right solutions.
right partner.

CERTIFICATE OF ANALYSIS

Work Order	:	**FC2501665**			
Amendment	:	**1**			
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 Alberta Canada T9H 5A1	Address	:	#4, 340 Macalpine Crescent Fort McMurray AB Canada T9H 4A8
Telephone	:	780-762-5863	E-mail	:	Megha.Walia@alsglobal.com
Project	:	Fort Chipewyan - SC4 Raw and R1 + Table 1 Treated	Telephone	:	+1 780 791 1524
PO	:	4500069025	Date Samples Received	:	02-Jul-2025 08:00
C-O-C number	:	----	Date Analysis Commenced	:	03-Jul-2025
Sampler	:	EA	Issue Date	:	22-Jul-2025 12:04
Site	:	----			
Quote number	:	FC24-RMWB100-0005 FC SC4			
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
Alastair McGibbon		Inorganics, Edmonton, Alberta
Alex Drake		Inorganics, Edmonton, Alberta
Alex Drake		Metals, Edmonton, Alberta
Amaninder Dhillon		Organics, Waterloo, Ontario
Anthony Calero		Inorganics, Calgary, Alberta
Brayden Ginther		Inorganics, Edmonton, Alberta
Catherine DeMone		LCMS, Waterloo, Ontario
Daniel Nguyen		Metals, Edmonton, Alberta
David Tremblett		VOC, Waterloo, Ontario
Hannah Lewis		Inorganics, Waterloo, Ontario
Harpreet Chawla		Inorganics, Calgary, Alberta
Jeremy Gingras		Organics, Waterloo, Ontario
Jing Liu		Inorganics, Edmonton, Alberta
Kari Mulroy		Organics, Edmonton, Alberta
Leah Yee		Inorganics, Edmonton, Alberta
Monica Ko		Inorganics, Burnaby, British Columbia
Nik Perkio		Inorganics, Waterloo, Ontario
Parth Goswami		LCMS, Waterloo, Ontario
Ping Yeung		Organics, Edmonton, Alberta
Ping Yeung		Inorganics, Edmonton, Alberta
Sanja Risticevic		LCMS, Waterloo, Ontario
Shruti Mudliar		Inorganics, Edmonton, Alberta
Yan Zhang		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).

Unit	*Description*
-	no units
%	percent
CU	colour units (1 cu = 1 mg/l pt)
meq/L	milliequivalents per litre
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.

Qualifiers

Qualifier	Description
DTC	Dissolved concentration exceeds total. Results were confirmed by re-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	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Physical Tests										
Alkalinity, total (as CaCO3)	----	E290/EO	1.0	mg/L		----	49.3	----	----	----
Colour, true	----	E329-L/EO	2.0	CU		----	9.6	----	----	----
Conductivity	----	E100/EO	1.0	µS/cm		----	126	----	----	----
Conductivity	----	E100S/VA	2.0	µS/cm		122	122	----	----	----
Hardness (as CaCO3), dissolved	----	EC100/EO	0.50	mg/L		51.5	----	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/EO	0.50	mg/L		----	47.7	----	----	----
Salinity	----	EC100S/VA	1.0	psu		<1.0	<1.0	----	----	----
Solids, total dissolved [TDS]	----	E162/EO	10	mg/L		----	67	----	----	----
Conductivity	----	E100/EO	2.0	µS/cm		177	----	----	----	----
pH	----	E108/EO	0.10	pH units		7.39	7.27	----	----	----
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/EO	1.2	mg/L		60.3	60.1	----	----	----
Alkalinity, carbonate (as CO3)	3812-32-6	E290/EO	1.0	mg/L		<0.6	<0.6	----	----	----
Alkalinity, hydroxide (as OH)	14280-30-9	E290/EO	1.0	mg/L		<0.3	<0.3	----	----	----
Alkalinity, total (as CaCO3)	----	E290/EO	2.0	mg/L		49.4	----	----	----	----
Solids, total dissolved [TDS], calculated	----	EC103/EO	1.0	mg/L		92.2	68.0	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/EO	0.0050	mg/L		----	0.0346	----	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/EO	0.0300	mg/L		----	<0.0300	----	----	----
Chloride	16887-00-6	E235.Cl/EO	0.50	mg/L		21.0	5.78	----	----	----
Fluoride	16984-48-8	E235.F/EO	0.020	mg/L		0.032	0.072	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/EO	0.020	mg/L		<0.020	<0.020	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
Client sampling date / time					02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
					FC2501665-001	FC2501665-002	----	----	----
					Result	Result	----	----	----
Anions and Nutrients									
Nitrite (as N)	14797-65-0	E235.NO2/EO	0.010	mg/L	<0.010	<0.010	----	----	----
Sulfate (as SO4)	14808-79-8	E235.SO4/EO	0.30	mg/L	6.86	7.26	----	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/EO	0.0500	mg/L	<0.0500	----	----	----	----
Cyanides									
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	----	<0.0020	----	----	----
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/CG	0.50	mg/L	----	6.28	----	----	----
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	<0.0015	----	----	----
Sulfide, total (as H2S)	7783-06-4	E395/CG	0.0016	mg/L	<0.0016	<0.0016	----	----	----
Ion Balance									
Anion sum	----	EC101/EO	0.10	meq/L	1.72	1.30	----	----	----
Cation sum	----	EC101/EO	0.10	meq/L	1.69	1.28	----	----	----
Ion balance (APHA)	----	EC101/EO	0.01	%	-0.88	-0.78	----	----	----
Ion balance (cations/anions)	----	EC101/EO	0.010	%	98.2	98.5	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/EO	0.0030	mg/L	0.0579	0.0455	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Antimony, total	7440-36-0	E420/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Arsenic, total	7440-38-2	E420/EO	0.00010	mg/L		0.00032	0.00046	----	----	----
Barium, total	7440-39-3	E420/EO	0.00010	mg/L		0.0214	0.0212	----	----	----
Beryllium, total	7440-41-7	E420/EO	0.000020	mg/L		<0.000020	<0.000020	----	----	----
Bismuth, total	7440-69-9	E420/EO	0.000050	mg/L		<0.000050	<0.000050	----	----	----
Boron, total	7440-42-8	E420/EO	0.010	mg/L		0.015	0.015	----	----	----
Cadmium, total	7440-43-9	E420/EO	0.0000050	mg/L		0.0000066	----	----	----	----
Cadmium, total	7440-43-9	E420/EO	0.0050	µg/L		----	0.0061	----	----	----
Calcium, total	7440-70-2	E420/EO	0.050	mg/L		13.7	12.7	----	----	----
Cesium, total	7440-46-2	E420/EO	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Chromium, total	7440-47-3	E420/EO	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Cobalt, total	7440-48-4	E420/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Copper, total	7440-50-8	E420/EO	0.00050	mg/L		0.00168	0.00264	----	----	----
Iron, total	7439-89-6	E420/EO	0.010	mg/L		<0.010	0.074	----	----	----
Lead, total	7439-92-1	E420/EO	0.000050	mg/L		<0.000050	----	----	----	----
Lead, total	7439-92-1	E420/EO	0.050	µg/L		----	<0.050	----	----	----
Lithium, total	7439-93-2	E420/EO	0.0010	mg/L		0.0038	0.0039	----	----	----
Magnesium, total	7439-95-4	E420/EO	0.0050	mg/L		3.79	3.88	----	----	----
Manganese, total	7439-96-5	E420/EO	0.00010	mg/L		0.00163	0.00863	----	----	----
Mercury, total	7439-97-6	E508/EO	0.0050	µg/L		----	<0.0050	----	----	----
Molybdenum, total	7439-98-7	E420/EO	0.000050	mg/L		0.000253	0.000289	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Total Metals										
Nickel, total	7440-02-0	E420/EO	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Phosphorus, total	7723-14-0	E420/EO	0.050	mg/L		<0.050	<0.050	----	----	----
Potassium, total	7440-09-7	E420/EO	0.050	mg/L		1.13	1.15	----	----	----
Rubidium, total	7440-17-7	E420/EO	0.00020	mg/L		0.00107	0.00104	----	----	----
Selenium, total	7782-49-2	E420/EO	0.000050	mg/L		<0.000050	----	----	----	----
Selenium, total	7782-49-2	E420/EO	0.050	µg/L		----	0.057	----	----	----
Silicon, total	7440-21-3	E420/EO	0.10	mg/L		0.40	0.42	----	----	----
Silver, total	7440-22-4	E420/EO	0.000010	mg/L		<0.000010	----	----	----	----
Silver, total	7440-22-4	E420/EO	0.010	µg/L		----	<0.010	----	----	----
Sodium, total	7440-23-5	E420/EO	0.050	mg/L		14.0	5.82	----	----	----
Strontium, total	7440-24-6	E420/EO	0.00020	mg/L		0.0826	0.0820	----	----	----
Sulfur, total	7704-34-9	E420/EO	0.50	mg/L		2.63	2.79	----	----	----
Tellurium, total	13494-80-9	E420/EO	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Thallium, total	7440-28-0	E420/EO	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Thorium, total	7440-29-1	E420/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Tin, total	7440-31-5	E420/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Titanium, total	7440-32-6	E420/EO	0.00030	mg/L		<0.00030	0.00047	----	----	----
Tungsten, total	7440-33-7	E420/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Uranium, total	7440-61-1	E420/EO	0.000010	mg/L		<0.000010	----	----	----	----
Uranium, total	7440-61-1	E420/EO	0.010	µg/L		----	0.156	----	----	----
Vanadium, total	7440-62-2	E420/EO	0.00050	mg/L		<0.00050	<0.00050	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time: 02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
					FC2501665-001	FC2501665-002	----	----	----
					Result	Result	----	----	----
Total Metals									
Zinc, total	7440-66-6	E420/EO	0.0030	mg/L	<0.0030	<0.0030	----	----	----
Zirconium, total	7440-67-7	E420/EO	0.00020	mg/L	<0.00020	<0.00020	----	----	----
Dissolved Metals									
Aluminum, dissolved	7429-90-5	E421/EO	0.0010	mg/L	0.0598	0.0322	----	----	----
Antimony, dissolved	7440-36-0	E421/EO	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Arsenic, dissolved	7440-38-2	E421/EO	0.00010	mg/L	0.00032	0.00040	----	----	----
Barium, dissolved	7440-39-3	E421/EO	0.00010	mg/L	0.0211	0.0203	----	----	----
Beryllium, dissolved	7440-41-7	E421/EO	0.000020	mg/L	<0.000020	<0.000020	----	----	----
Bismuth, dissolved	7440-69-9	E421/EO	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Boron, dissolved	7440-42-8	E421/EO	0.010	mg/L	0.018	0.018	----	----	----
Cadmium, dissolved	7440-43-9	E421/EO	0.0000050	mg/L	<0.0000050	<0.0000050	----	----	----
Calcium, dissolved	7440-70-2	E421/EO	0.050	mg/L	14.1	13.1	----	----	----
Cesium, dissolved	7440-46-2	E421/EO	0.000010	mg/L	<0.000010	<0.000010	----	----	----
Chromium, dissolved	7440-47-3	E421/EO	0.00050	mg/L	<0.00050	<0.00050	----	----	----
Cobalt, dissolved	7440-48-4	E421/EO	0.00010	mg/L	<0.00010	<0.00010	----	----	----
Copper, dissolved	7440-50-8	E421/EO	0.00020	mg/L	0.00087	0.00090	----	----	----
Iron, dissolved	7439-89-6	E421/EO	0.010	mg/L	<0.010	0.022	----	----	----
Lead, dissolved	7439-92-1	E421/EO	0.000050	mg/L	<0.000050	<0.000050	----	----	----
Lithium, dissolved	7439-93-2	E421/EO	0.0010	mg/L	0.0034	0.0032	----	----	----
Magnesium, dissolved	7439-95-4	E421/EO	0.0050	mg/L	3.96	4.02	----	----	----
Manganese, dissolved	7439-96-5	E421/EO	0.00010	mg/L	0.00048	0.00102	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Dissolved Metals										
Molybdenum, dissolved	7439-98-7	E421/EO	0.000050	mg/L		0.000285	0.000280	----	----	----
Nickel, dissolved	7440-02-0	E421/EO	0.00050	mg/L		<0.00050	0.00075	----	----	----
Phosphorus, dissolved	7723-14-0	E421/EO	0.050	mg/L		<0.050	<0.050	----	----	----
Potassium, dissolved	7440-09-7	E421/EO	0.050	mg/L		1.10	1.12	----	----	----
Rubidium, dissolved	7440-17-7	E421/EO	0.00020	mg/L		0.00118	0.00113	----	----	----
Selenium, dissolved	7782-49-2	E421/EO	0.000050	mg/L		<0.000050	0.000072	----	----	----
Silicon, dissolved	7440-21-3	E421/EO	0.050	mg/L		0.376	0.352	----	----	----
Silver, dissolved	7440-22-4	E421/EO	0.000010	mg/L		0.000032 DTC	<0.000010	----	----	----
Sodium, dissolved	7440-23-5	E421/EO	0.050	mg/L		14.4	6.04	----	----	----
Strontium, dissolved	7440-24-6	E421/EO	0.00020	mg/L		0.0852	0.0824	----	----	----
Sulfur, dissolved	7704-34-9	E421/EO	0.50	mg/L		2.61	2.87	----	----	----
Tellurium, dissolved	13494-80-9	E421/EO	0.00020	mg/L		<0.00020	<0.00020	----	----	----
Thallium, dissolved	7440-28-0	E421/EO	0.000010	mg/L		<0.000010	<0.000010	----	----	----
Thorium, dissolved	7440-29-1	E421/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Tin, dissolved	7440-31-5	E421/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Titanium, dissolved	7440-32-6	E421/EO	0.00030	mg/L		<0.00030	<0.00030	----	----	----
Tungsten, dissolved	7440-33-7	E421/EO	0.00010	mg/L		<0.00010	<0.00010	----	----	----
Uranium, dissolved	7440-61-1	E421/EO	0.000010	mg/L		<0.000010	0.000148	----	----	----
Vanadium, dissolved	7440-62-2	E421/EO	0.00050	mg/L		<0.00050	<0.00050	----	----	----
Zinc, dissolved	7440-66-6	E421/EO	0.0010	mg/L		<0.0010	<0.0010	----	----	----
Zirconium, dissolved	7440-67-7	E421/EO	0.00020	mg/L		----	<0.00020	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Dissolved Metals										
Zirconium, dissolved	7440-67-7	E421/EO	0.00030	mg/L		<0.00030	----	----	----	----
Dissolved metals filtration location	----	EP421/EO	-	-		Field	Field	----	----	----
Aggregate Organics										
Naphthenic acids	----	E565/EO	1.0	mg/L		<1.0	----	----	----	----
Nitrilotriacetic 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	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Volatile Organic Compounds										
Xylenes, total	1330-20-7	E611E/EO	0.50	µg/L		----	<0.50	----	----	----
Volatile Organic Compounds [BTEXS+MTBE]										
Benzene	71-43-2	E611A/EO	0.50	µg/L		<0.50	----	----	----	----
Ethylbenzene	100-41-4	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	0.50	µg/L		<0.50	----	----	----	----
Xylene, o-	95-47-6	E611A/EO	0.50	µg/L		<0.50	----	----	----	----
Xylenes, total	1330-20-7	E611A/EO	0.75	µg/L		<0.75	----	----	----	----
BTEX, total	----	E611A/EO	1.2	µg/L		<1.2	----	----	----	----
Hydrocarbons										
F1 (C6-C10)	----	E581.F1/EO	100	µg/L		<100	----	----	----	----
F1-BTEX	----	EC580/EO	100	µg/L		<100	----	----	----	----
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	400	µg/L		<400	----	----	----	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/EO	1.0	%		103	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/EO	1.0	%		93.5	----	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611E/EO	1.0	%		----	81.4	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time: 02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
					FC2501665-001	FC2501665-002	----	----	----
					Result	Result	----	----	----
Volatile Organic Compounds Surrogates									
Bromofluorobenzene, 4-	460-00-4	E611I/WT	1.0	%	----	93.6	----	----	----
Bromofluorobenzene, 4-	460-00-4	E611A/EO	1.0	%	88.3	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611I/WT	1.0	%	----	99.3	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611E/EO	1.0	%	----	114	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611A/EO	1.0	%	97.5	----	----	----	----
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	<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(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-c,d)pyrene	193-39-5	E641A/EO	0.010	µg/L	<0.010	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Polycyclic Aromatic Hydrocarbons										
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	----	----	----	----
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	----	----	----	----
PAHs, high molecular weight (BC AWQ)	n/a	E641A/EO	0.030	µg/L		<0.030	----	----	----	----
PAHs, low molecular weight (BC AWQ)	n/a	E641A/EO	0.060	µg/L		<0.060	----	----	----	----
PAHs, total (CCME sewer 18)	n/a	E641A/EO	0.070	µg/L		<0.070	----	----	----	----
PAHs, total (EPA 16)	n/a	E641A/EO	0.065	µg/L		<0.065	----	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/EO	0.1	%		122	120	----	----	----
Naphthalene-d8	1146-65-2	E641A/EO	0.1	%		124	108	----	----	----
Phenanthrene-d10	1517-22-2	E641A/EO	0.1	%		125	124	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Semi-Volatile Organics										
Nitrosodimethylamine, N- [NDMA]	62-75-9	E725-T/WT	0.00090	µg/L		----	<0.00090	----	----	----
Chlorinated Phenolics										
Dichlorophenol, 2,4-	120-83-2	E651C/WT	0.20	µg/L		----	<0.20	----	----	----
Pentachlorophenol [PCP]	87-86-5	E651C/WT	0.50	µg/L		----	<0.50	----	----	----
Tetrachlorophenol, 2,3,4,6-	58-90-2	E651C/WT	0.50	µg/L		----	<0.50	----	----	----
Trichlorophenol, 2,4,6-	88-06-2	E651C/WT	0.20	µg/L		----	<0.20	----	----	----
Phenolics Surrogates										
Tribromophenol, 2,4,6-	118-79-6	E651C/WT	1.0	%		----	81.9	----	----	----
Organochlorine Pesticides Surrogates										
Decachlorobiphenyl	2051-24-3	E660F/WT	0.10	%		----	47.7 SUR-ND	----	----	----
Tetrachloro-m-xylene	877-09-8	E660F/WT	0.10	%		----	80.1	----	----	----
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	----	----	----
Diuron	330-54-1	E755/WT	0.050	µg/L		----	<0.050	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time: 02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
					FC2501665-001	FC2501665-002	----	----	----
					Result	Result	----	----	----
Herbicides									
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	----	----	----
Herbicides Surrogates									
Dichlorophenylacetic acid, 2,4-	19719-28-9	E706A/WT	1.0	%	----	79.0	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Insecticides										
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	----	----	----
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	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	FCWTP-Treated Water Lab Sink ----	FCWTP-Raw Water Chamber ----	----	----	----
					Client sampling date / time	02-Jul-2025 08:00	02-Jul-2025 08:00	----	----	----
						FC2501665-001	FC2501665-002	----	----	----
						Result	Result	----	----	----
Pesticides										
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	E706A/WT	0.050	µg/L		----	<0.050	----	----	----
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	----	----	----
Heptachlor epoxide	1024-57-3	E660F/WT	0.0080	µg/L		----	<0.0080	----	----	----
Hexachlorocyclohexane, gamma-	58-89-9	E660F/WT	0.0080	µg/L		----	<0.0080	----	----	----
Methoxychlor	72-43-5	E660F/WT	0.0080	µg/L		----	<0.0080	----	----	----
Oxychlordane	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		----	<0.10	----	----	----
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	E706A/WT	0.050	µg/L		----	<0.050	----	----	----
Nitrosamines Surrogates										
Nitrosodimethylamine-d6, N-	17829-05-9	E725-T/WT	0.00090	%		----	112	----	----	----

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

ALS Canada Ltd.

right solutions.
right partner.

CERTIFICATE OF ANALYSIS

Work Order	: **FC2501665**	Page	: 1 of 12
Amendment	: **1**		
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 - SC4 Raw and R1 + Table 1 Treated	Date Samples Received	: 02-Jul-2025 08:00
PO	: 4500069025	Date Analysis Commenced	: 03-Jul-2025
C-O-C number	: ----	Issue Date	: 22-Jul-2025 12:04
Sampler	: EA		
Site	: ----		
Quote number	: FC24-RMWB100-0005 FC SC4		
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*
Alastair McGibbon	Laboratory Analyst	Inorganics, Edmonton, Alberta
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Alex Drake	Lab Analyst	Metals, Edmonton, Alberta
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Anthony Calero	Supervisor - Inorganic	Inorganics, Calgary, Alberta
Brayden Ginther	Laboratory Analyst	Inorganics, Edmonton, Alberta
Catherine DeMone	Laboratory Analyst	LCMS, Waterloo, Ontario
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
David Tremblett	VOC Section Supervisor	VOC, Waterloo, Ontario
Hannah Lewis	Inorganics Analyst	Inorganics, Waterloo, Ontario
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Jeremy Gingras	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jing Liu	Laboratory Analyst	Inorganics, Edmonton, Alberta
Kari Mulroy	Lab Supervisor - Environmental	Organics, Edmonton, Alberta
Leah Yee	Lab Assistant	Inorganics, Edmonton, Alberta
Monica Ko	Supervisor - Inorganic	Inorganics, Burnaby, British Columbia
Nik Perkio	Senior Analyst	Inorganics, Waterloo, Ontario
Parth Goswami	Team Leader - LCMS	LCMS, Waterloo, Ontario
Ping Yeung	Team Leader - Inorganics	Inorganics, Edmonton, Alberta
Ping Yeung	Team Leader - Inorganics	Organics, Edmonton, Alberta
Sanja Risticevic	Department Manager - LCMS	LCMS, 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.

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

Qualifiers

Qualifier	*Description*
DTC	*Dissolved concentration exceeds total. Results were confirmed by re-analysis.*
SUR-ND	*Surrogate recovery marginally exceeded ALS DQO. Reported non-detect results for associated samples were deemed to be unaffected.*

Analytical Results

FC2501665-001

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

Client sample ID: FCWTP-Treated Water Lab Sink
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Conductivity	----	122	2.0	µS/cm	E100S/VA	08-Jul-2025	08-Jul-2025	2094861
Hardness (as CaCO3), dissolved	----	51.5	0.50	mg/L	EC100/EO	-	04-Jul-2025	-
Salinity	----	<1.0	1.0	psu	EC100S/VA	-	09-Jul-2025	-
Conductivity	----	177	2.0	µS/cm	E100/EO	07-Jul-2025	07-Jul-2025	2093077
pH	----	7.39	0.10	pH units	E108/EO	07-Jul-2025	07-Jul-2025	2093079
Alkalinity, bicarbonate (as HCO3)	71-52-3	60.3	1.2	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Alkalinity, carbonate (as CO3)	3812-32-6	<0.6	0.6	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Alkalinity, hydroxide (as OH)	14280-30-9	<0.3	0.3	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Alkalinity, total (as CaCO3)	----	49.4	2.0	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Solids, total dissolved [TDS], calculated	----	92.2	1.0	mg/L	EC103/EO	-	04-Jul-2025	-
Anions and Nutrients								
Chloride	16887-00-6	21.0	0.50	mg/L	E235.Cl/EO	03-Jul-2025	03-Jul-2025	2088142
Fluoride	16984-48-8	0.032	0.020	mg/L	E235.F/EO	03-Jul-2025	03-Jul-2025	2088144
Nitrate (as N)	14797-55-8	<0.020	0.020	mg/L	E235.NO3/EO	03-Jul-2025	03-Jul-2025	2088145
Nitrite (as N)	14797-65-0	<0.010	0.010	mg/L	E235.NO2/EO	03-Jul-2025	03-Jul-2025	2088146
Sulfate (as SO4)	14808-79-8	6.86	0.30	mg/L	E235.SO4/EO	03-Jul-2025	03-Jul-2025	2088143
Nitrate + Nitrite (as N)	----	<0.0500	0.05	mg/L	EC235.N+N/EO	-	04-Jul-2025	-
Total Sulfides								
Sulfide, total (as S)	18496-25-8	<0.0015	0.0015	mg/L	E395/CG	-	04-Jul-2025	2089065
Sulfide, total (as H2S)	7783-06-4	<0.0016	0.0016	mg/L	E395/CG	-	04-Jul-2025	2089065
Ion Balance								
Anion sum	----	1.72	0.10	meq/L	EC101/EO	-	04-Jul-2025	-
Cation sum	----	1.69	0.10	meq/L	EC101/EO	-	04-Jul-2025	-
Ion balance (APHA)	----	-0.88	0.01	%	EC101/EO	-	04-Jul-2025	-
Ion balance (cations/anions)	----	98.2	0.010	%	EC101/EO	-	04-Jul-2025	-
Total Metals								
Aluminum, total	7429-90-5	0.0579	0.0030	mg/L	E420/EO	04-Jul-2025	05-Jul-2025	2089254
Antimony, total	7440-36-0	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Arsenic, total	7440-38-2	0.00032	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Barium, total	7440-39-3	0.0214	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Beryllium, total	7440-41-7	<0.000020	0.000020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Bismuth, total	7440-69-9	<0.000050	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Boron, total	7440-42-8	0.015	0.010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cadmium, total	7440-43-9	0.0000066	0.0000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Calcium, total	7440-70-2	13.7	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cesium, total	7440-46-2	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Chromium, total	7440-47-3	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cobalt, total	7440-48-4	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Copper, total	7440-50-8	0.00168	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Iron, total	7439-89-6	<0.010	0.010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Lead, total	7439-92-1	<0.000050	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Lithium, total	7439-93-2	0.0038	0.0010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Magnesium, total	7439-95-4	3.79	0.0050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Manganese, total	7439-96-5	0.00163	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Molybdenum, total	7439-98-7	0.000253	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254

Analytical Results

FC2501665-001

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

Client sample ID: FCWTP-Treated Water Lab Sink
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Total Metals								
Nickel, total	7440-02-0	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Phosphorus, total	7723-14-0	<0.050	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Potassium, total	7440-09-7	1.13	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Rubidium, total	7440-17-7	0.00107	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Selenium, total	7782-49-2	<0.000050	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Silicon, total	7440-21-3	0.40	0.10	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Silver, total	7440-22-4	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Sodium, total	7440-23-5	14.0	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Strontium, total	7440-24-6	0.0826	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Sulfur, total	7704-34-9	2.63	0.50	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tellurium, total	13494-80-9	<0.00020	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Thallium, total	7440-28-0	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Thorium, total	7440-29-1	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tin, total	7440-31-5	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Titanium, total	7440-32-6	<0.00030	0.00030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tungsten, total	7440-33-7	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Uranium, total	7440-61-1	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Vanadium, total	7440-62-2	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Zinc, total	7440-66-6	<0.0030	0.0030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Zirconium, total	7440-67-7	<0.00020	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Dissolved Metals								
Aluminum, dissolved	7429-90-5	0.0598	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Antimony, dissolved	7440-36-0	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Arsenic, dissolved	7440-38-2	0.00032	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Barium, dissolved	7440-39-3	0.0211	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Beryllium, dissolved	7440-41-7	<0.000020	0.000020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Bismuth, dissolved	7440-69-9	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Boron, dissolved	7440-42-8	0.018	0.010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cadmium, dissolved	7440-43-9	<0.0000050	0.0000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Calcium, dissolved	7440-70-2	14.1	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cesium, dissolved	7440-46-2	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Chromium, dissolved	7440-47-3	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cobalt, dissolved	7440-48-4	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Copper, dissolved	7440-50-8	0.00087	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Iron, dissolved	7439-89-6	<0.010	0.010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Lead, dissolved	7439-92-1	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Lithium, dissolved	7439-93-2	0.0034	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Magnesium, dissolved	7439-95-4	3.96	0.0050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Manganese, dissolved	7439-96-5	0.00048	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Molybdenum, dissolved	7439-98-7	0.000285	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Nickel, dissolved	7440-02-0	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Phosphorus, dissolved	7723-14-0	<0.050	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Potassium, dissolved	7440-09-7	1.10	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Rubidium, dissolved	7440-17-7	0.00118	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Selenium, dissolved	7782-49-2	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815

Analytical Results

FC2501665-001

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

Client sample ID: FCWTP-Treated Water Lab Sink
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Dissolved Metals								
Silicon, dissolved	7440-21-3	0.376	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Silver, dissolved	7440-22-4	0.000032 DTC	0.000010	mg/L	E421/EO	03-Jul-2025	05-Jul-2025	2087815
Sodium, dissolved	7440-23-5	14.4	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Strontium, dissolved	7440-24-6	0.0852	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Sulfur, dissolved	7704-34-9	2.61	0.50	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tellurium, dissolved	13494-80-9	<0.00020	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Thallium, dissolved	7440-28-0	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Thorium, dissolved	7440-29-1	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tin, dissolved	7440-31-5	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Titanium, dissolved	7440-32-6	<0.00030	0.00030	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tungsten, dissolved	7440-33-7	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Uranium, dissolved	7440-61-1	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Vanadium, dissolved	7440-62-2	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Zinc, dissolved	7440-66-6	<0.0010	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Zirconium, dissolved	7440-67-7	<0.00030	0.00030	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Dissolved metals filtration location	----	Field	-	-	EP421/EO	-	03-Jul-2025	2087815
Aggregate Organics								
Naphthenic acids	----	<1.0	1.0	mg/L	E565/EO	14-Jul-2025	16-Jul-2025	2092906
Volatile Organic Compounds [BTEXS+MTBE]								
Benzene	71-43-2	<0.50	0.50	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Ethylbenzene	100-41-4	<0.50	0.50	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Toluene	108-88-3	<0.50	0.50	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Xylene, m+p-	179601-23-1	<0.50	0.50	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Xylene, o-	95-47-6	<0.50	0.50	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Xylenes, total	1330-20-7	<0.75	0.75	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
BTEX, total	----	<1.2	1.2	µg/L	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Hydrocarbons								
F1 (C6-C10)	----	<100	100	µg/L	E581.F1/EO	07-Jul-2025	07-Jul-2025	2092411
F1-BTEX	----	<100	100	µg/L	EC580/EO	-	08-Jul-2025	-
F2 (C10-C16)	----	<100	100	µg/L	E601/EO	08-Jul-2025	08-Jul-2025	2094612
F3 (C16-C34)	----	<250	250	µg/L	E601/EO	08-Jul-2025	08-Jul-2025	2094612
F4 (C34-C50)	----	<250	250	µg/L	E601/EO	08-Jul-2025	08-Jul-2025	2094612
Hydrocarbons, total (C6-C50)	n/a	<400	400	µg/L	EC581/EO	-	08-Jul-2025	-
Hydrocarbons Surrogates								
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	103	1.0	%	E601/EO	08-Jul-2025	08-Jul-2025	2094612
Dichlorotoluene, 3,4-	95-75-0	93.5	1.0	%	E581.F1/EO	07-Jul-2025	07-Jul-2025	2092411
Volatile Organic Compounds Surrogates								
Bromofluorobenzene, 4-	460-00-4	88.3	1.0	%	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Difluorobenzene, 1,4-	540-36-3	97.5	1.0	%	E611A/EO	07-Jul-2025	07-Jul-2025	2092412
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	83-32-9	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Acenaphthylene	208-96-8	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Acridine	260-94-6	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Anthracene	120-12-7	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Benz(a)anthracene	56-55-3	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611

Analytical Results

FC2501665-001

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

Client sample ID: FCWTP-Treated Water Lab Sink

Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Polycyclic Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	<0.0050	0.0050	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Benzo(b+j)fluoranthene	n/a	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Benzo(b+j+k)fluoranthene	n/a	<0.015	0.015	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Benzo(g,h,i)perylene	191-24-2	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Benzo(k)fluoranthene	207-08-9	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Chrysene	218-01-9	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Dibenz(a,h)anthracene	53-70-3	<0.0050	0.0050	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Fluoranthene	206-44-0	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Fluorene	86-73-7	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Indeno(1,2,3-c,d)pyrene	193-39-5	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Methylnaphthalene, 1-	90-12-0	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Methylnaphthalene, 1+2-	----	<0.015	0.015	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Methylnaphthalene, 2-	91-57-6	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Naphthalene	91-20-3	<0.050	0.050	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Phenanthrene	85-01-8	<0.020	0.020	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Pyrene	129-00-0	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Quinoline	91-22-5	<0.050	0.050	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
B(a)P total potency equivalents [B(a)P TPE]	----	<0.010	0.010	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
PAHs, high molecular weight (BC AWQ)	n/a	<0.030	0.03	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
PAHs, low molecular weight (BC AWQ)	n/a	<0.060	0.06	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
PAHs, total (CCME sewer 18)	n/a	<0.070	0.07	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
PAHs, total (EPA 16)	n/a	<0.065	0.065	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Polycyclic Aromatic Hydrocarbons Surrogates								
Chrysene-d12	1719-03-5	122	0.1	%	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Naphthalene-d8	1146-65-2	124	0.1	%	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Phenanthrene-d10	1517-22-2	125	0.1	%	E641A/EO	08-Jul-2025	08-Jul-2025	2094611

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

Analytical Results

FC2501665-002

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

Client sample ID: FCWTP-Raw Water Chamber

Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Alkalinity, bicarbonate (as HCO3)	71-52-3	60.1	1.2	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Alkalinity, carbonate (as CO3)	3812-32-6	<0.6	0.6	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Alkalinity, hydroxide (as OH)	14280-30-9	<0.3	0.3	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Alkalinity, total (as CaCO3)	----	49.3	1.0	mg/L	E290/EO	07-Jul-2025	07-Jul-2025	2093078
Colour, true	----	9.6	2.0	CU	E329-L/EO	03-Jul-2025	03-Jul-2025	2087943
Conductivity	----	126	1.0	µS/cm	E100/EO	07-Jul-2025	07-Jul-2025	2093077
Conductivity	----	122	2.0	µS/cm	E100S/VA	08-Jul-2025	08-Jul-2025	2094144
Hardness (as CaCO3), from total Ca/Mg	----	47.7	0.50	mg/L	EC100A/EO	-	05-Jul-2025	-
pH	----	7.27	0.10	pH units	E108/EO	07-Jul-2025	07-Jul-2025	2093079

Analytical Results

FC2501665-002

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

Client sample ID: FCWTP-Raw Water Chamber
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Salinity	----	<1.0	1.0	psu	EC100S/VA	-	09-Jul-2025	-
Solids, total dissolved [TDS]	----	67	13	mg/L	E162/EO	-	09-Jul-2025	2092895
Solids, total dissolved [TDS], calculated	----	68.0	1.0	mg/L	EC103/EO	-	04-Jul-2025	-
Anions and Nutrients								
Ammonia, total (as N)	7664-41-7	0.0346	0.0050	mg/L	E298/EO	03-Jul-2025	05-Jul-2025	2087941
Chloride	16887-00-6	5.78	0.50	mg/L	E235.Cl/EO	03-Jul-2025	03-Jul-2025	2088142
Fluoride	16984-48-8	0.072	0.020	mg/L	E235.F/EO	03-Jul-2025	03-Jul-2025	2088144
Nitrate (as N)	14797-55-8	<0.020	0.020	mg/L	E235.NO3/EO	03-Jul-2025	03-Jul-2025	2088145
Nitrate + Nitrite (as N)	----	<0.0300	0.03	mg/L	EC235.N+N/EO	-	04-Jul-2025	-
Nitrite (as N)	14797-65-0	<0.010	0.010	mg/L	E235.NO2/EO	03-Jul-2025	03-Jul-2025	2088146
Sulfate (as SO4)	14808-79-8	7.26	0.30	mg/L	E235.SO4/EO	03-Jul-2025	03-Jul-2025	2088143
Cyanides								
Cyanide, strong acid dissociable (Total)	----	<0.0020	0.0020	mg/L	E333/WT	07-Jul-2025	07-Jul-2025	2092550
Organic / Inorganic Carbon								
Carbon, total organic [TOC]	----	6.28	0.50	mg/L	E355-L/CG	10-Jul-2025	10-Jul-2025	2099328
Inorganics								
Chlorine, total	7782-50-5	<0.10	0.10	mg/L	E326-H/EO	-	03-Jul-2025	2088072
Chlorine, free	7782-50-5	<0.10	0.10	mg/L	E327-H/EO	-	03-Jul-2025	2088075
Chloramines, total (as Cl2)	----	<0.20	0.20	mg/L	EC326/EO	-	03-Jul-2025	-
Total Sulfides								
Sulfide, total (as S)	18496-25-8	<0.0015	0.0015	mg/L	E395/CG	-	04-Jul-2025	2089065
Sulfide, total (as H2S)	7783-06-4	<0.0016	0.0016	mg/L	E395/CG	-	04-Jul-2025	2089065
Ion Balance								
Anion sum	----	1.30	0.10	meq/L	EC101/EO	-	04-Jul-2025	-
Cation sum	----	1.28	0.10	meq/L	EC101/EO	-	04-Jul-2025	-
Ion balance (APHA)	----	-0.78	0.01	%	EC101/EO	-	04-Jul-2025	-
Ion balance (cations/anions)	----	98.5	0.010	%	EC101/EO	-	04-Jul-2025	-
Total Metals								
Aluminum, total	7429-90-5	0.0455	0.0030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Antimony, total	7440-36-0	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Arsenic, total	7440-38-2	0.00046	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Barium, total	7440-39-3	0.0212	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Beryllium, total	7440-41-7	<0.000020	0.000020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Bismuth, total	7440-69-9	<0.000050	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Boron, total	7440-42-8	0.015	0.010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cadmium, total	7440-43-9	0.0061	0.0050	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Calcium, total	7440-70-2	12.7	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cesium, total	7440-46-2	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Chromium, total	7440-47-3	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cobalt, total	7440-48-4	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Copper, total	7440-50-8	0.00264	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Iron, total	7439-89-6	0.074	0.010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Lead, total	7439-92-1	<0.050	0.050	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Lithium, total	7439-93-2	0.0039	0.0010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Magnesium, total	7439-95-4	3.88	0.0050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254

Analytical Results

FC2501665-002

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

Client sample ID: FCWTP-Raw Water Chamber
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Total Metals								
Manganese, total	7439-96-5	0.00863	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Mercury, total	7439-97-6	<0.0050	0.0050	µg/L	E508/EO	04-Jul-2025	04-Jul-2025	2089510
Molybdenum, total	7439-98-7	0.000289	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Nickel, total	7440-02-0	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Phosphorus, total	7723-14-0	<0.050	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Potassium, total	7440-09-7	1.15	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Rubidium, total	7440-17-7	0.00104	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Selenium, total	7782-49-2	0.057	0.050	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Silicon, total	7440-21-3	0.42	0.10	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Silver, total	7440-22-4	<0.010	0.010	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Sodium, total	7440-23-5	5.82	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Strontium, total	7440-24-6	0.0820	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Sulfur, total	7704-34-9	2.79	0.50	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tellurium, total	13494-80-9	<0.00020	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Thallium, total	7440-28-0	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Thorium, total	7440-29-1	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tin, total	7440-31-5	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Titanium, total	7440-32-6	0.00047	0.00030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tungsten, total	7440-33-7	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Uranium, total	7440-61-1	0.156	0.010	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Vanadium, total	7440-62-2	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Zinc, total	7440-66-6	<0.0030	0.0030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Zirconium, total	7440-67-7	<0.00020	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Dissolved Metals								
Aluminum, dissolved	7429-90-5	0.0322	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Antimony, dissolved	7440-36-0	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Arsenic, dissolved	7440-38-2	0.00040	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Barium, dissolved	7440-39-3	0.0203	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Beryllium, dissolved	7440-41-7	<0.000020	0.000020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Bismuth, dissolved	7440-69-9	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Boron, dissolved	7440-42-8	0.018	0.010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cadmium, dissolved	7440-43-9	<0.0000050	0.0000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Calcium, dissolved	7440-70-2	13.1	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cesium, dissolved	7440-46-2	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Chromium, dissolved	7440-47-3	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cobalt, dissolved	7440-48-4	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Copper, dissolved	7440-50-8	0.00090	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Iron, dissolved	7439-89-6	0.022	0.010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Lead, dissolved	7439-92-1	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Lithium, dissolved	7439-93-2	0.0032	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Magnesium, dissolved	7439-95-4	4.02	0.0050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Manganese, dissolved	7439-96-5	0.00102	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Molybdenum, dissolved	7439-98-7	0.000280	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Nickel, dissolved	7440-02-0	0.00075	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Phosphorus, dissolved	7723-14-0	<0.050	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815

Analytical Results

FC2501665-002

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

Client sample ID: FCWTP-Raw Water Chamber
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Dissolved Metals								
Potassium, dissolved	7440-09-7	1.12	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Rubidium, dissolved	7440-17-7	0.00113	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Selenium, dissolved	7782-49-2	0.000072	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Silicon, dissolved	7440-21-3	0.352	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Silver, dissolved	7440-22-4	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Sodium, dissolved	7440-23-5	6.04	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Strontium, dissolved	7440-24-6	0.0824	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Sulfur, dissolved	7704-34-9	2.87	0.50	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tellurium, dissolved	13494-80-9	<0.00020	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Thallium, dissolved	7440-28-0	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Thorium, dissolved	7440-29-1	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tin, dissolved	7440-31-5	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Titanium, dissolved	7440-32-6	<0.00030	0.00030	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tungsten, dissolved	7440-33-7	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Uranium, dissolved	7440-61-1	0.000148	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Vanadium, dissolved	7440-62-2	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Zinc, dissolved	7440-66-6	<0.0010	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Zirconium, dissolved	7440-67-7	<0.00020	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Dissolved metals filtration location	----	Field	-	-	EP421/EO	-	03-Jul-2025	2087815
Aggregate Organics								
Nitrilotriacetic acid [NTA]	139-13-9	<0.40	0.40	mg/L	E394/WT	-	09-Jul-2025	2097309
Volatile Organic Compounds								
Benzene	71-43-2	<0.50	0.50	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Carbon tetrachloride	56-23-5	<0.50	0.50	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Chlorobenzene	108-90-7	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Dichlorobenzene, 1,2-	95-50-1	<0.50	0.50	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Dichlorobenzene, 1,4-	106-46-7	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Dichloroethane, 1,2-	107-06-2	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Dichloromethane	75-09-2	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Dioxane, 1,4-	123-91-1	<20	20	µg/L	E611I/WT	07-Jul-2025	07-Jul-2025	2092707
Ethylbenzene	100-41-4	<0.50	0.50	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Tetrachloroethylene	127-18-4	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Toluene	108-88-3	<0.50	0.50	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Trichloroethylene	79-01-6	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Vinyl chloride	75-01-4	<1.0	1.0	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Xylene, m+p-	179601-23-1	<0.40	0.40	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Xylene, o-	95-47-6	<0.30	0.30	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Xylenes, total	1330-20-7	<0.50	0.50	µg/L	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Volatile Organic Compounds Surrogates								
Bromofluorobenzene, 4-	460-00-4	81.4	1.0	%	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Bromofluorobenzene, 4-	460-00-4	93.6	1.0	%	E611I/WT	07-Jul-2025	07-Jul-2025	2092707
Difluorobenzene, 1,4-	540-36-3	114	1.0	%	E611E/EO	07-Jul-2025	07-Jul-2025	2092413
Difluorobenzene, 1,4-	540-36-3	99.3	1.0	%	E611I/WT	07-Jul-2025	07-Jul-2025	2092707
Polycyclic Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	<0.0050	0.0050	µg/L	E641A/EO	08-Jul-2025	08-Jul-2025	2094611

Analytical Results

FC2501665-002

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

Client sample ID: FCWTP-Raw Water Chamber
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Polycyclic Aromatic Hydrocarbons Surrogates								
Chrysene-d12	1719-03-5	120	0.1	%	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Naphthalene-d8	1146-65-2	108	0.1	%	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
Phenanthrene-d10	1517-22-2	124	0.1	%	E641A/EO	08-Jul-2025	08-Jul-2025	2094611
DIsinfectant By-Products								
Bromate	15541-45-4	<0.30	0.30	µg/L	E722A/WT	07-Jul-2025	07-Jul-2025	2092350
Chlorate	14866-68-3	<0.010	0.010	mg/L	E409.CLO3/WT	07-Jul-2025	07-Jul-2025	2092692
Chlorite	14998-27-7	<0.010	0.010	mg/L	E409.CLO2/WT	07-Jul-2025	07-Jul-2025	2092693
Semi-Volatile Organics								
Nitrosodimethylamine, N- [NDMA]	62-75-9	<0.00090	0.00090	µg/L	E725-T/WT	09-Jul-2025	09-Jul-2025	2094173
Chlorinated Phenolics								
Dichlorophenol, 2,4-	120-83-2	<0.20	0.20	µg/L	E651C/WT	08-Jul-2025	08-Jul-2025	2093838
Pentachlorophenol [PCP]	87-86-5	<0.50	0.50	µg/L	E651C/WT	08-Jul-2025	08-Jul-2025	2093838
Tetrachlorophenol, 2,3,4,6-	58-90-2	<0.50	0.50	µg/L	E651C/WT	08-Jul-2025	08-Jul-2025	2093838
Trichlorophenol, 2,4,6-	88-06-2	<0.20	0.20	µg/L	E651C/WT	08-Jul-2025	08-Jul-2025	2093838
Phenolics Surrogates								
Tribromophenol, 2,4,6-	118-79-6	81.9	1.0	%	E651C/WT	08-Jul-2025	08-Jul-2025	2093838
Organochlorine Pesticides Surrogates								
Decachlorobiphenyl	2051-24-3	47.7 SUR-ND.	0.10	%	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Tetrachloro-m-xylene	877-09-8	80.1	0.10	%	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Herbicides								
Alachlor	15972-60-8	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine	1912-24-9	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine + metabolites, total	----	<0.45	0.45	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine + N-dealkylated metabolites	----	<0.10	0.1	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine-desethyl	6190-65-4	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Cyanazine	21725-46-2	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Diclofop-methyl	51338-27-3	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Dinoseb	88-85-7	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Diuron	330-54-1	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Metolachlor	51218-45-2	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Metribuzin	21087-64-9	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Prometryn	7287-19-6	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Simazine	122-34-9	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Triallate	2303-17-5	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Trifluralin	1582-09-8	<0.10	0.10	µg/L	E756/WT	09-Jul-2025	09-Jul-2025	2096620
Herbicides Surrogates								
Dichlorophenylacetic acid, 2,4-	19719-28-9	79.0	1.0	%	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Insecticides								
Aldicarb	116-06-3	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Azinphos-methyl	86-50-0	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Bendiocarb	22781-23-3	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Carbaryl	63-25-2	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Carbofuran	1563-66-2	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Chlorpyrifos	2921-88-2	<0.10	0.10	µg/L	E756/WT	09-Jul-2025	09-Jul-2025	2096620
Diazinon	333-41-5	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645

Analytical Results

FC2501665-002

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

Client sample ID: FCWTP-Raw Water Chamber
Client sampling date / time: 02-Jul-2025 08:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Insecticides								
Dimethoate	60-51-5	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Malathion	121-75-5	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Parathion	56-38-2	<0.10	0.10	µg/L	E756/WT	09-Jul-2025	09-Jul-2025	2096620
Phorate	298-02-2	<0.25	0.25	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Temephos	3383-96-8	<0.25	0.25	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Terbufos	13071-79-9	<0.50	0.50	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Pesticides								
Acetic acid, 2-methyl-4-chlorophenoxy- [MCPA]	94-74-6	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Aldrin	309-00-2	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Aldrin + Dieldrin	----	<0.011	0.011	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Bromoxynil	1689-84-5	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Chlordane, cis- (alpha)	5103-71-9	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Chlordane, total	57-74-9	<0.011	0.011	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Chlordane, trans- (gamma)	5103-74-2	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDD, 2,4'-	53-19-0	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDD, 4,4'-	72-54-8	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDD, total	----	<0.0060	0.006	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDE, 2,4'-	3424-82-6	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDE, 4,4'-	72-55-9	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDE, total	----	<0.0060	0.006	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT + metabolites, total	----	<0.010	0.01	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT, 2,4'-	789-02-6	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT, 4,4'-	50-29-3	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT, total	----	<0.0060	0.006	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Dicamba	1918-00-9	<0.10	0.10	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Dieldrin	60-57-1	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Diquat (ion)	2764-72-9	<1.0	1.0	µg/L	E723A/WT	07-Jul-2025	07-Jul-2025	2092375
Glyphosate	1071-83-6	<1.0	1.0	µg/L	E716A/WT	07-Jul-2025	08-Jul-2025	2092343
Heptachlor	76-44-8	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Heptachlor + Heptachlor epoxide	n/a	<0.011	0.011	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Heptachlor epoxide	1024-57-3	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Hexachlorocyclohexane, gamma-	58-89-9	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Methoxychlor	72-43-5	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Oxychlordane	27304-13-8	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Paraquat (as dichloride)	1910-42-5	<1.0	1.0	µg/L	E723A/WT	07-Jul-2025	07-Jul-2025	2092375
Picloram	1918-02-1	<0.10	0.10	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Nitrosamines Surrogates								
Nitrosodimethylamine-d6, N-	17829-05-9	112	0.00090	%	E725-T/WT	09-Jul-2025	09-Jul-2025	2094173

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

right solutions.
right partner.

CERTIFICATE OF ANALYSIS

Work Order	:	**FC2501666**			
Amendment	:	**1**			
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 Alberta Canada T9H 5A1	Address	:	#4, 340 Macalpine Crescent Fort McMurray AB Canada T9H 4A8
Telephone	:	780-762-5863	E-mail	:	Megha.Walia@alsglobal.com
Project	:	FCWTP-SC4	Telephone	:	+1 780 791 1524
PO	:	450061478	Date Samples Received	:	02-Jul-2025 16:00
C-O-C number	:	----	Date Analysis Commenced	:	03-Jul-2025
Sampler	:	EA	Issue Date	:	22-Jul-2025 12:05
Site	:	Fort Chipewyan, Willy's B&B			
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.

Signatories	Position	Laboratory Department
Alastair McGibbon		Inorganics, Edmonton, Alberta
Alex Drake		Inorganics, Edmonton, Alberta
Alex Drake		Metals, Edmonton, Alberta
Amaninder Dhillon		Organics, Waterloo, Ontario
Anthony Calero		Inorganics, Calgary, Alberta
Brayden Ginther		Inorganics, Edmonton, Alberta
Catherine DeMone		LCMS, Waterloo, Ontario
Daniel Nguyen		Metals, Edmonton, Alberta
David Tremblett		VOC, Waterloo, Ontario
Hannah Lewis		Inorganics, Waterloo, Ontario
Harpreet Chawla		Inorganics, Calgary, Alberta
Jeremy Gingras		Organics, Waterloo, Ontario
Jing Liu		Inorganics, Edmonton, Alberta
Kari Mulroy		Organics, Edmonton, Alberta
Leah Yee		Inorganics, Edmonton, Alberta
Nik Perkio		Inorganics, Waterloo, Ontario
Parth Goswami		LCMS, Waterloo, Ontario
Sanja Risticevic		LCMS, Waterloo, Ontario
Shruti Mudliar		Inorganics, Edmonton, Alberta
Yan Zhang		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).

Unit	*Description*
-	no units
%	percent
CU	colour units (1 cu = 1 mg/l pt)
meq/L	milliequivalents per litre
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.

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501666-001	----	----	----	----
						Result	----	----	----	----
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/EO	1.2	mg/L		61.7	----	----	----	----
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		50.6	----	----	----	----
Colour, true	----	E329-L/EO	2.0	CU		<2.0	----	----	----	----
Conductivity	----	E100/EO	1.0	µS/cm		180	----	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/EO	0.50	mg/L		50.1	----	----	----	----
pH	----	E108/EO	0.10	pH units		8.11	----	----	----	----
Solids, total dissolved [TDS]	----	E162/EO	10	mg/L		84	----	----	----	----
Solids, total dissolved [TDS], calculated	----	EC103/EO	1.0	mg/L		91.6	----	----	----	----
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/EO	0.0050	mg/L		<0.0050	----	----	----	----
Chloride	16887-00-6	E235.Cl/EO	0.50	mg/L		20.3	----	----	----	----
Fluoride	16984-48-8	E235.F/EO	0.020	mg/L		0.031	----	----	----	----
Nitrate (as N)	14797-55-8	E235.NO3/EO	0.020	mg/L		0.022	----	----	----	----
Nitrate + Nitrite (as N)	----	EC235.N+N/EO	0.0300	mg/L		<0.0300	----	----	----	----
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		6.44	----	----	----	----
Cyanides										
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L		<0.0020	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	R1-9150030 ----	----	----	----	----
Client sampling date / time					02-Jul-2025 07:30	----	----	----	----
					FC2501666-001	----	----	----	----
					Result	----	----	----	----
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	----	E355-L/CG	0.50	mg/L	3.06	----	----	----	----
Inorganics									
Chlorine, total	7782-50-5	E326-H/EO	0.10	mg/L	1.04	----	----	----	----
Chlorine, free	7782-50-5	E327-H/EO	0.10	mg/L	0.66	----	----	----	----
Chloramines, total (as Cl2)	----	EC326/EO	0.20	mg/L	0.38	----	----	----	----
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									
Anion sum	----	EC101/EO	0.10	meq/L	1.72	----	----	----	----
Cation sum	----	EC101/EO	0.10	meq/L	1.67	----	----	----	----
Ion balance (APHA)	----	EC101/EO	0.01	%	-1.47	----	----	----	----
Ion balance (cations/anions)	----	EC101/EO	0.010	%	97.1	----	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/EO	0.0030	mg/L	0.0574	----	----	----	----
Antimony, total	7440-36-0	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----
Arsenic, total	7440-38-2	E420/EO	0.00010	mg/L	0.00030	----	----	----	----
Barium, total	7440-39-3	E420/EO	0.00010	mg/L	0.0231	----	----	----	----
Beryllium, total	7440-41-7	E420/EO	0.000020	mg/L	<0.000020	----	----	----	----
Bismuth, total	7440-69-9	E420/EO	0.000050	mg/L	<0.000050	----	----	----	----
Boron, total	7440-42-8	E420/EO	0.010	mg/L	0.016	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
						FC2501666-001	----	----	----	----
						Result	----	----	----	----
Total Metals										
Cadmium, total	7440-43-9	E420/EO	0.0050	µg/L		<0.0050	----	----	----	----
Calcium, total	7440-70-2	E420/EO	0.050	mg/L		13.7	----	----	----	----
Cesium, total	7440-46-2	E420/EO	0.000010	mg/L		<0.000010	----	----	----	----
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		0.00137	----	----	----	----
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		0.0041	----	----	----	----
Magnesium, total	7439-95-4	E420/EO	0.0050	mg/L		3.86	----	----	----	----
Manganese, total	7439-96-5	E420/EO	0.00010	mg/L		0.00150	----	----	----	----
Mercury, total	7439-97-6	E508/EO	0.0050	µg/L		<0.0050	----	----	----	----
Molybdenum, total	7439-98-7	E420/EO	0.000050	mg/L		0.000269	----	----	----	----
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	----	----	----	----
Potassium, total	7440-09-7	E420/EO	0.050	mg/L		1.16	----	----	----	----
Rubidium, total	7440-17-7	E420/EO	0.00020	mg/L		0.00120	----	----	----	----
Selenium, total	7782-49-2	E420/EO	0.050	µg/L		<0.050	----	----	----	----
Silicon, total	7440-21-3	E420/EO	0.10	mg/L		0.41	----	----	----	----
Silver, total	7440-22-4	E420/EO	0.010	µg/L		<0.010	----	----	----	----
Sodium, total	7440-23-5	E420/EO	0.050	mg/L		13.8	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
						FC2501666-001	----	----	----	----
						Result	----	----	----	----
Total Metals										
Strontium, total	7440-24-6	E420/EO	0.00020	mg/L		0.0825	----	----	----	----
Sulfur, total	7704-34-9	E420/EO	0.50	mg/L		2.63	----	----	----	----
Tellurium, total	13494-80-9	E420/EO	0.00020	mg/L		<0.00020	----	----	----	----
Thallium, total	7440-28-0	E420/EO	0.000010	mg/L		<0.000010	----	----	----	----
Thorium, total	7440-29-1	E420/EO	0.00010	mg/L		<0.00010	----	----	----	----
Tin, total	7440-31-5	E420/EO	0.00010	mg/L		<0.00010	----	----	----	----
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		0.0539	----	----	----	----
Antimony, dissolved	7440-36-0	E421/EO	0.00010	mg/L		<0.00010	----	----	----	----
Arsenic, dissolved	7440-38-2	E421/EO	0.00010	mg/L		0.00032	----	----	----	----
Barium, dissolved	7440-39-3	E421/EO	0.00010	mg/L		0.0216	----	----	----	----
Beryllium, dissolved	7440-41-7	E421/EO	0.000020	mg/L		<0.000020	----	----	----	----
Bismuth, dissolved	7440-69-9	E421/EO	0.000050	mg/L		<0.000050	----	----	----	----
Boron, dissolved	7440-42-8	E421/EO	0.010	mg/L		0.017	----	----	----	----
Cadmium, dissolved	7440-43-9	E421/EO	0.0000050	mg/L		<0.0000050	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
						FC2501666-001	----	----	----	----
						Result	----	----	----	----
Dissolved Metals										
Calcium, dissolved	7440-70-2	E421/EO	0.050	mg/L		13.9	----	----	----	----
Cesium, dissolved	7440-46-2	E421/EO	0.000010	mg/L		<0.000010	----	----	----	----
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		0.00099	----	----	----	----
Iron, dissolved	7439-89-6	E421/EO	0.010	mg/L		<0.010	----	----	----	----
Lead, dissolved	7439-92-1	E421/EO	0.000050	mg/L		<0.000050	----	----	----	----
Lithium, dissolved	7439-93-2	E421/EO	0.0010	mg/L		0.0034	----	----	----	----
Magnesium, dissolved	7439-95-4	E421/EO	0.0050	mg/L		3.97	----	----	----	----
Manganese, dissolved	7439-96-5	E421/EO	0.00010	mg/L		0.00055	----	----	----	----
Molybdenum, dissolved	7439-98-7	E421/EO	0.000050	mg/L		0.000278	----	----	----	----
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		1.12	----	----	----	----
Rubidium, dissolved	7440-17-7	E421/EO	0.00020	mg/L		0.00114	----	----	----	----
Selenium, dissolved	7782-49-2	E421/EO	0.000050	mg/L		<0.000050	----	----	----	----
Silicon, dissolved	7440-21-3	E421/EO	0.050	mg/L		0.402	----	----	----	----
Silver, dissolved	7440-22-4	E421/EO	0.000010	mg/L		<0.000010	----	----	----	----
Sodium, dissolved	7440-23-5	E421/EO	0.050	mg/L		14.2	----	----	----	----
Strontium, dissolved	7440-24-6	E421/EO	0.00020	mg/L		0.0827	----	----	----	----
Sulfur, dissolved	7704-34-9	E421/EO	0.50	mg/L		2.61	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	R1-9150030 ----	----	----	----	----
Client sampling date / time					02-Jul-2025 07:30	----	----	----	----
					FC2501666-001	----	----	----	----
					Result	----	----	----	----
Dissolved Metals									
Tellurium, dissolved	13494-80-9	E421/EO	0.00020	mg/L	<0.00020	----	----	----	----
Thallium, dissolved	7440-28-0	E421/EO	0.000010	mg/L	<0.000010	----	----	----	----
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	0.000010	mg/L	<0.000010	----	----	----	----
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	-	-	Field	----	----	----	----
Aggregate Organics									
Nitrilotriacetic 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	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501666-001	----	----	----	----
						Result	----	----	----	----
Volatile Organic Compounds										
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	%		93.2	----	----	----	----
Bromofluorobenzene, 4-	460-00-4	E611E/EO	1.0	%		76.3	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611I/WT	1.0	%		98.9	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611E/EO	1.0	%		99.4	----	----	----	----
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	%		119	----	----	----	----
Naphthalene-d8	1146-65-2	E641A/EO	0.1	%		113	----	----	----	----
Phenanthrene-d10	1517-22-2	E641A/EO	0.1	%		118	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
						FC2501666-001	----	----	----	----
						Result	----	----	----	----
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		0.075	----	----	----	----
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	%		86.1	----	----	----	----
Nitrobenzene-d5	4165-60-0	E625A/WT	1.0	%		86.2	----	----	----	----
Terphenyl-d14, p-	1718-51-0	E625A/WT	1.0	%		90.2	----	----	----	----
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	----	----	----	----
Phenolics Surrogates										
Tribromophenol, 2,4,6-	118-79-6	E625A/WT	0.50	%		81.4	----	----	----	----
Organochlorine Pesticides Surrogates										
Decachlorobiphenyl	2051-24-3	E660F/WT	0.10	%		86.6	----	----	----	----
Tetrachloro-m-xylene	877-09-8	E660F/WT	0.10	%		100	----	----	----	----
Herbicides										
Alachlor	15972-60-8	E755/WT	0.050	µg/L		<0.050	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	R1-9150030 ----	----	----	----	----
Client sampling date / time					02-Jul-2025 07:30	----	----	----	----
					FC2501666-001	----	----	----	----
					Result	----	----	----	----
Herbicides									
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	----	----	----	----
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	----	----	----	----
Herbicides Surrogates									
Dichlorophenylacetic acid, 2,4-	19719-28-9	E706A/WT	1.0	%	78.0	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
						FC2501666-001	----	----	----	----
						Result	----	----	----	----
Insecticides										
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	----	----	----	----
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	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501666-001	----	----	----	----
						Result	----	----	----	----
Pesticides										
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	----	----	----	----
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	E706A/WT	0.050	µg/L		<0.050	----	----	----	----
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	----	----	----	----
Heptachlor epoxide	1024-57-3	E660F/WT	0.0080	µg/L		<0.0080	----	----	----	----
Hexachlorocyclohexane, gamma-	58-89-9	E660F/WT	0.0080	µg/L		<0.0080	----	----	----	----
Methoxychlor	72-43-5	E660F/WT	0.0080	µg/L		<0.0080	----	----	----	----
Oxychlordane	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		<0.10	----	----	----	----
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	E706A/WT	0.050	µg/L		<0.050	----	----	----	----

Analytical Results

Sub-Matrix: Water (Matrix: Water)					Client sample ID	R1-9150030 ----	----	----	----	----
					Client sampling date / time	02-Jul-2025 07:30	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		FC2501666-001	----	----	----	----
						Result	----	----	----	----
Nitrosamines Surrogates										
Nitrosodimethylamine-d6, N-	17829-05-9	E725-T/WT	0.00090	%		100	----	----	----	----

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

CERTIFICATE OF ANALYSIS

Work Order	: **FC2501666**	Page	: 1 of 8
Amendment	: **1**		
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	: FCWTP-SC4	Date Samples Received	: 02-Jul-2025 16:00
PO	: 450061478	Date Analysis Commenced	: 03-Jul-2025
C-O-C number	: ----	Issue Date	: 22-Jul-2025 12:04
Sampler	: EA		
Site	: Fort Chipewyan, Willy's B&B		
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.

Signatories	*Position*	*Laboratory Department*
Alastair McGibbon	Laboratory Analyst	Inorganics, Edmonton, Alberta
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Alex Drake	Lab Analyst	Metals, Edmonton, Alberta
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Anthony Calero	Supervisor - Inorganic	Inorganics, Calgary, Alberta
Brayden Ginther	Laboratory Analyst	Inorganics, Edmonton, Alberta
Catherine DeMone	Laboratory Analyst	LCMS, Waterloo, Ontario
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
David Tremblett	VOC Section Supervisor	VOC, Waterloo, Ontario
Hannah Lewis	Inorganics Analyst	Inorganics, Waterloo, Ontario
Harpreet Chawla	Team Leader - Inorganics	Inorganics, Calgary, Alberta
Jeremy Gingras	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Jing Liu	Laboratory Analyst	Inorganics, Edmonton, 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
Sanja Risticevic	Department Manager - LCMS	LCMS, 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.

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

Analytical Results

FC2501666-001

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

Client sample ID: R1-9150030
Client sampling date / time: 02-Jul-2025 07:30

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Physical Tests								
Alkalinity, bicarbonate (as HCO3)	71-52-3	61.7	1.2	mg/L	E290/EO	08-Jul-2025	08-Jul-2025	2095303
Alkalinity, carbonate (as CO3)	3812-32-6	<0.6	0.6	mg/L	E290/EO	08-Jul-2025	08-Jul-2025	2095303
Alkalinity, hydroxide (as OH)	14280-30-9	<0.3	0.3	mg/L	E290/EO	08-Jul-2025	08-Jul-2025	2095303
Alkalinity, total (as CaCO3)	----	50.6	1.0	mg/L	E290/EO	08-Jul-2025	08-Jul-2025	2095303
Colour, true	----	<2.0	2.0	CU	E329-L/EO	03-Jul-2025	03-Jul-2025	2087943
Conductivity	----	180	1.0	µS/cm	E100/EO	08-Jul-2025	08-Jul-2025	2095302
Hardness (as CaCO3), from total Ca/Mg	----	50.1	0.50	mg/L	EC100A/EO	-	05-Jul-2025	-
pH	----	8.11	0.10	pH units	E108/EO	08-Jul-2025	08-Jul-2025	2095301
Solids, total dissolved [TDS]	----	84	13	mg/L	E162/EO	-	09-Jul-2025	2092895
Solids, total dissolved [TDS], calculated	----	91.6	1.0	mg/L	EC103/EO	-	04-Jul-2025	-
Anions and Nutrients								
Ammonia, total (as N)	7664-41-7	<0.0050	0.0050	mg/L	E298/EO	03-Jul-2025	05-Jul-2025	2087941
Chloride	16887-00-6	20.3	0.50	mg/L	E235.Cl/EO	03-Jul-2025	03-Jul-2025	2087793
Fluoride	16984-48-8	0.031	0.020	mg/L	E235.F/EO	03-Jul-2025	03-Jul-2025	2087799
Nitrate (as N)	14797-55-8	0.022	0.020	mg/L	E235.NO3/EO	03-Jul-2025	03-Jul-2025	2087797
Nitrate + Nitrite (as N)	----	<0.0300	0.03	mg/L	EC235.N+N/EO	-	04-Jul-2025	-
Nitrite (as N)	14797-65-0	<0.010	0.010	mg/L	E235.NO2/EO	03-Jul-2025	03-Jul-2025	2087795
Sulfate (as SO4)	14808-79-8	6.44	0.30	mg/L	E235.SO4/EO	03-Jul-2025	03-Jul-2025	2087794
Cyanides								
Cyanide, strong acid dissociable (Total)	----	<0.0020	0.0020	mg/L	E333/WT	07-Jul-2025	07-Jul-2025	2092550
Organic / Inorganic Carbon								
Carbon, total organic [TOC]	----	3.06	0.50	mg/L	E355-L/CG	10-Jul-2025	10-Jul-2025	2099328
Inorganics								
Chlorine, total	7782-50-5	1.04	0.10	mg/L	E326-H/EO	-	03-Jul-2025	2088072
Chlorine, free	7782-50-5	0.66	0.10	mg/L	E327-H/EO	-	03-Jul-2025	2088075
Chloramines, total (as Cl2)	----	0.38	0.20	mg/L	EC326/EO	-	03-Jul-2025	-
Total Sulfides								
Sulfide, total (as S)	18496-25-8	<0.0015	0.0015	mg/L	E395/CG	-	04-Jul-2025	2089065
Sulfide, total (as H2S)	7783-06-4	<0.0016	0.0016	mg/L	E395/CG	-	04-Jul-2025	2089065
Ion Balance								
Anion sum	----	1.72	0.10	meq/L	EC101/EO	-	04-Jul-2025	-
Cation sum	----	1.67	0.10	meq/L	EC101/EO	-	04-Jul-2025	-
Ion balance (APHA)	----	-1.47	0.01	%	EC101/EO	-	04-Jul-2025	-
Ion balance (cations/anions)	----	97.1	0.010	%	EC101/EO	-	04-Jul-2025	-
Total Metals								
Aluminum, total	7429-90-5	0.0574	0.0030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Antimony, total	7440-36-0	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Arsenic, total	7440-38-2	0.00030	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Barium, total	7440-39-3	0.0231	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Beryllium, total	7440-41-7	<0.000020	0.000020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Bismuth, total	7440-69-9	<0.000050	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Boron, total	7440-42-8	0.016	0.010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cadmium, total	7440-43-9	<0.0050	0.0050	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Calcium, total	7440-70-2	13.7	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cesium, total	7440-46-2	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254

Analytical Results

FC2501666-001

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

Client sample ID: R1-9150030
Client sampling date / time: 02-Jul-2025 07:30

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Total Metals								
Chromium, total	7440-47-3	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Cobalt, total	7440-48-4	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Copper, total	7440-50-8	0.00137	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Iron, total	7439-89-6	<0.010	0.010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Lead, total	7439-92-1	<0.050	0.050	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Lithium, total	7439-93-2	0.0041	0.0010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Magnesium, total	7439-95-4	3.86	0.0050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Manganese, total	7439-96-5	0.00150	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Mercury, total	7439-97-6	<0.0050	0.0050	µg/L	E508/EO	04-Jul-2025	04-Jul-2025	2089510
Molybdenum, total	7439-98-7	0.000269	0.000050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Nickel, total	7440-02-0	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Phosphorus, total	7723-14-0	<0.050	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Potassium, total	7440-09-7	1.16	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Rubidium, total	7440-17-7	0.00120	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Selenium, total	7782-49-2	<0.050	0.050	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Silicon, total	7440-21-3	0.41	0.10	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Silver, total	7440-22-4	<0.010	0.010	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Sodium, total	7440-23-5	13.8	0.050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Strontium, total	7440-24-6	0.0825	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Sulfur, total	7704-34-9	2.63	0.50	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tellurium, total	13494-80-9	<0.00020	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Thallium, total	7440-28-0	<0.000010	0.000010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Thorium, total	7440-29-1	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tin, total	7440-31-5	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Titanium, total	7440-32-6	<0.00030	0.00030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Tungsten, total	7440-33-7	<0.00010	0.00010	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Uranium, total	7440-61-1	<0.010	0.010	µg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Vanadium, total	7440-62-2	<0.00050	0.00050	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Zinc, total	7440-66-6	<0.0030	0.0030	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Zirconium, total	7440-67-7	<0.00020	0.00020	mg/L	E420/EO	04-Jul-2025	04-Jul-2025	2089254
Dissolved Metals								
Aluminum, dissolved	7429-90-5	0.0539	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Antimony, dissolved	7440-36-0	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Arsenic, dissolved	7440-38-2	0.00032	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Barium, dissolved	7440-39-3	0.0216	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Beryllium, dissolved	7440-41-7	<0.000020	0.000020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Bismuth, dissolved	7440-69-9	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Boron, dissolved	7440-42-8	0.017	0.010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cadmium, dissolved	7440-43-9	<0.0000050	0.0000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Calcium, dissolved	7440-70-2	13.9	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cesium, dissolved	7440-46-2	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Chromium, dissolved	7440-47-3	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Cobalt, dissolved	7440-48-4	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Copper, dissolved	7440-50-8	0.00099	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Iron, dissolved	7439-89-6	<0.010	0.010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815

Analytical Results

FC2501666-001

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

Client sample ID: R1-9150030
Client sampling date / time: 02-Jul-2025 07:30

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Dissolved Metals								
Lead, dissolved	7439-92-1	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Lithium, dissolved	7439-93-2	0.0034	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Magnesium, dissolved	7439-95-4	3.97	0.0050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Manganese, dissolved	7439-96-5	0.00055	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Molybdenum, dissolved	7439-98-7	0.000278	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Nickel, dissolved	7440-02-0	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Phosphorus, dissolved	7723-14-0	<0.050	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Potassium, dissolved	7440-09-7	1.12	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Rubidium, dissolved	7440-17-7	0.00114	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Selenium, dissolved	7782-49-2	<0.000050	0.000050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Silicon, dissolved	7440-21-3	0.402	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Silver, dissolved	7440-22-4	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Sodium, dissolved	7440-23-5	14.2	0.050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Strontium, dissolved	7440-24-6	0.0827	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Sulfur, dissolved	7704-34-9	2.61	0.50	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tellurium, dissolved	13494-80-9	<0.00020	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Thallium, dissolved	7440-28-0	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Thorium, dissolved	7440-29-1	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tin, dissolved	7440-31-5	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Titanium, dissolved	7440-32-6	<0.00030	0.00030	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Tungsten, dissolved	7440-33-7	<0.00010	0.00010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Uranium, dissolved	7440-61-1	<0.000010	0.000010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Vanadium, dissolved	7440-62-2	<0.00050	0.00050	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Zinc, dissolved	7440-66-6	0.0010	0.0010	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Zirconium, dissolved	7440-67-7	<0.00020	0.00020	mg/L	E421/EO	03-Jul-2025	03-Jul-2025	2087815
Dissolved metals filtration location	----	Field	-	-	EP421/EO	-	03-Jul-2025	2087815
Aggregate Organics								
Nitrilotriacetic acid [NTA]	139-13-9	<0.40	0.40	mg/L	E394/WT	-	09-Jul-2025	2097309
Volatile Organic Compounds								
Benzene	71-43-2	<0.50	0.50	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Carbon tetrachloride	56-23-5	<0.50	0.50	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Chlorobenzene	108-90-7	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Dichlorobenzene, 1,2-	95-50-1	<0.50	0.50	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Dichlorobenzene, 1,4-	106-46-7	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Dichloroethane, 1,2-	107-06-2	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Dichloromethane	75-09-2	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Dioxane, 1,4-	123-91-1	<20	20	µg/L	E611I/WT	07-Jul-2025	07-Jul-2025	2092707
Ethylbenzene	100-41-4	<0.50	0.50	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Tetrachloroethylene	127-18-4	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Toluene	108-88-3	<0.50	0.50	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Trichloroethylene	79-01-6	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Vinyl chloride	75-01-4	<1.0	1.0	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Xylene, m+p-	179601-23-1	<0.40	0.40	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Xylene, o-	95-47-6	<0.30	0.30	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Xylenes, total	1330-20-7	<0.50	0.50	µg/L	E611E/EO	03-Jul-2025	05-Jul-2025	2087450

Analytical Results

FC2501666-001

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

Client sample ID: R1-9150030
Client sampling date / time: 02-Jul-2025 07:30

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Volatile Organic Compounds Surrogates								
Bromofluorobenzene, 4-	460-00-4	76.3	1.0	%	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Bromofluorobenzene, 4-	460-00-4	93.2	1.0	%	E611I/WT	07-Jul-2025	07-Jul-2025	2092707
Difluorobenzene, 1,4-	540-36-3	99.4	1.0	%	E611E/EO	03-Jul-2025	05-Jul-2025	2087450
Difluorobenzene, 1,4-	540-36-3	98.9	1.0	%	E611I/WT	07-Jul-2025	07-Jul-2025	2092707
Polycyclic Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	<0.0050	0.0050	µg/L	E641A/EO	03-Jul-2025	04-Jul-2025	2087509
Polycyclic Aromatic Hydrocarbons Surrogates								
Chrysene-d12	1719-03-5	119	0.1	%	E641A/EO	03-Jul-2025	04-Jul-2025	2087509
Naphthalene-d8	1146-65-2	113	0.1	%	E641A/EO	03-Jul-2025	04-Jul-2025	2087509
Phenanthrene-d10	1517-22-2	118	0.1	%	E641A/EO	03-Jul-2025	04-Jul-2025	2087509
DIsinfectant By-Products								
Bromate	15541-45-4	<0.30	0.30	µg/L	E722A/WT	07-Jul-2025	07-Jul-2025	2092350
Chlorate	14866-68-3	0.075	0.010	mg/L	E409.CLO3/WT	07-Jul-2025	07-Jul-2025	2092692
Chlorite	14998-27-7	<0.010	0.010	mg/L	E409.CLO2/WT	07-Jul-2025	07-Jul-2025	2092693
Semi-Volatile Organics								
Nitrosodimethylamine, N- [NDMA]	62-75-9	<0.00090	0.00090	µg/L	E725-T/WT	09-Jul-2025	09-Jul-2025	2094173
Semi-Volatile Organics Surrogates								
Fluorobiphenyl, 2-	321-60-8	86.1	1.0	%	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Nitrobenzene-d5	4165-60-0	86.2	1.0	%	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Terphenyl-d14, p-	1718-51-0	90.2	1.0	%	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Chlorinated Phenolics								
Dichlorophenol, 2,4-	120-83-2	<0.20	0.20	µg/L	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Pentachlorophenol [PCP]	87-86-5	<0.50	0.50	µg/L	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Tetrachlorophenol, 2,3,4,6-	58-90-2	<0.50	0.50	µg/L	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Trichlorophenol, 2,4,6-	88-06-2	<0.20	0.20	µg/L	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Phenolics Surrogates								
Tribromophenol, 2,4,6-	118-79-6	81.4	0.50	%	E625A/WT	07-Jul-2025	07-Jul-2025	2092246
Organochlorine Pesticides Surrogates								
Decachlorobiphenyl	2051-24-3	86.6	0.10	%	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Tetrachloro-m-xylene	877-09-8	100	0.10	%	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Herbicides								
Alachlor	15972-60-8	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine	1912-24-9	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine + metabolites, total	----	<0.45	0.45	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine + N-dealkylated metabolites	----	<0.10	0.1	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Atrazine-desethyl	6190-65-4	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Cyanazine	21725-46-2	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Diclofop-methyl	51338-27-3	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Dinoseb	88-85-7	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Diuron	330-54-1	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Metolachlor	51218-45-2	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Metribuzin	21087-64-9	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Prometryn	7287-19-6	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Simazine	122-34-9	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Triallate	2303-17-5	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Trifluralin	1582-09-8	<0.10	0.10	µg/L	E756/WT	09-Jul-2025	09-Jul-2025	2096620

Analytical Results

FC2501666-001

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

Client sample ID: R1-9150030
Client sampling date / time: 02-Jul-2025 07:30

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Herbicides								
Herbicides Surrogates								
Dichlorophenylacetic acid, 2,4-	19719-28-9	78.0	1.0	%	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Insecticides								
Aldicarb	116-06-3	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Azinphos-methyl	86-50-0	<0.10	0.10	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Bendiocarb	22781-23-3	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Carbaryl	63-25-2	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Carbofuran	1563-66-2	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Chlorpyrifos	2921-88-2	<0.10	0.10	µg/L	E756/WT	09-Jul-2025	09-Jul-2025	2096620
Diazinon	333-41-5	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Dimethoate	60-51-5	<0.050	0.050	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Malathion	121-75-5	<0.025	0.025	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Parathion	56-38-2	<0.10	0.10	µg/L	E756/WT	09-Jul-2025	09-Jul-2025	2096620
Phorate	298-02-2	<0.25	0.25	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Temephos	3383-96-8	<0.25	0.25	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Terbufos	13071-79-9	<0.50	0.50	µg/L	E755/WT	07-Jul-2025	07-Jul-2025	2092645
Pesticides								
Acetic acid, 2-methyl-4-chlorophenoxy- [MCPA]	94-74-6	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Aldrin	309-00-2	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Aldrin + Dieldrin	----	<0.011	0.011	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Bromoxynil	1689-84-5	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Chlordane, cis- (alpha)	5103-71-9	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Chlordane, total	57-74-9	<0.011	0.011	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Chlordane, trans- (gamma)	5103-74-2	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDD, 2,4'-	53-19-0	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDD, 4,4'-	72-54-8	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDD, total	----	<0.0060	0.006	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDE, 2,4'-	3424-82-6	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDE, 4,4'-	72-55-9	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDE, total	----	<0.0060	0.006	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT + metabolites, total	----	<0.010	0.01	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT, 2,4'-	789-02-6	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT, 4,4'-	50-29-3	<0.0040	0.0040	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
DDT, total	----	<0.0060	0.006	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Dicamba	1918-00-9	<0.10	0.10	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Dieldrin	60-57-1	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Diquat (ion)	2764-72-9	<1.0	1.0	µg/L	E723A/WT	07-Jul-2025	07-Jul-2025	2092375
Glyphosate	1071-83-6	<1.0	1.0	µg/L	E716A/WT	07-Jul-2025	08-Jul-2025	2092343
Heptachlor	76-44-8	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Heptachlor + Heptachlor epoxide	n/a	<0.011	0.011	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Heptachlor epoxide	1024-57-3	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Hexachlorocyclohexane, gamma-	58-89-9	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Methoxychlor	72-43-5	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165
Oxychlordane	27304-13-8	<0.0080	0.0080	µg/L	E660F/WT	07-Jul-2025	09-Jul-2025	2093165

Analytical Results

FC2501666-001

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

Client sample ID: R1-9150030
Client sampling date / time: 02-Jul-2025 07:30

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
Pesticides								
Paraquat (as dichloride)	1910-42-5	<1.0	1.0	µg/L	E723A/WT	07-Jul-2025	07-Jul-2025	2092375
Picloram	1918-02-1	<0.10	0.10	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	<0.050	0.050	µg/L	E706A/WT	08-Jul-2025	16-Jul-2025	2094138
Nitrosamines Surrogates								
Nitrosodimethylamine-d6, N-	17829-05-9	100	0.00090	%	E725-T/WT	09-Jul-2025	09-Jul-2025	2094173

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