2025 ANNUAL REPORT
FOR THE MUNICIPALITY OF ARVIAT

YEAR BEING REPORTED: 2025

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water Licence No. **3AM-ARV2232** issued to the **Municipality of Arviat**.

Below are tabular summaries of data generated under the "Monitoring Program"

I. Monthly and annual quantities of freshwater obtained and estimated sewage waste discharged:

Table 1: Summary of water obtained from three raw water cells combined and estimated sewage water discharged in m^3.

Month Reported	Quantity of Water Obtained from all sources (m^3)	Quantity of Sewage Waste Discharged (m^3)
January	8,909.974	Same
February	8,739.918	Same
March	9,040.716	Same
April	9,140.535	Same
May	9,652.100	Same
June	9,662.944	Same
July	10,092.037	Same
August	10,085.361	Same
September	9,440.518	Same
October	10,071.441	Same
November	9,458.048	Same
December	9,382.841	Same
ANNUAL TOTAL	113,676.432	Same

Note: No meter exists to measure the sewage discharge volumes, therefore Sewage discharge volumes are considered equal to the water consumption volumes. No sludge removed from the Sewage Disposal Facility in 2025.

Table 2: Summary of water obtained from Wolf Creek to Raw Water Cells in m^3

Month Reported	Estimated Water Transferred from Wolf Creek to Raw Water Cells (m^3)
June	20,254.20
July	42,500.30
August	33,613.00
September	23,553.00
TOTAL	**119,920.50**

Note: Pumping from Wolf Creek River began on June 24, 2025, and periodically occurred throughout July, August, and September, ending on September 13, 2025. A total of 119,920.50 m^3 was pumped to raw water cells, across 42 days in 2025. Daily volumes are recorded in **Appendix A**.

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:

No modifications or major maintenance work carried out in 2025.

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

No updates or revisions to the approved Operation and Maintenance Plan occurred in 2025.

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

No known spills or unauthorized discharges associated with licenced infrastructure under licence 3AM-ARV2232 occurred in 2025. There were no hazardous waste spills within Water License facilities for 2025.

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

There was no abandonment and restoration work completed during 2025. There is no abandonment and restoration work anticipated for 2026.

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

- The initial solid waste site planning study was completed in 2020/21. The cost estimates have indicated that the current funding cannot support the construction of a new 20-year design-life landfill. The focus of the project will shift to making improvements to the current site. A second planning project to assess and prioritize the improvements to the current site was completed in 2025. Construction on the site upgrades is expected to commence in 2027. The upgrades to the waste site include the recommendation to repurpose the abandoned former sewage lagoon into a waste cell.
- Design of the new sewage lagoon is on-hold as geotechnical issues have delayed the project. Once design can move forward, an amendment application will be submitted to the NWB.
- To fulfil Part G, Item 5, the results of the 2022 Wetland Treatment Area performance study is being submitted with this annual report.

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

- An updated Sewage Treatment Facility Operation and Maintenance plan will follow the submission of the 2025 Annual Report. The updates will correct the Water Licence number and incorporate a Document Control section as requested by CIRNAC on September 12, 2025, and will also be aligned with the standardized template.
- An updated Environmental Monitoring Program and Quality Assurance/Quality Control Plan (QA/QC) to be submitted with the 2025 Annual Report as requested from the Nunavut Water Board on July 22, 2025, to include the frequency of replicate and duplicate sampling.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

- Decanting of the lagoon began on May 19, 2025, at 08:00 and concluded on May 26, 2025, at 17:00. Pumping occurred for approximately 8 hours per day, for a total of 48 hours of pumping. No notification was provided to the Nunavut Water Board prior to commencing the decant as required per Part E, Item 4 of the 3AM-ARV2232 Water Licence. Measures will be taken to ensure this requirement is met for future decanting events.
- Fecal Coliforms exceeded the 1 x 10^4 CFU/100mL limit on June 26 as is expected when sampling early in the season as required time for treatment has not been met.
- The August 19, 2025, sampling event recorded Total Suspended Solids (TSS) at ARV-4 above the maximum concentration limit of 120 mg/L, along with a slightly elevated pH. Other key wastewater parameters, including CBOD and fecal coliforms, remained well below effluent quality limits. TSS concentrations during all other sampling events were within the applicable limits. The elevated TSS observed during this event was likely attributable to disturbance within the sewage wetland area (e.g., mobilization of loose organic material and heavy rainfall), rather than indicating inadequately treated sewage.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

CIRNAC Inspection did not take place in 2025.

Appendices:

Appendix A: Arviat Annual Reservoir Resupply from Wolf Creek

Appendix B: Summary of Monitoring Data

Appendix C: Monitoring Program Sample Results

- Certificate of Analysis – 25-06-26
- Certificate of Analysis – 25-07-16
- Certificate of Analysis – 25-08-19

Appendix A: Arviat Annual Reservoir Resupply from Wolf Creek

Date	Meter reading (m^3)	Total Volume (m^3/day)	Monthly Pumped Volume Total (m^3)
June			
June 23, 2025	0	0	
June 24, 2025	3,015.00	3,015.00	
June 25, 2025	6,020.00	3,005.00	
June 26, 2025	8,853.00	2,833.00	
June 27, 2025	11,577.00	2,724.00	
June 28, 2025	14,051.70	2,474.70	
June 29, 2025	16,838.50	2,786.80	
June 30, 2025	20,254.20	3,415.70	20,254.20
July			
July 1, 2025	23,670.30	3,416.10	
July 2, 2025	26,101.30	2,431.00	
July 3, 2025	29,009.80	2,908.50	
July 4, 2025	31,835.60	2,825.80	
July 5, 2025	33,218.20	1,382.60	
July 6, 2025	37,680.60	4,462.40	
July 7, 2025	41,030.20	3,349.60	
July 8, 2025	41,030.20	0	
July 9, 2025	43,484.90	2,454.70	
July 10, 2025	49,348.90	5,864.00	
July 11, 2025	52,062.60	2,713.70	
July 12, 2025	54,140.30	2,077.70	
July 13, 2025	57,191.80	3,051.50	
July 14, 2025	61,204.20	4,012.40	
July 15, 2025	62,754.50	1,550.30	
July 16, 2025	62,754.50	0	42,500.30
August			
August 19, 2025	63.00	0	
August 20, 2025	2,354.00	2,417.00	
August 21, 2025	meter reset	2,750.00	
August 22, 2025	5,607.00	2,857.00	
August 23, 2025	8,427.00	2,820.00	
August 24, 2025	11,334.00	2,907.00	
August 25, 2025	14,205.00	2,871.00	
August 26, 2025	17,047.00	2,842.00	
August 27, 2025	19,814.00	2,767.00	
August 28, 2025	22,569.00	2,755.00	
August 29, 2025	25,404.00	2,835.00	
August 30, 2025	28,185.00	2,781.00	
August 31, 2025	31,196.00	3,011.00	33,613.00

September			
September 1, 2025	33,954.00	2,758.00	
September 2, 2025	36,434.00	2,480.00	
September 3, 2025	39,670.00	3,236.00	
September 4, 2025	42,649.00	2,979.00	
September 5, 2025	45,604.00	2,955.00	
September 6, 2025	0	0	
September 7, 2025	0	0	
September 8, 2025	0	0	
September 9, 2025	0	0	
September 10, 2025	48,570.00	2,966.00	
September 11, 2025	meter reset	1,457.00	
September 12, 2025	2,966.00	1,509.00	
September 13, 2025	6,179.00	3,213.00	
September 14, 2025	0	0	23,553.00
Total Annual Reservoir Resupply Volume (m^3):			119,920.50

Appendix B: Summary of Monitoring Data

ARV-4 Effluent Quality Limits as per Part E, Item 2

Parameter	Maximum Concentration of any Grab Sample	ARV-4		
		25-06-26	**25-07-16**	**25-08-19**
CBOD	100 mg/L	25.8 mg/L	30.1 mg/L	<50.0 mg/L
Total Suspended Solids	120 mg/L	35.9 mg/L	83.6 mg/L	322 mg/L
Fecal Coliforms	1 x 10^4 CFU/100mL	>2420 MPN/100mL	1300 MPN/100mL	6 MPN/100mL
Oil & Grease	No visible sheen	<5.0 mg/L	<5.0 mg/L	<5.0 mg/L
pH	Between 6 and 9	7.95	8.08	9.94

Note: During the 2025 sampling period, ARV-4 recorded three exceedances of the effluent quality limits. Specifically, Fecal Coliforms exceeded the 1 x 10^4 CFU/100mL limit on June 26, while the August 19 event showed significant exceedances for TSS (322 mg/L) and pH (9.94). While CBOD and Oil & Grease remained within compliance, elevated TSS and pH levels in August were present.

Appendix C: Monitoring Program Sample Results

CERTIFICATE OF ANALYSIS

Work Order	:	**WP2509983**		
Client	:	**Hamlet of Arviat**	Laboratory	: ALS Environmental - Winnipeg
Contact	:	Arviat SAO John Hussey	Account Manager	: Daniel Rocha
Address	:	PO Box 150 Arviat Nunavut Canada X0C 0E0	Address	: 1329 Niakwa Road East, Unit 12 Winnipeg MB Canada R2J 3T4
Telephone	:	867 857 2841	E-mail	: daniel.rocha@alsglobal.com
Project	:	----	Telephone	: +1 204 255 9720
PO	:	----	Date Samples Received	: 30-Jun-2025 12:59
C-O-C number	:	----	Date Analysis Commenced	: 30-Jun-2025
Sampler	:	----	Issue Date	: 22-Aug-2025 13:05
Site	:	Arviat - Analytical		
Quote number	:	2025 Analytical Testing		
No. of samples received	:	5		
No. of samples analysed	:	5		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Laboratory Department*
Nataliia Makovetska		Organics, Winnipeg, Manitoba
Jade Soliman		Microbiology, Winnipeg, Manitoba
Jeremy Gingras		Organics, Waterloo, Ontario
Kevin Baxter		Metals, Winnipeg, Manitoba
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Leila Conyard		Metals, Winnipeg, Manitoba
Manjit Brar		Organics, Winnipeg, Manitoba
Michelle Michalchuk		Organics, Winnipeg, Manitoba
Nik Perkio		Inorganics, Waterloo, Ontario
Ryan Velasco		Organics, 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).

Unit	*Description*
-	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

Qualifier	Description
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
HTA	Analytical holding time was exceeded.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	ARV - 5 ----	ARV - 6 ----	Lagoon ----
					Client sampling date / time	26-Jun-2025 08:53	26-Jun-2025 08:32	26-Jun-2025 09:09	26-Jun-2025 09:22	26-Jun-2025 08:44
						WP2509983-001	WP2509983-002	WP2509983-003	WP2509983-004	WP2509983-005
						Result	Result	Result	Result	Result
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WP	1.2	mg/L		370	287	59.3	163	295
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WP	1.0	mg/L		4.3	<0.6	<0.6	<0.6	<0.6
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WP	1.0	mg/L		<0.3	<0.3	<0.3	<0.3	<0.3
Conductivity	----	E100/WP	2.0	µS/cm		2040	1220	577	685	726
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WP	0.50	mg/L		601	121	105	210	41.5
pH	----	E108/WP	0.10	pH units		8.31	7.95	7.60	7.20	7.83
Solids, total suspended [TSS]	----	E160/WP	3.0	mg/L		18.7	35.9	5.3	160	43.7
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WP	0.0050	mg/L		3.65	37.6	0.0330	0.0265	58.2
Chloride	16887-00-6	E235.Cl/WP	0.50	mg/L		268	215	138	129	56.3
Nitrate (as N)	14797-55-8	E235.NO3/WP	0.020	mg/L		<0.200 DLM	<0.100 DLM	<0.020	<0.020	<0.020
Nitrate + Nitrite (as N)	----	EC235.N+N/WP	0.0050	mg/L		<0.224	<0.112	<0.0224	<0.0224	<0.0224
Nitrite (as N)	14797-65-0	E235.NO2/WP	0.010	mg/L		<0.100 DLM	<0.050 DLM	<0.010	<0.010	<0.010
Phosphorus, total	7723-14-0	E372/WP	0.020	mg/L		0.214	8.37	0.030	0.077	7.84
Sulfate (as SO4)	14808-79-8	E235.SO4/WP	0.30	mg/L		351	6.88	6.62	<0.30	<0.30
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WP	0.50	mg/L		32.5	42.1	10.9	45.5	151
Microbiological Tests										
Coliforms, thermotolerant [fecal]	----	E010.FC/WP	1	MPN/100 mL		19	>2420	2	<1	>2420
Total Metals										
Aluminum, total	7429-90-5	E420/WP	0.0030	mg/L		0.0121	0.0988	0.0227	0.100	0.112

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	ARV - 5 ----	ARV - 6 ----	Lagoon ----
					Client sampling date / time	26-Jun-2025 08:53	26-Jun-2025 08:32	26-Jun-2025 09:09	26-Jun-2025 09:22	26-Jun-2025 08:44
						WP2509983-001	WP2509983-002	WP2509983-003	WP2509983-004	WP2509983-005
						Result	Result	Result	Result	Result
Total Metals										
Antimony, total	7440-36-0	E420/WP	0.00010	mg/L		0.00409	0.00032	0.000030	0.000039	0.00053
Arsenic, total	7440-38-2	E420/WP	0.00010	mg/L		0.00220	0.00485	0.00055	0.00099	0.00052
Barium, total	7440-39-3	E420/WP	0.00010	mg/L		0.0376	0.0222	0.0272	0.186	0.0108
Beryllium, total	7440-41-7	E420/WP	0.000020	mg/L		0.0000016	0.0000076	Not Detected	0.0000047	0.00000072
Bismuth, total	7440-69-9	E420/WP	0.000050	mg/L		0.0000043	0.000219	0.0000032	0.0000019	0.000986
Boron, total	7440-42-8	E420/WP	0.010	mg/L		2.14	0.216	0.050	0.013	0.115
Cadmium, total	7440-43-9	E420/WP	0.0000050	mg/L		0.000179	0.0000483	0.0000017	0.0000054	0.0000625
Calcium, total	7440-70-2	E420/WP	0.050	mg/L		170	18.9	19.5	50.5	9.33
Cesium, total	7440-46-2	E420/WP	0.000010	mg/L		0.000020	0.000033	0.000019	0.000027	0.000166
Chromium, total	7440-47-3	E420/WP	0.00050	mg/L		0.00068	0.00100	0.00015	0.00065	0.00095
Cobalt, total	7440-48-4	E420/WP	0.00010	mg/L		0.00181	0.00135	0.00029	0.00425	0.00043
Copper, total	7440-50-8	E420/WP	0.00050	mg/L		0.0348	0.0285	0.00058	0.00085	0.125
Iron, total	7439-89-6	E420/WP	0.010	mg/L		3.22	3.01	1.79	67.5	0.661
Lead, total	7439-92-1	E420/WP	0.000050	mg/L		0.00651	0.000764	0.000075	0.000202	0.00105
Lithium, total	7439-93-2	E420/WP	0.0010	mg/L		0.0538	0.0060	0.0054	0.0089	0.0025
Magnesium, total	7439-95-4	E420/WP	0.0050	mg/L		42.8	17.9	13.6	20.4	4.42
Manganese, total	7439-96-5	E420/WP	0.00010	mg/L		0.692	0.282	0.263	7.31	0.0391
Molybdenum, total	7439-98-7	E420/WP	0.000050	mg/L		0.000808	0.000456	0.000233	0.000939	0.000789
Nickel, total	7440-02-0	E420/WP	0.00050	mg/L		0.0101	0.00490	0.00068	0.00229	0.00249
Phosphorus, total	7723-14-0	E420/WP	0.050	mg/L		0.228	9.68	0.030	0.096	9.03
Potassium, total	7440-09-7	E420/WP	0.050	mg/L		42.3	23.2	4.58	7.08	18.7

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	ARV - 5 ----	ARV - 6 ----	Lagoon ----
					Client sampling date / time	26-Jun-2025 08:53	26-Jun-2025 08:32	26-Jun-2025 09:09	26-Jun-2025 09:22	26-Jun-2025 08:44
						WP2509983-001	WP2509983-002	WP2509983-003	WP2509983-004	WP2509983-005
						Result	Result	Result	Result	Result
Total Metals										
Rubidium, total	7440-17-7	E420/WP	0.00020	mg/L		0.0339	0.0194	0.00444	0.00820	0.0212
Selenium, total	7782-49-2	E420/WP	0.000050	mg/L		0.000071	0.000244	0.000024	0.000108	0.000309
Silicon, total	7440-21-3	E420/WP	0.10	mg/L		3.82	2.20	0.41	3.40	0.83
Silver, total	7440-22-4	E420/WP	0.000010	mg/L		0.000062	0.000057	Not Detected	0.0000033	0.000058
Sodium, total	7440-23-5	E420/WP	0.050	mg/L		208	146	75.8	39.9	44.5
Strontium, total	7440-24-6	E420/WP	0.00020	mg/L		1.21	0.184	0.141	0.452	0.0400
Sulfur, total	7704-34-9	E420/WP	0.50	mg/L		138	5.44	2.90	0.54	4.28
Tellurium, total	13494-80-9	E420/WP	0.00020	mg/L		0.00011	0.000068	0.000022	0.000078	0.000034
Thallium, total	7440-28-0	E420/WP	0.000010	mg/L		0.000011	0.000012	0.0000027	0.0000028	0.0000042
Thorium, total	7440-29-1	E420/WP	0.00010	mg/L		Not Detected	0.000053	0.000024	0.00010	0.000015
Tin, total	7440-31-5	E420/WP	0.00010	mg/L		0.00018	0.00062	Not Detected	Not Detected	0.00143
Titanium, total	7440-32-6	E420/WP	0.00030	mg/L		0.00048	0.00560	0.00105	0.00669	0.00386
Tungsten, total	7440-33-7	E420/WP	0.00010	mg/L		0.000096	0.00020	0.000016	0.000067	0.000040
Uranium, total	7440-61-1	E420/WP	0.000010	mg/L		0.00111	0.000226	0.000044	0.000363	0.000030
Vanadium, total	7440-62-2	E420/WP	0.00050	mg/L		0.00064	0.00319	0.00025	0.00061	0.00019
Zinc, total	7440-66-6	E420/WP	0.0030	mg/L		0.239	0.0207	0.0718	0.0036	0.101
Zirconium, total	7440-67-7	E420/WP	0.00020	mg/L		0.00032	0.00085	0.000055	0.00036	0.00065
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/WP	0.0000050	mg/L		0.0000199	<0.0000050	<0.0000050	<0.0000050	0.0000130
Dissolved mercury filtration location	----	EP509/WP	-	-		Field	Field	Field	Field	Field

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	ARV - 5 ----	ARV - 6 ----	Lagoon ----
					Client sampling date / time	26-Jun-2025 08:53	26-Jun-2025 08:32	26-Jun-2025 09:09	26-Jun-2025 09:22	26-Jun-2025 08:44
						WP2509983-001	WP2509983-002	WP2509983-003	WP2509983-004	WP2509983-005
						Result	Result	Result	Result	Result
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/WP	2.0	mg/L		9.8 HTA	33.0 HTA	<6.0 HTA	46.5 HTA	144 HTA
Carbonaceous biochemical oxygen demand [CBOD]	----	E555/WP	2.0	mg/L		6.8 HTA	25.8 HTA	<6.0 HTA	39.7 HTA	126 HTA
Oil & grease (gravimetric)	----	E567/WP	5.0	mg/L		<5.0	<5.0	<5.0	<5.0	44.1
Phenols, total (4AAP)	----	E562/WT	0.0010	mg/L		0.0029	0.0969	<0.0010	0.0385	0.576
Volatile Organic Compounds										
Benzene	71-43-2	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Ethylbenzene	100-41-4	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
Toluene	108-88-3	E611A/WP	0.00050	mg/L		<0.00050	0.0141	<0.00050	0.00312	----
Xylene, m+p-	179601-23-1	E611A/WP	0.00040	mg/L		<0.00040	<0.00040	<0.00040	<0.00040	----
Xylene, o-	95-47-6	E611A/WP	0.00030	mg/L		<0.00030	<0.00030	<0.00030	<0.00030	----
Xylenes, total	1330-20-7	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	----
BTEX, total	----	E611A/WP	0.0010	mg/L		<0.0010	0.0141	<0.0010	0.0031	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1/WP	0.10	mg/L		<0.10	<0.10	<0.10	<0.10	----
F1-BTEX	----	EC580/WP	0.100	mg/L		<0.100	<0.100	<0.100	<0.100	----
F2 (C10-C16)	----	E601/WP	0.10	mg/L		0.10	0.23	<0.10	<0.10	----
F3 (C16-C34)	----	E601/WP	0.25	mg/L		0.29	1.96	<0.25	<0.25	----
F4 (C34-C50)	----	E601/WP	0.25	mg/L		<0.25	0.58	<0.25	<0.25	----
TEH (C10-C50)	n/a	E601/WP	0.40	mg/L		<0.40	2.77	<0.40	<0.40	----
TEH (C16-C50)	----	E601/WP	0.40	mg/L		<0.40	2.54	<0.40	<0.40	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	ARV - 5 ----	ARV - 6 ----	Lagoon ----
					Client sampling date / time	26-Jun-2025 08:53	26-Jun-2025 08:32	26-Jun-2025 09:09	26-Jun-2025 09:22	26-Jun-2025 08:44
						WP2509983-001	WP2509983-002	WP2509983-003	WP2509983-004	WP2509983-005
						Result	Result	Result	Result	Result
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/WP	1.0	%		124	115	114	113	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WP	1.0	%		116	88.0	113	112	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611A/WP	1.0	%		94.3	95.7	93.2	101	----
Difluorobenzene, 1,4-	540-36-3	E611A/WP	1.0	%		103	99.0	101	103	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Acenaphthylene	208-96-8	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Acridine	260-94-6	E641A/WT	0.010	µg/L		<0.010	0.040	<0.010	<0.010	----
Anthracene	120-12-7	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Benz(a)anthracene	56-55-3	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Benzo(a)pyrene	50-32-8	E641A/WT	0.0050	µg/L		<0.0050	<0.0050	<0.0050	<0.0050	----
Benzo(b+j)fluoranthene	n/a	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Benzo(b+j+k)fluoranthene	n/a	E641A/WT	0.015	µg/L		<0.015	<0.015	<0.015	<0.015	----
Benzo(g,h,i)perylene	191-24-2	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Benzo(k)fluoranthene	207-08-9	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Chrysene	218-01-9	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Dibenz(a,h)anthracene	53-70-3	E641A/WT	0.0050	µg/L		<0.0050	<0.0050	<0.0050	<0.0050	----
Fluoranthene	206-44-0	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Fluorene	86-73-7	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	ARV - 5 ----	ARV - 6 ----	Lagoon ----
					Client sampling date / time	26-Jun-2025 08:53	26-Jun-2025 08:32	26-Jun-2025 09:09	26-Jun-2025 09:22	26-Jun-2025 08:44
						WP2509983-001	WP2509983-002	WP2509983-003	WP2509983-004	WP2509983-005
						Result	Result	Result	Result	Result
Polycyclic Aromatic Hydrocarbons										
Methylnaphthalene, 1-	90-12-0	E641A/WT	0.010	µg/L		<0.010	0.054	<0.010	0.017	----
Methylnaphthalene, 1+2-	----	E641A/WT	0.015	µg/L		<0.015	0.114	<0.015	0.034	----
Methylnaphthalene, 2-	91-57-6	E641A/WT	0.010	µg/L		<0.010	0.060	<0.010	0.017	----
Naphthalene	91-20-3	E641A/WT	0.050	µg/L		<0.050	<0.050	<0.050	<0.050	----
Phenanthrene	85-01-8	E641A/WT	0.020	µg/L		<0.020	<0.020	<0.020	<0.020	----
Pyrene	129-00-0	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
Quinoline	91-22-5	E641A/WT	0.050	µg/L		<0.050	<0.115 DLM	<0.050	<0.050	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/WT	0.010	µg/L		<0.010	<0.010	<0.010	<0.010	----
PAHs, high molecular weight (BC AWQ)	n/a	E641A/WT	0.030	µg/L		<0.030	<0.030	<0.030	<0.030	----
PAHs, low molecular weight (BC AWQ)	n/a	E641A/WT	0.060	µg/L		<0.060	<0.060	<0.060	<0.060	----
PAHs, total (CCME sewer 18)	n/a	E641A/WT	0.070	µg/L		<0.070	0.114	<0.070	<0.070	----
PAHs, total (EPA 16)	n/a	E641A/WT	0.065	µg/L		<0.065	<0.065	<0.065	<0.065	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/WT	0.1	%		86.9	105	99.3	114	----
Naphthalene-d8	1146-65-2	E641A/WT	0.1	%		100	112	99.4	111	----
Phenanthrene-d10	1517-22-2	E641A/WT	0.1	%		98.2	105	102	115	----

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

ALS Environmental

www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number: 17 - 747856

Page 1 of 1

Report To	Contact and company name below will appear on the final report
Company:	Hamlet of ARVIAT
Contact:	JOHN HUSS
Phone:	867-857-2841
Company address below will appear on the final report	
Street:	
City/Province:	NUNAVUT
Postal Code:	X0C-0P0
Invoice To	Same as Report To: YES / NO
	Copy of Invoice with Report: YES / NO
Company:	
Contact:	

Report Format / Distribution	
Select Report Format:	PDF / EXCEL / EDD (DIGITAL)
Quality Control (QC) Report with Report	YES / NO
Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	EMAIL / MAIL / FAX
Email 1 or Fax	sao@arviat.ca
Email 2	GSiahu@gov.nu.ca
Email 3	

Invoice Distribution	
Select Invoice Distribution:	EMAIL / MAIL / FAX
Email 1 or Fax	
Email 2	

Project Information	
ALS Account # / Quote #:	
Job #:	
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)	
AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (lab use only):	ALS Contact:	Sampler:

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

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

PRIORITY (Business Days): 4 day [P4-20%] ☐ / 3 day [P3-25%] ☐ / 2 day [P2-50%] ☐

EMERGENCY: 1 Business day [E - 100%] ☐ / Same Day, Weekend or Statutory holiday [E2 -200% (Laboratory opening fees may apply)] ☐

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

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

Analysis Request

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

NUMBER OF CONTAINERS

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Total Metals	Regular BOD	Regular - Medium Bottle	Oil & Grease	Ecoli - Fecal	Total Mercury	TKN, TDC	EPH, LEPH x 2	F2-F4 x 2	F1-VH, BTEX x2	SAMPLES ON HOLD	SUSPECTED HAZARD (see Special Instructions)
	ARV-2	26.06.25	8:53am		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	ARV-4	26.06.25	8:32am		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	ARV-5	26.06.25	9:09am		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	ARV-6	26.06.25	9:22am		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Lagoon	26.06.25	8:44am		✓	✓	✓	✓	✓	✓	✓					

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)
Are samples taken from a Regulated DW System? ☐ YES ☐ NO	
Are samples for human consumption/ use? ☐ YES ☐ NO	

SAMPLE CONDITION AS

Frozen ☐ SIF Observations

Ice Packs ☑ Ice Cubes ☐ Custody seal inta

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C

9.3 C

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMEN		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date	
Laura	June 26/25	9:30	GC	June 30/2025	12:10 pm			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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

Environmental Division Winnipeg

Work Order Reference

WP2509983

Telephone : +1 204 255 9720

FRONT

CERTIFICATE OF ANALYSIS

Work Order	:	**WP2511331**			
Client	:	**Hamlet of Arviat**	Laboratory	:	ALS Environmental - Winnipeg
Contact	:	Arviat SAO John Hussey	Account Manager	:	Daniel Rocha
Address	:	PO Box 150 Arviat Nunavut Canada X0C 0E0	Address	:	1329 Niakwa Road East, Unit 12 Winnipeg MB Canada R2J 3T4
Telephone	:	867 857 2841	E-mail	:	daniel.rocha@alsglobal.com
Project	:	----	Telephone	:	+1 204 255 9720
PO	:	----	Date Samples Received	:	17-Jul-2025 13:04
C-O-C number	:	----	Date Analysis Commenced	:	17-Jul-2025
Sampler	:	----	Issue Date	:	22-Aug-2025 13:11
Site	:	Arviat - Analytical			
Quote number	:	2025 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
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Laboratory Department*
Andrew Beckett		Organics, Winnipeg, Manitoba
Brennan Dugas		Microbiology, Winnipeg, Manitoba
Danielle Gravel		Organics, Waterloo, Ontario
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Kevin Baxter		Metals, Winnipeg, Manitoba
Leila Conyard		Metals, Winnipeg, Manitoba
Livia Ciolan		Organics, Winnipeg, Manitoba
Manjit Brar		Organics, Winnipeg, Manitoba
Manuel TavaraTello		Organics, Waterloo, Ontario
Nik Perkio		Inorganics, Waterloo, Ontario

General Comments

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

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

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

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

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

Unit	*Description*
-	no units
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

Qualifier	Description
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DLQ	Detection Limit raised due to co-eluting interference. Mass Spectrometry qualifier ion ratio did not meet acceptance criteria.
MBHT	The APHA 30 hour holding time was exceeded for microbiological testing. Samples processed within 48 hours from time of sampling may be valid in some cases (refer to Health Canada guidance).

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	16-Jul-2025 09:30	16-Jul-2025 10:06	----	----	----
						WP2511331-001	WP2511331-002	----	----	----
						Result	Result	----	----	----
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WP	1.2	mg/L		621	271	----	----	----
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WP	1.0	mg/L		<0.6	<0.6	----	----	----
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WP	1.0	mg/L		<0.3	<0.3	----	----	----
Conductivity	----	E100/WP	2.0	µS/cm		2270	809	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WP	0.50	mg/L		959	69.5	----	----	----
pH	----	E108/WP	0.10	pH units		8.08	8.08	----	----	----
Solids, total suspended [TSS]	----	E160/WP	3.0	mg/L		28.8	83.6	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WP	0.0050	mg/L		8.42	32.2	----	----	----
Chloride	16887-00-6	E235.Cl/WP	0.50	mg/L		262	108	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/WP	0.020	mg/L		<0.400 DLM	0.205	----	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/WP	0.0050	mg/L		<0.447	0.237	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/WP	0.010	mg/L		<0.200 DLM	0.032	----	----	----
Phosphorus, total	7723-14-0	E372/WP	0.020	mg/L		0.493	7.36	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/WP	0.30	mg/L		478	6.72	----	----	----
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WP	0.50	mg/L		52.1	66.6	----	----	----
Microbiological Tests										
Coliforms, thermotolerant [fecal]	----	E010.FC/WP	1	MPN/100 mL		308 MBHT	1300 MBHT	----	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/WP	0.0030	mg/L		0.0347	0.104	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	16-Jul-2025 09:30	16-Jul-2025 10:06	----	----	----
						WP2511331-001	WP2511331-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Antimony, total	7440-36-0	E420/WP	0.00010	mg/L		0.00506	0.00037	----	----	----
Arsenic, total	7440-38-2	E420/WP	0.00010	mg/L		0.00298	0.00634	----	----	----
Barium, total	7440-39-3	E420/WP	0.00010	mg/L		0.0609	0.0151	----	----	----
Beryllium, total	7440-41-7	E420/WP	0.000020	mg/L		0.0000022	0.0000056	----	----	----
Bismuth, total	7440-69-9	E420/WP	0.000050	mg/L		0.0000018	0.000225	----	----	----
Boron, total	7440-42-8	E420/WP	0.010	mg/L		2.08	0.364	----	----	----
Cadmium, total	7440-43-9	E420/WP	0.0000050	mg/L		0.000293	0.0000328	----	----	----
Calcium, total	7440-70-2	E420/WP	0.050	mg/L		300	13.4	----	----	----
Cesium, total	7440-46-2	E420/WP	0.000010	mg/L		0.000026	0.000068	----	----	----
Chromium, total	7440-47-3	E420/WP	0.00050	mg/L		0.00106	0.00136	----	----	----
Cobalt, total	7440-48-4	E420/WP	0.00010	mg/L		0.00292	0.00122	----	----	----
Copper, total	7440-50-8	E420/WP	0.00050	mg/L		0.138	0.0422	----	----	----
Iron, total	7439-89-6	E420/WP	0.010	mg/L		1.49	1.52	----	----	----
Lead, total	7439-92-1	E420/WP	0.000050	mg/L		0.0150	0.000827	----	----	----
Lithium, total	7439-93-2	E420/WP	0.0010	mg/L		0.0565	0.0059	----	----	----
Magnesium, total	7439-95-4	E420/WP	0.0050	mg/L		51.0	8.76	----	----	----
Manganese, total	7439-96-5	E420/WP	0.00010	mg/L		2.16	0.165	----	----	----
Molybdenum, total	7439-98-7	E420/WP	0.000050	mg/L		0.00101	0.000581	----	----	----
Nickel, total	7440-02-0	E420/WP	0.00050	mg/L		0.0142	0.00498	----	----	----
Phosphorus, total	7723-14-0	E420/WP	0.050	mg/L		0.734	8.84	----	----	----
Potassium, total	7440-09-7	E420/WP	0.050	mg/L		55.2	25.0	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	16-Jul-2025 09:30	16-Jul-2025 10:06	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		WP2511331-001	WP2511331-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Rubidium, total	7440-17-7	E420/WP	0.00020	mg/L		0.0407	0.0226	----	----	----
Selenium, total	7782-49-2	E420/WP	0.000050	mg/L		0.000206	0.000230	----	----	----
Silicon, total	7440-21-3	E420/WP	0.10	mg/L		5.06	2.90	----	----	----
Silver, total	7440-22-4	E420/WP	0.000010	mg/L		0.000283	0.000055	----	----	----
Sodium, total	7440-23-5	E420/WP	0.050	mg/L		228	93.4	----	----	----
Strontium, total	7440-24-6	E420/WP	0.00020	mg/L		1.77	0.163	----	----	----
Sulfur, total	7704-34-9	E420/WP	0.50	mg/L		201	6.26	----	----	----
Tellurium, total	13494-80-9	E420/WP	0.00020	mg/L		0.000072	Not Detected	----	----	----
Thallium, total	7440-28-0	E420/WP	0.000010	mg/L		0.000014	0.000011	----	----	----
Thorium, total	7440-29-1	E420/WP	0.00010	mg/L		0.000029	0.000099	----	----	----
Tin, total	7440-31-5	E420/WP	0.00010	mg/L		0.00027	0.00060	----	----	----
Titanium, total	7440-32-6	E420/WP	0.00030	mg/L		0.00258	0.00854	----	----	----
Tungsten, total	7440-33-7	E420/WP	0.00010	mg/L		0.00014	0.00011	----	----	----
Uranium, total	7440-61-1	E420/WP	0.000010	mg/L		0.00108	0.000228	----	----	----
Vanadium, total	7440-62-2	E420/WP	0.00050	mg/L		0.00080	0.00351	----	----	----
Zinc, total	7440-66-6	E420/WP	0.0030	mg/L		0.422	0.0220	----	----	----
Zirconium, total	7440-67-7	E420/WP	0.00020	mg/L		0.00052	0.00120	----	----	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/WP	0.0000050	mg/L		0.0000678	<0.0000050	----	----	----
Dissolved mercury filtration location	----	EP509/WP	-	-		Field	Field	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

					Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	16-Jul-2025 09:30	16-Jul-2025 10:06	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		WP2511331-001	WP2511331-002	----	----	----
						Result	Result	----	----	----
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/WP	2.0	mg/L		<6.0	41.5	----	----	----
Carbonaceous biochemical oxygen demand [CBOD]	----	E555/WP	2.0	mg/L		<6.0	30.1	----	----	----
Oil & grease (gravimetric)	----	E567/WT	5.0	mg/L		<5.0	<5.0	----	----	----
Phenols, total (4AAP)	----	E562/WT	0.0010	mg/L		0.0049	0.0027	----	----	----
Volatile Organic Compounds										
Benzene	71-43-2	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Ethylbenzene	100-41-4	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Toluene	108-88-3	E611A/WP	0.00050	mg/L		<0.00050	0.00125	----	----	----
Xylene, m+p-	179601-23-1	E611A/WP	0.00040	mg/L		<0.00040	<0.00040	----	----	----
Xylene, o-	95-47-6	E611A/WP	0.00030	mg/L		<0.00030	<0.00030	----	----	----
Xylenes, total	1330-20-7	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	----	----	----
BTEX, total	----	E611A/WP	0.0010	mg/L		<0.0010	0.0012	----	----	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1/WP	0.10	mg/L		<0.10	<0.10	----	----	----
F1-BTEX	----	EC580/WP	0.100	mg/L		<0.100	<0.100	----	----	----
F2 (C10-C16)	----	E601/WP	0.10	mg/L		0.12	<0.10	----	----	----
F3 (C16-C34)	----	E601/WP	0.25	mg/L		0.26	0.96	----	----	----
F4 (C34-C50)	----	E601/WP	0.25	mg/L		<0.25	0.35	----	----	----
TEH (C10-C50)	n/a	E601/WP	0.40	mg/L		<0.40	1.31	----	----	----
TEH (C16-C50)	----	E601/WP	0.40	mg/L		<0.40	1.31	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	16-Jul-2025 09:30	16-Jul-2025 10:06	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		WP2511331-001	WP2511331-002	----	----	----
						Result	Result	----	----	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/WP	1.0	%		116	127	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WP	1.0	%		95.0	104	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611A/WP	1.0	%		103	106	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611A/WP	1.0	%		100.0	102	----	----	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Acenaphthylene	208-96-8	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Acridine	260-94-6	E641A/WT	0.010	µg/L		<0.010	0.069	----	----	----
Anthracene	120-12-7	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benz(a)anthracene	56-55-3	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(a)pyrene	50-32-8	E641A/WT	0.0050	µg/L		<0.0050	<0.0050	----	----	----
Benzo(b+j)fluoranthene	n/a	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(b+j+k)fluoranthene	n/a	E641A/WT	0.015	µg/L		<0.015	<0.015	----	----	----
Benzo(g,h,i)perylene	191-24-2	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(k)fluoranthene	207-08-9	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Chrysene	218-01-9	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Dibenz(a,h)anthracene	53-70-3	E641A/WT	0.0050	µg/L		<0.0050	<0.0050	----	----	----
Fluoranthene	206-44-0	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Fluorene	86-73-7	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

					Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	16-Jul-2025 09:30	16-Jul-2025 10:06	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		WP2511331-001	WP2511331-002	----	----	----
						Result	Result	----	----	----
Polycyclic Aromatic Hydrocarbons										
Methylnaphthalene, 1-	90-12-0	E641A/WT	0.010	µg/L		<0.010	<0.020 DLQ	----	----	----
Methylnaphthalene, 1+2-	----	E641A/WT	0.015	µg/L		<0.015	<0.022	----	----	----
Methylnaphthalene, 2-	91-57-6	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Naphthalene	91-20-3	E641A/WT	0.050	µg/L		<0.050	<0.050	----	----	----
Phenanthrene	85-01-8	E641A/WT	0.020	µg/L		<0.020	<0.020	----	----	----
Pyrene	129-00-0	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Quinoline	91-22-5	E641A/WT	0.050	µg/L		<0.050	<0.050	----	----	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
PAHs, high molecular weight (BC AWQ)	n/a	E641A/WT	0.030	µg/L		<0.030	<0.030	----	----	----
PAHs, low molecular weight (BC AWQ)	n/a	E641A/WT	0.060	µg/L		<0.060	<0.060	----	----	----
PAHs, total (CCME sewer 18)	n/a	E641A/WT	0.070	µg/L		<0.070	<0.070	----	----	----
PAHs, total (EPA 16)	n/a	E641A/WT	0.065	µg/L		<0.065	<0.065	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/WT	0.1	%		93.6	83.4	----	----	----
Naphthalene-d8	1146-65-2	E641A/WT	0.1	%		109	110	----	----	----
Phenanthrene-d10	1517-22-2	E641A/WT	0.1	%		104	98.9	----	----	----

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

ALS Environmental
www.alsglobal.com

Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC Number: 14 - 503154

Environmental Division
Winnipeg
Work Order Reference
WP2511331

Telephone : +1 204 255 9720

Report To		Report Format / Distribution	Select Service Level Below (Rush Turna
Company: Hamlet of Arviat		Select Report Format: ☑ PDF ☐ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3pm)
Contact: John Huss		Quality Control (QC) Report with Report ☐ Yes ☐ No	P ☐ Priority (2-4 business days if received by 3
Address: [redacted] PO Box 150, Arviat, NV, X0C0E0		☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 business days if received b
		Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency if receiv
Phone: 867-857-2841		Email 1 or Fax SAO@Arviat.ca	Specify Date Required for E2,E or P:
		Email 2 kivalliqwatersamples@gov.nu.ca	Analysis
Invoice To Same as Report To ☑ Yes ☐ No		Invoice Distribution	Indicate Filtered (F), Preserved (P) or Filtere
Copy of Invoice with Report ☐ Yes ☑ No		Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	
Company:		Email 1 or Fax	
Contact:		Email 2	

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:		Approver ID:	Cost Center:
Job #:		GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact:	Sampler:

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Number of Containers
	ARV-2	16-07-25	09:30	WV	14
	ARV-4	16-07-25	10:06	WV	14

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☐ Yes ☑ No	
Are samples for human drinking water use? ☐ Yes ☑ No	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen	☐		SIF Observations	Yes	☐	No	☐
Ice packs	Yes	☐ No ☐	Custody seal intact	Yes	☐	No	☐
Cooling Initiated	☐						

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
9.5 C					

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Brian Jr A	16-07-25	11:00	GK	July 17	12:04 pm			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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

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

ALS Canada Ltd.

right solutions.
right partner.

CERTIFICATE OF ANALYSIS

Work Order	:	**WP2513985**			
Client	:	**Hamlet of Arviat**	Laboratory	:	ALS Environmental - Winnipeg
Contact	:	Arviat SAO John Hussey	Account Manager	:	Daniel Rocha
Address	:	PO Box 150 Arviat Nunavut Canada X0C 0E0	Address	:	1329 Niakwa Road East, Unit 12 Winnipeg MB Canada R2J 3T4
Telephone	:	867 857 2841	E-mail	:	daniel.rocha@alsglobal.com
Project	:	----	Telephone	:	+1 204 255 9720
PO	:	----	Date Samples Received	:	20-Aug-2025 14:18
C-O-C number	:	----	Date Analysis Commenced	:	20-Aug-2025
Sampler	:	----	Issue Date	:	03-Nov-2025 09:31
Site	:	Arviat - Analytical			
Quote number	:	2025 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
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Laboratory Department*
Andrew Beckett		Organics, Winnipeg, Manitoba
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Kevin Baxter	Supervisor - Inorganic	Inorganics, Winnipeg, Manitoba
Kevin Baxter	Supervisor - Inorganic	Metals, Winnipeg, Manitoba
Lee McTavish		Inorganics, Winnipeg, Manitoba
Leila Conyard	Lab Assistant	Metals, Winnipeg, Manitoba
Livia Ciolan	Analyst	Organics, Winnipeg, Manitoba
Manjit Brar	Analyst	Organics, Winnipeg, Manitoba
Manuel TavaraTello	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Rachel Cameron	Supervisor - Semi-Volatile Extractions	Organics, Waterloo, Ontario
Walt Kippenhuck	Supervisor - Inorganic	Metals, Waterloo, Ontario
Walt Kippenhuck	Supervisor - Inorganic	Inorganics, Waterloo, Ontario
William Lake	Laboratory Supervisor	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).

Unit	*Description*
-	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

Qualifier	Description
DLHC	Detection Limit Raised: Dilution required due to high concentration of test analyte(s).
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:00	----	----	----
						WP2513985-001	WP2513985-002	----	----	----
						Result	Result	----	----	----
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/WP	1.2	mg/L		808	76.4	----	----	----
Alkalinity, carbonate (as CO3)	3812-32-6	E290/WP	1.0	mg/L		<0.6	59.6	----	----	----
Alkalinity, hydroxide (as OH)	14280-30-9	E290/WP	1.0	mg/L		<0.3	<0.3	----	----	----
Conductivity	----	E100/WP	2.0	µS/cm		2790	929	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WT	0.50	mg/L		949	77.2	----	----	----
pH	----	E108/WP	0.10	pH units		7.79	9.94	----	----	----
Solids, total suspended [TSS]	----	E160/WP	3.0	mg/L		14.2	322	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WP	0.0050	mg/L		13.0	5.66	----	----	----
Chloride	16887-00-6	E235.Cl/WP	0.50	mg/L		463	200	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/WP	0.020	mg/L		<0.400 DLM	0.107	----	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/WP	0.0050	mg/L		<0.447	0.202	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/WP	0.010	mg/L		<0.200 DLM	0.095	----	----	----
Phosphorus, total	7723-14-0	E372/WP	0.020	mg/L		0.184	9.92	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/WP	0.30	mg/L		606	9.39	----	----	----
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/WP	0.50	mg/L		48.8	174	----	----	----
Microbiological Tests										
Coliforms, thermotolerant [fecal]	----	E010.FC/WP	1	MPN/100 mL		8	6	----	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/WT	0.0030	mg/L		<0.0300 DLHC	0.397 DLM	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:00	----	----	----
						WP2513985-001	WP2513985-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Antimony, total	7440-36-0	E420/WT	0.00010	mg/L		0.00482 DLHC	<0.00100 DLM	----	----	----
Arsenic, total	7440-38-2	E420/WT	0.00010	mg/L		0.00267 DLHC	0.00933 DLM	----	----	----
Barium, total	7440-39-3	E420/WT	0.00010	mg/L		0.0525 DLHC	0.0277 DLM	----	----	----
Beryllium, total	7440-41-7	E420/WT	0.000020	mg/L		<0.000200 DLHC	<0.000200 DLM	----	----	----
Bismuth, total	7440-69-9	E420/WT	0.000050	mg/L		<0.000500 DLHC	<0.000500 DLM	----	----	----
Boron, total	7440-42-8	E420/WT	0.010	mg/L		2.43 DLHC	0.455 DLM	----	----	----
Cadmium, total	7440-43-9	E420/WT	0.0000050	mg/L		0.000180 DLHC	0.000105 DLM	----	----	----
Calcium, total	7440-70-2	E420/WT	0.050	mg/L		283 DLHC	12.8 DLM	----	----	----
Cesium, total	7440-46-2	E420/WT	0.000010	mg/L		<0.000100 DLHC	<0.000100 DLM	----	----	----
Chromium, total	7440-47-3	E420/WT	0.00050	mg/L		<0.00500 DLHC	<0.00500 DLM	----	----	----
Cobalt, total	7440-48-4	E420/WT	0.00010	mg/L		0.00129 DLHC	0.00149 DLM	----	----	----
Copper, total	7440-50-8	E420/WT	0.00050	mg/L		0.0392 DLHC	0.0485 DLM	----	----	----
Iron, total	7439-89-6	E420/WT	0.010	mg/L		3.75 DLHC	4.32 DLM	----	----	----
Lead, total	7439-92-1	E420/WT	0.000050	mg/L		0.00762 DLHC	0.00171 DLM	----	----	----
Lithium, total	7439-93-2	E420/WT	0.0010	mg/L		0.0488 DLHC	<0.0100 DLM	----	----	----
Magnesium, total	7439-95-4	E420/WT	0.0050	mg/L		58.8 DLHC	11.0 DLM	----	----	----
Manganese, total	7439-96-5	E420/WT	0.00010	mg/L		1.46 DLHC	0.177 DLM	----	----	----
Molybdenum, total	7439-98-7	E420/WT	0.000050	mg/L		<0.000500 DLHC	0.000862 DLM	----	----	----
Nickel, total	7440-02-0	E420/WT	0.00050	mg/L		0.0107 DLHC	0.00626 DLM	----	----	----
Phosphorus, total	7723-14-0	E420/WT	0.050	mg/L		<0.500 DLHC	10.4 DLM	----	----	----
Potassium, total	7440-09-7	E420/WT	0.050	mg/L		60.1 DLHC	31.0 DLM	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:00	----	----	----
						WP2513985-001	WP2513985-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Rubidium, total	7440-17-7	E420/WT	0.00020	mg/L		0.0500 DLHC	0.0262 DLM	----	----	----
Selenium, total	7782-49-2	E420/WT	0.000050	mg/L		<0.000500 DLHC	<0.000500 DLM	----	----	----
Silicon, total	7440-21-3	E420/WT	0.10	mg/L		5.30 DLHC	4.13 DLM	----	----	----
Silver, total	7440-22-4	E420/WT	0.000010	mg/L		<0.000100 DLHC	0.000103 DLM	----	----	----
Sodium, total	7440-23-5	E420/WT	0.050	mg/L		248 DLHC	148 DLM	----	----	----
Strontium, total	7440-24-6	E420/WT	0.00020	mg/L		2.02 DLHC	0.216 DLM	----	----	----
Sulfur, total	7704-34-9	E420/WT	0.50	mg/L		150 DLHC	6.06 DLM	----	----	----
Tellurium, total	13494-80-9	E420/WT	0.00020	mg/L		<0.00200 DLHC	<0.00200 DLM	----	----	----
Thallium, total	7440-28-0	E420/WT	0.000010	mg/L		<0.000100 DLHC	<0.000100 DLM	----	----	----
Thorium, total	7440-29-1	E420/WT	0.00010	mg/L		<0.00100 DLHC	<0.00100 DLM	----	----	----
Tin, total	7440-31-5	E420/WT	0.00010	mg/L		<0.00100 DLHC	<0.00100 DLM	----	----	----
Titanium, total	7440-32-6	E420/WT	0.00030	mg/L		<0.00300 DLHC	0.0173 DLM	----	----	----
Tungsten, total	7440-33-7	E420/WT	0.00010	mg/L		<0.00100 DLHC	<0.00100 DLM	----	----	----
Uranium, total	7440-61-1	E420/WT	0.000010	mg/L		0.000924 DLHC	0.000518 DLM	----	----	----
Vanadium, total	7440-62-2	E420/WT	0.00050	mg/L		<0.00500 DLHC	0.00539 DLM	----	----	----
Zinc, total	7440-66-6	E420/WT	0.0030	mg/L		0.0603 DLHC	0.0323 DLM	----	----	----
Zirconium, total	7440-67-7	E420/WT	0.00020	mg/L		<0.00200 DLHC	<0.00200 DLM	----	----	----
Dissolved Metals										
Mercury, dissolved	7439-97-6	E509/WP	0.0000050	mg/L		0.0000125	<0.0000050	----	----	----
Dissolved mercury filtration location	----	EP509/WP	-	-		Field	Field	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:00	----	----	----
						WP2513985-001	WP2513985-002	----	----	----
						Result	Result	----	----	----
Aggregate Organics										
Biochemical oxygen demand [BOD]	----	E550/WP	2.0	mg/L		7.8	<50.0	----	----	----
Carbonaceous biochemical oxygen demand [CBOD]	----	E555/WP	2.0	mg/L		7.5	<50.0	----	----	----
Oil & grease (gravimetric)	----	E567/WT	5.0	mg/L		<5.0	<5.0	----	----	----
Phenols, total (4AAP)	----	E562/WT	0.0010	mg/L		0.0040	0.0016	----	----	----
Volatile Organic Compounds										
Benzene	71-43-2	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Ethylbenzene	100-41-4	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Toluene	108-88-3	E611A/WP	0.00050	mg/L		<0.00050	0.00875	----	----	----
Xylene, m+p-	179601-23-1	E611A/WP	0.00040	mg/L		<0.00040	<0.00040	----	----	----
Xylene, o-	95-47-6	E611A/WP	0.00030	mg/L		<0.00030	<0.00030	----	----	----
Xylenes, total	1330-20-7	E611A/WP	0.00050	mg/L		<0.00050	<0.00050	----	----	----
BTEX, total	----	E611A/WP	0.0010	mg/L		<0.0010	0.0088	----	----	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1/WP	0.10	mg/L		<0.10	<0.10	----	----	----
F1-BTEX	----	EC580/WP	0.100	mg/L		<0.100	<0.100	----	----	----
F2 (C10-C16)	----	E601/WP	0.10	mg/L		0.16	0.11	----	----	----
F3 (C16-C34)	----	E601/WP	0.25	mg/L		0.32	1.60	----	----	----
F4 (C34-C50)	----	E601/WP	0.25	mg/L		<0.25	0.56	----	----	----
TEH (C10-C50)	n/a	E601/WP	0.40	mg/L		0.48	2.27	----	----	----
TEH (C16-C50)	----	E601/WP	0.40	mg/L		<0.40	2.16	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:00	----	----	----
						WP2513985-001	WP2513985-002	----	----	----
						Result	Result	----	----	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/WP	1.0	%		95.2	112	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/WP	1.0	%		96.7	108	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611A/WP	1.0	%		79.0	82.2	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611A/WP	1.0	%		97.4	101	----	----	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Acenaphthylene	208-96-8	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Acridine	260-94-6	E641A/WT	0.010	µg/L		<0.016 DLM	<0.096 DLM	----	----	----
Anthracene	120-12-7	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benz(a)anthracene	56-55-3	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(a)pyrene	50-32-8	E641A/WT	0.0050	µg/L		<0.0050	<0.0050	----	----	----
Benzo(b+j)fluoranthene	n/a	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(b+j+k)fluoranthene	n/a	E641A/WT	0.015	µg/L		<0.015	<0.015	----	----	----
Benzo(g,h,i)perylene	191-24-2	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Benzo(k)fluoranthene	207-08-9	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Chrysene	218-01-9	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Dibenz(a,h)anthracene	53-70-3	E641A/WT	0.0050	µg/L		<0.0050	<0.0050	----	----	----
Fluoranthene	206-44-0	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Fluorene	86-73-7	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/WT	0.010	µg/L		<0.010	<0.057 DLM	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	ARV - 2 ----	ARV - 4 ----	----	----	----
					Client sampling date / time	19-Aug-2025 13:00	19-Aug-2025 13:00	----	----	----
						WP2513985-001	WP2513985-002	----	----	----
						Result	Result	----	----	----
Polycyclic Aromatic Hydrocarbons										
Methylnaphthalene, 1-	90-12-0	E641A/WT	0.010	µg/L		<0.010	0.012	----	----	----
Methylnaphthalene, 1+2-	----	E641A/WT	0.015	µg/L		<0.015	<0.015	----	----	----
Methylnaphthalene, 2-	91-57-6	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Naphthalene	91-20-3	E641A/WT	0.050	µg/L		<0.050	<0.050	----	----	----
Phenanthrene	85-01-8	E641A/WT	0.020	µg/L		<0.020	<0.020	----	----	----
Pyrene	129-00-0	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
Quinoline	91-22-5	E641A/WT	0.050	µg/L		<0.070 DLM	0.180	----	----	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/WT	0.010	µg/L		<0.010	<0.010	----	----	----
PAHs, high molecular weight (BC AWQ)	n/a	E641A/WT	0.030	µg/L		<0.030	<0.063	----	----	----
PAHs, low molecular weight (BC AWQ)	n/a	E641A/WT	0.060	µg/L		<0.060	<0.060	----	----	----
PAHs, total (CCME sewer 18)	n/a	E641A/WT	0.070	µg/L		<0.070	<0.086	----	----	----
PAHs, total (EPA 16)	n/a	E641A/WT	0.065	µg/L		<0.065	<0.085	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/WT	0.1	%		118	127	----	----	----
Naphthalene-d8	1146-65-2	E641A/WT	0.1	%		107	113	----	----	----
Phenanthrene-d10	1517-22-2	E641A/WT	0.1	%		101	111	----	----	----

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

Chain of Custody (COC) / Analytical Request Form

COC Number: 22 -

Page of

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	Hamlet of Arviat
Contact:	John Hussy
Phone:	867-857-2841
	Company address below will appear on the final report
Street:	PO Box 150
City/Province:	Arviat
Postal Code:	X0C0E0
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

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

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

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

Select Distribution: ☐ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax SAO@arviat.ca

Email 2 kivalliqwatersamples@gov.nu.ca

Email 3

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax

Email 2

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge.

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

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

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

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Client Code / QUOTE #:

Job / Project #:

PO / AFE:

LSD:

ALS Lab Work Order # (ALS use only):

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#

Major/Minor Code: Routing Code:

Requisitioner:

Location:

ALS Contact: Daniel Sampler: Brian JT

Analysis Request

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	ARV-2	19-Aug-25	13:00	WW	14				
	ARV-4	19-Aug-25	13:00	WW	14				

Environmental Division
Winnipeg
Work Order Reference
WP2513985

Telephone : +1 204 255 9720

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

Are samples taken from a Regulated DW System?
☐ YES ☑ NO

Are samples for human consumption/ use?
☐ YES ☑ NO

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

Not field filtered

SAMPLE RECEIPT DETAILS (ALS use only)

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

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

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
			7.9				

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:
Brian JT Ashukark	August 19, 2025	13:00

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
ES Aug 20/25	Aug 20/25	2:18

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

MAY 2023 FRONT

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

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