

CERTIFICATE OF ANALYSIS

REPORTED TO	Stettler, Town of (Alberta) 5031 - 50 Street Stettler, AB T0C 2L0	WORK ORDER	24G0431
ATTENTION	Chris Saunders	RECEIVED / TEMP REPORTED	2024-07-04 09:00 / 14.1°C 2024-07-18 14:50
PO NUMBER		COC NUMBER	no#
PROJECT	Distribution System - Biannual Analysis		
PROJECT INFO			

Introduction:

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Big Picture Sidekicks



You know that the sample you collected after snowshoeing to site, digging 5 meters, and racing to get it on a plane so you can submit it to the lab for time sensitive results needed to make important and expensive decisions (whew) is VERY important. We know that too.

We've Got Chemistry



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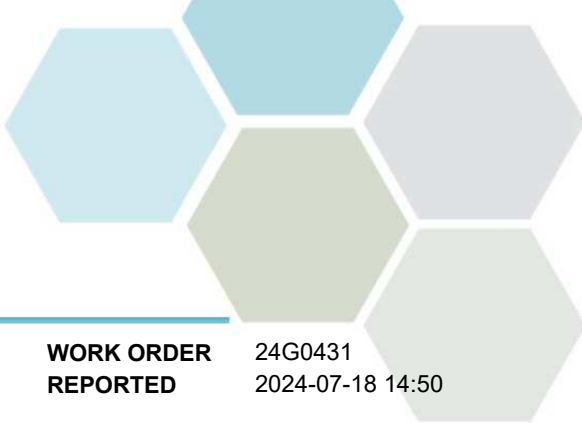
If you have any questions or concerns, please contact me at efex@caro.ca

Authorized By:

Echo Fex
Junior Account Manager

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TEST RESULTS

REPORTED TO PROJECT Stettler, Town of (Alberta)
Distribution System - Biannual Analysis

WORK ORDER REPORTED 24G0431
2024-07-18 14:50

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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GT Hydraulics (24G0431-01) | Matrix: Water | Sampled: 2024-07-03 10:00

Acid Herbicides

2,4-D	< 0.10	MAC = 100	0.10	µg/L	2024-07-16	
2,4-DB	< 0.10	N/A	0.10	µg/L	2024-07-16	
Dichlorprop (2,4-DP)	< 0.10	N/A	0.10	µg/L	2024-07-16	
Fenoprop	< 0.10	N/A	0.10	µg/L	2024-07-16	
MCPA	< 0.02	MAC = 350	0.02	µg/L	2024-07-16	
MCPB	< 0.10	N/A	0.10	µg/L	2024-07-16	
2,4,5-T	< 0.10	N/A	0.10	µg/L	2024-07-16	
MCPB	< 0.10	N/A	0.10	µg/L	2024-07-16	
Acifluorfen	< 0.10	N/A	0.10	µg/L	2024-07-16	
Bentazon	< 0.10	N/A	0.10	µg/L	2024-07-16	
Chloramben	< 0.10	N/A	0.10	µg/L	2024-07-16	
Dicamba	< 0.10	MAC = 110	0.10	µg/L	2024-07-16	
Triclopyr	< 0.10	N/A	0.10	µg/L	2024-07-16	
Picloram	< 0.10	MAC = 190	0.10	µg/L	2024-07-16	
Clopyralid	< 0.10	N/A	0.10	µg/L	2024-07-16	
Bromoxynil	< 0.10	MAC = 30	0.10	µg/L	2024-07-16	
Dinoseb	< 0.10	N/A	0.10	µg/L	2024-07-16	

Anions

Bromate	< 0.005	MAC = 0.01	0.010	mg/L	2024-07-12	
Chloride	11.7	AO ≤ 250	0.50	mg/L	2024-07-05	
Fluoride	0.68	MAC = 1.5	0.10	mg/L	2024-07-05	
Nitrate (as N)	< 0.050	MAC = 10	0.050	mg/L	2024-07-05	
Nitrite (as N)	< 0.050	MAC = 1	0.050	mg/L	2024-07-05	
Sulfate	43.5	AO ≤ 500	1.0	mg/L	2024-07-05	

Calculated Parameters

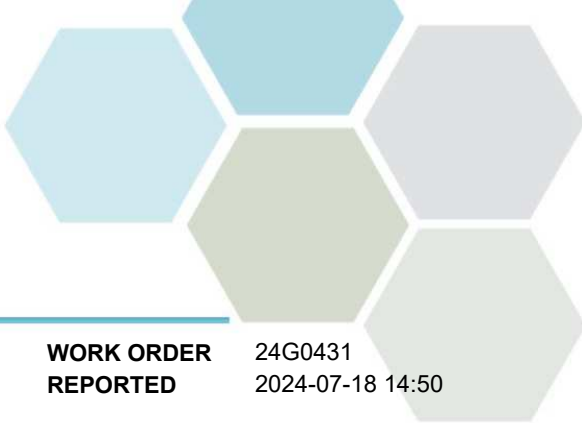
Chloramines	0.450	MAC = 3	0.0400	mg/L	N/A	
Total Trihalomethanes	0.0589	MAC = 0.1	0.00400	mg/L	N/A	
Ion Balance	101	N/A		%	N/A	
Hardness, Total (as CaCO3)	181	None Required	0.541	mg/L	N/A	
Nitrate+Nitrite (as N)	< 0.0500	N/A	0.0500	mg/L	N/A	
Solids, Total Dissolved	225	AO ≤ 500	2.00	mg/L	N/A	
Solids, Total Dissolved	226	AO ≤ 500	10	mg/L	2024-07-10	

Carbamates

Aldicarb	< 0.0010	N/A	0.0010	mg/L	2024-07-08	
Bendiocarb	< 0.0010	N/A	0.0010	mg/L	2024-07-08	
Carbaryl	< 0.0010	MAC = 0.09	0.0010	mg/L	2024-07-08	
Carbofuran	< 0.0010	MAC = 0.09	0.0010	mg/L	2024-07-08	

Chlorinated Phenols

2-Chlorophenol	< 0.10	N/A	0.10	µg/L	2024-07-10	
3 & 4-Chlorophenol	< 0.10	N/A	0.10	µg/L	2024-07-10	



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GT Hydraulics (24G0431-01) | Matrix: Water | Sampled: 2024-07-03 10:00, Continued

Chlorinated Phenols, Continued

4-Chloro-3-Methylphenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,3-Dichlorophenol	< 0.20	N/A	0.20 µg/L	2024-07-10	
2,4 & 2,5-Dichlorophenol	< 0.20	AO ≤ 0.3	0.20 µg/L	2024-07-10	
2,6-Dichlorophenol	< 0.20	N/A	0.20 µg/L	2024-07-10	
3,4-Dichlorophenol	< 0.20	N/A	0.20 µg/L	2024-07-10	
3,5-Dichlorophenol	< 0.20	N/A	0.20 µg/L	2024-07-10	
2,3,4-Trichlorophenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,3,5-Trichlorophenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,3,6-Trichlorophenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,4,5-Trichlorophenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,4,6-Trichlorophenol	< 0.50	AO ≤ 2	0.50 µg/L	2024-07-10	
3,4,5-Trichlorophenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,3,4,5 & 2,3,5,6-Tetrachlorophenol	< 0.50	N/A	0.50 µg/L	2024-07-10	
2,3,4,6-Tetrachlorophenol	< 0.50	AO ≤ 1	0.50 µg/L	2024-07-10	
Pentachlorophenol	< 0.50	AO ≤ 30	0.50 µg/L	2024-07-10	
Surrogate: 2,4-Dibromophenol	87		60-130 %	2024-07-10	
Surrogate: 2,4,6-Tribromophenol	86		60-130 %	2024-07-10	
Surrogate: Phenol-d6	118		70-130 %	2024-07-10	

General Parameters

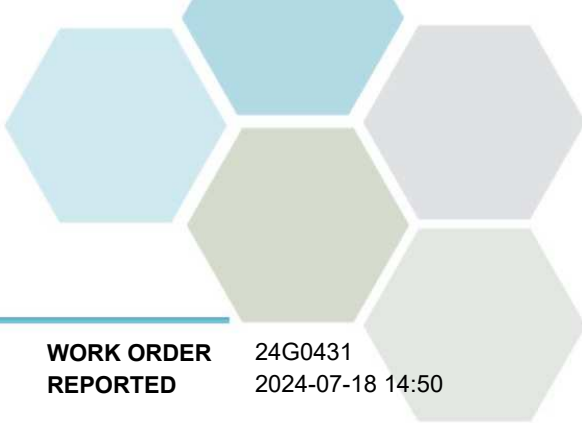
Alkalinity, Total (as CaCO3)	149	N/A	2.0 mg/L	2024-07-08	
Bicarbonate (HCO3)	182	N/A	2.0 mg/L	2024-07-08	
Carbonate (CO3)	< 2.0	N/A	2.0 mg/L	2024-07-08	
Hydroxide (OH)	< 2.0	N/A	2.0 mg/L	2024-07-08	
Ammonia, Total (as N)	0.445	None Required	0.050 mg/L	2024-07-17	
Carbon, Total Organic	6.82	N/A	0.50 mg/L	2024-07-08	
Chlorine, Total	1.37	None Required	0.02 mg/L	2024-07-17	HT2
Chlorine, Free	0.92	N/A	0.02 mg/L	2024-07-17	HT2
Colour, True	< 5.0	AO ≤ 15	5.0 CU	2024-07-04	
Conductivity (EC)	408	N/A	2.0 µS/cm	2024-07-08	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020 mg/L	2024-07-06	
Nitritotriacetic Acid	0.26	MAC = 0.4	0.20 mg/L	2024-07-09	
pH	8.27	7.0-10.5	0.10 pH units	2024-07-08	HT2
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020 mg/L	2024-07-05	
Turbidity	0.17	OG < 1	0.10 NTU	2024-07-05	

Microbiological Parameters

Microcystin, total	< 0.05	MAC = 1.5	0.05 µg/L	2024-07-11	
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Miscellaneous Herbicides

Diquat	< 0.0100	MAC = 0.05	0.0100 mg/L	2024-07-08	
Paraquat	< 0.0050	MAC = 0.007	0.0050 mg/L	2024-07-08	
Glyphosate	< 0.050	MAC = 0.28	0.050 mg/L	2024-07-10	



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Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
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GT Hydraulics (24G0431-01) | Matrix: Water | Sampled: 2024-07-03 10:00, Continued

Miscellaneous Organics

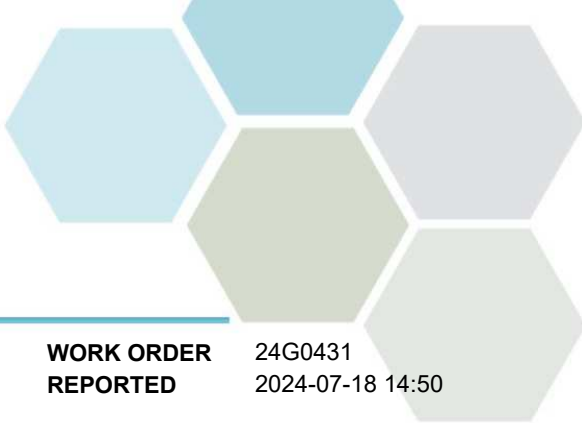
N-Nitrosodimethylamine	< 0.000009	MAC = 0.00004	0.000009	mg/L	2024-07-16	
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Perfluorinated Compounds

Perfluorooctanesulfonate (PFOS)	< 0.200	0.6	0.200	µg/L	2024-07-17	
Perfluorooctanoic acid (PFOA)	< 0.200	0.2	0.200	µg/L	2024-07-17	
Perfluoropentanoic acid (PFPeA)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluorobutanesulfonate (PFBS)	< 10.0	N/A	10.0	µg/L	2024-07-17	
Perfluorohexanoic acid (PFHxA)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluoroheptanoic acid (PFHpA)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluorohexanesulfonate (PFHxS)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluoroheptane sulfonate (PFHpS)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluorononanoic acid (PFNA)	< 0.020	N/A	0.020	µg/L	2024-07-17	
Perfluorodecanoic acid (PFDA)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluoroundecanoic acid (PFUnA)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluorodecanesulfonate (PFDS)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluorododecanoic acid (PFDoA)	< 0.200	N/A	0.200	µg/L	2024-07-17	
Perfluorooctanesulfonamide (PFOSA)	< 1.00	N/A	1.00	µg/L	2024-07-17	
Perfluorotridecanoic acid (PFTrA)	< 1.00	N/A	1.00	µg/L	2024-07-17	
Perfluorobutanoic acid (PFBA)	< 25.0	N/A	25.0	µg/L	2024-07-17	
6:2 Fluorotelomer sulfonate (6:2FTS)	< 0.200	N/A	0.200	µg/L	2024-07-17	
8:2 Fluorotelomer sulfonate (8:2FTS)	< 0.200	N/A	0.200	µg/L	2024-07-17	

Pesticides, Herbicides, and Fungicides

Alachlor	< 0.100	N/A	0.100	µg/L	2024-07-12	
Aldrin	< 0.006	N/A	0.006	µg/L	2024-07-12	
Atrazine and metabolites	< 0.100	MAC = 5	0.100	µg/L	2024-07-12	
Azinphos-methyl	< 0.200	MAC = 20	0.200	µg/L	2024-07-12	
alpha-BHC	< 0.010	N/A	0.010	µg/L	2024-07-12	
beta-BHC	< 0.050	N/A	0.050	µg/L	2024-07-12	
delta-BHC	< 0.050	N/A	0.050	µg/L	2024-07-12	
gamma-BHC (Lindane)	< 0.050	N/A	0.050	µg/L	2024-07-12	
Bromacil	< 0.100	N/A	0.100	µg/L	2024-07-12	
Bromoxynil	< 0.200	MAC = 30	0.200	µg/L	2024-07-12	
Butachlor	< 0.020	N/A	0.020	µg/L	2024-07-12	
Captan	< 0.100	N/A	0.100	µg/L	2024-07-12	
Chlordane (cis + trans)	< 0.050	N/A	0.050	µg/L	2024-07-12	
Chlorothalonil	< 0.050	N/A	0.050	µg/L	2024-07-12	
Chlorpyrifos	< 0.010	MAC = 90	0.010	µg/L	2024-07-12	
Cyanazine	< 0.100	N/A	0.100	µg/L	2024-07-12	
DDT, Total	< 0.010	N/A	0.010	µg/L	2024-07-12	
Deltamethrin	< 0.100	N/A	0.100	µg/L	2024-07-12	
Diazinon	< 0.020	MAC = 20	0.020	µg/L	2024-07-12	
Dichlorvos	< 0.100	N/A	0.100	µg/L	2024-07-12	
Diclofop-methyl	< 0.100	MAC = 9	0.100	µg/L	2024-07-12	



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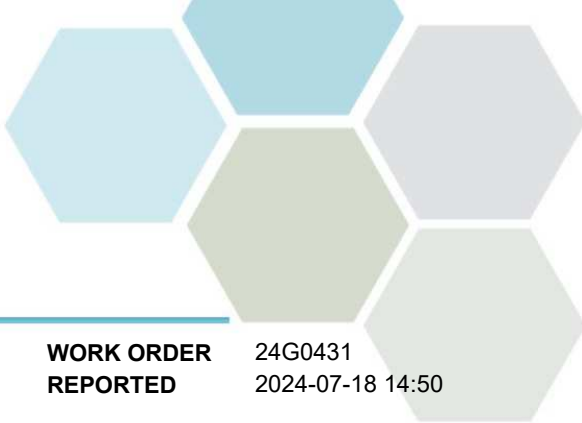
GT Hydraulics (24G0431-01) | Matrix: Water | Sampled: 2024-07-03 10:00, Continued

Pesticides, Herbicides, and Fungicides, Continued

Dieldrin	< 0.010	N/A	0.010	µg/L	2024-07-12	
Dimethoate	< 0.200	MAC = 20	0.200	µg/L	2024-07-12	
Disulfoton	< 0.100	N/A	0.100	µg/L	2024-07-12	
Diuron	< 0.200	MAC = 150	0.200	µg/L	2024-07-12	
Endosulfan I + II	< 0.010	N/A	0.010	µg/L	2024-07-12	
Endosulfan sulfate	< 0.050	N/A	0.050	µg/L	2024-07-12	
Endrin	< 0.020	N/A	0.020	µg/L	2024-07-12	
Endrin aldehyde	< 0.020	N/A	0.020	µg/L	2024-07-12	
Endrin ketone	< 0.020	N/A	0.020	µg/L	2024-07-12	
Fenchlorphos (Ronnell)	< 0.100	N/A	0.100	µg/L	2024-07-12	
Heptachlor	< 0.010	N/A	0.010	µg/L	2024-07-12	
Heptachlor epoxide	< 0.010	N/A	0.010	µg/L	2024-07-12	
Linuron	< 0.050	N/A	0.050	µg/L	2024-07-12	
Malathion	< 0.100	MAC = 290	0.100	µg/L	2024-07-12	
Methoxychlor	< 0.050	N/A	0.050	µg/L	2024-07-12	
Methyl parathion	< 0.100	N/A	0.100	µg/L	2024-07-12	
Metolachlor	< 0.100	MAC = 50	0.100	µg/L	2024-07-12	
Metribuzin	< 0.200	MAC = 80	0.200	µg/L	2024-07-12	
Parathion	< 0.100	N/A	0.100	µg/L	2024-07-12	
Pentachloronitrobenzene	< 0.100	N/A	0.100	µg/L	2024-07-12	
Permethrin	< 0.010	N/A	0.010	µg/L	2024-07-12	
Phorate	< 0.100	MAC = 2	0.100	µg/L	2024-07-12	
Prometon	< 0.300	N/A	0.300	µg/L	2024-07-12	
Prometryne	< 0.100	N/A	0.100	µg/L	2024-07-12	
Simazine	< 0.200	MAC = 10	0.200	µg/L	2024-07-12	
Sulfotep	< 0.100	N/A	0.100	µg/L	2024-07-12	
Tebuthiuron	< 0.200	N/A	0.200	µg/L	2024-07-12	
Temephos (Abate)	< 0.500	N/A	0.500	µg/L	2024-07-12	
Terbufos	< 0.100	MAC = 1	0.100	µg/L	2024-07-12	
Triallate	< 0.100	N/A	0.100	µg/L	2024-07-12	
Trifluralin	< 0.200	MAC = 45	0.200	µg/L	2024-07-12	
Surrogate: Tributyl Phosphate	93		50-140	%	2024-07-12	
Surrogate: 4-chloro-3-nitrobenzotrifluoride	89		50-140	%	2024-07-12	

Polycyclic Aromatic Hydrocarbons (PAH)

Acenaphthene	< 0.050	N/A	0.050	µg/L	2024-07-04	
Acenaphthylene	< 0.200	N/A	0.200	µg/L	2024-07-04	
Acridine	< 0.050	N/A	0.050	µg/L	2024-07-04	
Anthracene	< 0.010	N/A	0.010	µg/L	2024-07-04	
Benz(a)anthracene	< 0.010	N/A	0.010	µg/L	2024-07-04	
Benzo(a)pyrene	< 0.010	MAC = 0.04	0.010	µg/L	2024-07-04	
Benzo(b+j)fluoranthene	< 0.050	N/A	0.050	µg/L	2024-07-04	
Benzo(g,h,i)perylene	< 0.050	N/A	0.050	µg/L	2024-07-04	



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Polycyclic Aromatic Hydrocarbons (PAH), Continued

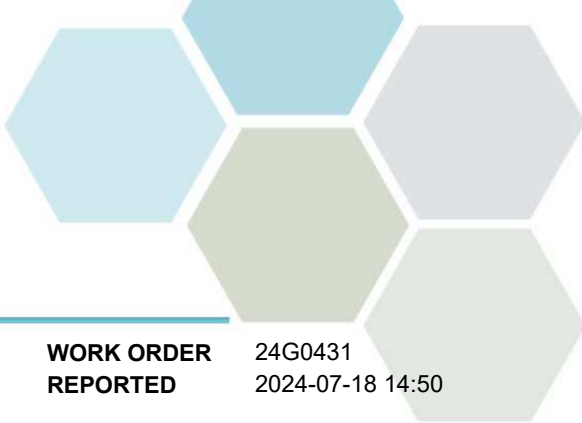
Benzo(k)fluoranthene	< 0.050	N/A	0.050	µg/L	2024-07-04	
2-Chloronaphthalene	< 0.100	N/A	0.100	µg/L	2024-07-04	
Chrysene	< 0.050	N/A	0.050	µg/L	2024-07-04	
Dibenz(a,h)anthracene	< 0.010	N/A	0.010	µg/L	2024-07-04	
Fluoranthene	< 0.030	N/A	0.030	µg/L	2024-07-04	
Fluorene	< 0.050	N/A	0.050	µg/L	2024-07-04	
Indeno(1,2,3-cd)pyrene	< 0.050	N/A	0.050	µg/L	2024-07-04	
1-Methylnaphthalene	< 0.100	N/A	0.100	µg/L	2024-07-04	
2-Methylnaphthalene	< 0.100	N/A	0.100	µg/L	2024-07-04	
Naphthalene	< 0.200	N/A	0.200	µg/L	2024-07-04	
Phenanthrene	< 0.100	N/A	0.100	µg/L	2024-07-04	
Pyrene	< 0.020	N/A	0.020	µg/L	2024-07-04	
Quinoline	< 0.050	N/A	0.050	µg/L	2024-07-04	
Surrogate: Naphthalene-d8	97		50-140	%	2024-07-04	
Surrogate: Perylene-d12	101		50-140	%	2024-07-04	

Total Metals

Aluminum, total	0.0477	OG < 0.1	0.0050	mg/L	2024-07-08	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2024-07-08	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	mg/L	2024-07-08	
Barium, total	0.0946	MAC = 2	0.0050	mg/L	2024-07-08	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2024-07-08	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	mg/L	2024-07-08	
Calcium, total	48.1	None Required	0.20	mg/L	2024-07-08	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-07-08	
Copper, total	0.00854	MAC = 2	0.00040	mg/L	2024-07-08	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2024-07-08	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2024-07-08	
Magnesium, total	14.7	None Required	0.010	mg/L	2024-07-08	
Manganese, total	0.00274	MAC = 0.12	0.00020	mg/L	2024-07-08	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2024-07-07	
Potassium, total	2.38	N/A	0.10	mg/L	2024-07-08	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2024-07-08	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2024-07-08	
Sodium, total	14.1	AO ≤ 200	0.10	mg/L	2024-07-08	
Strontium, total	0.333	MAC = 7	0.0010	mg/L	2024-07-08	
Uranium, total	0.000074	MAC = 0.02	0.000020	mg/L	2024-07-08	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2024-07-08	

Volatile Organic Compounds (VOC)

Benzene	< 0.5	MAC = 5	0.5	µg/L	2024-07-04	
Bromodichloromethane	2.7	N/A	1.0	µg/L	2024-07-04	
Bromoform	< 1.0	N/A	1.0	µg/L	2024-07-04	
Carbon tetrachloride	< 0.5	MAC = 2	0.5	µg/L	2024-07-04	



TEST RESULTS

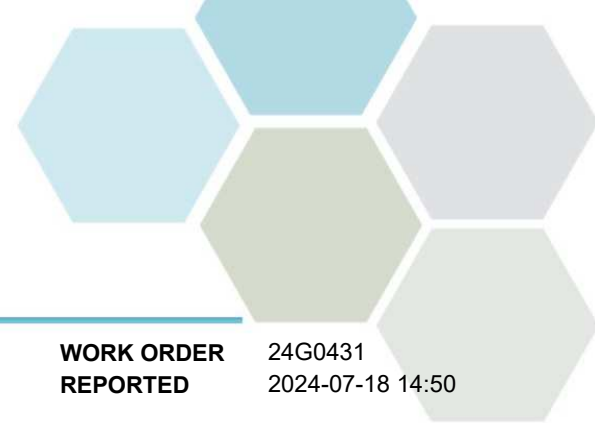
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Analyte	Result	Guideline	RL Units	Analyzed	Qualifier
GT Hydraulics (24G0431-01) Matrix: Water Sampled: 2024-07-03 10:00, Continued					
<i>Volatile Organic Compounds (VOC), Continued</i>					
Chlorobenzene	< 1.0	AO ≤ 30	1.0 µg/L	2024-07-04	
Chloroethane	< 2.0	N/A	2.0 µg/L	2024-07-04	
Chloroform	56.3	N/A	1.0 µg/L	2024-07-04	
Dibromochloromethane	< 1.0	N/A	1.0 µg/L	2024-07-04	
1,2-Dibromoethane	< 0.3	N/A	0.3 µg/L	2024-07-04	
Dibromomethane	< 1.0	N/A	1.0 µg/L	2024-07-04	
1,2-Dichlorobenzene	< 0.5	AO ≤ 3	0.5 µg/L	2024-07-04	
1,3-Dichlorobenzene	< 1.0	N/A	1.0 µg/L	2024-07-04	
1,4-Dichlorobenzene	< 1.0	AO ≤ 1	1.0 µg/L	2024-07-04	
1,2-Dichloroethane	< 1.0	MAC = 5	1.0 µg/L	2024-07-04	
1,1-Dichloroethylene	< 1.0	MAC = 14	1.0 µg/L	2024-07-04	
cis-1,2-Dichloroethylene	< 1.0	N/A	1.0 µg/L	2024-07-04	
trans-1,2-Dichloroethylene	< 1.0	N/A	1.0 µg/L	2024-07-04	
Dichloromethane	< 3.0	MAC = 50	3.0 µg/L	2024-07-04	
1,2-Dichloropropane	< 1.0	N/A	1.0 µg/L	2024-07-04	
1,3-Dichloropropene (cis + trans)	< 1.0	N/A	1.0 µg/L	2024-07-04	
Ethylbenzene	< 1.0	AO ≤ 1.6	1.0 µg/L	2024-07-04	
Methyl tert-butyl ether	< 1.0	AO ≤ 15	1.0 µg/L	2024-07-04	
Styrene	< 1.0	N/A	1.0 µg/L	2024-07-04	
1,1,1,2-Tetrachloroethane	< 0.5	N/A	0.5 µg/L	2024-07-04	
Tetrachloroethylene	< 1.0	MAC = 10	1.0 µg/L	2024-07-04	
Toluene	< 0.5	MAC = 60	0.5 µg/L	2024-07-04	
1,1,1-Trichloroethane	< 1.0	N/A	1.0 µg/L	2024-07-04	
1,1,2-Trichloroethane	< 1.0	N/A	1.0 µg/L	2024-07-04	
Trichloroethylene	< 1.0	MAC = 5	1.0 µg/L	2024-07-04	
Trichlorofluoromethane	< 1.0	N/A	1.0 µg/L	2024-07-04	
Vinyl chloride	< 1.0	MAC = 2	1.0 µg/L	2024-07-04	
Xylenes (total)	< 2.0	AO ≤ 20	2.0 µg/L	2024-07-04	
Surrogate: Toluene-d8	110		70-130 %	2024-07-04	
Surrogate: 4-Bromofluorobenzene	99		70-130 %	2024-07-04	

Sample Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.



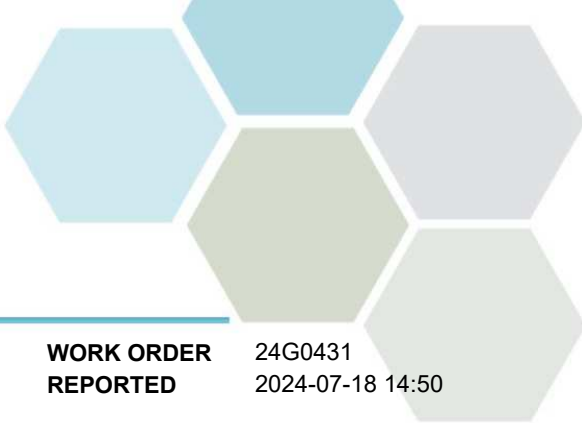
APPENDIX 1: SUPPORTING INFORMATION

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Analysis Description	Method Ref.	Technique	Accredited	Location
Acid Herbicides in Water in Water	In-House	N/A	✓	Richmond
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	✓	Edmonton
Ammonia, Total in Water	SM 4500-NH3 D* (2021)	Ion Selective Electrode	✓	Edmonton
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Edmonton
Bromate in Water	SM 4110 B (2020)	Ion Chromatography	✓	Sublet
Carbamates in Water	EPA 531.2*	Direct Aqueous Injection HPLC with Post-Column Derivatization and Fluorescence Detection	✓	Richmond
Carbon, Total Organic in Water	SM 5310 B (2022)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chlorine, Free in Water	SM 4500-Cl G (2021)	Colorimetry (DPD)	✓	Edmonton
Chlorine, Total in Water	SM 4500-Cl G (2021)	Colorimetry (DPD)	✓	Edmonton
Colour, True in Water	SM 2120 C (2021)	Spectrophotometry (456 nm)	✓	Edmonton
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Edmonton
Cyanide, SAD in Water	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Cyanobacterial Toxins in Water	EPA 546*	Adda Enzyme-Linked Immunosorbent Assay (ELISA)	✓	Sublet
Diquat/Paraquat in Water	EPA 549.2*	Liquid-Solid Extraction and HPLC-DAD	✓	Richmond
Glyphosate in Water	EPA 547*	Direct Aqueous Injection HPLC with Post-Column Derivatization and Fluorescence Detection	✓	Richmond
Hardness in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Ion Balance in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Mercury, total in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	✓	Richmond
Nitrate+Nitrite in Water	SM 2340 B (2021)	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	✓	N/A
Nitritotriacetic Acid in Water	EPA 430.1	Manual Colorimetry (Zinc-Zincon)		Kelowna
N-Nitrosodimethylamine in Water	In-House	N/A	✓	Sublet
Perfluorinated Compounds in Water	ASTM D7979-17	LC-MS/MS	✓	Richmond
Pesticides in Water	EPA 3510C* / EPA 8270D*	Liquid-Liquid DCM Extraction (B/N) / GC-MSD (SIM)	✓	Richmond
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Edmonton
Phenols, Chlorinated in Water	EPA 3510C* / EPA 8270D	Liquid-Liquid DCM Extraction (Acidic) / GC-MSD (SIM)	✓	Richmond
Polycyclic Aromatic Hydrocarbons in Water	EPA 3511* / EPA 8270D	Hexane MicroExtraction (Base/Neutral) / GC-MSD (SIM)		Edmonton
Solids, Total Dissolved in Water	SM 1030 E (2021)	SM 1030 E	✓	N/A
Sulfide, Total in Water	SM 4500-S2 D* (2021)	Colorimetry (Methylene Blue)	✓	Edmonton
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	✓	Richmond
Turbidity in Water	SM 2130 B (2020)	Nephelometry	✓	Edmonton
Volatile Organic Compounds in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)		Edmonton

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method



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Glossary of Terms:

RL	Reporting Limit (default)
%	Percent
<	Less than the specified Reporting Limit (RL) - the actual RL may be higher than the default RL due to various factors
AO	Aesthetic Objective
CU	Colour Units (referenced against a platinum cobalt standard)
MAC	Maximum Acceptable Concentration (health based)
mg/L	Milligrams per litre
NTU	Nephelometric Turbidity Units
OG	Operational Guideline (treated water)
pH units	pH < 7 = acidic, pH > 7 = basic
µg/L	Micrograms per litre
µS/cm	Microsiemens per centimetre
ASTM	ASTM International Test Methods
EPA	United States Environmental Protection Agency Test Methods
SM	Standard Methods for the Examination of Water and Wastewater, American Public Health Association

General Comments:

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