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**CERTIFICATE OF ANALYSIS**

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**Work Order** : **FC2500063**  
**Amendment** : **2**  
**Client** : **Regional Municipality of Wood Buffalo**  
**Contact** : Water Treatment Plant  
**Address** : 1 Silin Forest Road  
 Fort McMurray Alberta Canada T9H 5A1  
**Telephone** : 780-762-5863  
**Project** : FCWTP-SC4  
**PO** : 4500061478  
**C-O-C number** : ----  
**Sampler** : GR  
**Site** : ----  
**Quote number** : FC24-RMWB100-0005 FC SC4  
**No. of samples received** : 1  
**No. of samples analysed** : 1

**Laboratory** : ALS Environmental - Calgary  
**Account Manager** : Megha Walia  
**Address** : 2559 29th Street NE  
 Calgary AB Canada T1Y 7B5  
**Telephone** : +1 403 407 1800  
**Date Samples Received** : 08-Jan-2025 15:00  
**Date Analysis Commenced** : 09-Jan-2025  
**Issue Date** : 07-Feb-2025 09:26

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

This 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).

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## Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Anthony Calero	Supervisor - Inorganic	Inorganics, Calgary, Alberta
Dan Nguyen	Team Leader - Inorganics	Metals, Edmonton, Alberta
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Jing Liu	Laboratory Analyst	Inorganics, Edmonton, Alberta
Kari Mulroy	Lab Supervisor - Environmental	Organics, Edmonton, Alberta
Leah Yee	Lab Assistant	Inorganics, Edmonton, Alberta
Melissa Hahn	Department Manager - Biology	Microbiology, Winnipeg, Manitoba
Nik Perkio	Senior Analyst	Inorganics, Waterloo, Ontario
Sanja Risticjevic	Department Manager - LCMS	LCMS, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	VOC, Waterloo, Ontario
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta
Stephanie Pinheiro	Team Leader - LCMS	LCMS, Waterloo, Ontario
Yan Zhang	Team Leader - Organics	Organics, Edmonton, Alberta



## General Comments

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

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

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

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

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

<i>Unit</i>	<i>Description</i>
-	no units
%	percent
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.



## Qualifiers

<u>Qualifier</u>	<u>Description</u>
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
DLI	Detection Limit Raised: Dilution required to address Internal Standard response problems caused by matrix interference.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
RRV	Reported result verified by repeat analysis.



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID	R1-9150030-Fort Chipewyan Archie Simpson Arena	---	---	---	---
					Client sampling date / time	08-Jan-2025 09:00	---	---	---	---
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	---	---	---	---	
					Result	---	---	---	---	
<b>Physical Tests</b>										
Alkalinity, bicarbonate (as HCO <sub>3</sub> )	71-52-3	E290/EO	1.0	mg/L	53.6	---	---	---	---	
Alkalinity, carbonate (as CO <sub>3</sub> )	3812-32-6	E290/EO	1.0	mg/L	<1.0	---	---	---	---	
Alkalinity, hydroxide (as OH)	14280-30-9	E290/EO	1.0	mg/L	<1.0	---	---	---	---	
Alkalinity, total (as CaCO <sub>3</sub> )	---	E290/EO	1.0	mg/L	45.5	---	---	---	---	
Colour, true	---	E329-L/EO	2.0	CU	<2.0	---	---	---	---	
Conductivity	---	E100/EO	1.0	µS/cm	144 <sup>RRV</sup>	---	---	---	---	
Hardness (as CaCO <sub>3</sub> ), from total Ca/Mg	---	EC100A/EO	0.50	mg/L	33.3	---	---	---	---	
pH	---	E108/EO	0.10	pH units	8.38	---	---	---	---	
Solids, total dissolved [TDS]	---	E162/EO	10	mg/L	73	---	---	---	---	
Solids, total dissolved [TDS], calculated	---	EC103/EO	1.0	mg/L	77.2	---	---	---	---	
<b>Anions and Nutrients</b>										
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	12.9	---	---	---	---	
Fluoride	16984-48-8	E235.F/EO	0.020	mg/L	0.024	---	---	---	---	
Nitrate (as N)	14797-55-8	E235.NO <sub>3</sub> /EO	0.020	mg/L	0.025	---	---	---	---	
Nitrate + Nitrite (as N)	---	EC235.N+N/E O	0.0300	mg/L	<0.0300	---	---	---	---	
Nitrite (as N)	14797-65-0	E235.NO <sub>2</sub> /EO	0.010	mg/L	<0.010	---	---	---	---	
Sulfate (as SO <sub>4</sub> )	14808-79-8	E235.SO <sub>4</sub> /EO	0.30	mg/L	3.78	---	---	---	---	
<b>Cyanides</b>										
Cyanide, strong acid dissociable (Total)	---	E333/WT	0.0020	mg/L	<0.0020	---	---	---	---	



### Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID					
					R1-9150030-Fort Chipewyan Archie Simpson Arena	----	----	----	----	
					Client sampling date / time	08-Jan-2025 09:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	----	----	----	----	
					Result	----	----	----	----	
<b>Organic / Inorganic Carbon</b>										
Carbon, total organic [TOC]	----	E355-L/EO	0.50	mg/L	4.36	----	----	----	----	
<b>Inorganics</b>										
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	0.88	----	----	----	----	
Chloramines, total (as Cl2)	----	EC326/EO	0.20	mg/L	<0.20	----	----	----	----	
<b>Total Sulfides</b>										
Sulfide, total (as S)	18496-25-8	E395/CG	0.0015	mg/L	0.0144	----	----	----	----	
Sulfide, total (as H2S)	7783-06-4	E395/CG	0.0016	mg/L	0.0153	----	----	----	----	
<b>Ion Balance</b>										
Anion sum	----	EC101/EO	0.10	meq/L	1.35	----	----	----	----	
Cation sum	----	EC101/EO	0.10	meq/L	1.37	----	----	----	----	
Ion balance (APHA)	----	EC101/EO	0.01	%	0.74	----	----	----	----	
Ion balance (cations/anions)	----	EC101/EO	0.010	%	101	----	----	----	----	
<b>Total Metals</b>										
Aluminum, total	7429-90-5	E420/EO	0.0030	mg/L	0.0208	----	----	----	----	
Antimony, total	7440-36-0	E420/EO	0.00010	mg/L	<0.00010	----	----	----	----	
Arsenic, total	7440-38-2	E420/EO	0.00010	mg/L	0.00013	----	----	----	----	
Barium, total	7440-39-3	E420/EO	0.00010	mg/L	0.0160	----	----	----	----	
Boron, total	7440-42-8	E420/EO	0.010	mg/L	0.014	----	----	----	----	
Cadmium, total	7440-43-9	E420/EO	0.0050	µg/L	<0.0050	----	----	----	----	



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Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	----	----	----	----
					Result	----	----	----	----
<b>Total Metals</b>									
Calcium, total	7440-70-2	E420/EO	0.050	mg/L	8.98	----	----	----	----
Chromium, total	7440-47-3	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----
Copper, total	7440-50-8	E420/EO	0.00050	mg/L	0.0112	----	----	----	----
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	----	----	----	----
Magnesium, total	7439-95-4	E420/EO	0.0050	mg/L	2.65	----	----	----	----
Manganese, total	7439-96-5	E420/EO	0.00010	mg/L	0.00593	----	----	----	----
Mercury, total	7439-97-6	E508/EO	0.0050	µg/L	<0.0050	----	----	----	----
Nickel, total	7440-02-0	E420/EO	0.00050	mg/L	<0.00050	----	----	----	----
Selenium, total	7782-49-2	E420/EO	0.050	µg/L	<0.050	----	----	----	----
Silver, total	7440-22-4	E420/EO	0.010	µg/L	<0.010	----	----	----	----
Sodium, total	7440-23-5	E420/EO	0.050	mg/L	14.5	----	----	----	----
Strontium, total	7440-24-6	E420/EO	0.00020	mg/L	0.0604	----	----	----	----
Uranium, total	7440-61-1	E420/EO	0.010	µg/L	<0.010	----	----	----	----
Zinc, total	7440-66-6	E420/EO	0.0030	mg/L	<0.0030	----	----	----	----
<b>Dissolved Metals</b>									
Calcium, dissolved	7440-70-2	E421/EO	0.050	mg/L	9.28	----	----	----	----
Iron, dissolved	7439-89-6	E421/EO	0.010	mg/L	<0.010	----	----	----	----
Magnesium, dissolved	7439-95-4	E421/EO	0.0050	mg/L	2.68	----	----	----	----
Manganese, dissolved	7439-96-5	E421/EO	0.00010	mg/L	0.00096	----	----	----	----



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Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001					
					Result					
<b>Dissolved Metals</b>										
Potassium, dissolved	7440-09-7	E421/EO	0.050	mg/L	0.997	----	----	----	----	
Sodium, dissolved	7440-23-5	E421/EO	0.050	mg/L	15.1	----	----	----	----	
Dissolved metals filtration location	----	EP421/EO	-	-	Laboratory	----	----	----	----	
<b>Aggregate Organics</b>										
Nitritotriacetic acid [NTA]	139-13-9	E394/WT	0.40	mg/L	<0.40	----	----	----	----	
<b>Volatile Organic Compounds</b>										
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	----	----	----	----	





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					Client sampling date / time	08-Jan-2025 09:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	----	----	----	----	
					Result	----	----	----	----	
<b>Volatile Organic Compounds</b>										
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	----	----	----	----	
<b>Volatile Organic Compounds Surrogates</b>										
Bromofluorobenzene, 4-	460-00-4	E611I/WT	1.0	%	99.8	----	----	----	----	
Bromofluorobenzene, 4-	460-00-4	E611E/EO	1.0	%	113	----	----	----	----	
Difluorobenzene, 1,4-	540-36-3	E611I/WT	1.0	%	97.4	----	----	----	----	
Difluorobenzene, 1,4-	540-36-3	E611E/EO	1.0	%	104	----	----	----	----	
<b>Polycyclic Aromatic Hydrocarbons</b>										
Benzo(a)pyrene	50-32-8	E641A/EO	0.0050	µg/L	<0.0050	----	----	----	----	
B(a)P total potency equivalents [B(a)P TPE]	----	E641A/EO	0.010	µg/L	<0.010	----	----	----	----	
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>										
Chrysene-d12	1719-03-5	E641A/EO	0.1	%	105	----	----	----	----	
Naphthalene-d8	1146-65-2	E641A/EO	0.1	%	94.7	----	----	----	----	
Phenanthrene-d10	1517-22-2	E641A/EO	0.1	%	108	----	----	----	----	
<b>Disinfectant By-Products</b>										
Bromate	15541-45-4	E722A/WT	0.00030	mg/L	<0.00030	----	----	----	----	
<b>Semi-Volatile Organics</b>										
Nitrosodimethylamine, N- [NDMA]	62-75-9	E725-T/WT	0.00090	µg/L	<0.00207 <sup>DLB</sup>	----	----	----	----	
<b>Semi-Volatile Organics Surrogates</b>										
Fluorobiphenyl, 2-	321-60-8	E625A/WT	1.0	%	86.5	----	----	----	----	
Nitrobenzene-d5	4165-60-0	E625A/WT	1.0	%	86.8	----	----	----	----	



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Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	----	----	----	----	
					Result	----	----	----	----	
<b>Semi-Volatile Organics Surrogates</b>										
Terphenyl-d14, p-	1718-51-0	E625A/WT	1.0	%	98.4	----	----	----	----	
<b>Chlorinated Phenolics</b>										
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	----	----	----	----	
<b>Phenolics Surrogates</b>										
Tribromophenol, 2,4,6-	118-79-6	E625A/WT	0.50	%	120	----	----	----	----	
<b>Organochlorine Pesticides Surrogates</b>										
Decachlorobiphenyl	2051-24-3	E660F/WT	0.10	%	117	----	----	----	----	
Tetrachloro-m-xylene	877-09-8	E660F/WT	0.10	%	106	----	----	----	----	
<b>Herbicides</b>										
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	<0.48	----	----	----	----	
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	<0.50 <sup>DLM</sup>	----	----	----	----	
Diclofop-methyl	51338-27-3	E755/WT	0.10	µg/L	<0.10	----	----	----	----	
Dinoseb	88-85-7	E706A/WT	0.050	µg/L	<0.250 <sup>DLI</sup>	----	----	----	----	



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Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	----	----	----	----	
					Result	----	----	----	----	
<b>Herbicides</b>										
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	----	----	----	----	
<b>Herbicides Surrogates</b>										
Dichlorophenylacetic acid, 2,4-	19719-28-9	E706A/WT	1.0	%	95.6	----	----	----	----	
<b>Insecticides</b>										
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	----	----	----	----	



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Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001					
					Result					
<b>Insecticides</b>										
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	----	----	----	----	
<b>Pesticides</b>										
Acetic acid, 2-methyl-4-chlorophenoxy- [MCPA]	94-74-6	E706A/WT	0.050	µg/L	<0.250 <sup>DLI</sup>	----	----	----	----	
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	<0.250 <sup>DLI</sup>	----	----	----	----	
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	----	----	----	----	



## Analytical Results

Sub-Matrix: Water  
 (Matrix: Water)

					Client sample ID					
					R1-9150030-Fort Chipewyan Archie Simpson Arena	----	----	----	----	
					Client sampling date / time	08-Jan-2025 09:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2500063-001	----	----	----	----	
					Result	----	----	----	----	
<b>Pesticides</b>										
DDT, total	----	E660F/WT	0.0060	µg/L	<0.0060	----	----	----	----	
Dicamba	1918-00-9	E706A/WT	0.10	µg/L	<0.50 <sup>DLI</sup>	----	----	----	----	
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	E706A/WT	0.050	µg/L	<0.250 <sup>DLI</sup>	----	----	----	----	
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	0.20	µg/L	<0.20	----	----	----	----	
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	----	----	----	----	
Oxychlorane	27304-13-8	E660F/WT	0.0080	µg/L	<0.0080	----	----	----	----	
Paraquat (as dichloride)	1910-42-5	E723A/WT	1.0	µg/L	<1.0	----	----	----	----	
Picloram	1918-02-1	E706A/WT	0.10	µg/L	<0.50 <sup>DLI</sup>	----	----	----	----	
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	E706A/WT	0.050	µg/L	<0.250 <sup>DLI</sup>	----	----	----	----	
<b>Nitrosamines Surrogates</b>										
Nitrosodimethylamine-d6, N-	17829-05-9	E725-T/WT	0.00090	%	104	----	----	----	----	
<b>Organic Parameters</b>										
Microcystin	101043-37-2	E576/WP	0.15	µg/L	<0.15	----	----	----	----	

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



**CERTIFICATE OF ANALYSIS**

<b>Work Order</b>	: <b>FC2500063</b>	<b>Page</b>	: 1 of 7
<b>Amendment</b>	: <b>2</b>		
<b>Client</b>	: <b>Regional Municipality of Wood Buffalo</b>	<b>Laboratory</b>	: ALS Environmental - Fort McMurray
<b>Contact</b>	: Water Treatment Plant	<b>Account Manager</b>	: Megha Walia
<b>Address</b>	: 1 Silin Forest Road Fort McMurray AB Canada T9H 5A1	<b>Address</b>	: #4, 340 Macalpine Crescent Fort McMurray AB Canada T9H 4A8
<b>Telephone</b>	: 780-762-5863	<b>Telephone</b>	: +1 780 791 1524
<b>Project</b>	: FCWTP-SC4	<b>Date Samples Received</b>	: 08-Jan-2025 15:00
<b>PO</b>	: 4500061478	<b>Date Analysis</b>	: 09-Jan-2025
		<b>Commenced</b>	
		<b>Issue Date</b>	: 07-Feb-2025 09:24
<b>C-O-C number</b>	: ----		
<b>Sampler</b>	: GR		
<b>Site</b>	: ----		
<b>Quote number</b>	: FC24-RMWB100-0005 FC SC4		
<b>No. of samples received</b>	: 1		
<b>No. of samples analysed</b>	: 1		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

**Signatories**

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

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Alex Drake	Lab Analyst	Inorganics, Edmonton, Alberta
Anthony Calero	Supervisor - Inorganics	Inorganics, Calgary, Alberta
Dan Nguyen	Team Leader - Inorganics	Metals, Edmonton, Alberta
Daniel Nguyen	Laboratory Analyst	Metals, Edmonton, Alberta
Danielle Gravel	Supervisor - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Jing Liu	Laboratory Analyst	Inorganics, Edmonton, Alberta
Kari Mulroy	Lab Supervisor - Environmental	Organics, Edmonton, Alberta
Leah Yee	Lab Assistant	Inorganics, Edmonton, Alberta
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Sarah Birch	VOC Section Supervisor	VOC, Waterloo, Ontario
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta
Stephanie Pinheiro	Team Leader - LCMS	LCMS, Waterloo, Ontario
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.

## Qualifiers

Qualifier	Description
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
DLI	Detection Limit Raised: Dilution required to address Internal Standard response problems caused by matrix interference.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
RRV	Reported result verified by repeat analysis.



## Analytical Results

FC2500063-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: R1-9150030-Fort Chipewyan - Archie Simpson Arena

Client sampling date / time: 08-Jan-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Physical Tests</b>								
Alkalinity, bicarbonate (as HCO <sub>3</sub> )	71-52-3	53.6	1.0	mg/L	E290/EO	09-Jan-2025	09-Jan-2025	1834615
Alkalinity, carbonate (as CO <sub>3</sub> )	3812-32-6	<1.0	1.0	mg/L	E290/EO	09-Jan-2025	09-Jan-2025	1834615
Alkalinity, hydroxide (as OH)	14280-30-9	<1.0	1.0	mg/L	E290/EO	09-Jan-2025	09-Jan-2025	1834615
Alkalinity, total (as CaCO <sub>3</sub> )	----	45.5	1.0	mg/L	E290/EO	09-Jan-2025	09-Jan-2025	1834615
Colour, true	----	<2.0	2.0	CU	E329-L/EO	11-Jan-2025	11-Jan-2025	1836368
Conductivity	----	144	RRV, 1.0	µS/cm	E100/EO	09-Jan-2025	10-Jan-2025	1834614
Hardness (as CaCO <sub>3</sub> ), from total Ca/Mg	----	33.3	0.50	mg/L	EC100A/EO	-	11-Jan-2025	-
pH	----	8.38	0.10	pH units	E108/EO	09-Jan-2025	09-Jan-2025	1834613
Solids, total dissolved [TDS]	----	73	13	mg/L	E162/EO	-	14-Jan-2025	1834154
Solids, total dissolved [TDS], calculated	----	77.2	1.0	mg/L	EC103/EO	-	09-Jan-2025	-
<b>Anions and Nutrients</b>								
Ammonia, total (as N)	7664-41-7	<0.0050	0.0050	mg/L	E298/EO	09-Jan-2025	09-Jan-2025	1834424
Chloride	16887-00-6	12.9	0.50	mg/L	E235.Cl/EO	09-Jan-2025	09-Jan-2025	1834620
Fluoride	16984-48-8	0.024	0.020	mg/L	E235.F/EO	09-Jan-2025	09-Jan-2025	1834618
Nitrate (as N)	14797-55-8	0.025	0.020	mg/L	E235.NO3/EO	09-Jan-2025	09-Jan-2025	1834623
Nitrate + Nitrite (as N)	----	<0.0300	0.03	mg/L	EC235.N+N/EO	-	10-Jan-2025	-
Nitrite (as N)	14797-65-0	<0.010	0.010	mg/L	E235.NO2/EO	09-Jan-2025	09-Jan-2025	1834624
Sulfate (as SO <sub>4</sub> )	14808-79-8	3.78	0.30	mg/L	E235.SO4/EO	09-Jan-2025	09-Jan-2025	1834619
<b>Cyanides</b>								
Cyanide, strong acid dissociable (Total)	----	<0.0020	0.0020	mg/L	E333/WT	13-Jan-2025	04-Feb-2025	1837078
<b>Organic / Inorganic Carbon</b>								
Carbon, total organic [TOC]	----	4.36	0.50	mg/L	E355-L/EO	09-Jan-2025	11-Jan-2025	1834572
<b>Inorganics</b>								
Chlorine, total	7782-50-5	1.04	0.10	mg/L	E326-H/EO	-	09-Jan-2025	1834541
Chlorine, free	7782-50-5	0.88	0.10	mg/L	E327-H/EO	-	09-Jan-2025	1834542
Chloramines, total (as Cl <sub>2</sub> )	----	<0.20	0.20	mg/L	EC326/EO	-	10-Jan-2025	-
<b>Total Sulfides</b>								
Sulfide, total (as S)	18496-25-8	0.0144	0.0015	mg/L	E395/CG	-	09-Jan-2025	1834381
Sulfide, total (as H <sub>2</sub> S)	7783-06-4	0.0153	0.0016	mg/L	E395/CG	-	09-Jan-2025	1834381
<b>Ion Balance</b>								
Anion sum	----	1.35	0.10	meq/L	EC101/EO	-	09-Jan-2025	-
Cation sum	----	1.37	0.10	meq/L	EC101/EO	-	09-Jan-2025	-
Ion balance (APHA)	----	0.74	0.01	%	EC101/EO	-	09-Jan-2025	-
Ion balance (cations/anions)	----	101	0.010	%	EC101/EO	-	09-Jan-2025	-
<b>Total Metals</b>								
Aluminum, total	7429-90-5	0.0208	0.0030	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Antimony, total	7440-36-0	<0.00010	0.00010	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Arsenic, total	7440-38-2	0.00013	0.00010	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Barium, total	7440-39-3	0.0160	0.00010	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Boron, total	7440-42-8	0.014	0.010	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Cadmium, total	7440-43-9	<0.0050	0.0050	µg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Calcium, total	7440-70-2	8.98	0.050	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Chromium, total	7440-47-3	<0.00050	0.00050	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Copper, total	7440-50-8	0.0112	0.00050	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Iron, total	7439-89-6	<0.010	0.010	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248





## Analytical Results

FC2500063-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: R1-9150030-Fort Chipewyan - Archie Simpson Arena

Client sampling date / time: 08-Jan-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Total Metals</b>								
Lead, total	7439-92-1	<0.050	0.050	µg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Magnesium, total	7439-95-4	2.65	0.0050	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Manganese, total	7439-96-5	0.00593	0.00010	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Mercury, total	7439-97-6	<0.0050	0.0050	µg/L	E508/EO	10-Jan-2025	10-Jan-2025	1835097
Nickel, total	7440-02-0	<0.00050	0.00050	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Selenium, total	7782-49-2	<0.050	0.050	µg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Silver, total	7440-22-4	<0.010	0.010	µg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Sodium, total	7440-23-5	14.5	0.050	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Strontium, total	7440-24-6	0.0604	0.00020	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Uranium, total	7440-61-1	<0.010	0.010	µg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
Zinc, total	7440-66-6	<0.0030	0.0030	mg/L	E420/EO	11-Jan-2025	11-Jan-2025	1836248
<b>Dissolved Metals</b>								
Calcium, dissolved	7440-70-2	9.28	0.050	mg/L	E421/EO	11-Jan-2025	11-Jan-2025	1836295
Iron, dissolved	7439-89-6	<0.010	0.010	mg/L	E421/EO	11-Jan-2025	11-Jan-2025	1836295
Magnesium, dissolved	7439-95-4	2.68	0.0050	mg/L	E421/EO	11-Jan-2025	11-Jan-2025	1836295
Manganese, dissolved	7439-96-5	0.00096	0.00010	mg/L	E421/EO	11-Jan-2025	11-Jan-2025	1836295
Potassium, dissolved	7440-09-7	0.997	0.050	mg/L	E421/EO	11-Jan-2025	11-Jan-2025	1836295
Sodium, dissolved	7440-23-5	15.1	0.050	mg/L	E421/EO	11-Jan-2025	11-Jan-2025	1836295
Dissolved metals filtration location	----	Laboratory	-	-	EP421/EO	-	11-Jan-2025	1836295
<b>Aggregate Organics</b>								
Nitritotriacetic acid [NTA]	139-13-9	<0.40	0.40	mg/L	E394/WT	-	15-Jan-2025	1839624
<b>Volatile Organic Compounds</b>								
Benzene	71-43-2	<0.50	0.50	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Carbon tetrachloride	56-23-5	<0.50	0.50	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Chlorobenzene	108-90-7	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Dichlorobenzene, 1,2-	95-50-1	<0.50	0.50	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Dichlorobenzene, 1,4-	106-46-7	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Dichloroethane, 1,2-	107-06-2	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Dichloromethane	75-09-2	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Dioxane, 1,4-	123-91-1	<20	20	µg/L	E611I/WT	14-Jan-2025	14-Jan-2025	1839040
Ethylbenzene	100-41-4	<0.50	0.50	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Tetrachloroethylene	127-18-4	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Toluene	108-88-3	<0.50	0.50	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Trichloroethylene	79-01-6	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Vinyl chloride	75-01-4	<1.0	1.0	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Xylene, m+p-	179601-23-1	<0.40	0.40	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Xylene, o-	95-47-6	<0.30	0.30	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Xylenes, total	1330-20-7	<0.50	0.50	µg/L	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
<b>Volatile Organic Compounds Surrogates</b>								
Bromofluorobenzene, 4-	460-00-4	113	1.0	%	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Bromofluorobenzene, 4-	460-00-4	99.8	1.0	%	E611I/WT	14-Jan-2025	14-Jan-2025	1839040
Difluorobenzene, 1,4-	540-36-3	104	1.0	%	E611E/EO	13-Jan-2025	13-Jan-2025	1837261
Difluorobenzene, 1,4-	540-36-3	97.4	1.0	%	E611I/WT	14-Jan-2025	14-Jan-2025	1839040
<b>Polycyclic Aromatic Hydrocarbons</b>								
Benzo(a)pyrene	50-32-8	<0.0050	0.0050	µg/L	E641A/EO	10-Jan-2025	10-Jan-2025	1835435



## Analytical Results

FC2500063-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: R1-9150030-Fort Chipewyan - Archie Simpson Arena

Client sampling date / time: 08-Jan-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Polycyclic Aromatic Hydrocarbons</b>								
<b>B(a)P total potency equivalents [B(a)P TPE]</b>	----	<0.010	0.010	µg/L	E641A/EO	10-Jan-2025	10-Jan-2025	1835435
<b>Polycyclic Aromatic Hydrocarbons Surrogates</b>								
<b>Chrysene-d12</b>	1719-03-5	105	0.1	%	E641A/EO	10-Jan-2025	10-Jan-2025	1835435
<b>Naphthalene-d8</b>	1146-65-2	94.7	0.1	%	E641A/EO	10-Jan-2025	10-Jan-2025	1835435
<b>Phenanthrene-d10</b>	1517-22-2	108	0.1	%	E641A/EO	10-Jan-2025	10-Jan-2025	1835435
<b>Disinfectant By-Products</b>								
<b>Bromate</b>	15541-45-4	<0.00030	0.00030	mg/L	E722A/WT	13-Jan-2025	13-Jan-2025	1837096
<b>Semi-Volatile Organics</b>								
<b>Nitrosodimethylamine, N- [NDMA]</b>	62-75-9	<0.00207 <sup>DLB</sup>	0.00207	µg/L	E725-T/WT	14-Jan-2025	15-Jan-2025	1838110
<b>Semi-Volatile Organics Surrogates</b>								
<b>Fluorobiphenyl, 2-</b>	321-60-8	86.5	1.0	%	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Nitrobenzene-d5</b>	4165-60-0	86.8	1.0	%	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Terphenyl-d14, p-</b>	1718-51-0	98.4	1.0	%	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Chlorinated Phenolics</b>								
<b>Dichlorophenol, 2,4-</b>	120-83-2	<0.20	0.20	µg/L	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Pentachlorophenol [PCP]</b>	87-86-5	<0.50	0.50	µg/L	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Tetrachlorophenol, 2,3,4,6-</b>	58-90-2	<0.50	0.50	µg/L	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Trichlorophenol, 2,4,6-</b>	88-06-2	<0.20	0.20	µg/L	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Phenolics Surrogates</b>								
<b>Tribromophenol, 2,4,6-</b>	118-79-6	120	0.50	%	E625A/WT	13-Jan-2025	14-Jan-2025	1838018
<b>Organochlorine Pesticides Surrogates</b>								
<b>Decachlorobiphenyl</b>	2051-24-3	117	0.10	%	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
<b>Tetrachloro-m-xylene</b>	877-09-8	106	0.10	%	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
<b>Herbicides</b>								
<b>Alachlor</b>	15972-60-8	<0.050	0.050	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Atrazine</b>	1912-24-9	<0.050	0.050	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Atrazine + metabolites, total</b>	----	<0.48	0.48	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Atrazine + N-dealkylated metabolites</b>	----	<0.10	0.1	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Atrazine-desethyl</b>	6190-65-4	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Cyanazine</b>	21725-46-2	<0.50 <sup>DLM</sup>	0.50	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Diclofop-methyl</b>	51338-27-3	<0.10	0.10	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Dinoseb</b>	88-85-7	<0.250 <sup>DLI</sup>	0.250	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
<b>Diuron</b>	330-54-1	<0.050	0.050	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Metolachlor</b>	51218-45-2	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Metribuzin</b>	21087-64-9	<0.10	0.10	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Prometryn</b>	7287-19-6	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Simazine</b>	122-34-9	<0.10	0.10	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Triallate</b>	2303-17-5	<0.10	0.10	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Trifluralin</b>	1582-09-8	<0.10	0.10	µg/L	E756/WT	13-Jan-2025	13-Jan-2025	1837356
<b>Herbicides Surrogates</b>								
<b>Dichlorophenylacetic acid, 2,4-</b>	19719-28-9	95.6	1.0	%	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
<b>Insecticides</b>								
<b>Aldicarb</b>	116-06-3	<0.10	0.10	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Azinphos-methyl</b>	86-50-0	<0.10	0.10	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Bendiocarb</b>	22781-23-3	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Carbaryl</b>	63-25-2	<0.050	0.050	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909



## Analytical Results

FC2500063-001

Sub-Matrix: Water

(Matrix: Water)

Client sample ID: R1-9150030-Fort Chipewyan - Archie Simpson Arena

Client sampling date / time: 08-Jan-2025 09:00

Analyte	CAS Number	Result	LOR	Unit	Method/Lab	Prep Date	Analysis Date	QCLot
<b>Insecticides</b>								
Carbofuran	1563-66-2	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
Chlorpyrifos	2921-88-2	<0.10	0.10	µg/L	E756/WT	13-Jan-2025	13-Jan-2025	1837356
Diazinon	333-41-5	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
Dimethoate	60-51-5	<0.050	0.050	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
Malathion	121-75-5	<0.025	0.025	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
Parathion	56-38-2	<0.10	0.10	µg/L	E756/WT	13-Jan-2025	13-Jan-2025	1837356
Phorate	298-02-2	<0.25	0.25	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
Temephos	3383-96-8	<0.25	0.25	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
Terbufos	13071-79-9	<0.50	0.50	µg/L	E755/WT	15-Jan-2025	15-Jan-2025	1839909
<b>Pesticides</b>								
Acetic acid, 2-methyl-4-chlorophenoxy- [MCPA]	94-74-6	<0.250	DLI, 0.250	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
Aldrin	309-00-2	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Aldrin + Dieldrin	----	<0.011	0.011	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Bromoxynil	1689-84-5	<0.250	DLI, 0.250	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
Chlordane, cis- (alpha)	5103-71-9	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Chlordane, total	57-74-9	<0.011	0.011	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Chlordane, trans- (gamma)	5103-74-2	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDD, 2,4'-	53-19-0	<0.0040	0.0040	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDD, 4,4'-	72-54-8	<0.0040	0.0040	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDD, total	----	<0.0060	0.006	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDE, 2,4'-	3424-82-6	<0.0040	0.0040	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDE, 4,4'-	72-55-9	<0.0040	0.0040	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDE, total	----	<0.0060	0.006	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDT + metabolites, total	----	<0.010	0.01	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDT, 2,4'-	789-02-6	<0.0040	0.0040	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDT, 4,4'-	50-29-3	<0.0040	0.0040	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
DDT, total	----	<0.0060	0.006	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Dicamba	1918-00-9	<0.50	DLI, 0.50	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	<0.250	DLI, 0.250	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
Dieldrin	60-57-1	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Diquat (ion)	2764-72-9	<1.0	1.0	µg/L	E723A/WT	13-Jan-2025	13-Jan-2025	1837294
Glyphosate	1071-83-6	<0.20	0.20	µg/L	E716A/WT	15-Jan-2025	16-Jan-2025	1839532
Heptachlor	76-44-8	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Heptachlor + Heptachlor epoxide	n/a	<0.011	0.011	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Heptachlor epoxide	1024-57-3	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Hexachlorocyclohexane, gamma-	58-89-9	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Methoxychlor	72-43-5	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Oxychlordane	27304-13-8	<0.0080	0.0080	µg/L	E660F/WT	13-Jan-2025	13-Jan-2025	1837043
Paraquat (as dichloride)	1910-42-5	<1.0	1.0	µg/L	E723A/WT	13-Jan-2025	13-Jan-2025	1837294
Picloram	1918-02-1	<0.50	DLI, 0.50	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	<0.250	DLI, 0.250	µg/L	E706A/WT	13-Jan-2025	13-Jan-2025	1837047
<b>Nitrosamines Surrogates</b>								
Nitrosodimethylamine-d6, N-	17829-05-9	104	0.00090	%	E725-T/WT	14-Jan-2025	15-Jan-2025	1838110
<b>Organic Parameters</b>								
Microcystin	101043-37-2	<0.15	0.15	µg/L	E576/WP	-	16-Jan-2025	1841210