- |
| Rubidium, total | 7440-17-7 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Selenium, total | 7782-49-2 | E420 | 0.00005 | mg/L | <0.000050 | ---- |
| Silicon, total | 7440-21-3 | E420 | 0.1 | mg/L | <0.10 | ---- |
| Silver, total | 7440-22-4 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Sodium, total | 7440-23-5 | E420 | 0.05 | mg/L | <0.050 | ---- |
| Strontium, total | 7440-24-6 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Sulfur, total | 7704-34-9 | E420 | 0.5 | mg/L | <0.50 | ---- |
| Tellurium, total | 13494-80-9 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Thallium, total | 7440-28-0 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Thorium, total | 7440-29-1 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Tin, total | 7440-31-5 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Titanium, total | 7440-32-6 | E420 | 0.0003 | mg/L | <0.00030 | ---- |
| Tungsten, total | 7440-33-7 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Uranium, total | 7440-61-1 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Vanadium, total | 7440-62-2 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Zinc, total | 7440-66-6 | E420 | 0.003 | mg/L | <0.0030 | ---- |
| Zirconium, total | 7440-67-7 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Dissolved Metals (QCLot: 2098914) | | | | | | |
| Mercury, dissolved | 7439-97-6 | E509 | 0.000005 | mg/L | <0.0000050 | ---- |
| Aggregate Organics (QCLot: 2090322) | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2 | mg/L | <2.0 | ---- |
| Aggregate Organics (QCLot: 2090325) | | | | | | |



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> |
|--|-------------------|---------------|------------|-------------|---------------|------------------|
| Aggregate Organics (QCLot: 2090325) - continued | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550 | 2 | mg/L | <2.0 | ---- |
| Aggregate Organics (QCLot: 2090326) | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L | 1 | mg/L | <1.0 | ---- |
| Aggregate Organics (QCLot: 2092397) | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | <0.0010 | ---- |
| Aggregate Organics (QCLot: 2095502) | | | | | | |
| Oil & grease (gravimetric) | ---- | E567 | 5 | mg/L | <5.0 | ---- |



Laboratory Control Sample (LCS) Report

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

Sub-Matrix: Water

| | | | | | Laboratory Control Sample (LCS) Report | | | | |
|--|------------|----------|----------|----------|--|--------------|---------------------|------|-----------|
| | | | | | Spike | Recovery (%) | Recovery Limits (%) | | |
| Analyte | CAS Number | Method | LOR | Unit | Target Concentration | LCS | Low | High | Qualifier |
| Physical Tests (QCLot: 2094219) | | | | | | | | | |
| pH | ---- | E108 | ---- | pH units | 7 pH units | 101 | 98.0 | 102 | ---- |
| Physical Tests (QCLot: 2094220) | | | | | | | | | |
| Conductivity | ---- | E100 | 1 | µS/cm | 1410 µS/cm | 98.8 | 90.0 | 110 | ---- |
| Physical Tests (QCLot: 2094221) | | | | | | | | | |
| Alkalinity, total (as CaCO3) | ---- | E290 | 1 | mg/L | 100 mg/L | 101 | 85.0 | 115 | ---- |
| Physical Tests (QCLot: 2095182) | | | | | | | | | |
| Solids, total suspended [TSS] | ---- | E160 | 3 | mg/L | 150 mg/L | 92.6 | 85.0 | 115 | ---- |
| Anions and Nutrients (QCLot: 2089989) | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | 0.2 mg/L | 113 | 85.0 | 115 | ---- |
| Anions and Nutrients (QCLot: 2090004) | | | | | | | | | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 0.3 | mg/L | 100 mg/L | 98.4 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090009) | | | | | | | | | |
| Nitrate (as N) | 14797-55-8 | E235.NO3 | 0.02 | mg/L | 2.5 mg/L | 97.3 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090010) | | | | | | | | | |
| Nitrite (as N) | 14797-65-0 | E235.NO2 | 0.01 | mg/L | 0.5 mg/L | 96.7 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090011) | | | | | | | | | |
| Chloride | 16887-00-6 | E235.Cl | 0.5 | mg/L | 100 mg/L | 97.0 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090961) | | | | | | | | | |
| Phosphorus, total | 7723-14-0 | E372 | 0.02 | mg/L | 0.5 mg/L | 94.1 | 80.0 | 120 | ---- |
| Anions and Nutrients (QCLot: 2093279) | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | 0.2 mg/L | 102 | 85.0 | 115 | ---- |
| Total Metals (QCLot: 2095364) | | | | | | | | | |
| Aluminum, total | 7429-90-5 | E420 | 0.003 | mg/L | 2 mg/L | 93.5 | 80.0 | 120 | ---- |
| Antimony, total | 7440-36-0 | E420 | 0.0001 | mg/L | 1 mg/L | 92.1 | 80.0 | 120 | ---- |
| Arsenic, total | 7440-38-2 | E420 | 0.0001 | mg/L | 1 mg/L | 98.7 | 80.0 | 120 | ---- |
| Barium, total | 7440-39-3 | E420 | 0.0001 | mg/L | 0.25 mg/L | 95.0 | 80.0 | 120 | ---- |
| Beryllium, total | 7440-41-7 | E420 | 0.00002 | mg/L | 0.1 mg/L | 93.3 | 80.0 | 120 | ---- |
| Bismuth, total | 7440-69-9 | E420 | 0.00005 | mg/L | 1 mg/L | 94.4 | 80.0 | 120 | ---- |
| Boron, total | 7440-42-8 | E420 | 0.01 | mg/L | 1 mg/L | 100 | 80.0 | 120 | ---- |
| Cadmium, total | 7440-43-9 | E420 | 0.000005 | mg/L | 0.1 mg/L | 91.6 | 80.0 | 120 | ---- |



Sub-Matrix: **Water**

| | | | | | Laboratory Control Sample (LCS) Report | | | | |
|--|------------|--------|----------|------|--|--------------|---------------------|------|-----------|
| | | | | | Spike | Recovery (%) | Recovery Limits (%) | | |
| Analyte | CAS Number | Method | LOR | Unit | Target Concentration | LCS | Low | High | Qualifier |
| Total Metals (QCLot: 2095364) - continued | | | | | | | | | |
| Calcium, total | 7440-70-2 | E420 | 0.05 | mg/L | 50 mg/L | 92.3 | 80.0 | 120 | ---- |
| Cesium, total | 7440-46-2 | E420 | 0.00001 | mg/L | 0.05 mg/L | 86.4 | 80.0 | 120 | ---- |
| Chromium, total | 7440-47-3 | E420 | 0.0005 | mg/L | 0.25 mg/L | 94.7 | 80.0 | 120 | ---- |
| Cobalt, total | 7440-48-4 | E420 | 0.0001 | mg/L | 0.25 mg/L | 94.5 | 80.0 | 120 | ---- |
| Copper, total | 7440-50-8 | E420 | 0.0005 | mg/L | 0.25 mg/L | 95.2 | 80.0 | 120 | ---- |
| Iron, total | 7439-89-6 | E420 | 0.01 | mg/L | 1 mg/L | 93.7 | 80.0 | 120 | ---- |
| Lead, total | 7439-92-1 | E420 | 0.00005 | mg/L | 0.5 mg/L | 97.5 | 80.0 | 120 | ---- |
| Lithium, total | 7439-93-2 | E420 | 0.001 | mg/L | 0.25 mg/L | 85.3 | 80.0 | 120 | ---- |
| Magnesium, total | 7439-95-4 | E420 | 0.005 | mg/L | 50 mg/L | 100.0 | 80.0 | 120 | ---- |
| Manganese, total | 7439-96-5 | E420 | 0.0001 | mg/L | 0.25 mg/L | 93.8 | 80.0 | 120 | ---- |
| Molybdenum, total | 7439-98-7 | E420 | 0.00005 | mg/L | 0.25 mg/L | 93.4 | 80.0 | 120 | ---- |
| Nickel, total | 7440-02-0 | E420 | 0.0005 | mg/L | 0.5 mg/L | 93.9 | 80.0 | 120 | ---- |
| Phosphorus, total | 7723-14-0 | E420 | 0.05 | mg/L | 10 mg/L | 96.0 | 80.0 | 120 | ---- |
| Potassium, total | 7440-09-7 | E420 | 0.05 | mg/L | 50 mg/L | 93.3 | 80.0 | 120 | ---- |
| Rubidium, total | 7440-17-7 | E420 | 0.0002 | mg/L | 0.1 mg/L | 95.6 | 80.0 | 120 | ---- |
| Selenium, total | 7782-49-2 | E420 | 0.00005 | mg/L | 1 mg/L | 92.8 | 80.0 | 120 | ---- |
| Silicon, total | 7440-21-3 | E420 | 0.1 | mg/L | 10 mg/L | 95.3 | 80.0 | 120 | ---- |
| Silver, total | 7440-22-4 | E420 | 0.00001 | mg/L | 0.1 mg/L | 85.8 | 80.0 | 120 | ---- |
| Sodium, total | 7440-23-5 | E420 | 0.05 | mg/L | 50 mg/L | 93.2 | 80.0 | 120 | ---- |
| Strontium, total | 7440-24-6 | E420 | 0.0002 | mg/L | 0.25 mg/L | 90.2 | 80.0 | 120 | ---- |
| Sulfur, total | 7704-34-9 | E420 | 0.5 | mg/L | 50 mg/L | 89.7 | 80.0 | 120 | ---- |
| Tellurium, total | 13494-80-9 | E420 | 0.0002 | mg/L | 0.1 mg/L | 93.6 | 80.0 | 120 | ---- |
| Thallium, total | 7440-28-0 | E420 | 0.00001 | mg/L | 1 mg/L | 94.3 | 80.0 | 120 | ---- |
| Thorium, total | 7440-29-1 | E420 | 0.0001 | mg/L | 0.1 mg/L | 91.1 | 80.0 | 120 | ---- |
| Tin, total | 7440-31-5 | E420 | 0.0001 | mg/L | 0.5 mg/L | 91.8 | 80.0 | 120 | ---- |
| Titanium, total | 7440-32-6 | E420 | 0.0003 | mg/L | 0.25 mg/L | 92.0 | 80.0 | 120 | ---- |
| Tungsten, total | 7440-33-7 | E420 | 0.0001 | mg/L | 0.1 mg/L | 95.6 | 80.0 | 120 | ---- |
| Uranium, total | 7440-61-1 | E420 | 0.00001 | mg/L | 0.005 mg/L | 94.5 | 80.0 | 120 | ---- |
| Vanadium, total | 7440-62-2 | E420 | 0.0005 | mg/L | 0.5 mg/L | 94.9 | 80.0 | 120 | ---- |
| Zinc, total | 7440-66-6 | E420 | 0.003 | mg/L | 0.5 mg/L | 95.9 | 80.0 | 120 | ---- |
| Zirconium, total | 7440-67-7 | E420 | 0.0002 | mg/L | 0.1 mg/L | 91.0 | 80.0 | 120 | ---- |
| Mercury, dissolved | 7439-97-6 | E509 | 0.000005 | mg/L | 0 mg/L | 98.2 | 80.0 | 120 | ---- |
| Aggregate Organics (QCLot: 2090322) | | | | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2 | mg/L | 198 mg/L | 105 | 85.0 | 115 | ---- |



Sub-Matrix: **Water**

| | | | | | Laboratory Control Sample (LCS) Report | | | | | |
|---|------------|--------|-------|------|--|------|--------------|------|---------------------|--|
| | | | | | Spike | | Recovery (%) | | Recovery Limits (%) | |
| Analyte | CAS Number | Method | LOR | Unit | Target Concentration | LCS | Low | High | Qualifier | |
| Aggregate Organics (QCLot: 2090325) | | | | | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550 | 2 | mg/L | 198 mg/L | 97.9 | 85.0 | 115 | ---- | |
| Aggregate Organics (QCLot: 2090326) | | | | | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L | 1 | mg/L | 198 mg/L | 90.8 | 85.0 | 115 | ---- | |
| Aggregate Organics (QCLot: 2092397) | | | | | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | 0.02 mg/L | 103 | 85.0 | 115 | ---- | |
| Aggregate Organics (QCLot: 2095502) | | | | | | | | | | |
| Oil & grease (gravimetric) | ---- | E567 | 5 | mg/L | 100 mg/L | 99.5 | 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 $\geq 1x$ 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: 2089989) | | | | | | | | | | |
| WP2510289-013 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.108 mg/L | 0.1 mg/L | 108 | 75.0 | 125 | ---- |
| Anions and Nutrients (QCLot: 2090004) | | | | | | | | | | |
| WP2510293-007 | Anonymous | Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 101 mg/L | 100 mg/L | 101 | 75.0 | 125 | ---- |
| Anions and Nutrients (QCLot: 2090961) | | | | | | | | | | |
| WP2510237-001 | Anonymous | Phosphorus, total | 7723-14-0 | E372 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| Anions and Nutrients (QCLot: 2093279) | | | | | | | | | | |
| WP2510364-002 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | ND mg/L | ---- | ND | 75.0 | 125 | ---- |
| Dissolved Metals (QCLot: 2098914) | | | | | | | | | | |
| WP2510293-001 | Anonymous | Mercury, dissolved | 7439-97-6 | E509 | 0.0000943 mg/L | 0 mg/L | 94.3 | 70.0 | 130 | ---- |
| Aggregate Organics (QCLot: 2092397) | | | | | | | | | | |
| TY2506928-001 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0427 mg/L | 0.04 mg/L | 107 | 75.0 | 125 | ---- |

CERTIFICATE OF ANALYSIS

| | | | |
|--------------------------------|---|--------------------------------|--|
| Work Order | : WP2510324 | | |
| Client | : Hamlet of Baker Lake | Laboratory | : ALS Environmental - Winnipeg |
| Contact | : Sheldon Dorey | Account Manager | : Daniel Rocha |
| Address | : PO BOX 149 Baker Lake Nunavut Canada X0C 0A0 | Address | : 1329 Niakwa Road East, Unit 12 Winnipeg MB Canada R2J 3T4 |
| Telephone | : 867 793 2874 | E-mail | : daniel.rocha@alsglobal.com |
| Project | : Baker Lake | Telephone | : +1 204 255 9720 |
| PO | : ---- | Date Samples Received | : 04-Jul-2025 11:50 |
| C-O-C number | : ---- | Date Analysis Commenced | : 04-Jul-2025 |
| Sampler | : ---- | Issue Date | : 11-Jul-2025 14:23 |
| Site | : ---- | | |
| Quote number | : 2024 Analytical Testing | | |
| No. of samples received | : 2 | | |
| No. of samples analysed | : 2 | | |

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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

Signatories

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

| <i>Signatories</i> | <i>Position</i> | <i>Laboratory Department</i> |
|---------------------|-----------------|----------------------------------|
| Nataliia Makovetska | | Organics, Winnipeg, Manitoba |
| Kevin Baxter | | Metals, Winnipeg, Manitoba |
| Kevin Baxter | | Inorganics, Winnipeg, Manitoba |
| Leila Conyard | | Metals, Winnipeg, Manitoba |
| Nik Perkio | | Inorganics, Waterloo, Ontario |
| Oren Wurenqiqige | | Microbiology, Winnipeg, Manitoba |



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> |
|-------------|--|
| - | no units |
| mg/L | milligrams per litre |
| MPN/100mL | most probable number per hundred millilitres |
| pH units | pH units |
| µS/cm | microsiemens per centimetre |

<: less than.

>: greater than.

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

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

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

Qualifiers

| <i>Qualifier</i> | <i>Description</i> |
|------------------|--|
| DLM | Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity). |
| SFP | Sample was filtered and preserved at the laboratory. |



Analytical Results

| Sub-Matrix: Water (Matrix: Water) | | | | | Client sample ID | BAK-2 ---- | BAK-4 ---- | ---- | ---- | ---- |
|---------------------------------------|------------|--------------|--------|------------|-----------------------------|-----------------------|-------------------|------|------|------|
| | | | | | Client sampling date / time | 03-Jul-2025 12:30 | 03-Jul-2025 12:00 | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510324-001 | WP2510324-002 | ---- | ---- | ---- | |
| | | | | | Result | Result | ---- | ---- | ---- | |
| Physical Tests | | | | | | | | | | |
| Alkalinity, bicarbonate (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | 28.9 | 459 | ---- | ---- | ---- | |
| Alkalinity, bicarbonate (as HCO3) | 71-52-3 | E290/WP | 1.2 | mg/L | 35.2 | 560 | ---- | ---- | ---- | |
| Alkalinity, carbonate (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | <1.0 | <1.0 | ---- | ---- | ---- | |
| Alkalinity, carbonate (as CO3) | 3812-32-6 | E290/WP | 1.0 | mg/L | <0.6 | <0.6 | ---- | ---- | ---- | |
| Alkalinity, hydroxide (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | <1.0 | <1.0 | ---- | ---- | ---- | |
| Alkalinity, hydroxide (as OH) | 14280-30-9 | E290/WP | 1.0 | mg/L | <0.3 | <0.3 | ---- | ---- | ---- | |
| Alkalinity, total (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | 28.9 | 459 | ---- | ---- | ---- | |
| Conductivity | ---- | E100/WP | 2.0 | µS/cm | 172 | 3370 | ---- | ---- | ---- | |
| Hardness (as CaCO3), from total Ca/Mg | ---- | EC100A/WP | 0.50 | mg/L | 43.2 | 1560 | ---- | ---- | ---- | |
| pH | ---- | E108/WP | 0.10 | pH units | 7.69 | 8.00 | ---- | ---- | ---- | |
| Solids, total suspended [TSS] | ---- | E160/WP | 3.0 | mg/L | 23.9 | 76.3 | ---- | ---- | ---- | |
| Anions and Nutrients | | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298/WP | 0.0050 | mg/L | 0.0697 | 4.97 | ---- | ---- | ---- | |
| Chloride | 16887-00-6 | E235.Cl/WP | 0.50 | mg/L | 21.3 | 339 | ---- | ---- | ---- | |
| Nitrate (as N) | 14797-55-8 | E235.NO3/WP | 0.020 | mg/L | 0.732 | <0.400 ^{DLM} | ---- | ---- | ---- | |
| Nitrate + Nitrite (as N) | ---- | EC235.N+N/WP | 0.0050 | mg/L | 0.792 | <0.447 | ---- | ---- | ---- | |
| Nitrite (as N) | 14797-65-0 | E235.NO2/WP | 0.010 | mg/L | 0.060 | <0.200 ^{DLM} | ---- | ---- | ---- | |
| Phosphorus, total | 7723-14-0 | E372/WP | 0.020 | mg/L | 0.968 | 0.293 | ---- | ---- | ---- | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4/WP | 0.30 | mg/L | 14.4 | 1150 | ---- | ---- | ---- | |
| Microbiological Tests | | | | | | | | | | |
| Coliforms, thermotolerant [fecal] | ---- | E010.FC-H/WP | 10 | MPN/100 mL | 100 | 1720 | ---- | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-2 ---- | BAK-4 ---- | ---- | ---- | ---- |
|---------------------|------------|------------|-----------|------|-----------------------------|-------------------|-------------------|------|------|------|
| | | | | | Client sampling date / time | 03-Jul-2025 12:30 | 03-Jul-2025 12:00 | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510324-001 | WP2510324-002 | ---- | ---- | ---- | |
| | | | | | Result | Result | ---- | ---- | ---- | |
| Total Metals | | | | | | | | | | |
| Aluminum, total | 7429-90-5 | E420/WP | 0.0030 | mg/L | 0.0838 | 0.112 | ---- | ---- | ---- | |
| Antimony, total | 7440-36-0 | E420/WP | 0.00010 | mg/L | 0.00026 | 0.0115 | ---- | ---- | ---- | |
| Arsenic, total | 7440-38-2 | E420/WP | 0.00010 | mg/L | 0.00087 | 0.00233 | ---- | ---- | ---- | |
| Barium, total | 7440-39-3 | E420/WP | 0.00010 | mg/L | 0.0238 | 0.0425 | ---- | ---- | ---- | |
| Beryllium, total | 7440-41-7 | E420/WP | 0.000020 | mg/L | 0.0000054 | 0.0000022 | ---- | ---- | ---- | |
| Bismuth, total | 7440-69-9 | E420/WP | 0.000050 | mg/L | 0.000043 | 0.0000079 | ---- | ---- | ---- | |
| Boron, total | 7440-42-8 | E420/WP | 0.010 | mg/L | 0.056 | 2.07 | ---- | ---- | ---- | |
| Cadmium, total | 7440-43-9 | E420/WP | 0.0000050 | mg/L | 0.0000069 | 0.000247 | ---- | ---- | ---- | |
| Calcium, total | 7440-70-2 | E420/WP | 0.050 | mg/L | 13.2 | 502 | ---- | ---- | ---- | |
| Cesium, total | 7440-46-2 | E420/WP | 0.000010 | mg/L | 0.000011 | 0.000128 | ---- | ---- | ---- | |
| Chromium, total | 7440-47-3 | E420/WP | 0.00050 | mg/L | 0.00017 | 0.00076 | ---- | ---- | ---- | |
| Cobalt, total | 7440-48-4 | E420/WP | 0.00010 | mg/L | 0.00035 | 0.0131 | ---- | ---- | ---- | |
| Copper, total | 7440-50-8 | E420/WP | 0.00050 | mg/L | 0.00352 | 0.0296 | ---- | ---- | ---- | |
| Iron, total | 7439-89-6 | E420/WP | 0.010 | mg/L | 0.779 | 6.26 | ---- | ---- | ---- | |
| Lead, total | 7439-92-1 | E420/WP | 0.000050 | mg/L | 0.000154 | 0.00144 | ---- | ---- | ---- | |
| Lithium, total | 7439-93-2 | E420/WP | 0.0010 | mg/L | 0.0015 | 0.0840 | ---- | ---- | ---- | |
| Magnesium, total | 7439-95-4 | E420/WP | 0.0050 | mg/L | 2.50 | 75.5 | ---- | ---- | ---- | |
| Manganese, total | 7439-96-5 | E420/WP | 0.00010 | mg/L | 0.0816 | 3.06 | ---- | ---- | ---- | |
| Molybdenum, total | 7439-98-7 | E420/WP | 0.000050 | mg/L | 0.000273 | 0.00284 | ---- | ---- | ---- | |
| Nickel, total | 7440-02-0 | E420/WP | 0.00050 | mg/L | 0.00078 | 0.0250 | ---- | ---- | ---- | |
| Phosphorus, total | 7723-14-0 | E420/WP | 0.050 | mg/L | 0.931 | 0.190 | ---- | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-2 ---- | BAK-4 ---- | ---- | ---- | ---- |
|---------------------------------------|------------|------------|-----------|------|-----------------------------|---------------------------|-------------------|------|------|------|
| | | | | | Client sampling date / time | 03-Jul-2025 12:30 | 03-Jul-2025 12:00 | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510324-001 | WP2510324-002 | ---- | ---- | ---- | |
| | | | | | Result | Result | ---- | ---- | ---- | |
| Total Metals | | | | | | | | | | |
| Potassium, total | 7440-09-7 | E420/WP | 0.050 | mg/L | 3.26 | 85.5 | ---- | ---- | ---- | |
| Rubidium, total | 7440-17-7 | E420/WP | 0.00020 | mg/L | 0.00280 | 0.0586 | ---- | ---- | ---- | |
| Selenium, total | 7782-49-2 | E420/WP | 0.000050 | mg/L | 0.000091 | 0.000230 | ---- | ---- | ---- | |
| Silicon, total | 7440-21-3 | E420/WP | 0.10 | mg/L | 0.80 | 4.69 | ---- | ---- | ---- | |
| Silver, total | 7440-22-4 | E420/WP | 0.000010 | mg/L | 0.000013 | 0.000049 | ---- | ---- | ---- | |
| Sodium, total | 7440-23-5 | E420/WP | 0.050 | mg/L | 14.1 | 274 | ---- | ---- | ---- | |
| Strontium, total | 7440-24-6 | E420/WP | 0.00020 | mg/L | 0.0516 | 2.18 | ---- | ---- | ---- | |
| Sulfur, total | 7704-34-9 | E420/WP | 0.50 | mg/L | 5.46 | 419 | ---- | ---- | ---- | |
| Tellurium, total | 13494-80-9 | E420/WP | 0.00020 | mg/L | Not Detected | 0.00014 | ---- | ---- | ---- | |
| Thallium, total | 7440-28-0 | E420/WP | 0.000010 | mg/L | 0.0000015 | 0.0000040 | ---- | ---- | ---- | |
| Thorium, total | 7440-29-1 | E420/WP | 0.00010 | mg/L | 0.000043 | 0.000038 | ---- | ---- | ---- | |
| Tin, total | 7440-31-5 | E420/WP | 0.00010 | mg/L | 0.000049 | 0.00030 | ---- | ---- | ---- | |
| Titanium, total | 7440-32-6 | E420/WP | 0.00030 | mg/L | 0.00127 | 0.00452 | ---- | ---- | ---- | |
| Tungsten, total | 7440-33-7 | E420/WP | 0.00010 | mg/L | 0.000021 | 0.000093 | ---- | ---- | ---- | |
| Uranium, total | 7440-61-1 | E420/WP | 0.000010 | mg/L | 0.000182 | 0.000862 | ---- | ---- | ---- | |
| Vanadium, total | 7440-62-2 | E420/WP | 0.00050 | mg/L | 0.00091 | 0.00069 | ---- | ---- | ---- | |
| Zinc, total | 7440-66-6 | E420/WP | 0.0030 | mg/L | 0.0039 | 0.666 | ---- | ---- | ---- | |
| Zirconium, total | 7440-67-7 | E420/WP | 0.00020 | mg/L | 0.00022 | 0.00041 | ---- | ---- | ---- | |
| Dissolved Metals | | | | | | | | | | |
| Mercury, dissolved | 7439-97-6 | E509/WP | 0.0000050 | mg/L | <0.0000050 ^{SFP} | <0.0000050 ^{SFP} | ---- | ---- | ---- | |
| Dissolved mercury filtration location | ---- | EP509/WP | - | - | Laboratory | Laboratory | ---- | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
(Matrix: Water)

| | | | | | Client sample ID | | BAK-2 | BAK-4 | ---- | ---- | ---- |
|---|------------|------------|--------|------|-----------------------------|---------------|-------|-------|------|------|------|
| | | | | | Client sampling date / time | | ---- | ---- | ---- | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2510324-001 | WP2510324-002 | ---- | ---- | ---- | ---- | ---- |
| | | | | | Result | Result | ---- | ---- | ---- | ---- | ---- |
| Aggregate Organics | | | | | | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550/WP | 2.0 | mg/L | 7.2 | 14.4 | ---- | ---- | ---- | ---- | ---- |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L/WP | 1.0 | mg/L | 5.4 | 11.0 | ---- | ---- | ---- | ---- | ---- |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555/WP | 2.0 | mg/L | 5.8 | 11.0 | ---- | ---- | ---- | ---- | ---- |
| Oil & grease (gravimetric) | ---- | E567/WP | 5.0 | mg/L | <5.0 | 5.5 | ---- | ---- | ---- | ---- | ---- |
| Phenols, total (4AAP) | ---- | E562/WT | 0.0010 | mg/L | <0.0010 | 0.0140 | ---- | ---- | ---- | ---- | ---- |

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



QUALITY CONTROL INTERPRETIVE REPORT

| | |
|--|---|
| <p>Work Order : WP2510324</p> <p>Client : Hamlet of Baker Lake</p> <p>Contact : Sheldon Dorey</p> <p>Address : PO BOX 149 Baker Lake NU Canada X0C 0A0</p> <p>Telephone : 867 793 2874</p> <p>Project : Baker Lake</p> <p>PO : ----</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : ----</p> <p>Quote number : 2024 Analytical Testing</p> <p>No. of samples received : 2</p> <p>No. of samples analysed : 2</p> | <p>Page : 1 of 12</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 : 04-Jul-2025 11:50</p> <p>Issue Date : 11-Jul-2025 14:22</p> |
|--|---|

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)

- 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 | |
| Aggregate Organics : Biochemical Oxygen Demand - 5 day | | | | | | | | | | |
| HDPE BAK-2 | E550 | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 3 days | 1 days | ✓ |
| Aggregate Organics : Biochemical Oxygen Demand - 5 day | | | | | | | | | | |
| HDPE BAK-4 | E550 | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 3 days | 1 days | ✓ |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | | | | | | | | | | |
| HDPE BAK-2 | E555-L | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 0 hrs | 28 hrs | * UCP |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | | | | | | | | | | |
| HDPE BAK-4 | E555-L | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 0 hrs | 29 hrs | * UCP |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day | | | | | | | | | | |
| HDPE BAK-2 | E555 | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 3 days | 1 days | ✓ |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day | | | | | | | | | | |
| HDPE BAK-4 | E555 | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 3 days | 1 days | ✓ |
| Aggregate Organics : Oil & Grease by Gravimetry | | | | | | | | | | |
| Amber glass total (hydrochloric acid) BAK-2 | E567 | 03-Jul-2025 | 08-Jul-2025 | 28 days | 5 days | ✓ | 08-Jul-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 | | Eval | Analysis Date | Holding Times | | Eval |
| | | | | Rec | Actual | | | Rec | Actual | |
| Aggregate Organics : Oil & Grease by Gravimetry | | | | | | | | | | |
| Amber glass total (hydrochloric acid) BAK-4 | E567 | 03-Jul-2025 | 08-Jul-2025 | 28 days | 5 days | ✓ | 08-Jul-2025 | 28 days | 5 days | ✓ |
| Aggregate Organics : Phenols (4AAP) in Water by Colorimetry | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-2 | E562 | 03-Jul-2025 | 09-Jul-2025 | 28 days | 6 days | ✓ | 09-Jul-2025 | 28 days | 6 days | ✓ |
| Aggregate Organics : Phenols (4AAP) in Water by Colorimetry | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-4 | E562 | 03-Jul-2025 | 09-Jul-2025 | 28 days | 6 days | ✓ | 09-Jul-2025 | 28 days | 6 days | ✓ |
| Anions and Nutrients : Ammonia by Fluorescence | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-2 | E298 | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Ammonia by Fluorescence | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-4 | E298 | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Chloride in Water by IC | | | | | | | | | | |
| HDPE BAK-2 | E235.Cl | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Chloride in Water by IC | | | | | | | | | | |
| HDPE BAK-4 | E235.Cl | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Nitrate in Water by IC | | | | | | | | | | |
| HDPE BAK-2 | E235.NO3 | 03-Jul-2025 | 04-Jul-2025 | 3 days | 1 days | ✓ | 04-Jul-2025 | 3 days | 1 days | ✓ |
| Anions and Nutrients : Nitrate in Water by IC | | | | | | | | | | |
| HDPE BAK-4 | E235.NO3 | 03-Jul-2025 | 04-Jul-2025 | 3 days | 1 days | ✓ | 04-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 | | |
| Anions and Nutrients : Nitrite in Water by IC | | | | | | | | | | | |
| HDPE BAK-2 | E235.NO2 | 03-Jul-2025 | 04-Jul-2025 | 3 days | 1 days | ✓ | 04-Jul-2025 | 3 days | 1 days | ✓ | |
| Anions and Nutrients : Nitrite in Water by IC | | | | | | | | | | | |
| HDPE BAK-4 | E235.NO2 | 03-Jul-2025 | 04-Jul-2025 | 3 days | 1 days | ✓ | 04-Jul-2025 | 3 days | 1 days | ✓ | |
| Anions and Nutrients : Sulfate in Water by IC | | | | | | | | | | | |
| HDPE BAK-2 | E235.SO4 | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ | |
| Anions and Nutrients : Sulfate in Water by IC | | | | | | | | | | | |
| HDPE BAK-4 | E235.SO4 | 03-Jul-2025 | 04-Jul-2025 | 28 days | 1 days | ✓ | 04-Jul-2025 | 28 days | 1 days | ✓ | |
| Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L) | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-2 | E372 | 03-Jul-2025 | 05-Jul-2025 | 28 days | 2 days | ✓ | 05-Jul-2025 | 28 days | 2 days | ✓ | |
| Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L) | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-4 | E372 | 03-Jul-2025 | 05-Jul-2025 | 28 days | 2 days | ✓ | 05-Jul-2025 | 28 days | 2 days | ✓ | |
| Dissolved Metals : Dissolved Mercury in Water by CVAAS | | | | | | | | | | | |
| Glass vial dissolved (hydrochloric acid) BAK-2 | E509 | 03-Jul-2025 | 10-Jul-2025 | 28 days | 7 days | ✓ | 10-Jul-2025 | 28 days | 7 days | ✓ | |
| Dissolved Metals : Dissolved Mercury in Water by CVAAS | | | | | | | | | | | |
| Glass vial dissolved (hydrochloric acid) BAK-4 | E509 | 03-Jul-2025 | 10-Jul-2025 | 28 days | 7 days | ✓ | 10-Jul-2025 | 28 days | 7 days | ✓ | |
| Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | | | | | | | | | | | |
| Sterile HDPE (sodium thiosulfate) BAK-2 | E010.FC-H | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 30 hrs | 28 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 | | Eval | Analysis Date | Holding Times | | Eval | |
| | | | | Rec | Actual | | | Rec | Actual | | |
| Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | | | | | | | | | | | |
| Sterile HDPE (sodium thiosulfate) BAK-4 | E010.FC-H | 03-Jul-2025 | ---- | ---- | ---- | | 04-Jul-2025 | 30 hrs | 29 hrs | ✓ | |
| Physical Tests : Alkalinity Species by Titration | | | | | | | | | | | |
| HDPE BAK-2 | E290 | 03-Jul-2025 | 07-Jul-2025 | 14 days | 4 days | ✓ | 07-Jul-2025 | 14 days | 4 days | ✓ | |
| Physical Tests : Alkalinity Species by Titration | | | | | | | | | | | |
| HDPE BAK-4 | E290 | 03-Jul-2025 | 07-Jul-2025 | 14 days | 4 days | ✓ | 07-Jul-2025 | 14 days | 4 days | ✓ | |
| Physical Tests : Conductivity in Water | | | | | | | | | | | |
| HDPE BAK-2 | E100 | 03-Jul-2025 | 07-Jul-2025 | 28 days | 4 days | ✓ | 07-Jul-2025 | 28 days | 4 days | ✓ | |
| Physical Tests : Conductivity in Water | | | | | | | | | | | |
| HDPE BAK-4 | E100 | 03-Jul-2025 | 07-Jul-2025 | 28 days | 4 days | ✓ | 07-Jul-2025 | 28 days | 4 days | ✓ | |
| Physical Tests : pH by Meter | | | | | | | | | | | |
| HDPE BAK-2 | E108 | 03-Jul-2025 | 07-Jul-2025 | 0.25 hrs | 103 hrs | * EHTR-FM | 07-Jul-2025 | 0.25 hrs | 103 hrs | * EHTR-FM | |
| Physical Tests : pH by Meter | | | | | | | | | | | |
| HDPE BAK-4 | E108 | 03-Jul-2025 | 07-Jul-2025 | 0.25 hrs | 103 hrs | * EHTR-FM | 07-Jul-2025 | 0.25 hrs | 103 hrs | * EHTR-FM | |
| Physical Tests : TSS by Gravimetry | | | | | | | | | | | |
| HDPE BAK-2 | E160 | 03-Jul-2025 | ---- | ---- | ---- | | 08-Jul-2025 | 7 days | 5 days | ✓ | |
| Physical Tests : TSS by Gravimetry | | | | | | | | | | | |
| HDPE BAK-4 | E160 | 03-Jul-2025 | ---- | ---- | ---- | | 08-Jul-2025 | 7 days | 5 days | ✓ | |



Matrix: **Water** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

| Analyte Group : Analytical Method Container / Client Sample ID(s) | Method | Sampling Date | Extraction / Preparation | | | | Analysis | | | |
|--|--------|---------------|--------------------------|---------------|--------|------|---------------|---------------|--------|------|
| | | | Preparation Date | Holding Times | | Eval | Analysis Date | Holding Times | | Eval |
| | | | | Rec | Actual | | | Rec | Actual | |
| Total Metals : Total Metals in Water by CRC ICPMS | | | | | | | | | | |
| HDPE total (nitric acid) BAK-2 | E420 | 03-Jul-2025 | 09-Jul-2025 | 180 days | 6 days | ✔ | 09-Jul-2025 | 180 days | 6 days | ✔ |
| Total Metals : Total Metals in Water by CRC ICPMS | | | | | | | | | | |
| HDPE total (nitric acid) BAK-4 | E420 | 03-Jul-2025 | 09-Jul-2025 | 180 days | 6 days | ✔ | 09-Jul-2025 | 180 days | 6 days | ✔ |

Legend & Qualifier Definitions

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

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

UCP: Unsuitable Container and/or Preservative used (invalidates standard hold time). Maximum hold time of zero applied. Test results may be biased low / unreliable, and may not meet regulatory requirements.



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 (%) | | Evaluation |
|--|-----------|----------|-------|---------|---------------|----------|------------|
| | | | QC | Regular | Actual | Expected | |
| Analytical Methods | | | | | | | |
| Laboratory Duplicates (DUP) | | | | | | | |
| Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | E101.FC-H | 2090181 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Conductivity in Water | E100 | 2094220 | 1 | 13 | 7.6 | 5.0 | ✔ |
| pH by Meter | E108 | 2094219 | 1 | 19 | 5.2 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2095182 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2090011 | 0 | 7 | 0.0 | 5.0 | ✘ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 0 | 13 | 0.0 | 5.0 | ✘ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 0 | 13 | 0.0 | 5.0 | ✘ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2094221 | 1 | 9 | 11.1 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 0 | 13 | 0.0 | 5.0 | ✘ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2090325 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2090322 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2098138 | 2 | 33 | 6.0 | 5.0 | ✔ |
| Laboratory Control Samples (LCS) | | | | | | | |
| Conductivity in Water | E100 | 2094220 | 1 | 13 | 7.6 | 5.0 | ✔ |
| pH by Meter | E108 | 2094219 | 1 | 19 | 5.2 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2095182 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2090011 | 1 | 7 | 14.2 | 5.0 | ✔ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2094221 | 1 | 9 | 11.1 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2090325 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2090322 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L | 2090326 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2098138 | 2 | 33 | 6.0 | 5.0 | ✔ |
| Oil & Grease by Gravimetry | E567 | 2094253 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Method Blanks (MB) | | | | | | | |



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 |
| Analytical Methods | | | | | | | |
| Method Blanks (MB) - Continued | | | | | | | |
| Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | E010.FC-H | 2090181 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Conductivity in Water | E100 | 2094220 | 1 | 13 | 7.6 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2095182 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2090011 | 1 | 7 | 14.2 | 5.0 | ✔ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2094221 | 1 | 9 | 11.1 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2090325 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2090322 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L | 2090326 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2098138 | 2 | 33 | 6.0 | 5.0 | ✔ |
| Oil & Grease by Gravimetry | E567 | 2094253 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Matrix Spikes (MS) | | | | | | | |
| Chloride in Water by IC | E235.Cl | 2090011 | 0 | 7 | 0.0 | 5.0 | ✖ |
| Nitrite in Water by IC | E235.NO2 | 2090010 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Nitrate in Water by IC | E235.NO3 | 2090009 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Sulfate in Water by IC | E235.SO4 | 2090004 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2089989 | 2 | 27 | 7.4 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2090961 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2095364 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Dissolved Mercury in Water by CVAAS | E509 | 2098914 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2098138 | 2 | 33 | 6.0 | 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 |
|---|---|--------|-------------------|--|
| 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 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. |
| Dissolved Mercury in Water by CVAAS | E509 ALS Environmental - Winnipeg | Water | APHA 3030B/EPA 1631E (mod) | Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS. |
| 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. |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L 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 ₃ Fe(CN) ₆) and 4-amino-antipyrine (4-AAP) to form a red complex which is measured colorimetrically. |
| Oil & Grease by Gravimetry | E567 ALS Environmental - Winnipeg | 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. |



| Analytical Methods | Method / Lab | Matrix | Method Reference | Method Descriptions |
|--|--|--------|------------------|---|
| Hardness (Calculated) from Total Ca/Mg | EC100A ALS Environmental - Winnipeg | Water | APHA 2340B | "Hardness (as CaCO ₃), 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. |
| 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). |

| 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. |
| Digestion for Total Phosphorus in water | EP372 ALS Environmental - Winnipeg | Water | APHA 4500-P E (mod). | Samples are heated with a persulfate digestion reagent. |
| Dissolved Mercury Water Filtration | EP509 ALS Environmental - Winnipeg | Water | APHA 3030B | Water samples are filtered (0.45 um), and preserved with HCl. |
| Oil & Grease Extraction for Gravimetry | EP567 ALS Environmental - Winnipeg | Water | BC MOE Lab Manual (Oil & Grease) (mod) | The entire water sample is extracted with hexane by liquid-liquid extraction. |

QUALITY CONTROL REPORT

| | | | |
|--------------------------------|--|--------------------------------|---|
| Work Order | : WP2510324 | Page | : 1 of 10 |
| Client | : Hamlet of Baker Lake | Laboratory | : ALS Environmental - Winnipeg |
| Contact | : Sheldon Dorey | Account Manager | : Daniel Rocha |
| Address | : PO BOX 149 Baker Lake NU Canada X0C 0A0 | Address | : 1329 Niakwa Road East, Unit 12 Winnipeg, Manitoba Canada R2J 3T4 |
| Telephone | : 867 793 2874 | Telephone | : +1 204 255 9720 |
| Project | : Baker Lake | Date Samples Received | : 04-Jul-2025 11:50 |
| PO | : ---- | Date Analysis Commenced | : 04-Jul-2025 |
| C-O-C number | : ---- | Issue Date | : 11-Jul-2025 14:22 |
| Sampler | : ---- | | |
| Site | : ---- | | |
| Quote number | : 2024 Analytical Testing | | |
| No. of samples received | : 2 | | |
| No. of samples analysed | : 2 | | |

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

This Quality Control Report contains the following information:

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

Signatories

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

| <i>Signatories</i> | <i>Position</i> | <i>Laboratory Department</i> |
|---------------------|------------------------|---|
| Nataliia Makovetska | | Winnipeg Organics, Winnipeg, Manitoba |
| Kevin Baxter | Supervisor - Inorganic | Winnipeg Inorganics, Winnipeg, Manitoba |
| Kevin Baxter | Supervisor - Inorganic | Winnipeg Metals, Winnipeg, Manitoba |
| Leila Conyard | Lab Assistant | Winnipeg Metals, Winnipeg, Manitoba |
| Nik Perkio | Senior Analyst | Waterloo Inorganics, Waterloo, Ontario |
| Oren Wurenqiqige | Analyst | Winnipeg Microbiology, Winnipeg, Manitoba |

Page : 2 of 10
Work Order : WP2510324
Client : Hamlet of Baker Lake
Project : Baker Lake



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: 2094219) | | | | | | | | | | | |
| WP2510321-001 | Anonymous | pH | ---- | E108 | 0.10 | pH units | 8.05 | 7.89 | 2.01% | 4% | ---- |
| Physical Tests (QC Lot: 2094220) | | | | | | | | | | | |
| WP2510321-001 | Anonymous | Conductivity | ---- | E100 | 2.0 | µS/cm | 179 | 178 | 0.560% | 10% | ---- |
| Physical Tests (QC Lot: 2094221) | | | | | | | | | | | |
| WP2510321-001 | Anonymous | Alkalinity, total (as CaCO ₃) | ---- | E290 | 1.0 | mg/L | 42.2 | 40.7 | 3.62% | 20% | ---- |
| Physical Tests (QC Lot: 2095182) | | | | | | | | | | | |
| WP2510317-001 | Anonymous | Solids, total suspended [TSS] | ---- | E160 | 3.0 | mg/L | <3.0 | <3.0 | 0 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2089989) | | | | | | | | | | | |
| WP2510289-013 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.0050 | mg/L | <0.0050 | 0.0055 | 0.0005 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2090004) | | | | | | | | | | | |
| WP2510293-007 | Anonymous | Sulfate (as SO ₄) | 14808-79-8 | E235.SO4 | 0.30 | mg/L | 0.56 | 0.54 | 0.02 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2090961) | | | | | | | | | | | |
| WP2510222-001 | Anonymous | Phosphorus, total | 7723-14-0 | E372 | 0.020 | mg/L | 0.348 | 0.354 | 1.92% | 20% | ---- |
| Anions and Nutrients (QC Lot: 2093279) | | | | | | | | | | | |
| WP2510364-002 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.0100 | mg/L | 0.485 | 0.490 | 1.04% | 20% | ---- |
| Microbiological Tests (QC Lot: 2090181) | | | | | | | | | | | |
| WP2510324-001 | BAK-2 | Coliforms, thermotolerant [fecal] | ---- | E010.FC-H | 10 | MPN/100mL | 100 | 60 | 41.5% | 65% | ---- |
| Dissolved Metals (QC Lot: 2098914) | | | | | | | | | | | |
| WP2510289-015 | Anonymous | Mercury, dissolved | 7439-97-6 | E509 | 0.0000050 | mg/L | <0.0000050 | <0.0000050 | 0 | Diff <2x LOR | ---- |
| Aggregate Organics (QC Lot: 2090322) | | | | | | | | | | | |
| WP2510203-001 | Anonymous | Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2.0 | mg/L | <2.0 | <2.0 | 0.0% | 30% | ---- |
| Aggregate Organics (QC Lot: 2090325) | | | | | | | | | | | |
| WP2510282-002 | Anonymous | Biochemical oxygen demand [BOD] | ---- | E550 | 2.0 | mg/L | 2.4 | 2.9 | 18.9% | 30% | ---- |
| Aggregate Organics (QC Lot: 2098138) | | | | | | | | | | | |
| TY2507138-001 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0010 | mg/L | 0.0128 | 0.0126 | 1.10% | 20% | ---- |
| Aggregate Organics (QC Lot: 2098139) | | | | | | | | | | | |
| HA2502238-001 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0010 | mg/L | 0.0021 | 0.0020 | 0.00007 | 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: 2094220) | | | | | | |
| Conductivity | --- | E100 | 1 | µS/cm | <1.0 | --- |
| Physical Tests (QCLot: 2094221) | | | | | | |
| Alkalinity, total (as CaCO3) | --- | E290 | 1 | mg/L | <1.0 | --- |
| Physical Tests (QCLot: 2095182) | | | | | | |
| Solids, total suspended [TSS] | --- | E160 | 3 | mg/L | <3.0 | --- |
| Anions and Nutrients (QCLot: 2089989) | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | <0.0050 | --- |
| Anions and Nutrients (QCLot: 2090004) | | | | | | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 0.3 | mg/L | <0.30 | --- |
| Anions and Nutrients (QCLot: 2090009) | | | | | | |
| Nitrate (as N) | 14797-55-8 | E235.NO3 | 0.02 | mg/L | <0.020 | --- |
| Anions and Nutrients (QCLot: 2090010) | | | | | | |
| Nitrite (as N) | 14797-65-0 | E235.NO2 | 0.01 | mg/L | <0.010 | --- |
| Anions and Nutrients (QCLot: 2090011) | | | | | | |
| Chloride | 16887-00-6 | E235.Cl | 0.5 | mg/L | <0.50 | --- |
| Anions and Nutrients (QCLot: 2090961) | | | | | | |
| Phosphorus, total | 7723-14-0 | E372 | 0.02 | mg/L | <0.020 | --- |
| Anions and Nutrients (QCLot: 2093279) | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | <0.0050 | --- |
| Microbiological Tests (QCLot: 2090181) | | | | | | |
| Coliforms, thermotolerant [fecal] | --- | E010.FC-H | 10 | MPN/100mL | <10 | --- |
| Total Metals (QCLot: 2095364) | | | | | | |
| 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 | --- |



Sub-Matrix: **Water**

| Analyte | CAS Number | Method | LOR | Unit | Result | Qualifier |
|--|------------|--------|----------|------|------------|-----------|
| Total Metals (QCLot: 2095364) - continued | | | | | | |
| Cesium, total | 7440-46-2 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Chromium, total | 7440-47-3 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Cobalt, total | 7440-48-4 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Copper, total | 7440-50-8 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Iron, total | 7439-89-6 | E420 | 0.01 | mg/L | <0.010 | ---- |
| Lead, total | 7439-92-1 | E420 | 0.00005 | mg/L | <0.000050 | ---- |
| Lithium, total | 7439-93-2 | E420 | 0.001 | mg/L | <0.0010 | ---- |
| Magnesium, total | 7439-95-4 | E420 | 0.005 | mg/L | <0.0050 | ---- |
| Manganese, total | 7439-96-5 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Molybdenum, total | 7439-98-7 | E420 | 0.00005 | mg/L | <0.000050 | ---- |
| Nickel, total | 7440-02-0 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Phosphorus, total | 7723-14-0 | E420 | 0.05 | mg/L | <0.050 | ---- |
| Potassium, total | 7440-09-7 | E420 | 0.05 | mg/L | <0.050 | ---- |
| Rubidium, total | 7440-17-7 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Selenium, total | 7782-49-2 | E420 | 0.00005 | mg/L | <0.000050 | ---- |
| Silicon, total | 7440-21-3 | E420 | 0.1 | mg/L | <0.10 | ---- |
| Silver, total | 7440-22-4 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Sodium, total | 7440-23-5 | E420 | 0.05 | mg/L | <0.050 | ---- |
| Strontium, total | 7440-24-6 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Sulfur, total | 7704-34-9 | E420 | 0.5 | mg/L | <0.50 | ---- |
| Tellurium, total | 13494-80-9 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Thallium, total | 7440-28-0 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Thorium, total | 7440-29-1 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Tin, total | 7440-31-5 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Titanium, total | 7440-32-6 | E420 | 0.0003 | mg/L | <0.00030 | ---- |
| Tungsten, total | 7440-33-7 | E420 | 0.0001 | mg/L | <0.00010 | ---- |
| Uranium, total | 7440-61-1 | E420 | 0.00001 | mg/L | <0.000010 | ---- |
| Vanadium, total | 7440-62-2 | E420 | 0.0005 | mg/L | <0.00050 | ---- |
| Zinc, total | 7440-66-6 | E420 | 0.003 | mg/L | <0.0030 | ---- |
| Zirconium, total | 7440-67-7 | E420 | 0.0002 | mg/L | <0.00020 | ---- |
| Dissolved Metals (QCLot: 2098914) | | | | | | |
| Mercury, dissolved | 7439-97-6 | E509 | 0.000005 | mg/L | <0.0000050 | ---- |
| Aggregate Organics (QCLot: 2090322) | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2 | mg/L | <2.0 | ---- |
| Aggregate Organics (QCLot: 2090325) | | | | | | |



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> |
|--|-------------------|---------------|------------|-------------|---------------|------------------|
| Aggregate Organics (QCLot: 2090325) - continued | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550 | 2 | mg/L | <2.0 | ---- |
| Aggregate Organics (QCLot: 2090326) | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L | 1 | mg/L | <1.0 | ---- |
| Aggregate Organics (QCLot: 2094253) | | | | | | |
| Oil & grease (gravimetric) | ---- | E567 | 5 | mg/L | <5.0 | ---- |
| Aggregate Organics (QCLot: 2098138) | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | <0.0010 | ---- |
| Aggregate Organics (QCLot: 2098139) | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | <0.0010 | ---- |



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: 2094219) | | | | | | | | | |
| pH | ---- | E108 | ---- | pH units | 7 pH units | 101 | 98.0 | 102 | ---- |
| Physical Tests (QCLot: 2094220) | | | | | | | | | |
| Conductivity | ---- | E100 | 1 | µS/cm | 1410 µS/cm | 98.8 | 90.0 | 110 | ---- |
| Physical Tests (QCLot: 2094221) | | | | | | | | | |
| Alkalinity, total (as CaCO3) | ---- | E290 | 1 | mg/L | 100 mg/L | 101 | 85.0 | 115 | ---- |
| Physical Tests (QCLot: 2095182) | | | | | | | | | |
| Solids, total suspended [TSS] | ---- | E160 | 3 | mg/L | 150 mg/L | 92.6 | 85.0 | 115 | ---- |
| Anions and Nutrients (QCLot: 2089989) | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | 0.2 mg/L | 113 | 85.0 | 115 | ---- |
| Anions and Nutrients (QCLot: 2090004) | | | | | | | | | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 0.3 | mg/L | 100 mg/L | 98.4 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090009) | | | | | | | | | |
| Nitrate (as N) | 14797-55-8 | E235.NO3 | 0.02 | mg/L | 2.5 mg/L | 97.3 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090010) | | | | | | | | | |
| Nitrite (as N) | 14797-65-0 | E235.NO2 | 0.01 | mg/L | 0.5 mg/L | 96.7 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090011) | | | | | | | | | |
| Chloride | 16887-00-6 | E235.Cl | 0.5 | mg/L | 100 mg/L | 97.0 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2090961) | | | | | | | | | |
| Phosphorus, total | 7723-14-0 | E372 | 0.02 | mg/L | 0.5 mg/L | 94.1 | 80.0 | 120 | ---- |
| Anions and Nutrients (QCLot: 2093279) | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | 0.2 mg/L | 102 | 85.0 | 115 | ---- |
| Total Metals (QCLot: 2095364) | | | | | | | | | |
| Aluminum, total | 7429-90-5 | E420 | 0.003 | mg/L | 2 mg/L | 93.5 | 80.0 | 120 | ---- |
| Antimony, total | 7440-36-0 | E420 | 0.0001 | mg/L | 1 mg/L | 92.1 | 80.0 | 120 | ---- |
| Arsenic, total | 7440-38-2 | E420 | 0.0001 | mg/L | 1 mg/L | 98.7 | 80.0 | 120 | ---- |
| Barium, total | 7440-39-3 | E420 | 0.0001 | mg/L | 0.25 mg/L | 95.0 | 80.0 | 120 | ---- |
| Beryllium, total | 7440-41-7 | E420 | 0.00002 | mg/L | 0.1 mg/L | 93.3 | 80.0 | 120 | ---- |
| Bismuth, total | 7440-69-9 | E420 | 0.00005 | mg/L | 1 mg/L | 94.4 | 80.0 | 120 | ---- |
| Boron, total | 7440-42-8 | E420 | 0.01 | mg/L | 1 mg/L | 100 | 80.0 | 120 | ---- |
| Cadmium, total | 7440-43-9 | E420 | 0.000005 | mg/L | 0.1 mg/L | 91.6 | 80.0 | 120 | ---- |



Sub-Matrix: Water

| | | | | | Laboratory Control Sample (LCS) Report | | | | |
|--|------------|--------|----------|------|--|--------------|---------------------|------|-----------|
| | | | | | Spike | Recovery (%) | Recovery Limits (%) | | |
| Analyte | CAS Number | Method | LOR | Unit | Target Concentration | LCS | Low | High | Qualifier |
| Total Metals (QCLot: 2095364) - continued | | | | | | | | | |
| Calcium, total | 7440-70-2 | E420 | 0.05 | mg/L | 50 mg/L | 92.3 | 80.0 | 120 | ---- |
| Cesium, total | 7440-46-2 | E420 | 0.00001 | mg/L | 0.05 mg/L | 86.4 | 80.0 | 120 | ---- |
| Chromium, total | 7440-47-3 | E420 | 0.0005 | mg/L | 0.25 mg/L | 94.7 | 80.0 | 120 | ---- |
| Cobalt, total | 7440-48-4 | E420 | 0.0001 | mg/L | 0.25 mg/L | 94.5 | 80.0 | 120 | ---- |
| Copper, total | 7440-50-8 | E420 | 0.0005 | mg/L | 0.25 mg/L | 95.2 | 80.0 | 120 | ---- |
| Iron, total | 7439-89-6 | E420 | 0.01 | mg/L | 1 mg/L | 93.7 | 80.0 | 120 | ---- |
| Lead, total | 7439-92-1 | E420 | 0.00005 | mg/L | 0.5 mg/L | 97.5 | 80.0 | 120 | ---- |
| Lithium, total | 7439-93-2 | E420 | 0.001 | mg/L | 0.25 mg/L | 85.3 | 80.0 | 120 | ---- |
| Magnesium, total | 7439-95-4 | E420 | 0.005 | mg/L | 50 mg/L | 100.0 | 80.0 | 120 | ---- |
| Manganese, total | 7439-96-5 | E420 | 0.0001 | mg/L | 0.25 mg/L | 93.8 | 80.0 | 120 | ---- |
| Molybdenum, total | 7439-98-7 | E420 | 0.00005 | mg/L | 0.25 mg/L | 93.4 | 80.0 | 120 | ---- |
| Nickel, total | 7440-02-0 | E420 | 0.0005 | mg/L | 0.5 mg/L | 93.9 | 80.0 | 120 | ---- |
| Phosphorus, total | 7723-14-0 | E420 | 0.05 | mg/L | 10 mg/L | 96.0 | 80.0 | 120 | ---- |
| Potassium, total | 7440-09-7 | E420 | 0.05 | mg/L | 50 mg/L | 93.3 | 80.0 | 120 | ---- |
| Rubidium, total | 7440-17-7 | E420 | 0.0002 | mg/L | 0.1 mg/L | 95.6 | 80.0 | 120 | ---- |
| Selenium, total | 7782-49-2 | E420 | 0.00005 | mg/L | 1 mg/L | 92.8 | 80.0 | 120 | ---- |
| Silicon, total | 7440-21-3 | E420 | 0.1 | mg/L | 10 mg/L | 95.3 | 80.0 | 120 | ---- |
| Silver, total | 7440-22-4 | E420 | 0.00001 | mg/L | 0.1 mg/L | 85.8 | 80.0 | 120 | ---- |
| Sodium, total | 7440-23-5 | E420 | 0.05 | mg/L | 50 mg/L | 93.2 | 80.0 | 120 | ---- |
| Strontium, total | 7440-24-6 | E420 | 0.0002 | mg/L | 0.25 mg/L | 90.2 | 80.0 | 120 | ---- |
| Sulfur, total | 7704-34-9 | E420 | 0.5 | mg/L | 50 mg/L | 89.7 | 80.0 | 120 | ---- |
| Tellurium, total | 13494-80-9 | E420 | 0.0002 | mg/L | 0.1 mg/L | 93.6 | 80.0 | 120 | ---- |
| Thallium, total | 7440-28-0 | E420 | 0.00001 | mg/L | 1 mg/L | 94.3 | 80.0 | 120 | ---- |
| Thorium, total | 7440-29-1 | E420 | 0.0001 | mg/L | 0.1 mg/L | 91.1 | 80.0 | 120 | ---- |
| Tin, total | 7440-31-5 | E420 | 0.0001 | mg/L | 0.5 mg/L | 91.8 | 80.0 | 120 | ---- |
| Titanium, total | 7440-32-6 | E420 | 0.0003 | mg/L | 0.25 mg/L | 92.0 | 80.0 | 120 | ---- |
| Tungsten, total | 7440-33-7 | E420 | 0.0001 | mg/L | 0.1 mg/L | 95.6 | 80.0 | 120 | ---- |
| Uranium, total | 7440-61-1 | E420 | 0.00001 | mg/L | 0.005 mg/L | 94.5 | 80.0 | 120 | ---- |
| Vanadium, total | 7440-62-2 | E420 | 0.0005 | mg/L | 0.5 mg/L | 94.9 | 80.0 | 120 | ---- |
| Zinc, total | 7440-66-6 | E420 | 0.003 | mg/L | 0.5 mg/L | 95.9 | 80.0 | 120 | ---- |
| Zirconium, total | 7440-67-7 | E420 | 0.0002 | mg/L | 0.1 mg/L | 91.0 | 80.0 | 120 | ---- |
| Mercury, dissolved | 7439-97-6 | E509 | 0.000005 | mg/L | 0 mg/L | 98.2 | 80.0 | 120 | ---- |
| Aggregate Organics (QCLot: 2090322) | | | | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2 | mg/L | 198 mg/L | 105 | 85.0 | 115 | ---- |



Sub-Matrix: **Water**

| | | | | | Laboratory Control Sample (LCS) Report | | | | | |
|---|------------|--------|-------|------|--|------|--------------|---------------------|-----------|--|
| | | | | | Spike | | Recovery (%) | Recovery Limits (%) | | |
| Analyte | CAS Number | Method | LOR | Unit | Target Concentration | LCS | Low | High | Qualifier | |
| Aggregate Organics (QCLot: 2090325) | | | | | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550 | 2 | mg/L | 198 mg/L | 97.9 | 85.0 | 115 | ---- | |
| Aggregate Organics (QCLot: 2090326) | | | | | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L | 1 | mg/L | 198 mg/L | 90.8 | 85.0 | 115 | ---- | |
| Aggregate Organics (QCLot: 2094253) | | | | | | | | | | |
| Oil & grease (gravimetric) | ---- | E567 | 5 | mg/L | 100 mg/L | 86.0 | 70.0 | 130 | ---- | |
| Aggregate Organics (QCLot: 2098138) | | | | | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | 0.02 mg/L | 105 | 85.0 | 115 | ---- | |
| Aggregate Organics (QCLot: 2098139) | | | | | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | 0.02 mg/L | 104 | 85.0 | 115 | ---- | |

Matrix Spike (MS) Report

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

Sub-Matrix: **Water**

| | | | | | Matrix Spike (MS) Report | | | | | |
|--|------------------|-----------------------|------------|----------|--------------------------|-----------|--------------|---------------------|------|-----------|
| | | | | | Spike | | Recovery (%) | Recovery Limits (%) | | |
| Laboratory sample ID | Client sample ID | Analyte | CAS Number | Method | Concentration | Target | MS | Low | High | Qualifier |
| Anions and Nutrients (QCLot: 2089989) | | | | | | | | | | |
| WP2510289-013 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.108 mg/L | 0.1 mg/L | 108 | 75.0 | 125 | ---- |
| Anions and Nutrients (QCLot: 2090004) | | | | | | | | | | |
| WP2510293-007 | Anonymous | Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 101 mg/L | 100 mg/L | 101 | 75.0 | 125 | ---- |
| Anions and Nutrients (QCLot: 2090961) | | | | | | | | | | |
| WP2510237-001 | Anonymous | Phosphorus, total | 7723-14-0 | E372 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| Anions and Nutrients (QCLot: 2093279) | | | | | | | | | | |
| WP2510364-002 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | ND mg/L | ---- | ND | 75.0 | 125 | ---- |
| Dissolved Metals (QCLot: 2098914) | | | | | | | | | | |
| WP2510293-001 | Anonymous | Mercury, dissolved | 7439-97-6 | E509 | 0.0000943 mg/L | 0 mg/L | 94.3 | 70.0 | 130 | ---- |
| Aggregate Organics (QCLot: 2098138) | | | | | | | | | | |
| TY2507138-001 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0207 mg/L | 0.02 mg/L | 103 | 75.0 | 125 | ---- |
| Aggregate Organics (QCLot: 2098139) | | | | | | | | | | |
| HA2502238-001 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0202 mg/L | 0.02 mg/L | 101 | 75.0 | 125 | ---- |

Page : 10 of 10
Work Order : WP2510324
Client : Hamlet of Baker Lake
Project : Baker Lake



CERTIFICATE OF ANALYSIS

| | | | |
|--------------------------------|---|--------------------------------|----------------------------------|
| Work Order | : WP2514418 | Laboratory | : ALS Environmental - Winnipeg |
| Client | : Hamlet of Baker Lake | Account Manager | : Daniel Rocha |
| Contact | : Sheldon Dorey | Address | : 1329 Niakwa Road East, Unit 12 |
| Address | : PO BOX 149 Baker Lake Nunavut Canada X0C 0A0 | | : Winnipeg MB Canada R2J 3T4 |
| Telephone | : 867 793 2874 | E-mail | : daniel.rocha@alsglobal.com |
| Project | : Baker Lake | Telephone | : +1 204 255 9720 |
| PO | : ---- | Date Samples Received | : 27-Aug-2025 09:58 |
| C-O-C number | : ---- | Date Analysis Commenced | : 27-Aug-2025 |
| Sampler | : ---- | Issue Date | : 08-Sep-2025 15:10 |
| Site | : ---- | | |
| Quote number | : 2024 Analytical Testing | | |
| No. of samples received | : 3 | | |
| No. of samples analysed | : 3 | | |

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- 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> |
|--------------------|-----------------|----------------------------------|
| Brennan Dugas | | Microbiology, Winnipeg, Manitoba |
| Lee McTavish | | Metals, Winnipeg, Manitoba |
| Lee McTavish | | Inorganics, Winnipeg, Manitoba |
| Leila Conyard | | Metals, Winnipeg, Manitoba |
| Livia Ciolan | | Organics, Winnipeg, Manitoba |
| Manjit Brar | | Organics, Winnipeg, Manitoba |
| Manuel TaveraTello | | Organics, Waterloo, Ontario |
| Ryan Velasco | | 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> |
|-------------|--|
| - | no units |
| 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> |
|------------------|--|
| BODP | BOD dilution results differed by more than 30% RPD. Precision of reported BOD result may be less than usual. |
| 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 | BAK-2 ---- | BAK-3 ---- | BAK-4 ---- | ---- | ---- |
|---------------------------------------|------------|--------------|--------|------------|-----------------------------|-------------------|-----------------------|-------------------|------|------|
| | | | | | Client sampling date / time | 26-Aug-2025 10:00 | 26-Aug-2025 10:30 | 26-Aug-2025 11:00 | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2514418-001 | WP2514418-002 | WP2514418-003 | ---- | ---- | |
| | | | | | Result | Result | Result | ---- | ---- | |
| Physical Tests | | | | | | | | | | |
| Alkalinity, bicarbonate (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | 42.4 | 14.0 | 319 | ---- | ---- | |
| Alkalinity, bicarbonate (as HCO3) | 71-52-3 | E290/WP | 1.2 | mg/L | 51.7 | 17.1 | 389 | ---- | ---- | |
| Alkalinity, carbonate (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | <1.0 | 8.4 | <1.0 | ---- | ---- | |
| Alkalinity, carbonate (as CO3) | 3812-32-6 | E290/WP | 1.0 | mg/L | <0.6 | 5.0 | <0.6 | ---- | ---- | |
| Alkalinity, hydroxide (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | <1.0 | <1.0 | <1.0 | ---- | ---- | |
| Alkalinity, hydroxide (as OH) | 14280-30-9 | E290/WP | 1.0 | mg/L | <0.3 | <0.3 | <0.3 | ---- | ---- | |
| Alkalinity, total (as CaCO3) | ---- | E290/WP | 1.0 | mg/L | 42.4 | 22.4 | 319 | ---- | ---- | |
| Conductivity | ---- | E100/WP | 2.0 | µS/cm | 214 | 123 | 2030 | ---- | ---- | |
| Hardness (as CaCO3), from total Ca/Mg | ---- | EC100A/WP | 0.50 | mg/L | 61.8 | 32.9 | 765 | ---- | ---- | |
| pH | ---- | E108/WP | 0.10 | pH units | 7.50 | 9.25 | 7.59 | ---- | ---- | |
| Solids, total suspended [TSS] | ---- | E160/WP | 3.0 | mg/L | 41.0 | 19.0 | 42.4 | ---- | ---- | |
| Anions and Nutrients | | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298/WP | 0.0050 | mg/L | 0.108 | <0.0050 | 2.34 | ---- | ---- | |
| Chloride | 16887-00-6 | E235.Cl/WP | 0.50 | mg/L | 23.8 | 17.2 | 185 | ---- | ---- | |
| Nitrate (as N) | 14797-55-8 | E235.NO3/WP | 0.020 | mg/L | 0.766 | <0.020 | <0.200 ^{DLM} | ---- | ---- | |
| Nitrate + Nitrite (as N) | ---- | EC235.N+N/WP | 0.0050 | mg/L | 0.838 | <0.0224 | <0.224 | ---- | ---- | |
| Nitrite (as N) | 14797-65-0 | E235.NO2/WP | 0.010 | mg/L | 0.072 | <0.010 | <0.100 ^{DLM} | ---- | ---- | |
| Phosphorus, total | 7723-14-0 | E372/WP | 0.020 | mg/L | 0.846 | 0.102 | 0.306 | ---- | ---- | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4/WP | 0.30 | mg/L | 16.3 | 6.44 | 555 | ---- | ---- | |
| Microbiological Tests | | | | | | | | | | |
| Coliforms, thermotolerant [fecal] | ---- | E010.FC-H/WP | 10 | MPN/100 mL | 20 | <10 | 1550 | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-2 ---- | BAK-3 ---- | BAK-4 ---- | ---- | ---- |
|---------------------|------------|------------|-----------|------|-----------------------------|-------------------|-------------------|-------------------|------|------|
| | | | | | Client sampling date / time | 26-Aug-2025 10:00 | 26-Aug-2025 10:30 | 26-Aug-2025 11:00 | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2514418-001 | WP2514418-002 | WP2514418-003 | ---- | ---- | |
| | | | | | Result | Result | Result | ---- | ---- | |
| Total Metals | | | | | | | | | | |
| Aluminum, total | 7429-90-5 | E420/WP | 0.0030 | mg/L | 0.501 | 0.0214 | 0.0622 | ---- | ---- | |
| Antimony, total | 7440-36-0 | E420/WP | 0.00010 | mg/L | 0.00015 | 0.000062 | 0.00196 | ---- | ---- | |
| Arsenic, total | 7440-38-2 | E420/WP | 0.00010 | mg/L | 0.00091 | 0.00068 | 0.00082 | ---- | ---- | |
| Barium, total | 7440-39-3 | E420/WP | 0.00010 | mg/L | 0.0622 | 0.0443 | 0.0324 | ---- | ---- | |
| Beryllium, total | 7440-41-7 | E420/WP | 0.000020 | mg/L | 0.000028 | 0.0000041 | 0.0000034 | ---- | ---- | |
| Bismuth, total | 7440-69-9 | E420/WP | 0.000050 | mg/L | 0.000125 | 0.0000057 | 0.000018 | ---- | ---- | |
| Boron, total | 7440-42-8 | E420/WP | 0.010 | mg/L | 0.061 | 0.018 | 0.942 | ---- | ---- | |
| Cadmium, total | 7440-43-9 | E420/WP | 0.0000050 | mg/L | 0.0000178 | 0.0000067 | 0.0000501 | ---- | ---- | |
| Calcium, total | 7440-70-2 | E420/WP | 0.050 | mg/L | 18.4 | 9.95 | 248 | ---- | ---- | |
| Cesium, total | 7440-46-2 | E420/WP | 0.000010 | mg/L | 0.000093 | 0.0000074 | 0.000056 | ---- | ---- | |
| Chromium, total | 7440-47-3 | E420/WP | 0.00050 | mg/L | 0.00104 | 0.000092 | 0.00023 | ---- | ---- | |
| Cobalt, total | 7440-48-4 | E420/WP | 0.00010 | mg/L | 0.00057 | 0.00019 | 0.00573 | ---- | ---- | |
| Copper, total | 7440-50-8 | E420/WP | 0.00050 | mg/L | 0.00578 | 0.00153 | 0.00758 | ---- | ---- | |
| Iron, total | 7439-89-6 | E420/WP | 0.010 | mg/L | 1.64 | 0.326 | 7.43 | ---- | ---- | |
| Lead, total | 7439-92-1 | E420/WP | 0.000050 | mg/L | 0.000638 | 0.000042 | 0.000601 | ---- | ---- | |
| Lithium, total | 7439-93-2 | E420/WP | 0.0010 | mg/L | 0.0025 | 0.0012 | 0.0309 | ---- | ---- | |
| Magnesium, total | 7439-95-4 | E420/WP | 0.0050 | mg/L | 3.85 | 1.96 | 35.3 | ---- | ---- | |
| Manganese, total | 7439-96-5 | E420/WP | 0.00010 | mg/L | 0.140 | 0.0410 | 1.16 | ---- | ---- | |
| Molybdenum, total | 7439-98-7 | E420/WP | 0.000050 | mg/L | 0.000241 | 0.000319 | 0.000893 | ---- | ---- | |
| Nickel, total | 7440-02-0 | E420/WP | 0.00050 | mg/L | 0.00146 | 0.00054 | 0.00799 | ---- | ---- | |
| Phosphorus, total | 7723-14-0 | E420/WP | 0.050 | mg/L | 0.966 | 0.107 | 0.253 | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-2 ---- | BAK-3 ---- | BAK-4 ---- | ---- | ---- |
|---------------------------------------|------------|------------|-----------|------|-----------------------------|-------------------|-------------------|-------------------|------|------|
| | | | | | Client sampling date / time | 26-Aug-2025 10:00 | 26-Aug-2025 10:30 | 26-Aug-2025 11:00 | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2514418-001 | WP2514418-002 | WP2514418-003 | ---- | ---- | |
| | | | | | Result | Result | Result | ---- | ---- | |
| Total Metals | | | | | | | | | | |
| Potassium, total | 7440-09-7 | E420/WP | 0.050 | mg/L | 3.25 | 1.34 | 31.1 | ---- | ---- | |
| Rubidium, total | 7440-17-7 | E420/WP | 0.00020 | mg/L | 0.00325 | 0.00113 | 0.0216 | ---- | ---- | |
| Selenium, total | 7782-49-2 | E420/WP | 0.000050 | mg/L | 0.000156 | 0.000059 | 0.000115 | ---- | ---- | |
| Silicon, total | 7440-21-3 | E420/WP | 0.10 | mg/L | 2.44 | 0.81 | 2.96 | ---- | ---- | |
| Silver, total | 7440-22-4 | E420/WP | 0.000010 | mg/L | 0.000026 | 0.0000025 | 0.000014 | ---- | ---- | |
| Sodium, total | 7440-23-5 | E420/WP | 0.050 | mg/L | 16.8 | 8.91 | 134 | ---- | ---- | |
| Strontium, total | 7440-24-6 | E420/WP | 0.00020 | mg/L | 0.0799 | 0.0413 | 1.26 | ---- | ---- | |
| Sulfur, total | 7704-34-9 | E420/WP | 0.50 | mg/L | 7.43 | 2.40 | 203 | ---- | ---- | |
| Tellurium, total | 13494-80-9 | E420/WP | 0.00020 | mg/L | Not Detected | 0.000023 | 0.000099 | ---- | ---- | |
| Thallium, total | 7440-28-0 | E420/WP | 0.000010 | mg/L | 0.0000043 | 0.0000033 | 0.0000027 | ---- | ---- | |
| Thorium, total | 7440-29-1 | E420/WP | 0.00010 | mg/L | 0.00019 | 0.000016 | 0.000046 | ---- | ---- | |
| Tin, total | 7440-31-5 | E420/WP | 0.00010 | mg/L | 0.00012 | 0.000012 | 0.00013 | ---- | ---- | |
| Titanium, total | 7440-32-6 | E420/WP | 0.00030 | mg/L | 0.0153 | 0.00050 | 0.00195 | ---- | ---- | |
| Tungsten, total | 7440-33-7 | E420/WP | 0.00010 | mg/L | 0.000032 | Not Detected | 0.000038 | ---- | ---- | |
| Uranium, total | 7440-61-1 | E420/WP | 0.000010 | mg/L | 0.000486 | 0.000101 | 0.000564 | ---- | ---- | |
| Vanadium, total | 7440-62-2 | E420/WP | 0.00050 | mg/L | 0.00142 | 0.00032 | 0.00033 | ---- | ---- | |
| Zinc, total | 7440-66-6 | E420/WP | 0.0030 | mg/L | 0.0097 | 0.0014 | 0.179 | ---- | ---- | |
| Zirconium, total | 7440-67-7 | E420/WP | 0.00020 | mg/L | 0.00052 | 0.000072 | 0.00022 | ---- | ---- | |
| Dissolved Metals | | | | | | | | | | |
| Mercury, dissolved | 7439-97-6 | E509/WP | 0.0000050 | mg/L | <0.0000050 | <0.0000050 | <0.0000050 | ---- | ---- | |
| Dissolved mercury filtration location | ---- | EP509/WP | - | - | Field | Field | Field | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-2 | BAK-3 | BAK-4 | ---- | ---- |
|---|-------------|------------|---------|------|-----------------------------|---------------------|-------------------|-------------------|------|------|
| | | | | | Client sampling date / time | 26-Aug-2025 10:00 | 26-Aug-2025 10:30 | 26-Aug-2025 11:00 | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2514418-001 | WP2514418-002 | WP2514418-003 | ---- | ---- | |
| | | | | | Result | Result | Result | ---- | ---- | |
| Aggregate Organics | | | | | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550/WP | 2.0 | mg/L | 7.9 | <6.0 | <6.0 | ---- | ---- | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L/WP | 1.0 | mg/L | 4.7 | 3.4 ^{BODP} | 3.2 | ---- | ---- | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555/WP | 2.0 | mg/L | <6.0 | <6.0 | <6.0 | ---- | ---- | |
| Oil & grease (gravimetric) | ---- | E567/WT | 5.0 | mg/L | <5.0 | <5.0 | <5.0 | ---- | ---- | |
| Phenols, total (4AAP) | ---- | E562/WT | 0.0010 | mg/L | 0.0011 | <0.0010 | 0.0071 | ---- | ---- | |
| Volatile Organic Compounds | | | | | | | | | | |
| 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 | ---- | ---- | 0.00039 | ---- | ---- | |
| Xylenes, total | 1330-20-7 | E611A/WP | 0.00050 | mg/L | ---- | ---- | <0.00050 | ---- | ---- | |
| BTEX, total | ---- | E611A/WP | 0.0010 | mg/L | ---- | ---- | <0.0010 | ---- | ---- | |
| Hydrocarbons | | | | | | | | | | |
| 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 | ---- | ---- | |



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

| | | | | | Client sample ID | BAK-2 ---- | BAK-3 ---- | BAK-4 ---- | ---- | ---- |
|--|------------|------------|-----|------|-----------------------------|-------------------|-------------------|-------------------|------|------|
| | | | | | Client sampling date / time | 26-Aug-2025 10:00 | 26-Aug-2025 10:30 | 26-Aug-2025 11:00 | ---- | ---- |
| Analyte | CAS Number | Method/Lab | LOR | Unit | WP2514418-001 | WP2514418-002 | WP2514418-003 | ---- | ---- | |
| | | | | | Result | Result | Result | ---- | ---- | |
| Hydrocarbons Surrogates | | | | | | | | | | |
| Bromobenzotrifluoride, 2- (F2-F4 surrogate) | 392-83-6 | E601/WP | 1.0 | % | ---- | ---- | 105 | ---- | ---- | |
| Dichlorotoluene, 3,4- | 95-75-0 | E581.F1/WP | 1.0 | % | ---- | ---- | 111 | ---- | ---- | |
| Volatile Organic Compounds Surrogates | | | | | | | | | | |
| Bromofluorobenzene, 4- | 460-00-4 | E611A/WP | 1.0 | % | ---- | ---- | 81.1 | ---- | ---- | |
| Difluorobenzene, 1,4- | 540-36-3 | E611A/WP | 1.0 | % | ---- | ---- | 99.8 | ---- | ---- | |

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



QUALITY CONTROL INTERPRETIVE REPORT

| | |
|--|---|
| <p>Work Order : WP2514418</p> <p>Client : Hamlet of Baker Lake</p> <p>Contact : Sheldon Dorey</p> <p>Address : PO BOX 149 Baker Lake NU Canada X0C 0A0</p> <p>Telephone : 867 793 2874</p> <p>Project : Baker Lake</p> <p>PO : ----</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : ----</p> <p>Quote number : 2024 Analytical Testing</p> <p>No. of samples received : 3</p> <p>No. of samples analysed : 3</p> | <p>Page : 1 of 15</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 : 27-Aug-2025 09:58</p> <p>Issue Date : 08-Sep-2025 15:10</p> |
|--|---|

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)

- 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 | |
| Aggregate Organics : Biochemical Oxygen Demand - 5 day | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-4 | E550 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 54 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand - 5 day | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-2 | E550 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 55 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand - 5 day | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-3 | E550 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 55 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-4 | E555-L | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 54 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-2 | E555-L | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 55 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-3 | E555-L | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 55 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-4 | E555 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 54 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 | | Eval | Analysis Date | Holding Times | | Eval |
| | | | | Rec | Actual | | | Rec | Actual | |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-2 | E555 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 55 hrs | * EHT |
| Aggregate Organics : Biochemical Oxygen Demand (Carbonaceous) - 5 day | | | | | | | | | | |
| HDPE [BOD HT-48h] BAK-3 | E555 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 48 hrs | 55 hrs | * EHT |
| Aggregate Organics : Oil & Grease by Gravimetry | | | | | | | | | | |
| Amber glass (hydrochloric acid) BAK-2 | E567 | 26-Aug-2025 | 03-Sep-2025 | 28 days | 8 days | ✓ | 04-Sep-2025 | 28 days | 8 days | ✓ |
| Aggregate Organics : Oil & Grease by Gravimetry | | | | | | | | | | |
| Amber glass (hydrochloric acid) BAK-3 | E567 | 26-Aug-2025 | 03-Sep-2025 | 28 days | 8 days | ✓ | 04-Sep-2025 | 28 days | 8 days | ✓ |
| Aggregate Organics : Oil & Grease by Gravimetry | | | | | | | | | | |
| Amber glass (hydrochloric acid) BAK-4 | E567 | 26-Aug-2025 | 03-Sep-2025 | 28 days | 8 days | ✓ | 04-Sep-2025 | 28 days | 8 days | ✓ |
| Aggregate Organics : Phenols (4AAP) in Water by Colorimetry | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-2 | E562 | 26-Aug-2025 | 02-Sep-2025 | 28 days | 7 days | ✓ | 04-Sep-2025 | 28 days | 7 days | ✓ |
| Aggregate Organics : Phenols (4AAP) in Water by Colorimetry | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-3 | E562 | 26-Aug-2025 | 02-Sep-2025 | 28 days | 7 days | ✓ | 04-Sep-2025 | 28 days | 7 days | ✓ |
| Aggregate Organics : Phenols (4AAP) in Water by Colorimetry | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-4 | E562 | 26-Aug-2025 | 02-Sep-2025 | 28 days | 7 days | ✓ | 04-Sep-2025 | 28 days | 7 days | ✓ |
| Anions and Nutrients : Ammonia by Fluorescence | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-2 | E298 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 28-Aug-2025 | 28 days | 1 days | ✓ |



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

| Analyte Group : Analytical Method Container / Client Sample ID(s) | Method | Sampling Date | Extraction / Preparation | | | | Analysis | | | |
|--|----------|---------------|--------------------------|---------------|--------|------|---------------|---------------|--------|------|
| | | | Preparation Date | Holding Times | | Eval | Analysis Date | Holding Times | | Eval |
| | | | | Rec | Actual | | | Rec | Actual | |
| Anions and Nutrients : Ammonia by Fluorescence | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-3 | E298 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 28-Aug-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Ammonia by Fluorescence | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-4 | E298 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 28-Aug-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Chloride in Water by IC | | | | | | | | | | |
| HDPE BAK-2 | E235.Cl | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Chloride in Water by IC | | | | | | | | | | |
| HDPE BAK-3 | E235.Cl | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Chloride in Water by IC | | | | | | | | | | |
| HDPE BAK-4 | E235.Cl | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ |
| Anions and Nutrients : Nitrate in Water by IC | | | | | | | | | | |
| HDPE BAK-2 | E235.NO3 | 26-Aug-2025 | 27-Aug-2025 | 3 days | 1 days | ✓ | 27-Aug-2025 | 3 days | 1 days | ✓ |
| Anions and Nutrients : Nitrate in Water by IC | | | | | | | | | | |
| HDPE BAK-3 | E235.NO3 | 26-Aug-2025 | 27-Aug-2025 | 3 days | 1 days | ✓ | 27-Aug-2025 | 3 days | 1 days | ✓ |
| Anions and Nutrients : Nitrate in Water by IC | | | | | | | | | | |
| HDPE BAK-4 | E235.NO3 | 26-Aug-2025 | 27-Aug-2025 | 3 days | 1 days | ✓ | 27-Aug-2025 | 3 days | 1 days | ✓ |
| Anions and Nutrients : Nitrite in Water by IC | | | | | | | | | | |
| HDPE BAK-2 | E235.NO2 | 26-Aug-2025 | 27-Aug-2025 | 3 days | 1 days | ✓ | 27-Aug-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 | | |
| Anions and Nutrients : Nitrite in Water by IC | | | | | | | | | | | |
| HDPE BAK-3 | E235.NO2 | 26-Aug-2025 | 27-Aug-2025 | 3 days | 1 days | ✓ | 27-Aug-2025 | 3 days | 1 days | ✓ | |
| Anions and Nutrients : Nitrite in Water by IC | | | | | | | | | | | |
| HDPE BAK-4 | E235.NO2 | 26-Aug-2025 | 27-Aug-2025 | 3 days | 1 days | ✓ | 27-Aug-2025 | 3 days | 1 days | ✓ | |
| Anions and Nutrients : Sulfate in Water by IC | | | | | | | | | | | |
| HDPE BAK-2 | E235.SO4 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ | |
| Anions and Nutrients : Sulfate in Water by IC | | | | | | | | | | | |
| HDPE BAK-3 | E235.SO4 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ | |
| Anions and Nutrients : Sulfate in Water by IC | | | | | | | | | | | |
| HDPE BAK-4 | E235.SO4 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ | |
| Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L) | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-2 | E372 | 26-Aug-2025 | 28-Aug-2025 | 28 days | 2 days | ✓ | 28-Aug-2025 | 28 days | 2 days | ✓ | |
| Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L) | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-3 | E372 | 26-Aug-2025 | 28-Aug-2025 | 28 days | 2 days | ✓ | 28-Aug-2025 | 28 days | 2 days | ✓ | |
| Anions and Nutrients : Total Phosphorus by Colourimetry (0.02 mg/L) | | | | | | | | | | | |
| Amber glass total (sulfuric acid) BAK-4 | E372 | 26-Aug-2025 | 28-Aug-2025 | 28 days | 2 days | ✓ | 28-Aug-2025 | 28 days | 2 days | ✓ | |
| Dissolved Metals : Dissolved Mercury in Water by CVAAS | | | | | | | | | | | |
| Glass vial dissolved (hydrochloric acid) BAK-2 | E509 | 26-Aug-2025 | 03-Sep-2025 | 28 days | 8 days | ✓ | 03-Sep-2025 | 28 days | 8 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 | | |
| Dissolved Metals : Dissolved Mercury in Water by CVAAS | | | | | | | | | | | |
| Glass vial dissolved (hydrochloric acid) BAK-3 | E509 | 26-Aug-2025 | 03-Sep-2025 | 28 days | 8 days | ✓ | 03-Sep-2025 | 28 days | 8 days | ✓ | |
| Dissolved Metals : Dissolved Mercury in Water by CVAAS | | | | | | | | | | | |
| Glass vial dissolved (hydrochloric acid) BAK-4 | E509 | 26-Aug-2025 | 03-Sep-2025 | 28 days | 8 days | ✓ | 03-Sep-2025 | 28 days | 8 days | ✓ | |
| Hydrocarbons : CCME PHC - F1 by Headspace GC-FID | | | | | | | | | | | |
| Glass vial (sodium bisulfate) BAK-4 | E581.F1 | 26-Aug-2025 | 28-Aug-2025 | 14 days | 2 days | ✓ | 29-Aug-2025 | 14 days | 2 days | ✓ | |
| Hydrocarbons : CCME PHCs - F2-F4 by GC-FID | | | | | | | | | | | |
| Amber glass/Teflon lined cap (sodium bisulfate) BAK-4 | E601 | 26-Aug-2025 | 29-Aug-2025 | 14 days | 3 days | ✓ | 29-Aug-2025 | 40 days | 0 days | ✓ | |
| Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | | | | | | | | | | | |
| Sterile HDPE (sodium thiosulfate) BAK-4 | E010.FC-H | 26-Aug-2025 | ---- | ---- | ---- | | 27-Aug-2025 | 30 hrs | 28 hrs | ✓ | |
| Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | | | | | | | | | | | |
| Sterile HDPE (sodium thiosulfate) BAK-2 | E010.FC-H | 26-Aug-2025 | ---- | ---- | ---- | | 27-Aug-2025 | 30 hrs | 29 hrs | ✓ | |
| Microbiological Tests : Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | | | | | | | | | | | |
| Sterile HDPE (sodium thiosulfate) BAK-3 | E010.FC-H | 26-Aug-2025 | ---- | ---- | ---- | | 27-Aug-2025 | 30 hrs | 29 hrs | ✓ | |
| Physical Tests : Alkalinity Species by Titration | | | | | | | | | | | |
| HDPE BAK-2 | E290 | 26-Aug-2025 | 27-Aug-2025 | 14 days | 1 days | ✓ | 27-Aug-2025 | 14 days | 1 days | ✓ | |
| Physical Tests : Alkalinity Species by Titration | | | | | | | | | | | |
| HDPE BAK-3 | E290 | 26-Aug-2025 | 27-Aug-2025 | 14 days | 1 days | ✓ | 27-Aug-2025 | 14 days | 1 days | ✓ | |



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

| Analyte Group : Analytical Method Container / Client Sample ID(s) | Method | Sampling Date | Extraction / Preparation | | | | Analysis | | | | |
|--|--------|---------------|--------------------------|---------------|--------|--------------|---------------|---------------|--------|--------------|--|
| | | | Preparation Date | Holding Times | | Eval | Analysis Date | Holding Times | | Eval | |
| | | | | Rec | Actual | | | Rec | Actual | | |
| Physical Tests : Alkalinity Species by Titration | | | | | | | | | | | |
| HDPE BAK-4 | E290 | 26-Aug-2025 | 27-Aug-2025 | 14 days | 1 days | ✓ | 27-Aug-2025 | 14 days | 1 days | ✓ | |
| Physical Tests : Conductivity in Water | | | | | | | | | | | |
| HDPE BAK-2 | E100 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ | |
| Physical Tests : Conductivity in Water | | | | | | | | | | | |
| HDPE BAK-3 | E100 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ | |
| Physical Tests : Conductivity in Water | | | | | | | | | | | |
| HDPE BAK-4 | E100 | 26-Aug-2025 | 27-Aug-2025 | 28 days | 1 days | ✓ | 27-Aug-2025 | 28 days | 1 days | ✓ | |
| Physical Tests : pH by Meter | | | | | | | | | | | |
| HDPE BAK-3 | E108 | 26-Aug-2025 | 27-Aug-2025 | 0.25 hrs | 24 hrs | * EHTR-FM | 27-Aug-2025 | 0.25 hrs | 24 hrs | * EHTR-FM | |
| Physical Tests : pH by Meter | | | | | | | | | | | |
| HDPE BAK-4 | E108 | 26-Aug-2025 | 27-Aug-2025 | 0.25 hrs | 24 hrs | * EHTR-FM | 27-Aug-2025 | 0.25 hrs | 24 hrs | * EHTR-FM | |
| Physical Tests : pH by Meter | | | | | | | | | | | |
| HDPE BAK-2 | E108 | 26-Aug-2025 | 27-Aug-2025 | 0.25 hrs | 25 hrs | * EHTR-FM | 27-Aug-2025 | 0.25 hrs | 25 hrs | * EHTR-FM | |
| Physical Tests : TSS by Gravimetry | | | | | | | | | | | |
| HDPE BAK-2 | E160 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 7 days | 2 days | ✓ | |
| Physical Tests : TSS by Gravimetry | | | | | | | | | | | |
| HDPE BAK-3 | E160 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 7 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 | |
| Physical Tests : TSS by Gravimetry | | | | | | | | | | |
| HDPE BAK-4 | E160 | 26-Aug-2025 | ---- | ---- | ---- | | 28-Aug-2025 | 7 days | 2 days | ✓ |
| Total Metals : Total Metals in Water by CRC ICPMS | | | | | | | | | | |
| HDPE total (nitric acid) BAK-2 | E420 | 26-Aug-2025 | 02-Sep-2025 | 180 days | 7 days | ✓ | 02-Sep-2025 | 180 days | 7 days | ✓ |
| Total Metals : Total Metals in Water by CRC ICPMS | | | | | | | | | | |
| HDPE total (nitric acid) BAK-3 | E420 | 26-Aug-2025 | 02-Sep-2025 | 180 days | 7 days | ✓ | 02-Sep-2025 | 180 days | 7 days | ✓ |
| Total Metals : Total Metals in Water by CRC ICPMS | | | | | | | | | | |
| HDPE total (nitric acid) BAK-4 | E420 | 26-Aug-2025 | 02-Sep-2025 | 180 days | 7 days | ✓ | 02-Sep-2025 | 180 days | 7 days | ✓ |
| Volatile Organic Compounds : BTEX by Headspace GC-MS | | | | | | | | | | |
| Glass vial (sodium bisulfate) BAK-4 | E611A | 26-Aug-2025 | 28-Aug-2025 | 14 days | 2 days | ✓ | 29-Aug-2025 | 14 days | 2 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 (%) | | Evaluation |
|--|-----------|----------|-------|---------|---------------|----------|------------|
| | | | QC | Regular | Actual | Expected | |
| Analytical Methods | | | | | | | |
| Laboratory Duplicates (DUP) | | | | | | | |
| Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | E101.FC-H | 2186090 | 1 | 5 | 20.0 | 5.0 | ✔ |
| Conductivity in Water | E100 | 2185716 | 1 | 10 | 10.0 | 5.0 | ✔ |
| pH by Meter | E108 | 2185715 | 0 | 19 | 0.0 | 5.0 | ✘ |
| TSS by Gravimetry | E160 | 2186203 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2185777 | 0 | 10 | 0.0 | 5.0 | ✘ |
| Nitrite in Water by IC | E235.NO2 | 2185775 | 0 | 13 | 0.0 | 5.0 | ✘ |
| Nitrate in Water by IC | E235.NO3 | 2185776 | 0 | 15 | 0.0 | 5.0 | ✘ |
| Sulfate in Water by IC | E235.SO4 | 2185774 | 1 | 15 | 6.6 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2185717 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2186975 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2187255 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2194306 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2196132 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2188928 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2188929 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2193853 | 1 | 20 | 5.0 | 5.0 | ✔ |
| CCME PHC - F1 by Headspace GC-FID | E581.F1 | 2189570 | 1 | 17 | 5.8 | 5.0 | ✔ |
| BTEX by Headspace GC-MS | E611A | 2189571 | 1 | 17 | 5.8 | 5.0 | ✔ |
| Laboratory Control Samples (LCS) | | | | | | | |
| Conductivity in Water | E100 | 2185716 | 1 | 10 | 10.0 | 5.0 | ✔ |
| pH by Meter | E108 | 2185715 | 1 | 19 | 5.2 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2186203 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2185777 | 1 | 10 | 10.0 | 5.0 | ✔ |
| Nitrite in Water by IC | E235.NO2 | 2185775 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Nitrate in Water by IC | E235.NO3 | 2185776 | 1 | 15 | 6.6 | 5.0 | ✔ |
| Sulfate in Water by IC | E235.SO4 | 2185774 | 1 | 15 | 6.6 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2185717 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2186975 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2187255 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2194306 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2196132 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2188928 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2188929 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L | 2188930 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2193853 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Oil & Grease by Gravimetry | E567 | 2196824 | 1 | 4 | 25.0 | 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 |
| Analytical Methods | | | | | | | |
| Laboratory Control Samples (LCS) - Continued | | | | | | | |
| CCME PHC - F1 by Headspace GC-FID | E581.F1 | 2189570 | 1 | 17 | 5.8 | 5.0 | ✔ |
| CCME PHCs - F2-F4 by GC-FID | E601 | 2190314 | 1 | 8 | 12.5 | 5.0 | ✔ |
| BTEX by Headspace GC-MS | E611A | 2189571 | 1 | 17 | 5.8 | 5.0 | ✔ |
| Method Blanks (MB) | | | | | | | |
| Thermotolerant (Fecal) Coliform (Enzyme Substrate) 1:10 | E010.FC-H | 2186090 | 1 | 5 | 20.0 | 5.0 | ✔ |
| Conductivity in Water | E100 | 2185716 | 1 | 10 | 10.0 | 5.0 | ✔ |
| TSS by Gravimetry | E160 | 2186203 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Chloride in Water by IC | E235.Cl | 2185777 | 1 | 10 | 10.0 | 5.0 | ✔ |
| Nitrite in Water by IC | E235.NO2 | 2185775 | 1 | 13 | 7.6 | 5.0 | ✔ |
| Nitrate in Water by IC | E235.NO3 | 2185776 | 1 | 15 | 6.6 | 5.0 | ✔ |
| Sulfate in Water by IC | E235.SO4 | 2185774 | 1 | 15 | 6.6 | 5.0 | ✔ |
| Alkalinity Species by Titration | E290 | 2185717 | 1 | 11 | 9.0 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2186975 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2187255 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2194306 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2196132 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand - 5 day | E550 | 2188928 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day | E555 | 2188929 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L | 2188930 | 1 | 3 | 33.3 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2193853 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Oil & Grease by Gravimetry | E567 | 2196824 | 1 | 4 | 25.0 | 5.0 | ✔ |
| CCME PHC - F1 by Headspace GC-FID | E581.F1 | 2189570 | 1 | 17 | 5.8 | 5.0 | ✔ |
| CCME PHCs - F2-F4 by GC-FID | E601 | 2190314 | 1 | 8 | 12.5 | 5.0 | ✔ |
| BTEX by Headspace GC-MS | E611A | 2189571 | 1 | 17 | 5.8 | 5.0 | ✔ |
| Matrix Spikes (MS) | | | | | | | |
| Chloride in Water by IC | E235.Cl | 2185777 | 0 | 10 | 0.0 | 5.0 | ✖ |
| Nitrite in Water by IC | E235.NO2 | 2185775 | 0 | 13 | 0.0 | 5.0 | ✖ |
| Nitrate in Water by IC | E235.NO3 | 2185776 | 0 | 15 | 0.0 | 5.0 | ✖ |
| Sulfate in Water by IC | E235.SO4 | 2185774 | 1 | 15 | 6.6 | 5.0 | ✔ |
| Ammonia by Fluorescence | E298 | 2186975 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Phosphorus by Colourimetry (0.02 mg/L) | E372 | 2187255 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Total Metals in Water by CRC ICPMS | E420 | 2194306 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Dissolved Mercury in Water by CVAAS | E509 | 2196132 | 1 | 20 | 5.0 | 5.0 | ✔ |
| Phenols (4AAP) in Water by Colorimetry | E562 | 2193853 | 1 | 20 | 5.0 | 5.0 | ✔ |
| CCME PHC - F1 by Headspace GC-FID | E581.F1 | 2189570 | 1 | 17 | 5.8 | 5.0 | ✔ |
| BTEX by Headspace GC-MS | E611A | 2189571 | 1 | 17 | 5.8 | 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 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. |
| Dissolved Mercury in Water by CVAAS | E509 ALS Environmental - Winnipeg | Water | APHA 3030B/EPA 1631E (mod) | Water samples are filtered (0.45 um), preserved with HCl, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS. |
| 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. |
| Biochemical Oxygen Demand (Carbonaceous) - 5 day (Low Level) | E555-L 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 ₃ Fe(CN) ₆) and 4-amino-antipyrine (4-AAP) to form a red complex which is measured colorimetrically. |
| 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. |



| Analytical Methods | Method / Lab | Matrix | Method Reference | Method Descriptions |
|--|---|--------|---------------------------|---|
| 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 ₃), 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. |
| 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. |
| Digestion for Total Phosphorus in water | EP372 ALS Environmental - Winnipeg | Water | APHA 4500-P E (mod). | Samples are heated with a persulfate digestion reagent. |



| <i>Preparation Methods</i> | <i>Method / Lab</i> | <i>Matrix</i> | <i>Method Reference</i> | <i>Method Descriptions</i> |
|---|--|---------------|---|--|
| Dissolved Mercury Water Filtration | EP509 ALS Environmental - Winnipeg | Water | APHA 3030B | Water samples are filtered (0.45 um), and preserved with HCl. |
| 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>Work Order : WP2514418</p> <p>Client : Hamlet of Baker Lake</p> <p>Contact : Sheldon Dorey</p> <p>Address : PO BOX 149 Baker Lake NU Canada X0C 0A0</p> <p>Telephone : 867 793 2874</p> <p>Project : Baker Lake</p> <p>PO : ----</p> <p>C-O-C number : ----</p> <p>Sampler : ----</p> <p>Site : ----</p> <p>Quote number : 2024 Analytical Testing</p> <p>No. of samples received : 3</p> <p>No. of samples analysed : 3</p> | <p>Page : 1 of 13</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 : 27-Aug-2025 09:58</p> <p>Date Analysis Commenced : 27-Aug-2025</p> <p>Issue Date : 08-Sep-2025 15:08</p> |
|---|---|

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 |
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Work Order : WP2514418
Client : Hamlet of Baker Lake
Project : Baker Lake



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: 2185716) | | | | | | | | | | | |
| WP2514386-001 | Anonymous | Conductivity | ---- | E100 | 2.0 | µS/cm | 291 | 289 | 0.690% | 10% | ---- |
| Physical Tests (QC Lot: 2185717) | | | | | | | | | | | |
| WP2514386-001 | Anonymous | Alkalinity, total (as CaCO ₃) | ---- | E290 | 2.0 | mg/L | 55.4 | 56.0 | 1.08% | 20% | ---- |
| Physical Tests (QC Lot: 2186203) | | | | | | | | | | | |
| WP2514330-001 | Anonymous | Solids, total suspended [TSS] | ---- | E160 | 3.0 | mg/L | <3.0 | <3.0 | 0 | Diff <2x LOR | ---- |
| Anions and Nutrients (QC Lot: 2185774) | | | | | | | | | | | |
| WP2514399-001 | Anonymous | Sulfate (as SO ₄) | 14808-79-8 | E235.SO4 | 0.30 | mg/L | 44.0 | 44.5 | 1.04% | 20% | ---- |
| Anions and Nutrients (QC Lot: 2186975) | | | | | | | | | | | |
| WP2514421-001 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | 0.0250 | mg/L | 0.682 | 0.695 | 1.85% | 20% | ---- |
| Anions and Nutrients (QC Lot: 2187255) | | | | | | | | | | | |
| WP2514211-002 | Anonymous | Phosphorus, total | 7723-14-0 | E372 | 0.020 | mg/L | 0.250 | 0.248 | 0.904% | 20% | ---- |
| Microbiological Tests (QC Lot: 2186090) | | | | | | | | | | | |
| WP2514451-005 | Anonymous | Coliforms, thermotolerant [fecal] | ---- | E010.FC-H | 10 | MPN/100mL | 30 | 30 | 0.00% | 65% | ---- |
| Total Metals (QC Lot: 2194306) | | | | | | | | | | | |
| WP2514403-002 | Anonymous | Aluminum, total | 7429-90-5 | E420 | 0.0030 | mg/L | 0.0196 | 0.0188 | 0.0008 | Diff <2x LOR | ---- |
| | | Antimony, total | 7440-36-0 | E420 | 0.00010 | mg/L | 0.00060 | 0.00060 | 0.000002 | Diff <2x LOR | ---- |
| | | Arsenic, total | 7440-38-2 | E420 | 0.00010 | mg/L | 0.00060 | 0.00059 | 0.00001 | Diff <2x LOR | ---- |
| | | Barium, total | 7440-39-3 | E420 | 0.00010 | mg/L | 0.00975 | 0.00957 | 1.87% | 20% | ---- |
| | | Beryllium, total | 7440-41-7 | E420 | 0.000020 | mg/L | <0.000020 | <0.000020 | 0 | Diff <2x LOR | ---- |
| | | Bismuth, total | 7440-69-9 | E420 | 0.000050 | mg/L | <0.000050 | <0.000050 | 0 | Diff <2x LOR | ---- |
| | | Boron, total | 7440-42-8 | E420 | 0.010 | mg/L | 0.218 | 0.206 | 5.65% | 20% | ---- |
| | | Cadmium, total | 7440-43-9 | E420 | 0.0000050 | mg/L | 0.0000070 | 0.0000059 | 0.000010 | Diff <2x LOR | ---- |
| | | Calcium, total | 7440-70-2 | E420 | 0.050 | mg/L | 64.8 | 63.0 | 2.73% | 20% | ---- |
| | | Cesium, total | 7440-46-2 | E420 | 0.000010 | mg/L | 0.000094 | 0.000086 | 0.000008 | Diff <2x LOR | ---- |
| | | Chromium, total | 7440-47-3 | E420 | 0.00050 | mg/L | <0.00050 | <0.00050 | 0 | Diff <2x LOR | ---- |
| | | Cobalt, total | 7440-48-4 | E420 | 0.00010 | mg/L | 0.00034 | 0.00036 | 0.00002 | Diff <2x LOR | ---- |
| | | Copper, total | 7440-50-8 | E420 | 0.00050 | mg/L | <0.00050 | <0.00050 | 0 | Diff <2x LOR | ---- |
| | | Iron, total | 7439-89-6 | E420 | 0.010 | mg/L | 0.031 | 0.030 | 0.001 | Diff <2x LOR | ---- |
| | | Lead, total | 7439-92-1 | E420 | 0.000050 | mg/L | 0.000124 | 0.000128 | 0.000004 | Diff <2x LOR | ---- |
| | | Lithium, total | 7439-93-2 | E420 | 0.0010 | mg/L | 0.0837 | 0.0764 | 9.21% | 20% | ---- |



| Sub-Matrix: Water | | | | | Laboratory Duplicate (DUP) Report | | | | | | |
|---|------------------|---|------------|--------|-----------------------------------|------|-----------------|------------------|----------------------|------------------|-----------|
| Laboratory sample ID | Client sample ID | Analyte | CAS Number | Method | LOR | Unit | Original Result | Duplicate Result | RPD(%) or Difference | Duplicate Limits | Qualifier |
| Total Metals (QC Lot: 2194306) - continued | | | | | | | | | | | |
| WP2514403-002 | Anonymous | Magnesium, total | 7439-95-4 | E420 | 0.0050 | mg/L | 34.0 | 34.4 | 1.09% | 20% | ---- |
| | | Manganese, total | 7439-96-5 | E420 | 0.00010 | mg/L | 0.0703 | 0.0705 | 0.336% | 20% | ---- |
| | | Molybdenum, total | 7439-98-7 | E420 | 0.000050 | mg/L | 0.00302 | 0.00289 | 4.37% | 20% | ---- |
| | | Nickel, total | 7440-02-0 | E420 | 0.00050 | mg/L | 0.00273 | 0.00285 | 0.00012 | Diff <2x LOR | ---- |
| | | Phosphorus, total | 7723-14-0 | E420 | 0.050 | mg/L | 0.341 | 0.332 | 0.009 | Diff <2x LOR | ---- |
| | | Potassium, total | 7440-09-7 | E420 | 0.050 | mg/L | 31.6 | 31.9 | 0.680% | 20% | ---- |
| | | Rubidium, total | 7440-17-7 | E420 | 0.00020 | mg/L | 0.0253 | 0.0260 | 2.76% | 20% | ---- |
| | | Selenium, total | 7782-49-2 | E420 | 0.000050 | mg/L | 0.000500 | 0.000436 | 0.000065 | Diff <2x LOR | ---- |
| | | Silicon, total | 7440-21-3 | E420 | 0.10 | mg/L | 5.73 | 5.67 | 1.10% | 20% | ---- |
| | | Silver, total | 7440-22-4 | E420 | 0.000010 | mg/L | <0.000010 | <0.000010 | 0 | Diff <2x LOR | ---- |
| | | Sodium, total | 7440-23-5 | E420 | 0.050 | mg/L | 192 | 194 | 0.953% | 20% | ---- |
| | | Strontium, total | 7440-24-6 | E420 | 0.00020 | mg/L | 0.239 | 0.234 | 2.24% | 20% | ---- |
| | | Sulfur, total | 7704-34-9 | E420 | 0.50 | mg/L | 140 | 141 | 1.12% | 20% | ---- |
| | | Tellurium, total | 13494-80-9 | E420 | 0.00020 | mg/L | <0.00020 | <0.00020 | 0 | Diff <2x LOR | ---- |
| | | Thallium, total | 7440-28-0 | E420 | 0.000010 | mg/L | <0.000010 | <0.000010 | 0 | Diff <2x LOR | ---- |
| | | Thorium, total | 7440-29-1 | E420 | 0.00010 | mg/L | <0.00010 | <0.00010 | 0 | Diff <2x LOR | ---- |
| | | Tin, total | 7440-31-5 | E420 | 0.00010 | mg/L | <0.00010 | <0.00010 | 0 | Diff <2x LOR | ---- |
| | | Titanium, total | 7440-32-6 | E420 | 0.00030 | mg/L | <0.00030 | <0.00030 | 0 | Diff <2x LOR | ---- |
| | | Tungsten, total | 7440-33-7 | E420 | 0.00010 | mg/L | <0.00010 | <0.00010 | 0 | Diff <2x LOR | ---- |
| | | Uranium, total | 7440-61-1 | E420 | 0.000010 | mg/L | 0.000194 | 0.000205 | 5.35% | 20% | ---- |
| | | Vanadium, total | 7440-62-2 | E420 | 0.00050 | mg/L | 0.00076 | 0.00074 | 0.00002 | Diff <2x LOR | ---- |
| | | Zinc, total | 7440-66-6 | E420 | 0.0030 | mg/L | 0.0222 | 0.0226 | 0.0004 | Diff <2x LOR | ---- |
| | | Zirconium, total | 7440-67-7 | E420 | 0.00020 | mg/L | <0.00020 | <0.00020 | 0 | Diff <2x LOR | ---- |
| Dissolved Metals (QC Lot: 2196132) | | | | | | | | | | | |
| WP2514267-008 | Anonymous | Mercury, dissolved | 7439-97-6 | E509 | 0.0000050 | mg/L | <0.0000050 | <0.0000050 | 0 | Diff <2x LOR | ---- |
| Aggregate Organics (QC Lot: 2188928) | | | | | | | | | | | |
| WP2514437-001 | Anonymous | Biochemical oxygen demand [BOD] | ---- | E550 | 2.0 | mg/L | 3.9 | 4.2 | 7.4% | 30% | ---- |
| Aggregate Organics (QC Lot: 2188929) | | | | | | | | | | | |
| WP2514404-001 | Anonymous | Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2.0 | mg/L | <2.0 | <2.0 | 0.0% | 30% | ---- |
| Aggregate Organics (QC Lot: 2193853) | | | | | | | | | | | |
| TY2509354-005 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0010 | mg/L | 0.0010 | 0.0011 | 0.00006 | Diff <2x LOR | ---- |
| Volatile Organic Compounds (QC Lot: 2189571) | | | | | | | | | | | |
| WP2514345-001 | Anonymous | Benzene | 71-43-2 | E611A | 0.50 | µg/L | <0.00050 mg/L | <0.50 | 0 | Diff <2x LOR | ---- |



| Sub-Matrix: Water | | | | | Laboratory Duplicate (DUP) Report | | | | | | |
|---|------------------|--------------|-------------|---------|-----------------------------------|------|-----------------|------------------|----------------------|------------------|-----------|
| Laboratory sample ID | Client sample ID | Analyte | CAS Number | Method | LOR | Unit | Original Result | Duplicate Result | RPD(%) or Difference | Duplicate Limits | Qualifier |
| Volatile Organic Compounds (QC Lot: 2189571) - continued | | | | | | | | | | | |
| WP2514345-001 | Anonymous | 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 | ---- |
| | | Xylene, o- | 95-47-6 | E611A | 0.30 | µg/L | <0.00030 mg/L | <0.30 | 0 | Diff <2x LOR | ---- |
| Hydrocarbons (QC Lot: 2189570) | | | | | | | | | | | |
| WP2514345-001 | 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 |
|---|------------|-----------|----------|-----------|------------|-----------|
| Physical Tests (QCLot: 2185716) | | | | | | |
| Conductivity | --- | E100 | 1 | µS/cm | <1.0 | --- |
| Physical Tests (QCLot: 2185717) | | | | | | |
| Alkalinity, total (as CaCO3) | --- | E290 | 1 | mg/L | <1.0 | --- |
| Physical Tests (QCLot: 2186203) | | | | | | |
| Solids, total suspended [TSS] | --- | E160 | 3 | mg/L | <3.0 | --- |
| Anions and Nutrients (QCLot: 2185774) | | | | | | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 0.3 | mg/L | <0.30 | --- |
| Anions and Nutrients (QCLot: 2185775) | | | | | | |
| Nitrite (as N) | 14797-65-0 | E235.NO2 | 0.01 | mg/L | <0.010 | --- |
| Anions and Nutrients (QCLot: 2185776) | | | | | | |
| Nitrate (as N) | 14797-55-8 | E235.NO3 | 0.02 | mg/L | <0.020 | --- |
| Anions and Nutrients (QCLot: 2185777) | | | | | | |
| Chloride | 16887-00-6 | E235.Cl | 0.5 | mg/L | <0.50 | --- |
| Anions and Nutrients (QCLot: 2186975) | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | <0.0050 | --- |
| Anions and Nutrients (QCLot: 2187255) | | | | | | |
| Phosphorus, total | 7723-14-0 | E372 | 0.02 | mg/L | <0.020 | --- |
| Microbiological Tests (QCLot: 2186090) | | | | | | |
| Coliforms, thermotolerant [fecal] | --- | E010.FC-H | 10 | MPN/100mL | <10 | --- |
| Total Metals (QCLot: 2194306) | | | | | | |
| 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 |
|--|------------|--------|----------|------|------------|-----------|
| Total Metals (QCLot: 2194306) - continued | | | | | | |
| 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 | ---- |
| Dissolved Metals (QCLot: 2196132) | | | | | | |
| Mercury, dissolved | 7439-97-6 | E509 | 0.000005 | mg/L | <0.0000050 | ---- |
| Aggregate Organics (QCLot: 2188928) | | | | | | |
| Biochemical oxygen demand [BOD] | ---- | E550 | 2 | mg/L | <2.0 | ---- |
| Aggregate Organics (QCLot: 2188929) | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555 | 2 | mg/L | <2.0 | ---- |
| Aggregate Organics (QCLot: 2188930) | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | ---- | E555-L | 1 | mg/L | <1.0 | ---- |



Sub-Matrix: **Water**

| Analyte | CAS Number | Method | LOR | Unit | Result | Qualifier |
|--|-------------|---------|-------|------|---------|-----------|
| Aggregate Organics (QCLot: 2193853) | | | | | | |
| Phenols, total (4AAP) | ---- | E562 | 0.001 | mg/L | <0.0010 | ---- |
| Aggregate Organics (QCLot: 2196824) | | | | | | |
| Oil & grease (gravimetric) | ---- | E567 | 5 | mg/L | <5.0 | ---- |
| Volatile Organic Compounds (QCLot: 2189571) | | | | | | |
| 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 | ---- |
| Hydrocarbons (QCLot: 2189570) | | | | | | |
| F1 (C6-C10) | ---- | E581.F1 | 100 | µg/L | <100 | ---- |
| Hydrocarbons (QCLot: 2190314) | | | | | | |
| 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 |
| Physical Tests (QCLot: 2185715) | | | | | | | | | |
| pH | ---- | E108 | ---- | pH units | 7 pH units | 100 | 98.0 | 102 | ---- |
| Physical Tests (QCLot: 2185716) | | | | | | | | | |
| Conductivity | ---- | E100 | 1 | µS/cm | 1410 µS/cm | 99.6 | 90.0 | 110 | ---- |
| Physical Tests (QCLot: 2185717) | | | | | | | | | |
| Alkalinity, total (as CaCO3) | ---- | E290 | 1 | mg/L | 100 mg/L | 99.4 | 85.0 | 115 | ---- |
| Physical Tests (QCLot: 2186203) | | | | | | | | | |
| Solids, total suspended [TSS] | ---- | E160 | 3 | mg/L | 150 mg/L | 95.9 | 85.0 | 115 | ---- |
| Anions and Nutrients (QCLot: 2185774) | | | | | | | | | |
| Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 0.3 | mg/L | 100 mg/L | 98.5 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2185775) | | | | | | | | | |
| Nitrite (as N) | 14797-65-0 | E235.NO2 | 0.01 | mg/L | 0.5 mg/L | 98.5 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2185776) | | | | | | | | | |
| Nitrate (as N) | 14797-55-8 | E235.NO3 | 0.02 | mg/L | 2.5 mg/L | 97.3 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2185777) | | | | | | | | | |
| Chloride | 16887-00-6 | E235.Cl | 0.5 | mg/L | 100 mg/L | 97.4 | 90.0 | 110 | ---- |
| Anions and Nutrients (QCLot: 2186975) | | | | | | | | | |
| Ammonia, total (as N) | 7664-41-7 | E298 | 0.005 | mg/L | 0.2 mg/L | 94.4 | 85.0 | 115 | ---- |
| Anions and Nutrients (QCLot: 2187255) | | | | | | | | | |
| Phosphorus, total | 7723-14-0 | E372 | 0.02 | mg/L | 0.5 mg/L | 94.1 | 80.0 | 120 | ---- |
| Total Metals (QCLot: 2194306) | | | | | | | | | |
| Aluminum, total | 7429-90-5 | E420 | 0.003 | mg/L | 2 mg/L | 100 | 80.0 | 120 | ---- |
| Antimony, total | 7440-36-0 | E420 | 0.0001 | mg/L | 1 mg/L | 105 | 80.0 | 120 | ---- |
| Arsenic, total | 7440-38-2 | E420 | 0.0001 | mg/L | 1 mg/L | 102 | 80.0 | 120 | ---- |
| Barium, total | 7440-39-3 | E420 | 0.0001 | mg/L | 0.25 mg/L | 101 | 80.0 | 120 | ---- |
| Beryllium, total | 7440-41-7 | E420 | 0.00002 | mg/L | 0.1 mg/L | 103 | 80.0 | 120 | ---- |
| Bismuth, total | 7440-69-9 | E420 | 0.00005 | mg/L | 1 mg/L | 100 | 80.0 | 120 | ---- |
| Boron, total | 7440-42-8 | E420 | 0.01 | mg/L | 1 mg/L | 100.0 | 80.0 | 120 | ---- |
| Cadmium, total | 7440-43-9 | E420 | 0.000005 | mg/L | 0.1 mg/L | 100 | 80.0 | 120 | ---- |
| Calcium, total | 7440-70-2 | E420 | 0.05 | mg/L | 50 mg/L | 102 | 80.0 | 120 | ---- |
| Cesium, total | 7440-46-2 | E420 | 0.00001 | mg/L | 0.05 mg/L | 101 | 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: 2194306) - continued | | | | | | | | | |
| Chromium, total | 7440-47-3 | E420 | 0.0005 | mg/L | 0.25 mg/L | 99.4 | 80.0 | 120 | ---- |
| Cobalt, total | 7440-48-4 | E420 | 0.0001 | mg/L | 0.25 mg/L | 98.8 | 80.0 | 120 | ---- |
| Copper, total | 7440-50-8 | E420 | 0.0005 | mg/L | 0.25 mg/L | 98.4 | 80.0 | 120 | ---- |
| Iron, total | 7439-89-6 | E420 | 0.01 | mg/L | 1 mg/L | 99.9 | 80.0 | 120 | ---- |
| Lead, total | 7439-92-1 | E420 | 0.00005 | mg/L | 0.5 mg/L | 100 | 80.0 | 120 | ---- |
| Lithium, total | 7439-93-2 | E420 | 0.001 | mg/L | 0.25 mg/L | 108 | 80.0 | 120 | ---- |
| Magnesium, total | 7439-95-4 | E420 | 0.005 | mg/L | 50 mg/L | 104 | 80.0 | 120 | ---- |
| Manganese, total | 7439-96-5 | E420 | 0.0001 | mg/L | 0.25 mg/L | 99.0 | 80.0 | 120 | ---- |
| Molybdenum, total | 7439-98-7 | E420 | 0.00005 | mg/L | 0.25 mg/L | 104 | 80.0 | 120 | ---- |
| Nickel, total | 7440-02-0 | E420 | 0.0005 | mg/L | 0.5 mg/L | 96.5 | 80.0 | 120 | ---- |
| Phosphorus, total | 7723-14-0 | E420 | 0.05 | mg/L | 10 mg/L | 113 | 80.0 | 120 | ---- |
| Potassium, total | 7440-09-7 | E420 | 0.05 | mg/L | 50 mg/L | 99.4 | 80.0 | 120 | ---- |
| Rubidium, total | 7440-17-7 | E420 | 0.0002 | mg/L | 0.1 mg/L | 98.0 | 80.0 | 120 | ---- |
| Selenium, total | 7782-49-2 | E420 | 0.00005 | mg/L | 1 mg/L | 99.6 | 80.0 | 120 | ---- |
| Silicon, total | 7440-21-3 | E420 | 0.1 | mg/L | 10 mg/L | 107 | 80.0 | 120 | ---- |
| Silver, total | 7440-22-4 | E420 | 0.00001 | mg/L | 0.1 mg/L | 95.7 | 80.0 | 120 | ---- |
| Sodium, total | 7440-23-5 | E420 | 0.05 | mg/L | 50 mg/L | 104 | 80.0 | 120 | ---- |
| Strontium, total | 7440-24-6 | E420 | 0.0002 | mg/L | 0.25 mg/L | 98.7 | 80.0 | 120 | ---- |
| Sulfur, total | 7704-34-9 | E420 | 0.5 | mg/L | 50 mg/L | 108 | 80.0 | 120 | ---- |
| Tellurium, total | 13494-80-9 | E420 | 0.0002 | mg/L | 0.1 mg/L | 108 | 80.0 | 120 | ---- |
| Thallium, total | 7440-28-0 | E420 | 0.00001 | mg/L | 1 mg/L | 98.3 | 80.0 | 120 | ---- |
| Thorium, total | 7440-29-1 | E420 | 0.0001 | mg/L | 0.1 mg/L | 100 | 80.0 | 120 | ---- |
| Tin, total | 7440-31-5 | E420 | 0.0001 | mg/L | 0.5 mg/L | 102 | 80.0 | 120 | ---- |
| Titanium, total | 7440-32-6 | E420 | 0.0003 | mg/L | 0.25 mg/L | 95.6 | 80.0 | 120 | ---- |
| Tungsten, total | 7440-33-7 | E420 | 0.0001 | mg/L | 0.1 mg/L | 98.4 | 80.0 | 120 | ---- |
| Uranium, total | 7440-61-1 | E420 | 0.00001 | mg/L | 0.005 mg/L | 103 | 80.0 | 120 | ---- |
| Vanadium, total | 7440-62-2 | E420 | 0.0005 | mg/L | 0.5 mg/L | 99.0 | 80.0 | 120 | ---- |
| Zinc, total | 7440-66-6 | E420 | 0.003 | mg/L | 0.5 mg/L | 98.6 | 80.0 | 120 | ---- |
| Zirconium, total | 7440-67-7 | E420 | 0.0002 | mg/L | 0.1 mg/L | 98.1 | 80.0 | 120 | ---- |
| Mercury, dissolved | 7439-97-6 | E509 | 0.000005 | mg/L | 0 mg/L | 94.6 | 80.0 | 120 | ---- |
| Aggregate Organics (QCLot: 2188928) | | | | | | | | | |
| Biochemical oxygen demand [BOD] | --- | E550 | 2 | mg/L | 198 mg/L | 99.2 | 85.0 | 115 | ---- |
| Aggregate Organics (QCLot: 2188929) | | | | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | --- | E555 | 2 | mg/L | 198 mg/L | 95.0 | 85.0 | 115 | ---- |



Sub-Matrix: **Water**

| | | | | | Laboratory Control Sample (LCS) Report | | | | |
|--|-------------|---------|-------|------|--|--------------|---------------------|------|-----------|
| | | | | | Spike | Recovery (%) | Recovery Limits (%) | | |
| Analyte | CAS Number | Method | LOR | Unit | Target Concentration | LCS | Low | High | Qualifier |
| Aggregate Organics (QCLot: 2188930) | | | | | | | | | |
| Carbonaceous biochemical oxygen demand [CBOD] | --- | E555-L | 1 | mg/L | 198 mg/L | 91.4 | 85.0 | 115 | --- |
| Aggregate Organics (QCLot: 2193853) | | | | | | | | | |
| Phenols, total (4AAP) | --- | E562 | 0.001 | mg/L | 0.02 mg/L | 101 | 85.0 | 115 | --- |
| Aggregate Organics (QCLot: 2196824) | | | | | | | | | |
| Oil & grease (gravimetric) | --- | E567 | 5 | mg/L | 200 mg/L | 91.5 | 70.0 | 130 | --- |
| Volatile Organic Compounds (QCLot: 2189571) | | | | | | | | | |
| Benzene | 71-43-2 | E611A | 0.5 | µg/L | 100 µg/L | 80.7 | 70.0 | 130 | --- |
| Ethylbenzene | 100-41-4 | E611A | 0.5 | µg/L | 100 µg/L | 85.6 | 70.0 | 130 | --- |
| Toluene | 108-88-3 | E611A | 0.5 | µg/L | 100 µg/L | 84.4 | 70.0 | 130 | --- |
| Xylene, m+p- | 179601-23-1 | E611A | 0.4 | µg/L | 200 µg/L | 88.2 | 70.0 | 130 | --- |
| Xylene, o- | 95-47-6 | E611A | 0.3 | µg/L | 100 µg/L | 87.0 | 70.0 | 130 | --- |
| Hydrocarbons (QCLot: 2189570) | | | | | | | | | |
| F1 (C6-C10) | --- | E581.F1 | 100 | µg/L | 5280 µg/L | 86.1 | 70.0 | 130 | --- |
| Hydrocarbons (QCLot: 2190314) | | | | | | | | | |
| F2 (C10-C16) | --- | E601 | 100 | µg/L | 3400 µg/L | 89.2 | 70.0 | 130 | --- |
| F3 (C16-C34) | --- | E601 | 250 | µg/L | 6780 µg/L | 81.4 | 70.0 | 130 | --- |
| F4 (C34-C50) | --- | E601 | 250 | µg/L | 5840 µg/L | 102 | 70.0 | 130 | --- |



Matrix Spike (MS) Report

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

Sub-Matrix: **Water**

| | | | | | Matrix Spike (MS) Report | | | | | |
|--|------------------|-----------------------|------------|----------|--------------------------|------------|--------------|---------------------|------|-----------|
| | | | | | Spike | | Recovery (%) | Recovery Limits (%) | | |
| Laboratory sample ID | Client sample ID | Analyte | CAS Number | Method | Concentration | Target | MS | Low | High | Qualifier |
| Anions and Nutrients (QCLot: 2185774) | | | | | | | | | | |
| WP2514399-001 | Anonymous | Sulfate (as SO4) | 14808-79-8 | E235.SO4 | 101 mg/L | 100 mg/L | 101 | 75.0 | 125 | ---- |
| Anions and Nutrients (QCLot: 2186975) | | | | | | | | | | |
| WP2514421-001 | Anonymous | Ammonia, total (as N) | 7664-41-7 | E298 | ND mg/L | ---- | ND | 75.0 | 125 | ---- |
| Anions and Nutrients (QCLot: 2187255) | | | | | | | | | | |
| WP2514211-004 | Anonymous | Phosphorus, total | 7723-14-0 | E372 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| Total Metals (QCLot: 2194306) | | | | | | | | | | |
| WP2514403-002 | Anonymous | Aluminum, total | 7429-90-5 | E420 | 0.195 mg/L | 0.2 mg/L | 97.4 | 70.0 | 130 | ---- |
| | | Antimony, total | 7440-36-0 | E420 | 0.0222 mg/L | 0.02 mg/L | 111 | 70.0 | 130 | ---- |
| | | Arsenic, total | 7440-38-2 | E420 | 0.0207 mg/L | 0.02 mg/L | 103 | 70.0 | 130 | ---- |
| | | Barium, total | 7440-39-3 | E420 | 0.0202 mg/L | 0.02 mg/L | 101 | 70.0 | 130 | ---- |
| | | Beryllium, total | 7440-41-7 | E420 | 0.0383 mg/L | 0.04 mg/L | 95.8 | 70.0 | 130 | ---- |
| | | Bismuth, total | 7440-69-9 | E420 | 0.00953 mg/L | 0.01 mg/L | 95.3 | 70.0 | 130 | ---- |
| | | Boron, total | 7440-42-8 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Cadmium, total | 7440-43-9 | E420 | 0.00395 mg/L | 0.004 mg/L | 98.7 | 70.0 | 130 | ---- |
| | | Calcium, total | 7440-70-2 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Cesium, total | 7440-46-2 | E420 | 0.00997 mg/L | 0.01 mg/L | 99.7 | 70.0 | 130 | ---- |
| | | Chromium, total | 7440-47-3 | E420 | 0.0389 mg/L | 0.04 mg/L | 97.2 | 70.0 | 130 | ---- |
| | | Cobalt, total | 7440-48-4 | E420 | 0.0192 mg/L | 0.02 mg/L | 96.1 | 70.0 | 130 | ---- |
| | | Copper, total | 7440-50-8 | E420 | 0.0183 mg/L | 0.02 mg/L | 91.5 | 70.0 | 130 | ---- |
| | | Iron, total | 7439-89-6 | E420 | 1.94 mg/L | 2 mg/L | 97.0 | 70.0 | 130 | ---- |
| | | Lead, total | 7439-92-1 | E420 | 0.0188 mg/L | 0.02 mg/L | 94.2 | 70.0 | 130 | ---- |
| | | Lithium, total | 7439-93-2 | E420 | 0.0866 mg/L | 0.1 mg/L | 86.6 | 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 | 0.0219 mg/L | 0.02 mg/L | 109 | 70.0 | 130 | ---- |
| | | Nickel, total | 7440-02-0 | E420 | 0.0369 mg/L | 0.04 mg/L | 92.3 | 70.0 | 130 | ---- |
| | | Phosphorus, total | 7723-14-0 | E420 | 10.4 mg/L | 10 mg/L | 104 | 70.0 | 130 | ---- |
| | | Potassium, total | 7440-09-7 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Rubidium, total | 7440-17-7 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Selenium, total | 7782-49-2 | E420 | 0.0423 mg/L | 0.04 mg/L | 106 | 70.0 | 130 | ---- |
| | | Silicon, total | 7440-21-3 | E420 | 10.0 mg/L | 10 mg/L | 100 | 70.0 | 130 | ---- |
| | | Silver, total | 7440-22-4 | E420 | 0.00402 mg/L | 0.004 mg/L | 100 | 70.0 | 130 | ---- |
| | | Sodium, total | 7440-23-5 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Strontium, total | 7440-24-6 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Sulfur, total | 7704-34-9 | E420 | ND mg/L | ---- | ND | 70.0 | 130 | ---- |
| | | Tellurium, total | 13494-80-9 | E420 | 0.0431 mg/L | 0.04 mg/L | 108 | 70.0 | 130 | ---- |
| | | Thallium, total | 7440-28-0 | E420 | 0.00385 mg/L | 0.004 mg/L | 96.2 | 70.0 | 130 | ---- |
| | | Thorium, total | 7440-29-1 | E420 | 0.0212 mg/L | 0.02 mg/L | 106 | 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: 2194306) - continued | | | | | | | | | | |
| WP2514403-002 | Anonymous | Tin, total | 7440-31-5 | E420 | 0.0215 mg/L | 0.02 mg/L | 107 | 70.0 | 130 | ---- |
| | | Titanium, total | 7440-32-6 | E420 | 0.0417 mg/L | 0.04 mg/L | 104 | 70.0 | 130 | ---- |
| | | Tungsten, total | 7440-33-7 | E420 | 0.0209 mg/L | 0.02 mg/L | 104 | 70.0 | 130 | ---- |
| | | Uranium, total | 7440-61-1 | E420 | 0.00413 mg/L | 0.004 mg/L | 103 | 70.0 | 130 | ---- |
| | | Vanadium, total | 7440-62-2 | E420 | 0.100 mg/L | 0.1 mg/L | 100 | 70.0 | 130 | ---- |
| | | Zinc, total | 7440-66-6 | E420 | 0.372 mg/L | 0.4 mg/L | 93.0 | 70.0 | 130 | ---- |
| | | Zirconium, total | 7440-67-7 | E420 | 0.0437 mg/L | 0.04 mg/L | 109 | 70.0 | 130 | ---- |
| Dissolved Metals (QCLot: 2196132) | | | | | | | | | | |
| WP2514267-009 | Anonymous | Mercury, dissolved | 7439-97-6 | E509 | 0.000101 mg/L | 0 mg/L | 101 | 70.0 | 130 | ---- |
| Aggregate Organics (QCLot: 2193853) | | | | | | | | | | |
| TY2509354-005 | Anonymous | Phenols, total (4AAP) | ---- | E562 | 0.0204 mg/L | 0.02 mg/L | 102 | 75.0 | 125 | ---- |
| Volatile Organic Compounds (QCLot: 2189571) | | | | | | | | | | |
| WP2514345-001 | Anonymous | Benzene | 71-43-2 | E611A | 71.6 µg/L | 100 µg/L | 71.6 | 60.0 | 140 | ---- |
| | | Ethylbenzene | 100-41-4 | E611A | 73.2 µg/L | 100 µg/L | 73.2 | 60.0 | 140 | ---- |
| | | Toluene | 108-88-3 | E611A | 70.3 µg/L | 100 µg/L | 70.3 | 60.0 | 140 | ---- |
| | | Xylene, m+p- | 179601-23-1 | E611A | 160 µg/L | 200 µg/L | 80.1 | 60.0 | 140 | ---- |
| | | Xylene, o- | 95-47-6 | E611A | 74.3 µg/L | 100 µg/L | 74.3 | 60.0 | 140 | ---- |
| Hydrocarbons (QCLot: 2189570) | | | | | | | | | | |
| WP2514345-001 | Anonymous | F1 (C6-C10) | ---- | E581.F1 | 4570 µg/L | 5280 µg/L | 86.6 | 60.0 | 140 | ---- |



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