



CERTIFICATE OF ANALYSIS

Work Order	: FC2600645		
Client	: Regional Municipality of Wood Buffalo	Laboratory	: ALS Environmental - Fort McMurray
Contact	: Water Treatment Plant	Account Manager	: Megha Walia
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	: Fort McMurray Alberta Canada T9H 5A1		: Fort McMurray AB Canada T9H 4A8
Telephone	: 780-762-5863	E-mail	: Megha.Walia@alsglobal.com
Project	: Fort Chipewyan Imperial Release	Telephone	: +1 780 791 1524
PO	: 4500068005	Date Samples Received	: 02-Apr-2026 09:00
C-O-C number	: ----	Date Analysis Commenced	: 07-Apr-2026
Sampler	: EA	Issue Date	: 16-Apr-2026 13:09
Site	: ----		
Quote number	: FC24-RMWB100-0005 FC SC4		
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
- 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>
Alex Drake	Lab Analyst	Metals, Edmonton, Alberta
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Beelee Lacson	Lab Assistant	Inorganics, Edmonton, Alberta
Catherine DeMone	Laboratory Analyst	LCMS, Waterloo, Ontario
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Geoff Berg	Lab Analyst	Organics, Edmonton, Alberta
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Ping Yeung	Team Leader - Inorganics	Inorganics, Edmonton, Alberta
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta



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
%	percent
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
pH units	pH units
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre

<: less than.

>: greater than.

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

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

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



Qualifiers

<u>Qualifier</u>	<u>Description</u>
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
PEHT	Parameter exceeded recommended holding time prior to analysis.
RRV	Reported result verified by repeat analysis.
SUR-ND	Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	---	---	---	---
					Client sampling date / time	01-Apr-2026 15:00	---	---	---	---
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	---	---	---	---	
						Result	---	---	---	---
Physical Tests										
Alkalinity, bicarbonate (as HCO ₃)	71-52-3	E290/EO	1.2	mg/L	37.2	---	---	---	---	
Alkalinity, carbonate (as CO ₃)	3812-32-6	E290/EO	1.0	mg/L	<0.6	---	---	---	---	
Alkalinity, hydroxide (as OH)	14280-30-9	E290/EO	1.0	mg/L	<0.3	---	---	---	---	
Alkalinity, total (as CaCO ₃)	---	E290/EO	1.0	mg/L	30.5	---	---	---	---	
Colour, true	---	E329-L/EO	2.0	CU	9.6	---	---	---	---	
Conductivity	---	E100/EO	1.0	µS/cm	84.9	---	---	---	---	
Hardness (as CaCO ₃), dissolved	---	EC100/EO	0.50	mg/L	32.7	---	---	---	---	
Hardness (as CaCO ₃), from total Ca/Mg	---	EC100A/EO	0.50	mg/L	34.4	---	---	---	---	
pH	---	E108/EO	0.10	pH units	7.24	---	---	---	---	
Solids, total dissolved [TDS]	---	E162/EO	10	mg/L	43	---	---	---	---	
Solids, total dissolved [TDS], calculated	---	EC103/EO	1.0	mg/L	52.8	---	---	---	---	
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/EO	0.0050	mg/L	0.0102	---	---	---	---	
Chloride	16887-00-6	E235.Cl/EO	0.50	mg/L	5.50	---	---	---	---	
Fluoride	16984-48-8	E235.F/EO	0.020	mg/L	0.045	---	---	---	---	
Nitrate (as N)	14797-55-8	E235.NO ₃ /EO	0.020	mg/L	0.422	---	---	---	---	
Nitrate + Nitrite (as N)	---	EC235.N+N/EO	0.0032	mg/L	0.422	---	---	---	---	
Nitrite (as N)	14797-65-0	E235.NO ₂ /EO	0.010	mg/L	<0.010	---	---	---	---	
Sulfate (as SO ₄)	14808-79-8	E235.SO ₄ /EO	0.30	mg/L	5.06	---	---	---	---	



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Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
					Result	----	----	----	----	----
Cyanides										
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	<0.0020	----	----	----	----	----
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/EO	0.50	mg/L	5.41 ^{RRV}	----	----	----	----	----
Inorganics										
Chlorine, total	7782-50-5	E326-H/EO	0.10	mg/L	<0.10	----	----	----	----	----
Chlorine, free	7782-50-5	E327-H/EO	0.10	mg/L	<0.10	----	----	----	----	----
Chloramines, total (as Cl2)	----	EC326/EO	0.20	mg/L	<0.20	----	----	----	----	----
Total Sulfides										
Sulfide, total (as S)	18496-25-8	E395/CG	0.0015	mg/L	<0.0015	----	----	----	----	----
Sulfide, total (as H2S)	7783-06-4	E395/CG	0.0016	mg/L	<0.0016	----	----	----	----	----
Ion Balance										
Ion balance (cations/anions)	----	EC101/EO	0.010	%	91.1	----	----	----	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/EO	0.0030	mg/L	0.0415	----	----	----	----	----
Antimony, total	7440-36-0	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Arsenic, total	7440-38-2	E420/EO	0.00010	mg/L	0.00024	----	----	----	----	----
Barium, total	7440-39-3	E420/EO	0.00010	mg/L	0.0159	----	----	----	----	----
Boron, total	7440-42-8	E420/EO	0.010	mg/L	0.015	----	----	----	----	----
Cadmium, total	7440-43-9	E420/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Calcium, total	7440-70-2	E420/EO	0.050	mg/L	9.04	----	----	----	----	----



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					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
					Result	----	----	----	----	----
Total Metals										
Chromium, total	7440-47-3	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Copper, total	7440-50-8	E420/EO	0.00050	mg/L	0.00126	----	----	----	----	----
Iron, total	7439-89-6	E420/EO	0.010	mg/L	0.100	----	----	----	----	----
Lead, total	7439-92-1	E420/EO	0.050	µg/L	<0.050	----	----	----	----	----
Magnesium, total	7439-95-4	E420/EO	0.0050	mg/L	2.86	----	----	----	----	----
Manganese, total	7439-96-5	E420/EO	0.00010	mg/L	0.00669	----	----	----	----	----
Mercury, total	7439-97-6	E508/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Nickel, total	7440-02-0	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Selenium, total	7782-49-2	E420/EO	0.050	µg/L	<0.050	----	----	----	----	----
Silver, total	7440-22-4	E420/EO	0.010	µg/L	<0.010	----	----	----	----	----
Sodium, total	7440-23-5	E420/EO	0.050	mg/L	3.25	----	----	----	----	----
Strontium, total	7440-24-6	E420/EO	0.00020	mg/L	0.0658	----	----	----	----	----
Uranium, total	7440-61-1	E420/EO	0.010	µg/L	0.072	----	----	----	----	----
Zinc, total	7440-66-6	E420/EO	0.0030	mg/L	<0.0030 ^{RRV}	----	----	----	----	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/EO	0.0010	mg/L	0.0453	----	----	----	----	----
Antimony, dissolved	7440-36-0	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Arsenic, dissolved	7440-38-2	E421/EO	0.00010	mg/L	0.00019	----	----	----	----	----
Barium, dissolved	7440-39-3	E421/EO	0.00010	mg/L	0.0154	----	----	----	----	----
Beryllium, dissolved	7440-41-7	E421/EO	0.020	µg/L	<0.020	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
					Result	----	----	----	----	----
Dissolved Metals										
Bismuth, dissolved	7440-69-9	E421/EO	0.050	µg/L	<0.050	----	----	----	----	----
Boron, dissolved	7440-42-8	E421/EO	0.010	mg/L	0.014	----	----	----	----	----
Cadmium, dissolved	7440-43-9	E421/EO	0.0050	µg/L	0.0053	----	----	----	----	----
Calcium, dissolved	7440-70-2	E421/EO	0.050	mg/L	8.58	----	----	----	----	----
Cesium, dissolved	7440-46-2	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Chromium, dissolved	7440-47-3	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Cobalt, dissolved	7440-48-4	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Copper, dissolved	7440-50-8	E421/EO	0.00020	mg/L	0.00134	----	----	----	----	----
Iron, dissolved	7439-89-6	E421/EO	0.010	mg/L	0.034	----	----	----	----	----
Lead, dissolved	7439-92-1	E421/EO	0.050	µg/L	<0.050	----	----	----	----	----
Lithium, dissolved	7439-93-2	E421/EO	0.0010	mg/L	0.0030	----	----	----	----	----
Magnesium, dissolved	7439-95-4	E421/EO	0.0050	mg/L	2.75	----	----	----	----	----
Manganese, dissolved	7439-96-5	E421/EO	0.00010	mg/L	0.00466	----	----	----	----	----
Molybdenum, dissolved	7439-98-7	E421/EO	0.000050	mg/L	0.000212	----	----	----	----	----
Nickel, dissolved	7440-02-0	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Phosphorus, dissolved	7723-14-0	E421/EO	0.050	mg/L	<0.050	----	----	----	----	----
Potassium, dissolved	7440-09-7	E421/EO	0.050	mg/L	0.961	----	----	----	----	----
Rubidium, dissolved	7440-17-7	E421/EO	0.00020	mg/L	0.00103	----	----	----	----	----
Selenium, dissolved	7782-49-2	E421/EO	0.050	µg/L	0.054	----	----	----	----	----
Silicon, dissolved	7440-21-3	E421/EO	0.050	mg/L	2.40	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
						Result	----	----	----	----
Dissolved Metals										
Silver, dissolved	7440-22-4	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Sodium, dissolved	7440-23-5	E421/EO	0.050	mg/L	3.10	----	----	----	----	----
Strontium, dissolved	7440-24-6	E421/EO	0.00020	mg/L	0.0625	----	----	----	----	----
Sulfur, dissolved	7704-34-9	E421/EO	0.50	mg/L	1.35	----	----	----	----	----
Tellurium, dissolved	13494-80-9	E421/EO	0.00020	mg/L	<0.00020	----	----	----	----	----
Thallium, dissolved	7440-28-0	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Thorium, dissolved	7440-29-1	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Tin, dissolved	7440-31-5	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Titanium, dissolved	7440-32-6	E421/EO	0.00030	mg/L	<0.00030	----	----	----	----	----
Tungsten, dissolved	7440-33-7	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Uranium, dissolved	7440-61-1	E421/EO	0.010	µg/L	0.055	----	----	----	----	----
Vanadium, dissolved	7440-62-2	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Zinc, dissolved	7440-66-6	E421/EO	0.0010	mg/L	0.0255 ^{DTC}	----	----	----	----	----
Zirconium, dissolved	7440-67-7	E421/EO	0.00020	mg/L	<0.00020	----	----	----	----	----
Dissolved metals filtration location	----	EP421/EO	-	-	Field	----	----	----	----	----
Aggregate Organics										
Nitritotriacetic acid [NTA]	139-13-9	E394/WT	0.40	mg/L	<0.40	----	----	----	----	----
Volatile Organic Compounds										
Benzene	71-43-2	E611E/EO	0.50	µg/L	<0.50	----	----	----	----	----
Carbon tetrachloride	56-23-5	E611E/EO	0.50	µg/L	<0.50	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
					Result	----	----	----	----	----
Volatile Organic Compounds										
Chlorobenzene	108-90-7	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Dichlorobenzene, 1,2-	95-50-1	E611E/EO	0.50	µg/L	<0.50	----	----	----	----	----
Dichlorobenzene, 1,4-	106-46-7	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Dichloroethane, 1,2-	107-06-2	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Dichloromethane	75-09-2	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Dioxane, 1,4-	123-91-1	E611I/WT	20	µg/L	<20	----	----	----	----	----
Ethylbenzene	100-41-4	E611E/EO	0.50	µg/L	<0.50	----	----	----	----	----
Tetrachloroethylene	127-18-4	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Toluene	108-88-3	E611E/EO	0.50	µg/L	<0.50	----	----	----	----	----
Trichloroethylene	79-01-6	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Vinyl chloride	75-01-4	E611E/EO	1.0	µg/L	<1.0	----	----	----	----	----
Xylene, m+p-	179601-23-1	E611E/EO	0.40	µg/L	<0.40	----	----	----	----	----
Xylene, o-	95-47-6	E611E/EO	0.30	µg/L	<0.30	----	----	----	----	----
Xylenes, total	1330-20-7	E611E/EO	0.50	µg/L	<0.50	----	----	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611I/WT	1.0	%	83.9	----	----	----	----	----
Bromofluorobenzene, 4-	460-00-4	E611E/EO	1.0	%	89.6	----	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611I/WT	1.0	%	97.7	----	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611E/EO	1.0	%	94.1	----	----	----	----	----



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					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
						Result	----	----	----	----
Polycyclic Aromatic Hydrocarbons										
Benzo(a)pyrene	50-32-8	E641A/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/EO	0.1	%	105	----	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/EO	0.1	%	105	----	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/EO	0.1	%	99.7	----	----	----	----	----
Disinfectant By-Products										
Bromate	15541-45-4	E722A/WT	0.30	µg/L	<0.30	----	----	----	----	----
Chlorate	14866-68-3	E409.CLO3/WT	0.010	mg/L	<0.010	----	----	----	----	----
Chlorite	14998-27-7	E409.CLO2/WT	0.010	mg/L	<0.010	----	----	----	----	----
Semi-Volatile Organics										
Nitrosodimethylamine, N- [NDMA]	62-75-9	E725-T/WT	0.00090	µg/L	<0.00090	----	----	----	----	----
Semi-Volatile Organics Surrogates										
Fluorobiphenyl, 2-	321-60-8	E625A/WT	1.0	%	67.9	----	----	----	----	----
Nitrobenzene-d5	4165-60-0	E625A/WT	1.0	%	103	----	----	----	----	----
Terphenyl-d14, p-	1718-51-0	E625A/WT	1.0	%	81.7	----	----	----	----	----
Chlorinated Phenolics										
Dichlorophenol, 2,4-	120-83-2	E625A/WT	0.20	µg/L	<0.20	----	----	----	----	----
Pentachlorophenol [PCP]	87-86-5	E625A/WT	0.50	µg/L	<0.50	----	----	----	----	----
Tetrachlorophenol, 2,3,4,6-	58-90-2	E625A/WT	0.50	µg/L	<0.50	----	----	----	----	----
Trichlorophenol, 2,4,6-	88-06-2	E625A/WT	0.20	µg/L	<0.20	----	----	----	----	----



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					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
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						Result	----	----	----	----
Phenolics Surrogates										
Tribromophenol, 2,4,6-	118-79-6	E625A/WT	0.50	%	76.9	----	----	----	----	----
Organochlorine Pesticides Surrogates										
Decachlorobiphenyl	2051-24-3	E660F/WT	0.10	%	140 ^{SUR-ND}	----	----	----	----	----
Tetrachloro-m-xylene	877-09-8	E660F/WT	0.10	%	127	----	----	----	----	----
Herbicides										
Alachlor	15972-60-8	E755/WT	0.050	µg/L	<0.050	----	----	----	----	----
Atrazine	1912-24-9	E755/WT	0.050	µg/L	<0.050	----	----	----	----	----
Atrazine + metabolites, total	----	E755/WT	0.45	µg/L	<0.45	----	----	----	----	----
Atrazine + N-dealkylated metabolites	----	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Atrazine-desethyl	6190-65-4	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Cyanazine	21725-46-2	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Diclofop-methyl	51338-27-3	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Dinoseb	88-85-7	E706A/WT	0.050	µg/L	<0.050 ^{PEHT}	----	----	----	----	----
Diuron	330-54-1	E755/WT	0.050	µg/L	<0.050	----	----	----	----	----
Metolachlor	51218-45-2	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Metribuzin	21087-64-9	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Prometryn	7287-19-6	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Simazine	122-34-9	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Triallate	2303-17-5	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Trifluralin	1582-09-8	E756/WT	0.10	µg/L	<0.10	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
						Result	----	----	----	----
Herbicides Surrogates										
Dichlorophenylacetic acid, 2,4-	19719-28-9	E706A/WT	1.0	%	107 ^{PEHT}	----	----	----	----	----
Insecticides										
Aldicarb	116-06-3	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Azinphos-methyl	86-50-0	E755/WT	0.10	µg/L	<0.10	----	----	----	----	----
Bendiocarb	22781-23-3	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Carbaryl	63-25-2	E755/WT	0.050	µg/L	<0.050	----	----	----	----	----
Carbofuran	1563-66-2	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Chlorpyrifos	2921-88-2	E756/WT	0.10	µg/L	<0.10	----	----	----	----	----
Diazinon	333-41-5	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Dimethoate	60-51-5	E755/WT	0.050	µg/L	<0.050	----	----	----	----	----
Malathion	121-75-5	E755/WT	0.025	µg/L	<0.025	----	----	----	----	----
Parathion	56-38-2	E756/WT	0.10	µg/L	<0.10	----	----	----	----	----
Phorate	298-02-2	E755/WT	0.25	µg/L	<0.25	----	----	----	----	----
Temephos	3383-96-8	E755/WT	0.25	µg/L	<0.25	----	----	----	----	----
Terbufos	13071-79-9	E755/WT	0.50	µg/L	<0.50	----	----	----	----	----
Pesticides										
Acetic acid, 2-methyl-4-chlorophenoxy-[MCPA]	94-74-6	E706A/WT	0.050	µg/L	<0.050 ^{PEHT}	----	----	----	----	----
Aldrin	309-00-2	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Aldrin + Dieldrin	----	E660F/WT	0.011	µg/L	<0.011	----	----	----	----	----
Bromoxynil	1689-84-5	E706A/WT	0.050	µg/L	<0.050 ^{PEHT}	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
					Result	----	----	----	----	----
Pesticides										
Chlordane, cis- (alpha)	5103-71-9	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Chlordane, total	57-74-9	E660F/WT	0.011	µg/L	<0.011	----	----	----	----	----
Chlordane, trans- (gamma)	5103-74-2	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
DDD, 2,4'-	53-19-0	E660F/WT	0.0040	µg/L	<0.0040	----	----	----	----	----
DDD, 4,4'-	72-54-8	E660F/WT	0.0040	µg/L	<0.0040	----	----	----	----	----
DDD, total	----	E660F/WT	0.0060	µg/L	<0.0060	----	----	----	----	----
DDE, 2,4'-	3424-82-6	E660F/WT	0.0040	µg/L	<0.0040	----	----	----	----	----
DDE, 4,4'-	72-55-9	E660F/WT	0.0040	µg/L	<0.0040	----	----	----	----	----
DDE, total	----	E660F/WT	0.0060	µg/L	<0.0060	----	----	----	----	----
DDT + metabolites, total	----	E660F/WT	0.010	µg/L	<0.010	----	----	----	----	----
DDT, 2,4'-	789-02-6	E660F/WT	0.0040	µg/L	<0.0040	----	----	----	----	----
DDT, 4,4'-	50-29-3	E660F/WT	0.0040	µg/L	<0.0040	----	----	----	----	----
DDT, total	----	E660F/WT	0.0060	µg/L	<0.0060	----	----	----	----	----
Dicamba	1918-00-9	E706A/WT	0.10	µg/L	<0.10 ^{PEHT}	----	----	----	----	----
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	E706A/WT	0.050	µg/L	<0.050 ^{PEHT}	----	----	----	----	----
Dieldrin	60-57-1	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Diquat (ion)	2764-72-9	E723A/WT	1.0	µg/L	<1.0	----	----	----	----	----
Glyphosate	1071-83-6	E716A/WT	1.0	µg/L	<1.0	----	----	----	----	----
Heptachlor	76-44-8	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Heptachlor + Heptachlor epoxide	n/a	E660F/WT	0.011	µg/L	<0.011	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Raw Water Chamber Tap (SC4)	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600645-001	----	----	----	----	----
						Result	----	----	----	----
Pesticides										
Heptachlor epoxide	1024-57-3	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Hexachlorocyclohexane, gamma- [Lindane]	58-89-9	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Methoxychlor	72-43-5	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Oxychlorane	27304-13-8	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	----
Paraquat (as dichloride)	1910-42-5	E723A/WT	1.0	µg/L	<1.0	----	----	----	----	----
Picloram	1918-02-1	E706A/WT	0.10	µg/L	<0.50 ^{DLM, PEHT}	----	----	----	----	----
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	E706A/WT	0.050	µg/L	<0.050 ^{PEHT}	----	----	----	----	----
Nitrosamines Surrogates										
Nitrosodimethylamine-d6, N-	17829-05-9	E725-T/WT	0.00090	%	92.2	----	----	----	----	----

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



CERTIFICATE OF ANALYSIS

Work Order	: FC2600645	Page	: 1 of 7
Client	: Regional Municipality of Wood Buffalo	Laboratory	: ALS Environmental - Fort McMurray
Contact	: Water Treatment Plant	Account Manager	: Megha Walia
Address	: 1 Silin Forest Road Fort McMurray AB Canada T9H 5A1	Address	: #4, 340 Macalpine Crescent Fort McMurray AB Canada T9H 4A8
Telephone	: 780-762-5863	Telephone	: +1 780 791 1524
Project	: Fort Chipewyan Imperial Release	Date Samples Received	: 02-Apr-2026 09:00
PO	: 4500068005	Date Analysis	: 07-Apr-2026
C-O-C number	: ----	Commenced	
Sampler	: EA	Issue Date	: 16-Apr-2026 13:08
Site	: ----		
Quote number	: FC24-RMWB100-0005 FC SC4		
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
- 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>
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Alex Drake	Lab Analyst	Metals, Edmonton, Alberta
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Beelee Lacson	Lab Assistant	Inorganics, Edmonton, Alberta
Catherine DeMone	Laboratory Analyst	LCMS, Waterloo, Ontario
Dan Nguyen	Team Leader - Inorganics	Metals, Edmonton, Alberta
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
David Tremblett	VOC Section Supervisor	VOC, Waterloo, Ontario
Geoff Berg	Lab Analyst	Organics, Edmonton, Alberta
Hannah Lewis	Inorganics Analyst	Inorganics, Waterloo, Ontario
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Kari Mulroy	Lab Supervisor - Environmental	Organics, Edmonton, Alberta
Leah Yee	Lab Assistant	Inorganics, Edmonton, Alberta
Nik Perkio	Senior Analyst	Inorganics, Waterloo, Ontario
Parth Goswami	Team Leader - LCMS	LCMS, Waterloo, Ontario
Ping Yeung	Team Leader - Inorganics	Inorganics, Edmonton, Alberta
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta



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).

Measurement Uncertainty: The reported uncertainties in this report are expanded uncertainties calculated using a coverage factor of 2, which gives a level of confidence of approximately 95%.

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.

Unit	Description
-	no units
%	percent
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
pH units	pH units

>: greater than.

<: less than.

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).
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
PEHT	Parameter exceeded recommended holding time prior to analysis.
RRV	Reported result verified by repeat analysis.
SUR-ND	Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.



Analytical Results

FC2600645-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Raw Water Chamber Tap (SC4)

Client sampling date / time: 01-Apr-2026 15:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QC/Lot
Physical Tests								
Alkalinity, bicarbonate (as HCO ₃)	71-52-3	37.2	1.2	mg/L	E290/EO	07-Apr-2026	07-Apr-2026	2528608
Alkalinity, carbonate (as CO ₃)	3812-32-6	<0.6	0.6	mg/L	E290/EO	07-Apr-2026	07-Apr-2026	2528608
Alkalinity, hydroxide (as OH)	14280-30-9	<0.3	0.3	mg/L	E290/EO	07-Apr-2026	07-Apr-2026	2528608
Alkalinity, total (as CaCO ₃)	----	30.5	1.0	mg/L	E290/EO	07-Apr-2026	07-Apr-2026	2528608
Colour, true	----	9.6	2.0	CU	E329-L/EO	07-Apr-2026	07-Apr-2026	2528515
Conductivity	----	84.9	1.0	µS/cm	E100/EO	07-Apr-2026	07-Apr-2026	2528607
Hardness (as CaCO ₃), dissolved	----	32.7	0.50	mg/L	EC100/EO	-	10-Apr-2026	-
Hardness (as CaCO ₃), from total Ca/Mg	----	34.4	0.50	mg/L	EC100A/EO	-	10-Apr-2026	-
pH	----	7.24	0.10	pH units	E108/EO	07-Apr-2026	07-Apr-2026	2528606
Solids, total dissolved [TDS]	----	43	13	mg/L	E162/EO	-	08-Apr-2026	2530170
Solids, total dissolved [TDS], calculated	----	52.8	1.0	mg/L	EC103/EO	-	07-Apr-2026	-
Anions and Nutrients								
Ammonia, total (as N)	7664-41-7	0.0102	0.0050	mg/L	E298/EO	08-Apr-2026	09-Apr-2026	2529454
Chloride	16887-00-6	5.50	0.50	mg/L	E235.Cl/EO	07-Apr-2026	08-Apr-2026	2528599
Fluoride	16984-48-8	0.045	0.020	mg/L	E235.F/EO	07-Apr-2026	08-Apr-2026	2528601
Nitrate (as N)	14797-55-8	0.422	0.020	mg/L	E235.NO3/EO	07-Apr-2026	08-Apr-2026	2528604
Nitrate + Nitrite (as N)	----	0.422	0.022	mg/L	EC235.N+N/EO	-	08-Apr-2026	-
Nitrite (as N)	14797-65-0	<0.010	0.010	mg/L	E235.NO2/EO	07-Apr-2026	08-Apr-2026	2528605
Sulfate (as SO ₄)	14808-79-8	5.06	0.30	mg/L	E235.SO4/EO	07-Apr-2026	08-Apr-2026	2528600
Cyanides								
Cyanide, strong acid dissociable (Total)	----	<0.0020	0.0020	mg/L	E333/WT	10-Apr-2026	10-Apr-2026	2532897
Organic / Inorganic Carbon								
Carbon, total organic [TOC]	----	5.41 ^{RRV}	0.50	mg/L	E355-L/EO	09-Apr-2026	10-Apr-2026	2531767
Inorganics								
Chlorine, total	7782-50-5	<0.10	0.10	mg/L	E326-H/EO	-	07-Apr-2026	2528519
Chlorine, free	7782-50-5	<0.10	0.10	mg/L	E327-H/EO	-	07-Apr-2026	2528518
Chloramines, total (as Cl ₂)	----	<0.20	0.20	mg/L	EC326/EO	-	08-Apr-2026	-
Total Sulfides								
Sulfide, total (as S)	18496-25-8	<0.0015	0.0015	mg/L	E395/CG	-	08-Apr-2026	2529223
Sulfide, total (as H ₂ S)	7783-06-4	<0.0016	0.0016	mg/L	E395/CG	-	08-Apr-2026	2529223
Ion Balance								
Ion balance (cations/anions)	----	91.1	0.010	%	EC101/EO	-	07-Apr-2026	-
Total Metals								
Aluminum, total	7429-90-5	0.0415	0.0030	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Antimony, total	7440-36-0	<0.00010	0.00010	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Arsenic, total	7440-38-2	0.00024	0.00010	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Barium, total	7440-39-3	0.0159	0.00010	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Boron, total	7440-42-8	0.015	0.010	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Cadmium, total	7440-43-9	<0.0050	0.0050	µg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Calcium, total	7440-70-2	9.04	0.050	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Chromium, total	7440-47-3	<0.00050	0.00050	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Copper, total	7440-50-8	0.00126	0.00050	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Iron, total	7439-89-6	0.100	0.010	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Lead, total	7439-92-1	<0.050	0.050	µg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Magnesium, total	7439-95-4	2.86	0.0050	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174



Analytical Results

FC2600645-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Raw Water Chamber Tap (SC4)

Client sampling date / time: 01-Apr-2026 15:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Total Metals								
Manganese, total	7439-96-5	0.00669	0.00010	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Mercury, total	7439-97-6	<0.0050	0.0050	µg/L	E508/EO	10-Apr-2026	10-Apr-2026	2533248
Nickel, total	7440-02-0	<0.00050	0.00050	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Selenium, total	7782-49-2	<0.050	0.050	µg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Silver, total	7440-22-4	<0.010	0.010	µg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Sodium, total	7440-23-5	3.25	0.050	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Strontium, total	7440-24-6	0.0658	0.00020	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Uranium, total	7440-61-1	0.072	0.010	µg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Zinc, total	7440-66-6	<0.0030	0.0030	mg/L	E420/EO	10-Apr-2026	10-Apr-2026	2532174
Dissolved Metals								
Aluminum, dissolved	7429-90-5	0.0453	0.0010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Antimony, dissolved	7440-36-0	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Arsenic, dissolved	7440-38-2	0.00019	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Barium, dissolved	7440-39-3	0.0154	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Beryllium, dissolved	7440-41-7	<0.020	0.020	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Bismuth, dissolved	7440-69-9	<0.050	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Boron, dissolved	7440-42-8	0.014	0.010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Cadmium, dissolved	7440-43-9	0.0053	0.0050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Calcium, dissolved	7440-70-2	8.58	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Cesium, dissolved	7440-46-2	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Chromium, dissolved	7440-47-3	<0.00050	0.00050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Cobalt, dissolved	7440-48-4	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Copper, dissolved	7440-50-8	0.00134	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Iron, dissolved	7439-89-6	0.034	0.010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Lead, dissolved	7439-92-1	<0.050	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Lithium, dissolved	7439-93-2	0.0030	0.0010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Magnesium, dissolved	7439-95-4	2.75	0.0050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Manganese, dissolved	7439-96-5	0.00466	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Molybdenum, dissolved	7439-98-7	0.000212	0.000050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Nickel, dissolved	7440-02-0	<0.00050	0.00050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Phosphorus, dissolved	7723-14-0	<0.050	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Potassium, dissolved	7440-09-7	0.961	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Rubidium, dissolved	7440-17-7	0.00103	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Selenium, dissolved	7782-49-2	0.054	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Silicon, dissolved	7440-21-3	2.40	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Silver, dissolved	7440-22-4	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Sodium, dissolved	7440-23-5	3.10	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Strontium, dissolved	7440-24-6	0.0625	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Sulfur, dissolved	7704-34-9	1.35	0.50	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Tellurium, dissolved	13494-80-9	<0.00020	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Thallium, dissolved	7440-28-0	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Thorium, dissolved	7440-29-1	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Tin, dissolved	7440-31-5	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Titanium, dissolved	7440-32-6	<0.00030	0.00030	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Tungsten, dissolved	7440-33-7	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060



Analytical Results

FC2600645-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Raw Water Chamber Tap (SC4)

Client sampling date / time: 01-Apr-2026 15:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLOT
Dissolved Metals								
Uranium, dissolved	7440-61-1	0.055	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Vanadium, dissolved	7440-62-2	<0.00050	0.00050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Zinc, dissolved	7440-66-6	0.0255 ^{DTC}	0.0010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Zirconium, dissolved	7440-67-7	<0.00020	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533060
Dissolved metals filtration location	----	Field	-	-	EP421/EO	-	10-Apr-2026	2533060
Aggregate Organics								
Nitritotriacetic acid [NTA]	139-13-9	<0.40	0.40	mg/L	E394/WT	-	09-Apr-2026	2531812
Volatile Organic Compounds								
Benzene	71-43-2	<0.50	0.50	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Carbon tetrachloride	56-23-5	<0.50	0.50	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Chlorobenzene	108-90-7	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Dichlorobenzene, 1,2-	95-50-1	<0.50	0.50	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Dichlorobenzene, 1,4-	106-46-7	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Dichloroethane, 1,2-	107-06-2	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Dichloromethane	75-09-2	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Dioxane, 1,4-	123-91-1	<20	20	µg/L	E611I/WT	10-Apr-2026	10-Apr-2026	2532791
Ethylbenzene	100-41-4	<0.50	0.50	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Tetrachloroethylene	127-18-4	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Toluene	108-88-3	<0.50	0.50	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Trichloroethylene	79-01-6	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Vinyl chloride	75-01-4	<1.0	1.0	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Xylene, m+p-	179601-23-1	<0.40	0.40	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Xylene, o-	95-47-6	<0.30	0.30	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Xylenes, total	1330-20-7	<0.50	0.50	µg/L	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Volatile Organic Compounds Surrogates								
Bromofluorobenzene, 4-	460-00-4	89.6	1.0	%	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Bromofluorobenzene, 4-	460-00-4	83.9	1.0	%	E611I/WT	10-Apr-2026	10-Apr-2026	2532791
Difluorobenzene, 1,4-	540-36-3	94.1	1.0	%	E611E/EO	09-Apr-2026	09-Apr-2026	2530635
Difluorobenzene, 1,4-	540-36-3	97.7	1.0	%	E611I/WT	10-Apr-2026	10-Apr-2026	2532791
Polycyclic Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	<0.0050	0.0050	µg/L	E641A/EO	08-Apr-2026	08-Apr-2026	2529850
Polycyclic Aromatic Hydrocarbons Surrogates								
Chrysene-d12	1719-03-5	105	0.1	%	E641A/EO	08-Apr-2026	08-Apr-2026	2529850
Naphthalene-d8	1146-65-2	105	0.1	%	E641A/EO	08-Apr-2026	08-Apr-2026	2529850
Phenanthrene-d10	1517-22-2	99.7	0.1	%	E641A/EO	08-Apr-2026	08-Apr-2026	2529850
Disinfectant By-Products								
Bromate	15541-45-4	<0.30	0.30	µg/L	E722A/WT	09-Apr-2026	09-Apr-2026	2530887
Chlorate	14866-68-3	<0.010	0.010	mg/L	E409.CLO3/WT	13-Apr-2026	13-Apr-2026	2536353
Chlorite	14998-27-7	<0.010	0.010	mg/L	E409.CLO2/WT	13-Apr-2026	13-Apr-2026	2536354
Semi-Volatile Organics								
Nitrosodimethylamine, N- [NDMA]	62-75-9	<0.00090	0.00090	µg/L	E725-T/WT	14-Apr-2026	15-Apr-2026	2537564
Semi-Volatile Organics Surrogates								
Fluorobiphenyl, 2-	321-60-8	67.9	1.0	%	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Nitrobenzene-d5	4165-60-0	103	1.0	%	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Terphenyl-d14, p-	1718-51-0	81.7	1.0	%	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Chlorinated Phenolics								



Analytical Results

FC2600645-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Raw Water Chamber Tap (SC4)

Client sampling date / time: 01-Apr-2026 15:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Chlorinated Phenolics								
Dichlorophenol, 2,4-	120-83-2	<0.20	0.20	µg/L	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Pentachlorophenol [PCP]	87-86-5	<0.50	0.50	µg/L	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Tetrachlorophenol, 2,3,4,6-	58-90-2	<0.50	0.50	µg/L	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Trichlorophenol, 2,4,6-	88-06-2	<0.20	0.20	µg/L	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Phenolics Surrogates								
Tribromophenol, 2,4,6-	118-79-6	76.9	0.50	%	E625A/WT	08-Apr-2026	08-Apr-2026	2529541
Organochlorine Pesticides Surrogates								
Decachlorobiphenyl	2051-24-3	140 ^{SUR-N.D.}	0.10	%	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Tetrachloro-m-xylene	877-09-8	127	0.10	%	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Herbicides								
Alachlor	15972-60-8	<0.050	0.050	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Atrazine	1912-24-9	<0.050	0.050	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Atrazine + metabolites, total	----	<0.45	0.45	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Atrazine + N-dealkylated metabolites	----	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Atrazine-desethyl	6190-65-4	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Cyanazine	21725-46-2	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Diclofop-methyl	51338-27-3	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Dinoseb	88-85-7	<0.050 ^{PEHT.}	0.050	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Diuron	330-54-1	<0.050	0.050	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Metolachlor	51218-45-2	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Metribuzin	21087-64-9	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Prometryn	7287-19-6	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Simazine	122-34-9	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Triallate	2303-17-5	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Trifluralin	1582-09-8	<0.10	0.10	µg/L	E756/WT	08-Apr-2026	14-Apr-2026	2529884
Herbicides Surrogates								
Dichlorophenylacetic acid, 2,4-	19719-28-9	107 ^{PEHT.}	1.0	%	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Insecticides								
Aldicarb	116-06-3	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Azinphos-methyl	86-50-0	<0.10	0.10	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Bendiocarb	22781-23-3	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Carbaryl	63-25-2	<0.050	0.050	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Carbofuran	1563-66-2	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Chlorpyrifos	2921-88-2	<0.10	0.10	µg/L	E756/WT	08-Apr-2026	14-Apr-2026	2529884
Diazinon	333-41-5	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Dimethoate	60-51-5	<0.050	0.050	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Malathion	121-75-5	<0.025	0.025	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Parathion	56-38-2	<0.10	0.10	µg/L	E756/WT	08-Apr-2026	14-Apr-2026	2529884
Phorate	298-02-2	<0.25	0.25	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Temephos	3383-96-8	<0.25	0.25	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Terbufos	13071-79-9	<0.50	0.50	µg/L	E755/WT	08-Apr-2026	08-Apr-2026	2529674
Pesticides								
Acetic acid, 2-methyl-4-chlorophenoxy- [MCPA]	94-74-6	<0.050 ^{PEHT.}	0.050	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Aldrin	309-00-2	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Aldrin + Dieldrin	----	<0.011	0.011	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785



Analytical Results

FC2600645-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Raw Water Chamber Tap (SC4)

Client sampling date / time: 01-Apr-2026 15:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Pesticides								
Bromoxynil	1689-84-5	<0.050 ^{PEHT.}	0.050	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Chlordane, cis- (alpha)	5103-71-9	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Chlordane, total	57-74-9	<0.011	0.011	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Chlordane, trans- (gamma)	5103-74-2	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDD, 2,4'-	53-19-0	<0.0040	0.0040	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDD, 4,4'-	72-54-8	<0.0040	0.0040	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDD, total	----	<0.0060	0.0060	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDE, 2,4'-	3424-82-6	<0.0040	0.0040	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDE, 4,4'-	72-55-9	<0.0040	0.0040	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDE, total	----	<0.0060	0.0060	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDT + metabolites, total	----	<0.010	0.010	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDT, 2,4'-	789-02-6	<0.0040	0.0040	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDT, 4,4'-	50-29-3	<0.0040	0.0040	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
DDT, total	----	<0.0060	0.0060	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Dicamba	1918-00-9	<0.10 ^{PEHT.}	0.10	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	<0.050 ^{PEHT.}	0.050	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Dieldrin	60-57-1	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Diquat (ion)	2764-72-9	<1.0	1.0	µg/L	E723A/WT	08-Apr-2026	14-Apr-2026	2530399
Glyphosate	1071-83-6	<1.0	1.0	µg/L	E716A/WT	13-Apr-2026	14-Apr-2026	2536663
Heptachlor	76-44-8	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Heptachlor + Heptachlor epoxide	n/a	<0.011	0.011	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Heptachlor epoxide	1024-57-3	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Hexachlorocyclohexane, gamma- [Lindane]	58-89-9	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Methoxychlor	72-43-5	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Oxychlordan	27304-13-8	<0.0080	0.0080	µg/L	E660F/WT	08-Apr-2026	09-Apr-2026	2529785
Paraquat (as dichloride)	1910-42-5	<1.0	1.0	µg/L	E723A/WT	08-Apr-2026	14-Apr-2026	2530399
Picloram	1918-02-1	<0.50 ^{DLM, PEHT.}	0.50	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	<0.050 ^{PEHT.}	0.050	µg/L	E706A/WT	10-Apr-2026	10-Apr-2026	2533315
Nitrosamines Surrogates								
Nitrosodimethylamine-d6, N-	17829-05-9	92.2	0.00090	%	E725-T/WT	14-Apr-2026	15-Apr-2026	2537564

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

CERTIFICATE OF ANALYSIS

Work Order	: FC2600623	Laboratory	: ALS Environmental - Fort McMurray
Client	: Regional Municipality of Wood Buffalo	Account Manager	: Megha Walia
Contact	: Water Treatment Plant	Address	: #4, 340 Macalpine Crescent
Address	: 1 Silin Forest Road Fort McMurray Alberta Canada T9H 5A1		: Fort McMurray AB Canada T9H 4A8
Telephone	: 780-762-5863	E-mail	: Megha.Walia@alsglobal.com
Project	: Fort Chipewyan Imperial Release	Telephone	: +1 780 791 1524
PO	: 4500068005	Date Samples Received	: 02-Apr-2026 09:00
C-O-C number	: ----	Date Analysis Commenced	: 04-Apr-2026
Sampler	: EA	Issue Date	: 15-Apr-2026 12:54
Site	: ----		
Quote number	: Water Treatment Plant		
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
- 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>
Alex Drake	Lab Analyst	Metals, Edmonton, Alberta
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Dan Nguyen	Team Leader - Inorganics	Metals, Edmonton, Alberta
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
Geoff Berg	Lab Analyst	Organics, Edmonton, Alberta
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Kari Mulroy	Lab Supervisor - Environmental	Organics, Edmonton, Alberta
Monica Ko	Supervisor - Inorganic	Inorganics, Burnaby, British Columbia
Nik Perkio	Senior Analyst	Inorganics, Waterloo, Ontario
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta
Yan Zhang	Team Leader - Organics	Organics, Edmonton, Alberta



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
%	percent
mg/L	milligrams per litre
pH units	pH units
psu	practical salinity 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.



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/EO	1.2	mg/L	64.5	----	----	----	----	----
Alkalinity, carbonate (as CO3)	3812-32-6	E290/EO	1.0	mg/L	<0.6	----	----	----	----	----
Alkalinity, hydroxide (as OH)	14280-30-9	E290/EO	1.0	mg/L	<0.3	----	----	----	----	----
Alkalinity, total (as CaCO3)	----	E290/EO	1.0	mg/L	52.9	----	----	----	----	----
Conductivity	----	E100/EO	1.0	µS/cm	158	----	----	----	----	----
Hardness (as CaCO3), dissolved	----	EC100/EO	0.50	mg/L	35.8	----	----	----	----	----
pH	----	E108/EO	0.10	pH units	8.23	----	----	----	----	----
Salinity	----	EC100S/VA	1.0	psu	<1.0	----	----	----	----	----
Solids, total dissolved [TDS], calculated	----	EC103/EO	1.0	mg/L	85.4	----	----	----	----	----
Anions and Nutrients										
Chloride	16887-00-6	E235.Cl/EO	0.50	mg/L	12.3	----	----	----	----	----
Fluoride	16984-48-8	E235.F/EO	0.020	mg/L	<0.020	----	----	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/EO	0.020	mg/L	0.105	----	----	----	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/EO	0.0032	mg/L	0.105	----	----	----	----	----
Nitrite (as N)	14797-65-0	E235.NO2/EO	0.010	mg/L	<0.010	----	----	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/EO	0.30	mg/L	3.12	----	----	----	----	----
Total Sulfides										
Sulfide, total (as S)	18496-25-8	E395/CG	0.0015	mg/L	<0.0015	----	----	----	----	----
Sulfide, total (as H2S)	7783-06-4	E395/CG	0.0016	mg/L	<0.0016	----	----	----	----	----
Ion Balance										
Ion balance (cations/anions)	----	EC101/EO	0.010	%	104	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/EO	0.0030	mg/L	0.0160	----	----	----	----	----
Antimony, total	7440-36-0	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Arsenic, total	7440-38-2	E420/EO	0.00010	mg/L	0.00012	----	----	----	----	----
Barium, total	7440-39-3	E420/EO	0.00010	mg/L	0.0158	----	----	----	----	----
Beryllium, total	7440-41-7	E420/EO	0.020	µg/L	<0.020	----	----	----	----	----
Bismuth, total	7440-69-9	E420/EO	0.050	µg/L	<0.050	----	----	----	----	----
Boron, total	7440-42-8	E420/EO	0.010	mg/L	0.015	----	----	----	----	----
Cadmium, total	7440-43-9	E420/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Calcium, total	7440-70-2	E420/EO	0.050	mg/L	9.71	----	----	----	----	----
Cesium, total	7440-46-2	E420/EO	0.010	µg/L	<0.010	----	----	----	----	----
Chromium, total	7440-47-3	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Cobalt, total	7440-48-4	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Copper, total	7440-50-8	E420/EO	0.00050	mg/L	0.00068	----	----	----	----	----
Iron, total	7439-89-6	E420/EO	0.010	mg/L	<0.010	----	----	----	----	----
Lead, total	7439-92-1	E420/EO	0.050	µg/L	<0.050	----	----	----	----	----
Lithium, total	7439-93-2	E420/EO	0.0010	mg/L	0.0032	----	----	----	----	----
Magnesium, total	7439-95-4	E420/EO	0.0050	mg/L	2.70	----	----	----	----	----
Manganese, total	7439-96-5	E420/EO	0.00010	mg/L	0.00439	----	----	----	----	----
Molybdenum, total	7439-98-7	E420/EO	0.050	µg/L	0.218	----	----	----	----	----
Nickel, total	7440-02-0	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Phosphorus, total	7723-14-0	E420/EO	0.050	mg/L	<0.050	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Total Metals										
Potassium, total	7440-09-7	E420/EO	0.050	mg/L	1.00	----	----	----	----	----
Rubidium, total	7440-17-7	E420/EO	0.00020	mg/L	0.00097	----	----	----	----	----
Selenium, total	7782-49-2	E420/EO	0.050	µg/L	<0.050	----	----	----	----	----
Silicon, total	7440-21-3	E420/EO	0.10	mg/L	2.21	----	----	----	----	----
Silver, total	7440-22-4	E420/EO	0.010	µg/L	<0.010	----	----	----	----	----
Sodium, total	7440-23-5	E420/EO	0.050	mg/L	18.9	----	----	----	----	----
Strontium, total	7440-24-6	E420/EO	0.00020	mg/L	0.0650	----	----	----	----	----
Sulfur, total	7704-34-9	E420/EO	0.50	mg/L	1.31	----	----	----	----	----
Tellurium, total	13494-80-9	E420/EO	0.00020	mg/L	<0.00020	----	----	----	----	----
Thallium, total	7440-28-0	E420/EO	0.010	µg/L	<0.010	----	----	----	----	----
Thorium, total	7440-29-1	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Tin, total	7440-31-5	E420/EO	0.00010	mg/L	0.00017	----	----	----	----	----
Titanium, total	7440-32-6	E420/EO	0.00030	mg/L	<0.00030	----	----	----	----	----
Tungsten, total	7440-33-7	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Uranium, total	7440-61-1	E420/EO	0.010	µg/L	<0.010	----	----	----	----	----
Vanadium, total	7440-62-2	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Zinc, total	7440-66-6	E420/EO	0.0030	mg/L	<0.0030	----	----	----	----	----
Zirconium, total	7440-67-7	E420/EO	0.00020	mg/L	<0.00020	----	----	----	----	----
Dissolved Metals										
Aluminum, dissolved	7429-90-5	E421/EO	0.0010	mg/L	0.0126	----	----	----	----	----
Antimony, dissolved	7440-36-0	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Dissolved Metals										
Arsenic, dissolved	7440-38-2	E421/EO	0.00010	mg/L	0.00011	----	----	----	----	----
Barium, dissolved	7440-39-3	E421/EO	0.00010	mg/L	0.0160	----	----	----	----	----
Beryllium, dissolved	7440-41-7	E421/EO	0.020	µg/L	<0.020	----	----	----	----	----
Bismuth, dissolved	7440-69-9	E421/EO	0.050	µg/L	<0.050	----	----	----	----	----
Boron, dissolved	7440-42-8	E421/EO	0.010	mg/L	0.016	----	----	----	----	----
Cadmium, dissolved	7440-43-9	E421/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Calcium, dissolved	7440-70-2	E421/EO	0.050	mg/L	9.78	----	----	----	----	----
Cesium, dissolved	7440-46-2	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Chromium, dissolved	7440-47-3	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Cobalt, dissolved	7440-48-4	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Copper, dissolved	7440-50-8	E421/EO	0.00020	mg/L	0.00047	----	----	----	----	----
Iron, dissolved	7439-89-6	E421/EO	0.010	mg/L	<0.010	----	----	----	----	----
Lead, dissolved	7439-92-1	E421/EO	0.050	µg/L	<0.050	----	----	----	----	----
Lithium, dissolved	7439-93-2	E421/EO	0.0010	mg/L	0.0030	----	----	----	----	----
Magnesium, dissolved	7439-95-4	E421/EO	0.0050	mg/L	2.76	----	----	----	----	----
Manganese, dissolved	7439-96-5	E421/EO	0.00010	mg/L	0.00010	----	----	----	----	----
Molybdenum, dissolved	7439-98-7	E421/EO	0.050	µg/L	0.272	----	----	----	----	----
Nickel, dissolved	7440-02-0	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Phosphorus, dissolved	7723-14-0	E421/EO	0.050	mg/L	<0.050	----	----	----	----	----
Potassium, dissolved	7440-09-7	E421/EO	0.050	mg/L	0.965	----	----	----	----	----
Rubidium, dissolved	7440-17-7	E421/EO	0.00020	mg/L	0.00098	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Dissolved Metals										
Selenium, dissolved	7782-49-2	E421/EO	0.050	µg/L	<0.050	----	----	----	----	----
Silicon, dissolved	7440-21-3	E421/EO	0.050	mg/L	2.20	----	----	----	----	----
Silver, dissolved	7440-22-4	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Sodium, dissolved	7440-23-5	E421/EO	0.050	mg/L	18.3	----	----	----	----	----
Strontium, dissolved	7440-24-6	E421/EO	0.00020	mg/L	0.0660	----	----	----	----	----
Sulfur, dissolved	7704-34-9	E421/EO	0.50	mg/L	1.28	----	----	----	----	----
Tellurium, dissolved	13494-80-9	E421/EO	0.00020	mg/L	<0.00020	----	----	----	----	----
Thallium, dissolved	7440-28-0	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Thorium, dissolved	7440-29-1	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Tin, dissolved	7440-31-5	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Titanium, dissolved	7440-32-6	E421/EO	0.00030	mg/L	<0.00030	----	----	----	----	----
Tungsten, dissolved	7440-33-7	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----
Uranium, dissolved	7440-61-1	E421/EO	0.010	µg/L	<0.010	----	----	----	----	----
Vanadium, dissolved	7440-62-2	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	----
Zinc, dissolved	7440-66-6	E421/EO	0.0010	mg/L	<0.0010	----	----	----	----	----
Zirconium, dissolved	7440-67-7	E421/EO	0.00020	mg/L	<0.00020	----	----	----	----	----
Dissolved metals filtration location	----	EP421/EO	-	-	Laboratory	----	----	----	----	----
Aggregate Organics										
Naphthenic acids	----	E565/EO	1.0	mg/L	<1.0	----	----	----	----	----
Volatile Organic Compounds [Fuels]										
Benzene	71-43-2	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Volatile Organic Compounds [Fuels]										
Ethylbenzene	100-41-4	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----
Styrene	100-42-5	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----
Toluene	108-88-3	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/EO	0.40	µg/L	<0.40	----	----	----	----	----
Xylene, o-	95-47-6	E611A/EO	0.30	µg/L	<0.30	----	----	----	----	----
Xylenes, total	1330-20-7	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----
BTEX, total	----	E611A/EO	1.0	µg/L	<1.0	----	----	----	----	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1/EO	100	µg/L	<100	----	----	----	----	----
F1-BTEX	----	EC580/EO	25	µg/L	<26	----	----	----	----	----
F2 (C10-C16)	----	E601/EO	100	µg/L	<100	----	----	----	----	----
F3 (C16-C34)	----	E601/EO	250	µg/L	<250	----	----	----	----	----
F4 (C34-C50)	----	E601/EO	250	µg/L	<250	----	----	----	----	----
Hydrocarbons, total (C6-C50)	n/a	EC581/EO	370	µg/L	<380	----	----	----	----	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/EO	1.0	%	97.1	----	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/EO	1.0	%	126	----	----	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611A/EO	1.0	%	88.8	----	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611A/EO	1.0	%	97.1	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Polycyclic Aromatic Hydrocarbons										
Acenaphthene	83-32-9	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Acenaphthylene	208-96-8	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Acridine	260-94-6	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Anthracene	120-12-7	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Benz(a)anthracene	56-55-3	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Benzo(a)pyrene	50-32-8	E641A/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Benzo(b+j)fluoranthene	n/a	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Benzo(b+j+k)fluoranthene	n/a	E641A/EO	0.015	µg/L	<0.015	----	----	----	----	----
Benzo(e)pyrene	192-97-2	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Benzo(k)fluoranthene	207-08-9	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Chrysene	218-01-9	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	E641A/EO	0.0050	µg/L	<0.0050	----	----	----	----	----
Fluoranthene	206-44-0	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Fluorene	86-73-7	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Indeno(1,2,3-cd)pyrene	193-39-5	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Methylnaphthalene, 1-	90-12-0	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Methylnaphthalene, 1+2-	----	E641A/EO	0.015	µg/L	<0.015	----	----	----	----	----
Methylnaphthalene, 2-	91-57-6	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Naphthalene	91-20-3	E641A/EO	0.050	µg/L	<0.050	----	----	----	----	----
Perylene	198-55-0	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	Treated Water - ED	----	----	----	----
					Client sampling date / time	01-Apr-2026 15:25	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2600623-001	----	----	----	----	----
						Result	----	----	----	----
Polycyclic Aromatic Hydrocarbons										
Phenanthrene	85-01-8	E641A/EO	0.020	µg/L	<0.020	----	----	----	----	----
Pyrene	129-00-0	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Quinoline	91-22-5	E641A/EO	0.050	µg/L	<0.050	----	----	----	----	----
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/EO	0.1	%	105	----	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/EO	0.1	%	101	----	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/EO	0.1	%	102	----	----	----	----	----
Disinfectant By-Products										
Chlorate	14866-68-3	E409.CLO3/WT	0.010	mg/L	0.065	----	----	----	----	----
Chlorite	14998-27-7	E409.CLO2/WT	0.010	mg/L	<0.010	----	----	----	----	----

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



CERTIFICATE OF ANALYSIS

Work Order	: FC2600623	Page	: 1 of 6
Client	: Regional Municipality of Wood Buffalo	Laboratory	: ALS Environmental - Fort McMurray
Contact	: Water Treatment Plant	Account Manager	: Megha Walia
Address	: 1 Silin Forest Road	Address	: #4, 340 Macalpine Crescent
	Fort McMurray AB Canada T9H 5A1		Fort McMurray AB Canada T9H 4A8
Telephone	: 780-762-5863	Telephone	: +1 780 791 1524
Project	: Fort Chipewyan Imperial Release	Date Samples Received	: 02-Apr-2026 09:00
PO	: 4500068005	Date Analysis	: 04-Apr-2026
		Commenced	
		Issue Date	: 15-Apr-2026 12:54
C-O-C number	: ----		
Sampler	: EA		
Site	: ----		
Quote number	: Water Treatment Plant		
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
- 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>
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Alex Drake	Lab Analyst	Metals, Edmonton, Alberta
Dan Nguyen	Team Leader - Inorganics	Metals, Edmonton, Alberta
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
Geoff Berg	Lab Analyst	Organics, Edmonton, Alberta
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Kari Mulroy	Lab Supervisor - Environmental	Organics, Edmonton, Alberta
Monica Ko	Supervisor - Inorganic	Inorganics, Burnaby, British Columbia
Nik Perkio	Senior Analyst	Inorganics, Waterloo, Ontario
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta
Yan Zhang	Team Leader - Organics	Organics, Edmonton, Alberta



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).

Measurement Uncertainty: The reported uncertainties in this report are expanded uncertainties calculated using a coverage factor of 2, which gives a level of confidence of approximately 95%.

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.

<i>Unit</i>	<i>Description</i>
-	no units
%	percent
µg/L	micrograms per litre
µS/cm	microsiemens per centimetre
mg/L	milligrams per litre
pH units	pH units
psu	practical salinity units

>: greater than.

<: less than.

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

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



Analytical Results

FC2600623-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Treated Water - ED

Client sampling date / time: 01-Apr-2026 15:25

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Alkalinity, bicarbonate (as HCO ₃)	71-52-3	64.5	1.2	mg/L	E290/EO	04-Apr-2026	04-Apr-2026	2525159
Alkalinity, carbonate (as CO ₃)	3812-32-6	<0.6	0.6	mg/L	E290/EO	04-Apr-2026	04-Apr-2026	2525159
Alkalinity, hydroxide (as OH)	14280-30-9	<0.3	0.3	mg/L	E290/EO	04-Apr-2026	04-Apr-2026	2525159
Alkalinity, total (as CaCO ₃)	----	52.9	1.0	mg/L	E290/EO	04-Apr-2026	04-Apr-2026	2525159
Conductivity	----	158	1.0	µS/cm	E100/EO	04-Apr-2026	04-Apr-2026	2525160
Hardness (as CaCO ₃), dissolved	----	35.8	0.50	mg/L	EC100/EO	-	10-Apr-2026	-
pH	----	8.23	0.10	pH units	E108/EO	04-Apr-2026	04-Apr-2026	2525158
Salinity	----	<1.0	1.0	psu	EC100S/VA	-	09-Apr-2026	-
Solids, total dissolved [TDS], calculated	----	85.4	1.0	mg/L	EC103/EO	-	04-Apr-2026	-
Anions and Nutrients								
Chloride	16887-00-6	12.3	0.50	mg/L	E235.Cl/EO	04-Apr-2026	04-Apr-2026	2525129
Fluoride	16984-48-8	<0.020	0.020	mg/L	E235.F/EO	04-Apr-2026	04-Apr-2026	2525127
Nitrate (as N)	14797-55-8	0.105	0.020	mg/L	E235.NO3/EO	04-Apr-2026	04-Apr-2026	2525133
Nitrate + Nitrite (as N)	----	0.105	0.022	mg/L	EC235.N+N/EO	-	04-Apr-2026	-
Nitrite (as N)	14797-65-0	<0.010	0.010	mg/L	E235.NO2/EO	04-Apr-2026	04-Apr-2026	2525134
Sulfate (as SO ₄)	14808-79-8	3.12	0.30	mg/L	E235.SO4/EO	04-Apr-2026	04-Apr-2026	2525128
Total Sulfides								
Sulfide, total (as S)	18496-25-8	<0.0015	0.0015	mg/L	E395/CG	-	07-Apr-2026	2527253
Sulfide, total (as H ₂ S)	7783-06-4	<0.0016	0.0016	mg/L	E395/CG	-	07-Apr-2026	2527253
Ion Balance								
Ion balance (cations/anions)	----	104	0.010	%	EC101/EO	-	04-Apr-2026	-
Total Metals								
Aluminum, total	7429-90-5	0.0160	0.0030	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Antimony, total	7440-36-0	<0.00010	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Arsenic, total	7440-38-2	0.00012	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Barium, total	7440-39-3	0.0158	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Beryllium, total	7440-41-7	<0.020	0.020	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Bismuth, total	7440-69-9	<0.050	0.050	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Boron, total	7440-42-8	0.015	0.010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Cadmium, total	7440-43-9	<0.0050	0.0050	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Calcium, total	7440-70-2	9.71	0.050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Cesium, total	7440-46-2	<0.010	0.010	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Chromium, total	7440-47-3	<0.00050	0.00050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Cobalt, total	7440-48-4	<0.00010	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Copper, total	7440-50-8	0.00068	0.00050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Iron, total	7439-89-6	<0.010	0.010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Lead, total	7439-92-1	<0.050	0.050	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Lithium, total	7439-93-2	0.0032	0.0010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Magnesium, total	7439-95-4	2.70	0.0050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Manganese, total	7439-96-5	0.00439	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Molybdenum, total	7439-98-7	0.218	0.050	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Nickel, total	7440-02-0	<0.00050	0.00050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Phosphorus, total	7723-14-0	<0.050	0.050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Potassium, total	7440-09-7	1.00	0.050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Rubidium, total	7440-17-7	0.00097	0.00020	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969



Analytical Results

FC2600623-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Treated Water - ED

Client sampling date / time: 01-Apr-2026 15:25

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Total Metals								
Selenium, total	7782-49-2	<0.050	0.050	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Silicon, total	7440-21-3	2.21	0.10	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Silver, total	7440-22-4	<0.010	0.010	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Sodium, total	7440-23-5	18.9	0.050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Strontium, total	7440-24-6	0.0650	0.00020	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Sulfur, total	7704-34-9	1.31	0.50	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Tellurium, total	13494-80-9	<0.00020	0.00020	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Thallium, total	7440-28-0	<0.010	0.010	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Thorium, total	7440-29-1	<0.00010	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Tin, total	7440-31-5	0.00017	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Titanium, total	7440-32-6	<0.00030	0.00030	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Tungsten, total	7440-33-7	<0.00010	0.00010	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Uranium, total	7440-61-1	<0.010	0.010	µg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Vanadium, total	7440-62-2	<0.00050	0.00050	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Zinc, total	7440-66-6	<0.0030	0.0030	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Zirconium, total	7440-67-7	<0.00020	0.00020	mg/L	E420/EO	04-Apr-2026	04-Apr-2026	2524969
Dissolved Metals								
Aluminum, dissolved	7429-90-5	0.0126	0.0010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Antimony, dissolved	7440-36-0	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Arsenic, dissolved	7440-38-2	0.00011	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Barium, dissolved	7440-39-3	0.0160	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Beryllium, dissolved	7440-41-7	<0.020	0.020	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Bismuth, dissolved	7440-69-9	<0.050	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Boron, dissolved	7440-42-8	0.016	0.010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Cadmium, dissolved	7440-43-9	<0.0050	0.0050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Calcium, dissolved	7440-70-2	9.78	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Cesium, dissolved	7440-46-2	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Chromium, dissolved	7440-47-3	<0.00050	0.00050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Cobalt, dissolved	7440-48-4	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Copper, dissolved	7440-50-8	0.00047	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Iron, dissolved	7439-89-6	<0.010	0.010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Lead, dissolved	7439-92-1	<0.050	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Lithium, dissolved	7439-93-2	0.0030	0.0010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Magnesium, dissolved	7439-95-4	2.76	0.0050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Manganese, dissolved	7439-96-5	0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Molybdenum, dissolved	7439-98-7	0.272	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Nickel, dissolved	7440-02-0	<0.00050	0.00050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Phosphorus, dissolved	7723-14-0	<0.050	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Potassium, dissolved	7440-09-7	0.965	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Rubidium, dissolved	7440-17-7	0.00098	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Selenium, dissolved	7782-49-2	<0.050	0.050	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Silicon, dissolved	7440-21-3	2.20	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Silver, dissolved	7440-22-4	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Sodium, dissolved	7440-23-5	18.3	0.050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Strontium, dissolved	7440-24-6	0.0660	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059



Analytical Results

FC2600623-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Treated Water - ED

Client sampling date / time: 01-Apr-2026 15:25

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLOT
Dissolved Metals								
Sulfur, dissolved	7704-34-9	1.28	0.50	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Tellurium, dissolved	13494-80-9	<0.00020	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Thallium, dissolved	7440-28-0	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Thorium, dissolved	7440-29-1	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Tin, dissolved	7440-31-5	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Titanium, dissolved	7440-32-6	<0.00030	0.00030	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Tungsten, dissolved	7440-33-7	<0.00010	0.00010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Uranium, dissolved	7440-61-1	<0.010	0.010	µg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Vanadium, dissolved	7440-62-2	<0.00050	0.00050	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Zinc, dissolved	7440-66-6	<0.0010	0.0010	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Zirconium, dissolved	7440-67-7	<0.00020	0.00020	mg/L	E421/EO	10-Apr-2026	10-Apr-2026	2533059
Dissolved metals filtration location	----	Laboratory	-	-	EP421/EO	-	10-Apr-2026	2533059
Aggregate Organics								
Naphthenic acids	----	<1.0	1.0	mg/L	E565/EO	13-Apr-2026	14-Apr-2026	2536309
Volatile Organic Compounds [Fuels]								
Benzene	71-43-2	<0.50	0.50	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Ethylbenzene	100-41-4	<0.50	0.50	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Styrene	100-42-5	<0.50	0.50	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Toluene	108-88-3	<0.50	0.50	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Xylene, m+p-	179601-23-1	<0.40	0.40	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Xylene, o-	95-47-6	<0.30	0.30	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Xylenes, total	1330-20-7	<0.50	0.50	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
BTEX, total	----	<1.0	1.0	µg/L	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Hydrocarbons								
F1 (C6-C10)	----	<100	100	µg/L	E581.F1/EO	09-Apr-2026	09-Apr-2026	2530633
F1-BTEX	----	<26	26	µg/L	EC580/EO	-	10-Apr-2026	-
F2 (C10-C16)	----	<100	100	µg/L	E601/EO	06-Apr-2026	06-Apr-2026	2525846
F3 (C16-C34)	----	<250	250	µg/L	E601/EO	06-Apr-2026	06-Apr-2026	2525846
F4 (C34-C50)	----	<250	250	µg/L	E601/EO	06-Apr-2026	06-Apr-2026	2525846
Hydrocarbons, total (C6-C50)	n/a	<380	380	µg/L	EC581/EO	-	06-Apr-2026	-
Hydrocarbons Surrogates								
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	97.1	1.0	%	E601/EO	06-Apr-2026	06-Apr-2026	2525846
Dichlorotoluene, 3,4-	95-75-0	126	1.0	%	E581.F1/EO	09-Apr-2026	09-Apr-2026	2530633
Volatile Organic Compounds Surrogates								
Bromofluorobenzene, 4-	460-00-4	88.8	1.0	%	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Difluorobenzene, 1,4-	540-36-3	97.1	1.0	%	E611A/EO	09-Apr-2026	09-Apr-2026	2530632
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	83-32-9	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Acenaphthylene	208-96-8	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Acridine	260-94-6	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Anthracene	120-12-7	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Benzo(a)anthracene	56-55-3	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Benzo(a)pyrene	50-32-8	<0.0050	0.0050	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Benzo(b+j)fluoranthene	n/a	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Benzo(b+j+k)fluoranthene	n/a	<0.015	0.015	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847



Analytical Results

FC2600623-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: Treated Water - ED

Client sampling date / time: 01-Apr-2026 15:25

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Polycyclic Aromatic Hydrocarbons								
Benzo(e)pyrene	192-97-2	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Benzo(g,h,i)perylene	191-24-2	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Benzo(k)fluoranthene	207-08-9	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Chrysene	218-01-9	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Dibenz(a,h)anthracene	53-70-3	<0.0050	0.0050	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Fluoranthene	206-44-0	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Fluorene	86-73-7	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Indeno(1,2,3-cd)pyrene	193-39-5	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Methylnaphthalene, 1-	90-12-0	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Methylnaphthalene, 1+2-	----	<0.015	0.015	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Methylnaphthalene, 2-	91-57-6	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Naphthalene	91-20-3	<0.050	0.050	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Perylene	198-55-0	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Phenanthrene	85-01-8	<0.020	0.020	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Pyrene	129-00-0	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Quinoline	91-22-5	<0.050	0.050	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
B(a)P total potency equivalents [B(a)P TPE]	----	<0.010	0.010	µg/L	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Polycyclic Aromatic Hydrocarbons Surrogates								
Chrysene-d12	1719-03-5	105	0.1	%	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Naphthalene-d8	1146-65-2	101	0.1	%	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Phenanthrene-d10	1517-22-2	102	0.1	%	E641A/EO	06-Apr-2026	06-Apr-2026	2525847
Disinfectant By-Products								
Chlorate	14866-68-3	0.065	0.010	mg/L	E409.CLO3/WT	07-Apr-2026	07-Apr-2026	2527712
Chlorite	14998-27-7	<0.010	0.010	mg/L	E409.CLO2/WT	07-Apr-2026	07-Apr-2026	2527711

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