



CERTIFICATE OF ANALYSIS

Work Order : **FC2402849**
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 : Fort Chipewyan - SC4 Raw + SC4 R1 + Table 1 Treated
PO : 4500051416
C-O-C number : ----
Sampler : GS
Site : ----
Quote number : FC24-RMWB100-0005 FC SC4
No. of samples received : 3
No. of samples analysed : 3

Laboratory : ALS Environmental - Calgary
Account Manager : Megan Trydal
Address : 2559 29th Street NE
 Calgary AB Canada T1Y 7B5
Telephone : +1 403 407 1800
Date Samples Received : 16-Oct-2024 08:13
Date Analysis Commenced : 16-Oct-2024
Issue Date : 20-Nov-2024 14:09

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
Amaninder Dhillon	Team Lead - Semi-Volatile Instrumentation	Organics, Waterloo, Ontario
Anthony Calero	Supervisor - Inorganic	Inorganics, Calgary, Alberta
Brayden Ginther	Laboratory Analyst	Inorganics, Edmonton, Alberta
Christian Murera	Lab Analyst	Organics, Edmonton, 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
Hannah Lewis	Inorganics Analyst	Inorganics, Waterloo, Ontario
Jing Liu	Laboratory Analyst	Inorganics, Edmonton, Alberta
Leah Yee	Lab Assistant	Inorganics, Edmonton, Alberta
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Sanja Risticvic	Department Manager - LCMS	LCMS, Waterloo, Ontario
Sarah Birch	VOC Section Supervisor	VOC, Waterloo, Ontario
Shruti Mudliar	Lab Analyst	Metals, Edmonton, Alberta
Shruti Mudliar	Lab Analyst	Inorganics, Edmonton, Alberta
Stephanie Pinheiro	Team Leader - LCMS	LCMS, Waterloo, Ontario
William Lake	Analyst	Microbiology, Winnipeg, Manitoba
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>
mg/L	milligrams per litre
µg/L	micrograms per litre
psu	practical salinity units
pH units	pH units
µS/cm	microsiemens per centimetre
CU	colour units (1 cu = 1 mg/l pt)
-	no units
%	percent
meq/L	milliequivalents per litre

<: 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>
DLAI	Detection limit raised due to low level analytical interference or background.
DLI	Detection Limit Raised: Dilution required to address Internal Standard response problems caused by matrix interference.
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	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Physical Tests										
Alkalinity, bicarbonate (as HCO3)	71-52-3	E290/EO	1.0	mg/L	67.7	58.0	68.3	----	----	
Alkalinity, carbonate (as CO3)	3812-32-6	E290/EO	1.0	mg/L	<1.0	<1.0	<1.0	----	----	
Alkalinity, hydroxide (as OH)	14280-30-9	E290/EO	1.0	mg/L	<1.0	<1.0	<1.0	----	----	
Alkalinity, total (as CaCO3)	----	E290/EO	1.0	mg/L	55.5	47.5	56.0	----	----	
Colour, true	----	E329-L/EO	2.0	CU	----	10.1	<2.0	----	----	
Conductivity	----	E100/EO	1.0	µS/cm	197	124	198	----	----	
Hardness (as CaCO3), dissolved	----	EC100/EO	0.50	mg/L	55.4	----	----	----	----	
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/EO	0.50	mg/L	----	53.1	55.9	----	----	
pH	----	E108/EO	0.10	pH units	8.25	8.02	8.28	----	----	
Salinity	----	EC100S/VA	1.0	psu	<1.0	<1.0	----	----	----	
Solids, total dissolved [TDS]	----	E162/EO	10	mg/L	----	90	118	----	----	
Solids, total dissolved [TDS], calculated	----	EC103/EO	1.0	mg/L	106	68.4	105	----	----	
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/EO	0.0050	mg/L	----	0.0131	<0.0050	----	----	
Chloride	16887-00-6	E235.Cl/EO	0.50	mg/L	22.8	4.63	22.8	----	----	
Fluoride	16984-48-8	E235.F/EO	0.020	mg/L	<0.020	0.065	<0.020	----	----	
Nitrate (as N)	14797-55-8	E235.NO3/EO	0.020	mg/L	<0.020	<0.020	<0.020	----	----	
Nitrate + Nitrite (as N)	----	EC235.N+N/E O	0.0300	mg/L	----	<0.0300	<0.0300	----	----	
Nitrate + Nitrite (as N)	----	EC235.N+N/E O	0.0032	mg/L	<0.0224	----	----	----	----	
Nitrite (as N)	14797-65-0	E235.NO2/EO	0.010	mg/L	<0.010	<0.010	<0.010	----	----	
Sulfate (as SO4)	14808-79-8	E235.SO4/EO	0.30	mg/L	8.27	8.94	8.14	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Cyanides										
Cyanide, strong acid dissociable (Total)	----	E333/WT	0.0020	mg/L	----	<0.0020	<0.0020	----	----	
Organic / Inorganic Carbon										
Carbon, total organic [TOC]	----	E355-L/EO	0.50	mg/L	----	6.10	2.64	----	----	
Inorganics										
Chlorine, total	7782-50-5	E326-H/EO	0.10	mg/L	----	<0.10	1.17	----	----	
Chlorine, free	7782-50-5	E327-H/EO	0.10	mg/L	----	<0.10	1.13	----	----	
Chloramines, total (as Cl2)	----	EC326/EO	0.20	mg/L	----	<0.20	<0.20	----	----	
Total Sulfides										
Sulfide, total (as S)	18496-25-8	E395/CG	0.0015	mg/L	<0.0015	<0.0015	<0.0015	----	----	
Sulfide, total (as H2S)	7783-06-4	E395/CG	0.0016	mg/L	<0.0016	<0.0016	<0.0016	----	----	
Ion Balance										
Anion sum	----	EC101/EO	0.10	meq/L	----	1.27	1.93	----	----	
Cation sum	----	EC101/EO	0.10	meq/L	----	1.23	1.88	----	----	
Ion balance (APHA)	----	EC101/EO	0.01	%	----	-1.60	-1.31	----	----	
Ion balance (cations/anions)	----	EC101/EO	0.010	%	102	96.8	97.4	----	----	
Total Metals										
Aluminum, total	7429-90-5	E420/EO	0.0030	mg/L	0.0084	0.0403	0.0101	----	----	
Antimony, total	7440-36-0	E420/EO	0.00010	mg/L	<0.00010	<0.00010	<0.00010	----	----	
Arsenic, total	7440-38-2	E420/EO	0.00010	mg/L	0.00024	0.00048	0.00031	----	----	
Barium, total	7440-39-3	E420/EO	0.00010	mg/L	0.0271	0.0278	0.0273	----	----	
Beryllium, total	7440-41-7	E420/EO	0.000020	mg/L	<0.000020	----	----	----	----	



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 (Matrix: Water)

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					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Total Metals										
Bismuth, total	7440-69-9	E420/EO	0.000050	mg/L	<0.000050	----	----	----	----	
Boron, total	7440-42-8	E420/EO	0.010	mg/L	0.018	0.016	0.017	----	----	
Cadmium, total	7440-43-9	E420/EO	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	----	----	
Calcium, total	7440-70-2	E420/EO	0.050	mg/L	15.2	14.2	15.4	----	----	
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	<0.00050	<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	0.00103	0.00115	0.00116	----	----	
Iron, total	7439-89-6	E420/EO	0.010	mg/L	<0.010	0.065	<0.010	----	----	
Lead, total	7439-92-1	E420/EO	0.000050	mg/L	<0.000050	<0.000050	<0.000050	----	----	
Lithium, total	7439-93-2	E420/EO	0.0010	mg/L	0.0037	----	----	----	----	
Magnesium, total	7439-95-4	E420/EO	0.0050	mg/L	4.38	4.28	4.24	----	----	
Manganese, total	7439-96-5	E420/EO	0.00010	mg/L	0.00087	0.00270	0.00065	----	----	
Mercury, total	7439-97-6	E508/EO	0.0000050	mg/L	----	<0.0000050	<0.0000050	----	----	
Molybdenum, total	7439-98-7	E420/EO	0.000050	mg/L	0.000288	----	----	----	----	
Nickel, total	7440-02-0	E420/EO	0.00050	mg/L	<0.00050	0.00060	<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	1.02	----	----	----	----	
Rubidium, total	7440-17-7	E420/EO	0.00020	mg/L	0.00099	----	----	----	----	
Selenium, total	7782-49-2	E420/EO	0.000050	mg/L	<0.000050	0.000087	<0.000050	----	----	
Silicon, total	7440-21-3	E420/EO	0.10	mg/L	1.04	----	----	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID		FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time		15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Total Metals											
Silver, total	7440-22-4	E420/EO	0.000010	mg/L	<0.000010	0.000011	<0.000010	----	----	----	----
Sodium, total	7440-23-5	E420/EO	0.050	mg/L	19.1	4.87	17.5	----	----	----	----
Strontium, total	7440-24-6	E420/EO	0.00020	mg/L	0.0800	0.0892	0.0909	----	----	----	----
Sulfur, total	7704-34-9	E420/EO	0.50	mg/L	3.10	----	----	----	----	----	----
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	0.000010	mg/L	<0.000010	0.000104	<0.000010	----	----	----	----
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	<0.0030	<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	0.0083	----	----	----	----	----	----
Antimony, dissolved	7440-36-0	E421/EO	0.00010	mg/L	<0.00010	----	----	----	----	----	----
Arsenic, dissolved	7440-38-2	E421/EO	0.00010	mg/L	0.00023	----	----	----	----	----	----
Barium, dissolved	7440-39-3	E421/EO	0.00010	mg/L	0.0269	----	----	----	----	----	----
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	----	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Dissolved Metals										
Boron, dissolved	7440-42-8	E421/EO	0.010	mg/L	0.023	----	----	----	----	
Cadmium, dissolved	7440-43-9	E421/EO	0.0000050	mg/L	<0.0000050	----	----	----	----	
Calcium, dissolved	7440-70-2	E421/EO	0.050	mg/L	15.0	13.4	14.3	----	----	
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	0.018	<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	0.0038	----	----	----	----	
Magnesium, dissolved	7439-95-4	E421/EO	0.0050	mg/L	4.36	3.96	4.04	----	----	
Manganese, dissolved	7439-96-5	E421/EO	0.00010	mg/L	0.00073	0.00036	0.00032	----	----	
Molybdenum, dissolved	7439-98-7	E421/EO	0.000050	mg/L	0.000317	----	----	----	----	
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	1.02	1.01	1.13	----	----	
Rubidium, dissolved	7440-17-7	E421/EO	0.00020	mg/L	0.00090	----	----	----	----	
Selenium, dissolved	7782-49-2	E421/EO	0.000050	mg/L	<0.000050	----	----	----	----	
Silicon, dissolved	7440-21-3	E421/EO	0.050	mg/L	1.02	----	----	----	----	
Silver, dissolved	7440-22-4	E421/EO	0.000010	mg/L	<0.000010	----	----	----	----	
Sodium, dissolved	7440-23-5	E421/EO	0.050	mg/L	18.8	4.77	18.6	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Dissolved Metals										
Strontium, dissolved	7440-24-6	E421/EO	0.00020	mg/L	0.0799	----	----	----	----	
Sulfur, dissolved	7704-34-9	E421/EO	0.50	mg/L	2.95	----	----	----	----	
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	0.000017	----	----	----	----	
Vanadium, dissolved	7440-62-2	E421/EO	0.00050	mg/L	<0.00050	----	----	----	----	
Zinc, dissolved	7440-66-6	E421/EO	0.0010	mg/L	0.0013	----	----	----	----	
Zirconium, dissolved	7440-67-7	E421/EO	0.00020	mg/L	<0.00020	----	----	----	----	
Dissolved metals filtration location	----	EP421/EO	-	-	Laboratory	Laboratory	Laboratory	----	----	
Aggregate Organics										
Naphthenic acids	----	E565/EO	1.0	mg/L	<1.0	----	----	----	----	
Nitritotriacetic acid [NTA]	139-13-9	E394/WT	0.40	mg/L	----	<0.40	<0.40	----	----	
Volatile Organic Compounds										
Benzene	71-43-2	E611E/EO	0.50	µg/L	----	<0.50	<0.50	----	----	
Carbon tetrachloride	56-23-5	E611E/EO	0.50	µg/L	----	<0.50	<0.50	----	----	
Chlorobenzene	108-90-7	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	
Dichlorobenzene, 1,2-	95-50-1	E611E/EO	0.50	µg/L	----	<0.50	<0.50	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID		FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time		15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Volatile Organic Compounds											
Dichlorobenzene, 1,4-	106-46-7	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	----	----
Dichloroethane, 1,2-	107-06-2	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	----	----
Dichloromethane	75-09-2	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	----	----
Dioxane, 1,4-	123-91-1	E611I/WT	20	µg/L	----	<20	<20	----	----	----	----
Ethylbenzene	100-41-4	E611E/EO	0.50	µg/L	----	<0.50	<0.50	----	----	----	----
Tetrachloroethylene	127-18-4	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	----	----
Toluene	108-88-3	E611E/EO	0.50	µg/L	----	<0.50	<0.50	----	----	----	----
Trichloroethylene	79-01-6	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	----	----
Vinyl chloride	75-01-4	E611E/EO	1.0	µg/L	----	<1.0	<1.0	----	----	----	----
Xylene, m+p-	179601-23-1	E611E/EO	0.40	µg/L	----	<0.40	<0.40	----	----	----	----
Xylene, o-	95-47-6	E611E/EO	0.30	µg/L	----	<0.30	<0.30	----	----	----	----
Xylenes, total	1330-20-7	E611E/EO	0.50	µg/L	----	<0.50	<0.50	----	----	----	----
Volatile Organic Compounds [Fuels]											
Benzene	71-43-2	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----	----
Ethylbenzene	100-41-4	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----	----
Styrene	100-42-5	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----	----
Toluene	108-88-3	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----	----
Xylene, m+p-	179601-23-1	E611A/EO	0.40	µg/L	<0.40	----	----	----	----	----	----
Xylene, o-	95-47-6	E611A/EO	0.30	µg/L	<0.30	----	----	----	----	----	----
Xylenes, total	1330-20-7	E611A/EO	0.50	µg/L	<0.50	----	----	----	----	----	----
BTEX, total	----	E611A/EO	1.0	µg/L	<1.0	----	----	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Hydrocarbons										
F1 (C6-C10)	----	E581.F1/EO	100	µg/L	<100	----	----	----	----	----
F1-BTEX	----	EC580/EO	25	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	370	µg/L	<380	----	----	----	----	----
Hydrocarbons Surrogates										
Bromobenzotrifluoride, 2- (F2-F4 surrogate)	392-83-6	E601/EO	1.0	%	97.6	----	----	----	----	----
Dichlorotoluene, 3,4-	95-75-0	E581.F1/EO	1.0	%	81.9	----	----	----	----	----
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611E/EO	1.0	%	----	81.1	80.7	----	----	----
Bromofluorobenzene, 4-	460-00-4	E611I/WT	1.0	%	----	101	102	----	----	----
Bromofluorobenzene, 4-	460-00-4	E611A/EO	1.0	%	84.8	----	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611I/WT	1.0	%	----	101	101	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611E/EO	1.0	%	----	93.8	93.6	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611A/EO	1.0	%	92.8	----	----	----	----	----
Polycyclic Aromatic Hydrocarbons										
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	<0.010	----	----	----
Polycyclic Aromatic Hydrocarbons Surrogates										
Chrysene-d12	1719-03-5	E641A/EO	0.1	%	113	117	112	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Polycyclic Aromatic Hydrocarbons Surrogates										
Naphthalene-d8	1146-65-2	E641A/EO	0.1	%	119	117	124	----	----	
Phenanthrene-d10	1517-22-2	E641A/EO	0.1	%	107	111	106	----	----	
Disinfectant By-Products										
Bromate	15541-45-4	E722A/WT	0.00030	mg/L	----	<0.00030	<0.00030	----	----	
Semi-Volatile Organics										
Nitrosodimethylamine, N- [NDMA]	62-75-9	E725-T/WT	0.00090	µg/L	----	<0.00130 ^{DLAI}	<0.00101 ^{DLAI}	----	----	
Semi-Volatile Organics Surrogates										
Fluorobiphenyl, 2-	321-60-8	E625A/WT	1.0	%	----	87.2	87.7	----	----	
Nitrobenzene-d5	4165-60-0	E625A/WT	1.0	%	----	87.3	96.8	----	----	
Terphenyl-d14, p-	1718-51-0	E625A/WT	1.0	%	----	93.0	87.0	----	----	
Chlorinated Phenolics										
Dichlorophenol, 2,4-	120-83-2	E625A/WT	0.20	µg/L	----	<0.20	<0.20	----	----	
Pentachlorophenol [PCP]	87-86-5	E625A/WT	0.50	µg/L	----	<0.50	<0.50	----	----	
Tetrachlorophenol, 2,3,4,6-	58-90-2	E625A/WT	0.50	µg/L	----	<0.50	<0.50	----	----	
Trichlorophenol, 2,4,6-	88-06-2	E625A/WT	0.20	µg/L	----	<0.20	<0.20	----	----	
Phenolics Surrogates										
Tribromophenol, 2,4,6-	118-79-6	E625A/WT	0.50	%	----	94.4	78.4	----	----	
Organochlorine Pesticides Surrogates										
Decachlorobiphenyl	2051-24-3	E660F/WT	0.10	%	----	109	131 ^{SUR-ND}	----	----	
Tetrachloro-m-xylene	877-09-8	E660F/WT	0.10	%	----	106	92.6	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID		FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time		15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	----	----
					Result	Result	Result	----	----	----	----
Herbicides											
Alachlor	15972-60-8	E755/WT	0.050	µg/L	----	<0.050	<0.050	----	----	----	----
Atrazine	1912-24-9	E755/WT	0.050	µg/L	----	<0.050	<0.050	----	----	----	----
Atrazine + metabolites, total	----	E755/WT	0.450	µg/L	----	<0.450	<0.450	----	----	----	----
Atrazine + N-dealkylated metabolites	----	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Atrazine-desethyl	6190-65-4	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	----	----
Cyanazine	21725-46-2	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Diclofop-methyl	51338-27-3	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Dinoseb	88-85-7	E706A/WT	0.050	µg/L	----	<0.500 ^{DLI}	<0.500 ^{DLI}	----	----	----	----
Diuron	330-54-1	E755/WT	0.050	µg/L	----	<0.050	<0.050	----	----	----	----
Metolachlor	51218-45-2	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	----	----
Metribuzin	21087-64-9	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Prometryn	7287-19-6	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	----	----
Simazine	122-34-9	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Triallate	2303-17-5	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Trifluralin	1582-09-8	E756/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Herbicides Surrogates											
Dichlorophenylacetic acid, 2,4-	19719-28-9	E706A/WT	1.0	%	----	119 ^{DLI}	130	----	----	----	----
Insecticides											
Aldicarb	116-06-3	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Azinphos-methyl	86-50-0	E755/WT	0.10	µg/L	----	<0.10	<0.10	----	----	----	----
Bendiocarb	22781-23-3	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time	15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----	
					Result	Result	Result	----	----	
Insecticides										
Carbaryl	63-25-2	E755/WT	0.050	µg/L	----	<0.050	<0.050	----	----	
Carbofuran	1563-66-2	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	
Chlorpyrifos	2921-88-2	E756/WT	0.10	µg/L	----	<0.10	<0.10	----	----	
Diazinon	333-41-5	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	
Dimethoate	60-51-5	E755/WT	0.050	µg/L	----	<0.050	<0.050	----	----	
Malathion	121-75-5	E755/WT	0.0250	µg/L	----	<0.0250	<0.0250	----	----	
Parathion	56-38-2	E756/WT	0.10	µg/L	----	<0.10	<0.10	----	----	
Phorate	298-02-2	E755/WT	0.250	µg/L	----	<0.250	<0.250	----	----	
Temephos	3383-96-8	E755/WT	0.250	µg/L	----	<0.250	<0.250	----	----	
Terbufos	13071-79-9	E755/WT	0.50	µg/L	----	<0.50	<0.50	----	----	
Pesticides										
Acetic acid, 2-methyl-4-chlorophenoxy-[MCPA]	94-74-6	E706A/WT	0.050	µg/L	----	<0.500 ^{DLI}	<0.500 ^{DLI}	----	----	
Aldrin	309-00-2	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----	
Aldrin + Dieldrin	----	E660F/WT	0.011	µg/L	----	<0.011	<0.011	----	----	
Bromoxynil	1689-84-5	E706A/WT	0.050	µg/L	----	<0.500 ^{DLI}	<0.500 ^{DLI}	----	----	
Chlordane, cis- (alpha)	5103-71-9	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----	
Chlordane, total	57-74-9	E660F/WT	0.011	µg/L	----	<0.011	<0.011	----	----	
Chlordane, trans- (gamma)	5103-74-2	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----	
DDD, 2,4'-	53-19-0	E660F/WT	0.0040	µg/L	----	<0.0040	<0.0040	----	----	
DDD, 4,4'-	72-54-8	E660F/WT	0.0040	µg/L	----	<0.0040	<0.0040	----	----	
DDD, total	----	E660F/WT	0.0060	µg/L	----	<0.0060	<0.0060	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID		FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time		15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003	----	----		
					Result	Result	Result	----	----		
Pesticides											
DDE, 2,4'-	3424-82-6	E660F/WT	0.0040	µg/L	----	<0.0040	<0.0040	----	----		
DDE, 4,4'-	72-55-9	E660F/WT	0.0040	µg/L	----	<0.0040	<0.0040	----	----		
DDE, total	----	E660F/WT	0.0060	µg/L	----	<0.0060	<0.0060	----	----		
DDT + metabolites, total	----	E660F/WT	0.010	µg/L	----	<0.010	<0.010	----	----		
DDT, 2,4'-	789-02-6	E660F/WT	0.0040	µg/L	----	<0.0040	<0.0040	----	----		
DDT, 4,4'-	50-29-3	E660F/WT	0.0040	µg/L	----	<0.0040	<0.0040	----	----		
DDT, total	----	E660F/WT	0.0060	µg/L	----	<0.0060	<0.0060	----	----		
Dicamba	1918-00-9	E706A/WT	0.10	µg/L	----	<1.00 ^{DLI}	<1.00 ^{DLI}	----	----		
Dichlorophenoxyacetic acid, 2,4- [2,4-D]	94-75-7	E706A/WT	0.050	µg/L	----	<0.500 ^{DLI}	<0.500 ^{DLI}	----	----		
Dieldrin	60-57-1	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----		
Diquat (ion)	2764-72-9	E723A/WT	1.0	µg/L	----	<1.0	<1.0	----	----		
Glyphosate	1071-83-6	E716A/WT	0.20	µg/L	----	<0.20	<0.20	----	----		
Heptachlor	76-44-8	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----		
Heptachlor + Heptachlor epoxide	n/a	E660F/WT	0.011	µg/L	----	<0.011	<0.011	----	----		
Heptachlor epoxide	1024-57-3	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----		
Hexachlorocyclohexane, gamma-	58-89-9	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----		
Methoxychlor	72-43-5	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----		
Oxychlorane	27304-13-8	E660F/WT	0.0080	µg/L	----	<0.0080	<0.0080	----	----		
Paraquat (as dichloride)	1910-42-5	E723A/WT	1.0	µg/L	----	<1.0	<1.0	----	----		
Picloram	1918-02-1	E706A/WT	0.10	µg/L	----	<1.00 ^{DLI}	<1.00 ^{DLI}	----	----		
Trichlorophenoxyacetic acid, 2,4,5- [2,4,5-T]	93-76-5	E706A/WT	0.050	µg/L	----	<0.500 ^{DLI}	<0.500 ^{DLI}	----	----		



Analytical Results

Sub-Matrix: Water
(Matrix: Water)

					Client sample ID		FCWTP-Treated Water Lab Sink	FCWTP-Raw Water Chamber	FCWTP-R1-9150030	----	----
					Client sampling date / time		15-Oct-2024 08:05	15-Oct-2024 07:25	15-Oct-2024 08:45	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	FC2402849-001	FC2402849-002	FC2402849-003				
					Result	Result	Result	----	----		
Nitrosamines Surrogates											
Nitrosodimethylamine-d6, N-	17829-05-9	E725-T/WT	0.00090	%	----	130	136	----	----		
Organic Parameters											
Microcystin	101043-37-2	E576/WP	0.20	µg/L	----	<0.20	<0.20	----	----		

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