

CERTIFICATE OF ANALYSIS

REPORTED TO Newell Regional Services Corporation
P.O. Box 638
Brooks, AB T1R 1B6

ATTENTION Kole Steinley

PO NUMBER 4199

PROJECT Schedule 4

PROJECT INFO Water Treatment Plant

WORK ORDER 21G2679

RECEIVED / TEMP 2021-07-22 08:30 / 11.3°C

REPORTED 2021-08-06 13:58

COC NUMBER No Number

Introduction:

CARO Analytical Services is a testing laboratory full of smart, engaged scientists driven to make the world a safer and healthier place. Through our clients' projects we become an essential element for a better world. We employ methods conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts. CARO is accredited by the Canadian Association for Laboratories Accreditation (CALA) to ISO/IEC 17025:2017 for specific tests listed in the scope of accreditation approved by CALA.

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



It's simple. We figure the more you enjoy working with our fun and engaged team members; the more likely you are to give us continued opportunities to support you.

Ahead of the Curve



Through research, regulation knowledge, and instrumentation, we are your analytical centre for the technical knowledge you need, BEFORE you need it, so you can stay up to date and in the know.

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

Authorized By:

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Junior Account Manager



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TEST RESULTS

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Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	Guideline	RL	Units	Analyzed	Qualifier
WTP Header #1 (21G2679-01) Matrix: Water Sampled: 2021-07-21 12:20						PRES
Acid Herbicides						
2,4-D	< 0.10	MAC = 100	0.10	µg/L	2021-07-29	
MCPA	< 0.02	MAC = 100	0.02	µg/L	2021-07-29	
2,4,5-T	< 0.10	N/A	0.10	µg/L	2021-07-29	
Dicamba	< 0.10	MAC = 120	0.10	µg/L	2021-07-29	
Picloram	< 0.10	MAC = 190	0.10	µg/L	2021-07-29	
Dinoseb	< 0.10	N/A	0.10	µg/L	2021-07-29	
Anions						
Bromate	< 0.010	MAC = 0.01	0.010	mg/L	2021-07-30	
Chlorate	< 0.50	MAC = 1	0.50	mg/L	2021-07-29	
Chloride	15.0	AO ≤ 250	0.50	mg/L	2021-07-22	
Chlorite	< 0.50	MAC = 1	0.50	mg/L	2021-07-29	
Fluoride	< 0.10	MAC = 1.5	0.10	mg/L	2021-07-22	
Nitrate (as N)	< 0.050	MAC = 10	0.050	mg/L	2021-07-22	
Nitrite (as N)	< 0.050	MAC = 1	0.050	mg/L	2021-07-22	
Sulfate	49.5	AO ≤ 500	1.0	mg/L	2021-07-22	
Calculated Parameters						
Chloramines	0.170	MAC = 3	0.0400	mg/L	N/A	
Total Trihalomethanes	0.0420	MAC = 0.1	0.00400	mg/L	N/A	
Hardness, Total (as CaCO3)	166	None Required	0.541	mg/L	N/A	
Solids, Total Dissolved	220	AO ≤ 500	3.35	mg/L	N/A	
Chlorinated Phenols						
2-Chlorophenol	< 0.10	N/A	0.10	µg/L	2021-07-30	
3 & 4-Chlorophenol	< 0.10	N/A	0.10	µg/L	2021-07-30	
4-Chloro-3-Methylphenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,3-Dichlorophenol	< 0.20	N/A	0.20	µg/L	2021-07-30	
2,4 & 2,5-Dichlorophenol	< 0.20	AO ≤ 0.3	0.20	µg/L	2021-07-30	
2,6-Dichlorophenol	< 0.20	N/A	0.20	µg/L	2021-07-30	
3,4-Dichlorophenol	< 0.20	N/A	0.20	µg/L	2021-07-30	
3,5-Dichlorophenol	< 0.20	N/A	0.20	µg/L	2021-07-30	
2,3,4-Trichlorophenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,3,5-Trichlorophenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,3,6-Trichlorophenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,4,5-Trichlorophenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,4,6-Trichlorophenol	< 0.50	AO ≤ 2	0.50	µg/L	2021-07-30	
3,4,5-Trichlorophenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,3,4,5 & 2,3,5,6-Tetrachlorophenol	< 0.50	N/A	0.50	µg/L	2021-07-30	
2,3,4,6-Tetrachlorophenol	< 0.50	AO ≤ 1	0.50	µg/L	2021-07-30	
Pentachlorophenol	< 0.50	AO ≤ 30	0.50	µg/L	2021-07-30	
Surrogate: 2,4-Dibromophenol	37		60-130	%	2021-07-30	S09
Surrogate: 2,4,6-Tribromophenol	28		60-130	%	2021-07-30	S09

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2021-08-06 13:58

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WTP Header #1 (21G2679-01) Matrix: Water Sampled: 2021-07-21 12:20, Continued						PRES
General Parameters						
Alkalinity, Total (as CaCO ₃)	130	N/A	2.0	mg/L	2021-07-23	
Bicarbonate (HCO ₃)	159	N/A	2.0	mg/L	2021-07-23	
Carbonate (CO ₃)	< 2.0	N/A	2.0	mg/L	2021-07-23	
Hydroxide (OH)	< 2.0	N/A	2.0	mg/L	2021-07-23	
Ammonia, Total (as N)	0.104	None Required	0.050	mg/L	2021-07-28	
Carbon, Total Organic	2.92	N/A	0.50	mg/L	2021-07-27	
Chlorine, Total	1.47	None Required	0.02	mg/L	2021-07-23	HT2
Chlorine, Free	1.30	N/A	0.02	mg/L	2021-07-23	HT2
Colour, True	< 5.0	AO ≤ 15	5.0	CU	2021-07-23	
Conductivity (EC)	375	N/A	2.0	µS/cm	2021-07-28	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2021-07-29	
Nitrilotriacetic Acid	< 0.20	MAC = 0.4	0.20	mg/L	2021-07-29	HT1
pH	7.75	7.0-10.5	0.10	pH units	2025-07-23	HT2
Sulfide, Total	< 0.020	AO ≤ 0.05	0.020	mg/L	2021-07-23	
Turbidity	< 0.10	OG < 1	0.10	NTU	2021-07-23	
Miscellaneous Herbicides						
Glyphosate	< 0.050	MAC = 0.28	0.050	mg/L	2021-08-03	
Miscellaneous Organics						
N-Nitrosodimethylamine	0.0035	MAC = 0.04	0.0016	µg/L	2021-08-04	
Pesticides, Herbicides, and Fungicides						
Alachlor	< 0.100	N/A	0.100	µg/L	2021-07-31	
Aldrin	< 0.006	N/A	0.006	µg/L	2021-07-31	
Atrazine and metabolites	< 0.100	MAC = 5	0.100	µg/L	2021-07-31	
Azinphos-methyl	< 0.200	MAC = 20	0.200	µg/L	2021-07-31	
alpha-BHC	< 0.010	N/A	0.010	µg/L	2021-07-31	
beta-BHC	< 0.050	N/A	0.050	µg/L	2021-07-31	
delta-BHC	< 0.050	N/A	0.050	µg/L	2021-07-31	
gamma-BHC (Lindane)	< 0.050	N/A	0.050	µg/L	2021-07-31	
Bromacil	< 0.100	N/A	0.100	µg/L	2021-07-31	
Bromoxynil	< 0.200	MAC = 5	0.200	µg/L	2021-07-31	
Butachlor	< 0.020	N/A	0.020	µg/L	2021-07-31	
Captan	< 0.100	N/A	0.100	µg/L	2021-07-31	
Chlordane (cis + trans)	< 0.050	N/A	0.050	µg/L	2021-07-31	
Chlorothalonil	< 0.050	N/A	0.050	µg/L	2021-07-31	
Chlorpyrifos	< 0.010	MAC = 90	0.010	µg/L	2021-07-31	
Cyanazine	< 0.100	N/A	0.100	µg/L	2021-07-31	
DDT, Total	< 0.010	N/A	0.010	µg/L	2021-07-31	
Deltamethrin	< 0.100	N/A	0.100	µg/L	2021-07-31	
Diazinon	< 0.020	MAC = 20	0.020	µg/L	2021-07-31	
Dichlorvos	< 0.100	N/A	0.100	µg/L	2021-07-31	
Diclofop-methyl	< 0.100	MAC = 9	0.100	µg/L	2021-07-31	

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WTP Header #1 (21G2679-01) | Matrix: Water | Sampled: 2021-07-21 12:20, Continued

PRES

Pesticides, Herbicides, and Fungicides, Continued

Dieldrin	< 0.010	N/A	0.010	µg/L	2021-07-31	
Dimethoate	< 0.200	MAC = 20	0.200	µg/L	2021-07-31	
Disulfoton	< 0.100	N/A	0.100	µg/L	2021-07-31	
Diuron	< 0.200	MAC = 150	0.200	µg/L	2021-07-31	
Endosulfan I + II	< 0.010	N/A	0.010	µg/L	2021-07-31	
Endosulfan sulfate	< 0.050	N/A	0.050	µg/L	2021-07-31	
Endrin	< 0.020	N/A	0.020	µg/L	2021-07-31	
Endrin aldehyde	< 0.020	N/A	0.020	µg/L	2021-07-31	
Endrin ketone	< 0.020	N/A	0.020	µg/L	2021-07-31	
Fenchlorphos (Ronnell)	< 0.100	N/A	0.100	µg/L	2021-07-31	
Heptachlor	< 0.010	N/A	0.010	µg/L	2021-07-31	
Heptachlor epoxide	< 0.010	N/A	0.010	µg/L	2021-07-31	
Linuron	< 0.050	N/A	0.050	µg/L	2021-07-31	
Malathion	< 0.100	MAC = 190	0.100	µg/L	2021-07-31	
Methoxychlor	< 0.050	N/A	0.050	µg/L	2021-07-31	
Methyl parathion	< 0.100	N/A	0.100	µg/L	2021-07-31	
Metolachlor	< 0.100	MAC = 50	0.100	µg/L	2021-07-31	
Metribuzin	< 0.200	MAC = 80	0.200	µg/L	2021-07-31	
Parathion	< 0.100	N/A	0.100	µg/L	2021-07-31	
Pentachloronitrobenzene	< 0.100	N/A	0.100	µg/L	2021-07-31	
Permethrin	< 0.010	N/A	0.010	µg/L	2021-07-31	
Phorate	< 0.100	MAC = 2	0.100	µg/L	2021-07-31	
Prometon	< 0.300	N/A	0.300	µg/L	2021-07-31	
Prometryne	< 0.100	N/A	0.100	µg/L	2021-07-31	
Simazine	< 0.200	MAC = 10	0.200	µg/L	2021-07-31	
Sulfotep	< 0.100	N/A	0.100	µg/L	2021-07-31	
Tebuthiuron	< 0.200	N/A	0.200	µg/L	2021-07-31	
Temephos (Abate)	< 0.500	N/A	0.500	µg/L	2021-07-31	
Terbufos	< 0.100	MAC = 1	0.100	µg/L	2021-07-31	
Triallate	< 0.100	N/A	0.100	µg/L	2021-07-31	
Trifluralin	< 0.200	MAC = 45	0.200	µg/L	2021-07-31	
Surrogate: Tributyl Phosphate	73		50-140	%	2021-07-31	
Surrogate: 4-chloro-3-nitrobenzotrifluoride	60		50-140	%	2021-07-31	

Polycyclic Aromatic Hydrocarbons (PAH)

Acenaphthene	< 0.050	N/A	0.050	µg/L	2021-07-27	
Acenaphthylene	< 0.200	N/A	0.200	µg/L	2021-07-27	
Acridine	< 0.050	N/A	0.050	µg/L	2021-07-27	
Anthracene	< 0.010	N/A	0.010	µg/L	2021-07-27	
Benz(a)anthracene	< 0.010	N/A	0.010	µg/L	2021-07-27	
Benzo(a)pyrene	< 0.010	MAC = 0.04	0.010	µg/L	2021-07-27	
Benzo(b+j)fluoranthene	< 0.050	N/A	0.050	µg/L	2021-07-27	
Benzo(g,h,i)perylene	< 0.050	N/A	0.050	µg/L	2021-07-27	

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2021-08-06 13:58

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WTP Header #1 (21G2679-01) | Matrix: Water | Sampled: 2021-07-21 12:20, Continued

PRES

Polycyclic Aromatic Hydrocarbons (PAH), Continued

Benzo(k)fluoranthene	< 0.050	N/A	0.050	µg/L	2021-07-27	
2-Chloronaphthalene	< 0.100	N/A	0.100	µg/L	2021-07-27	
Chrysene	< 0.050	N/A	0.050	µg/L	2021-07-27	
Dibenz(a,h)anthracene	< 0.010	N/A	0.010	µg/L	2021-07-27	
Fluoranthene	< 0.030	N/A	0.030	µg/L	2021-07-27	
Fluorene	< 0.050	N/A	0.050	µg/L	2021-07-27	
Indeno(1,2,3-cd)pyrene	< 0.050	N/A	0.050	µg/L	2021-07-27	
1-Methylnaphthalene	< 0.100	N/A	0.100	µg/L	2021-07-27	
2-Methylnaphthalene	< 0.100	N/A	0.100	µg/L	2021-07-27	
Naphthalene	< 0.200	N/A	0.200	µg/L	2021-07-27	
Phenanthrene	< 0.100	N/A	0.100	µg/L	2021-07-27	
Pyrene	< 0.020	N/A	0.020	µg/L	2021-07-27	
Quinoline	< 0.050	N/A	0.050	µg/L	2021-07-27	
Surrogate: Acridine-d9	69		50-140	%	2021-07-27	
Surrogate: Naphthalene-d8	69		50-140	%	2021-07-27	
Surrogate: Perylene-d12	66		50-140	%	2021-07-27	

Total Metals

Aluminum, total	0.131	OG < 0.1	0.0050	mg/L	2021-07-28	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	mg/L	2021-07-28	
Arsenic, total	0.00171	MAC = 0.01	0.00050	mg/L	2021-07-28	
Barium, total	0.0634	MAC = 2	0.0050	mg/L	2021-07-28	
Boron, total	< 0.0500	MAC = 5	0.0500	mg/L	2021-07-28	
Cadmium, total	< 0.000010	MAC = 0.005	0.000010	mg/L	2021-07-28	
Calcium, total	37.1	None Required	0.20	mg/L	2021-07-28	
Chromium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2021-07-28	
Copper, total	0.00055	MAC = 2	0.00040	mg/L	2021-07-28	
Iron, total	< 0.010	AO ≤ 0.3	0.010	mg/L	2021-07-28	
Lead, total	< 0.00020	MAC = 0.005	0.00020	mg/L	2021-07-28	
Magnesium, total	17.9	None Required	0.010	mg/L	2021-07-28	
Manganese, total	0.00068	MAC = 0.12	0.00020	mg/L	2021-07-28	
Mercury, total	< 0.000010	MAC = 0.001	0.000010	mg/L	2021-07-28	
Potassium, total	1.91	N/A	0.10	mg/L	2021-07-28	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	mg/L	2021-07-28	
Silver, total	< 0.000050	None Required	0.000050	mg/L	2021-07-28	
Sodium, total	18.8	AO ≤ 200	0.10	mg/L	2021-07-28	
Strontium, total	0.207	7	0.0010	mg/L	2021-07-28	
Uranium, total	0.000623	MAC = 0.02	0.000020	mg/L	2021-07-28	
Zinc, total	< 0.0040	AO ≤ 5	0.0040	mg/L	2021-07-28	

Volatile Organic Compounds (VOC)

Benzene	< 0.5	MAC = 5	0.5	µg/L	2021-07-30	
Bromodichloromethane	5.5	N/A	1.0	µg/L	2021-07-30	
Bromoform	7.5	N/A	1.0	µg/L	2021-07-30	

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<i>Volatile Organic Compounds (VOC), Continued</i>						
Carbon tetrachloride	< 0.5	MAC = 2	0.5	µg/L	2021-07-30	
Chlorobenzene	< 1.0	AO ≤ 30	1.0	µg/L	2021-07-30	
Chloroethane	< 2.0	N/A	2.0	µg/L	2021-07-30	
Chloroform	26.9	N/A	1.0	µg/L	2021-07-30	
Dibromochloromethane	2.0	N/A	1.0	µg/L	2021-07-30	
1,2-Dibromoethane	< 0.3	N/A	0.3	µg/L	2021-07-30	
Dibromomethane	< 1.0	N/A	1.0	µg/L	2021-07-30	
1,2-Dichlorobenzene	< 0.5	AO ≤ 3	0.5	µg/L	2021-07-30	
1,3-Dichlorobenzene	< 1.0	N/A	1.0	µg/L	2021-07-30	
1,4-Dichlorobenzene	< 1.0	AO ≤ 1	1.0	µg/L	2021-07-30	
1,1-Dichloroethane	< 1.0	N/A	1.0	µg/L	2021-07-30	
1,2-Dichloroethane	< 1.0	MAC = 5	1.0	µg/L	2021-07-30	
1,1-Dichloroethylene	< 1.0	MAC = 14	1.0	µg/L	2021-07-30	
cis-1,2-Dichloroethylene	< 1.0	N/A	1.0	µg/L	2021-07-30	
trans-1,2-Dichloroethylene	< 1.0	N/A	1.0	µg/L	2021-07-30	
Dichloromethane	< 3.0	MAC = 50	3.0	µg/L	2021-07-30	
1,2-Dichloropropane	< 1.0	N/A	1.0	µg/L	2021-07-30	
1,3-Dichloropropene (cis + trans)	< 1.0	N/A	1.0	µg/L	2021-07-30	
Ethylbenzene	< 1.0	AO ≤ 1.6	1.0	µg/L	2021-07-30	
Methyl tert-butyl ether	< 1.0	AO ≤ 15	1.0	µg/L	2021-07-30	
Styrene	< 1.0	N/A	1.0	µg/L	2021-07-30	
1,1,2,2-Tetrachloroethane	< 0.5	N/A	0.5	µg/L	2021-07-30	
Tetrachloroethylene	< 1.0	MAC = 10	1.0	µg/L	2021-07-30	
Toluene	< 1.0	AO ≤ 24	1.0	µg/L	2021-07-30	
1,1,1-Trichloroethane	< 1.0	N/A	1.0	µg/L	2021-07-30	
1,1,2-Trichloroethane	< 1.0	N/A	1.0	µg/L	2021-07-30	
Trichloroethylene	< 1.0	MAC = 5	1.0	µg/L	2021-07-30	
Trichlorofluoromethane	< 1.0	N/A	1.0	µg/L	2021-07-30	
Vinyl chloride	< 1.0	MAC = 2	1.0	µg/L	2021-07-30	
Xylenes (total)	< 2.0	AO ≤ 20	2.0	µg/L	2021-07-30	
Surrogate: Toluene-d8	6		70-130	%	2021-07-30	S02
Surrogate: 4-Bromofluorobenzene	97		70-130	%	2021-07-30	

Sample Qualifiers:

HT1	The sample was prepared and/or analyzed past the recommended holding time.
HT2	The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.
PRES	Sample has been preserved for glyph and herb in the laboratory and the holding time has been extended.
S02	Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.
S09	The surrogate recovery for this sample is outside of established control limits No sample left for re-test. Results likely not affected.

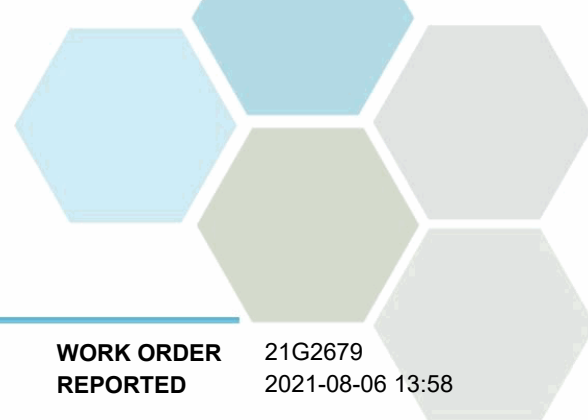
APPENDIX 1: SUPPORTING INFORMATION

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2021-08-06 13:58

Analysis Description	Method Ref.	Technique	Accredited	Location
Acid Herbicides in Water in Water	In-House	N/A	✓	Richmond
Alkalinity in Water	SM 2320 B* (2017)	Titration with H2SO4	✓	Edmonton
Ammonia, Total in Water	SM 4500-NH3 D* (2017)	Ion Selective Electrode	✓	Edmonton
Anions in Water	SM 4110 B (2017)	Ion Chromatography	✓	Edmonton
Bromate in Water	SM 4110 B (2017)	Ion Chromatography	✓	Sublet
Carbon, Total Organic in Water	SM 5310 B (2017)	Combustion, Infrared CO2 Detection	✓	Kelowna
Chlorine, Free in Water	SM 4500-Cl G (2017)	Colorimetry (DPD)	✓	Edmonton
Chlorine, Total in Water	SM 4500-Cl G (2017)	Colorimetry (DPD)	✓	Edmonton
Colour, True in Water	SM 2120 C (2017)	Spectrophotometry (456 nm)	✓	Edmonton
Conductivity in Water	SM 2510 B (2017)	Conductivity Meter	✓	Edmonton
Cyanide, SAD in Water	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	✓	Kelowna
Glyphosate in Water	EPA 547*	Direct Aqueous Injection HPLC with Post-Column Derivatization and Fluorescence Detection	✓	Richmond
Hardness in Water	SM 2340 B (2017)	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
Nitrilotriacetic Acid in Water	EPA 430.1	Manual Colorimetry (Zinc-Zincon)		Kelowna
N-Nitrosodimethylamine in Water	In-House	N/A	✓	Sublet
Pesticides in Water	EPA 3510C* / EPA 8270D*	Liquid-Liquid DCM Extraction (B/N) / GC-MSD (SIM)	✓	Richmond
pH in Water	SM 4500-H+ B (2017)	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)	✓	Richmond
Solids, Total Dissolved in Water	SM 1030 E (2017)	SM 1030 E (2011)	✓	N/A
Sulfide, Total in Water	SM 4500-S2 D* (2017)	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 (2017)	Nephelometry	✓	Edmonton
Volatile Organic Compounds in Water	EPA 5030B / EPA 8260D	Purge&Trap / GC-MSD (SIM)	✓	Richmond

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



APPENDIX 1: SUPPORTING INFORMATION

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Glossary of Terms:

RL	Reporting Limit (default)
<	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:

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued or once samples expire, whichever comes first. Longer hold is possible if agreed to in writing.

Results in **Bold** indicate values that are above CARO's method reporting limits. Any results that are above regulatory limits are highlighted **red**. Please note that results will only be highlighted red if the regulatory limits are included on the CARO report. Any Bold and/or highlighted results do not take into account method uncertainty. If you would like method uncertainty or regulatory limits to be included on your report, please contact your Account Manager: rpshyk@caro.ca

Please note any regulatory guidelines applied to this report are added as a convenience to the client, at their request, to help provide some initial context to analytical results obtained. Although CARO makes every effort to ensure accuracy of the associated regulatory guideline(s) applied, the guidelines applied cannot be assumed to be correct due to a variety of factors and as such CARO Analytical Services assumes no liability or responsibility for the use of those guidelines to make any decisions. The original source of the regulation should be verified and a review of the guideline(s) should be validated as correct in order to make any decisions arising from the comparison of the analytical data obtained to the relevant regulatory guideline for one's particular circumstances. Further, CARO Analytical Services assumes no liability or responsibility for any loss attributed from the use of these guidelines in any way.

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (BLK):** A blank sample that undergoes sample processing identical to that carried out for the test samples. Method blank results are used to assess contamination from the laboratory environment and reagents.
- **Duplicate (Dup):** An additional or second portion of a randomly selected sample in the analytical run carried through the entire analytical process. Duplicates provide a measure of the analytical method's precision (reproducibility).
- **Blank Spike (BS):** A sample of known concentration which undergoes processing identical to that carried out for test samples, also referred to as a laboratory control sample (LCS). Blank spikes provide a measure of the analytical method's accuracy.
- **Matrix Spike (MS):** A second aliquot of sample is fortified with with a known concentration of target analytes and carried through the entire analytical process. Matrix spikes evaluate potential matrix effects that may affect the analyte recovery.
- **Reference Material (SRM):** A homogenous material of similar matrix to the samples, certified for the parameter(s) listed. Reference Materials ensure that the analytical process is adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10-20 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Acid Herbicides, Batch B1G3057

Blank (B1G3057-BLK1)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
2,4-D	< 0.10	0.10 µg/L							
MCPA	< 0.02	0.02 µg/L							
2,4,5-T	< 0.10	0.10 µg/L							
Dicamba	< 0.10	0.10 µg/L							
Picloram	< 0.10	0.10 µg/L							
Dinoseb	< 0.10	0.10 µg/L							
LCS (B1G3057-BS1)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
2,4-D	5.08	0.10 µg/L	5.05		101	70-130			
MCPA	4.12	0.02 µg/L	5.05		82	70-130			
2,4,5-T	4.71	0.10 µg/L	4.98		95	70-130			
Dicamba	4.30	0.10 µg/L	5.05		85	70-130			
Picloram	3.69	0.10 µg/L	5.00		74	70-130			
Dinoseb	4.19	0.10 µg/L	4.98		84	70-130			
LCS Dup (B1G3057-BSD1)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
2,4-D	4.94	0.10 µg/L	5.05		98	70-130	3	30	
MCPA	4.41	0.02 µg/L	5.05		87	70-130	7	30	
2,4,5-T	5.00	0.10 µg/L	4.98		101	70-130	6	30	
Dicamba	4.56	0.10 µg/L	5.05		90	70-130	6	30	
Picloram	4.04	0.10 µg/L	5.00		81	70-130	9	30	
Dinoseb	4.03	0.10 µg/L	4.98		81	70-130	4	30	

Anions, Batch B1G2383

Blank (B1G2383-BLK1)			Prepared: 2021-07-22, Analyzed: 2021-07-22						
Chloride	< 0.50	0.50 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.050	0.050 mg/L							
Nitrite (as N)	< 0.050	0.050 mg/L							
Sulfate	< 1.0	1.0 mg/L							
Blank (B1G2383-BLK2)			Prepared: 2021-07-22, Analyzed: 2021-07-22						
Chloride	< 0.50	0.50 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.050	0.050 mg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Anions, Batch B1G2383, Continued

Blank (B1G2383-BLK2), Continued

Prepared: 2021-07-22, Analyzed: 2021-07-22

Nitrite (as N)	< 0.050	0.050 mg/L							
Sulfate	< 1.0	1.0 mg/L							

LCS (B1G2383-BS1)

Prepared: 2021-07-22, Analyzed: 2021-07-22

Chloride	9.94	0.50 mg/L	10.0		99	90-110			
Fluoride	1.01	0.10 mg/L	1.00		101	85-115			
Nitrate (as N)	1.02	0.050 mg/L	1.00		102	92-108			
Nitrite (as N)	0.476	0.050 mg/L	0.500		95	85-115			
Sulfate	49.9	1.0 mg/L	50.0		100	90-110			

LCS (B1G2383-BS2)

Prepared: 2021-07-22, Analyzed: 2021-07-22

Chloride	10.7	0.50 mg/L	10.0		107	90-110			
Fluoride	0.93	0.10 mg/L	1.00		93	85-115			
Nitrate (as N)	1.02	0.050 mg/L	1.00		102	92-108			
Nitrite (as N)	0.505	0.050 mg/L	0.500		101	85-115			
Sulfate	53.5	1.0 mg/L	50.0		107	90-110			

Anions, Batch B1G3031

Blank (B1G3031-BLK1)

Prepared: 2021-07-29, Analyzed: 2021-07-29

Chlorate	< 0.50	0.50 mg/L							
Chlorite	< 0.50	0.50 mg/L							

LCS (B1G3031-BS1)

Prepared: 2021-07-29, Analyzed: 2021-07-29

Chlorate	9.69	0.50 mg/L	10.0		97	89-112			
Chlorite	10.4	0.50 mg/L	10.0		104	80-120			

Duplicate (B1G3031-DUP1)

Source: 21G2679-01

Prepared: 2021-07-29, Analyzed: 2021-07-29

Chlorate	< 0.50	0.50 mg/L		< 0.50				9	
Chlorite	< 0.50	0.50 mg/L		< 0.50				20	

Matrix Spike (B1G3031-MS1)

Source: 21G2679-01

Prepared: 2021-07-29, Analyzed: 2021-07-29

Chlorate	9.74	0.50 mg/L	10.0	< 0.50	97	85-115			
Chlorite	4.86	0.50 mg/L	5.00	< 0.50	97	80-120			

Matrix Spike Dup (B1G3031-MSD1)

Source: 21G2679-01

Prepared: 2021-07-29, Analyzed: 2021-07-29

Chlorate	9.69	0.50 mg/L	10.0	< 0.50	97	85-115	< 1		
Chlorite	4.82	0.50 mg/L	5.00	< 0.50	96	80-120	< 1		

Chlorinated Phenols, Batch B1G3074

Blank (B1G3074-BLK1)

Prepared: 2021-07-29, Analyzed: 2021-07-30

2-Chlorophenol	< 0.10	0.10 µg/L							
3 & 4-Chlorophenol	< 0.10	0.10 µg/L							
4-Chloro-3-Methylphenol	< 0.20	0.20 µg/L							
2,3-Dichlorophenol	< 0.20	0.20 µg/L							
2,4 & 2,5-Dichlorophenol	< 0.20	0.20 µg/L							
2,6-Dichlorophenol	< 0.20	0.20 µg/L							
3,4-Dichlorophenol	< 0.20	0.20 µg/L							
3,5-Dichlorophenol	< 0.20	0.20 µg/L							
2,3,4-Trichlorophenol	< 0.50	0.50 µg/L							
2,3,5-Trichlorophenol	< 0.50	0.50 µg/L							
2,3,6-Trichlorophenol	< 0.50	0.50 µg/L							
2,4,5-Trichlorophenol	< 0.50	0.50 µg/L							
2,4,6-Trichlorophenol	< 0.50	0.50 µg/L							
3,4,5-Trichlorophenol	< 0.50	0.50 µg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Chlorinated Phenols, Batch B1G3074, Continued

Blank (B1G3074-BLK1), Continued

Prepared: 2021-07-29, Analyzed: 2021-07-30

2,3,4,5 & 2,3,5,6-Tetrachlorophenol	< 0.50	0.50 µg/L							
2,3,4,6-Tetrachlorophenol	< 0.50	0.50 µg/L							
Pentachlorophenol	< 0.50	0.50 µg/L							
Surrogate: 2,4-Dibromophenol	1.38	µg/L	2.00		69	60-130			
Surrogate: 2,4,6-Tribromophenol	1.19	µg/L	2.00		60	60-130			

LCS (B1G3074-BS1)

Prepared: 2021-07-29, Analyzed: 2021-07-30

2-Chlorophenol	4.67	0.10 µg/L	10.0		47	60-130			SPK1
3 & 4-Chlorophenol	7.66	0.10 µg/L	20.1		38	60-130			SPK1
4-Chloro-3-Methylphenol	5.75	0.20 µg/L	10.0		57	60-130			SPK1
2,3-Dichlorophenol	6.33	0.20 µg/L	10.0		63	60-130			
2,4 & 2,5-Dichlorophenol	12.8	0.20 µg/L	20.2		63	60-130			
2,6-Dichlorophenol	6.47	0.20 µg/L	10.0		65	60-130			
3,4-Dichlorophenol	5.32	0.20 µg/L	10.0		53	60-130			SPK1
3,5-Dichlorophenol	5.40	0.20 µg/L	10.0		54	60-130			SPK1
2,3,4-Trichlorophenol	6.83	0.50 µg/L	10.0		68	60-130			
2,3,5-Trichlorophenol	6.87	0.50 µg/L	10.0		69	60-130			
2,3,6-Trichlorophenol	6.56	0.50 µg/L	10.0		66	60-130			
2,4,5-Trichlorophenol	6.90	0.50 µg/L	10.0		69	60-130			
2,4,6-Trichlorophenol	6.89	0.50 µg/L	10.0		69	60-130			
3,4,5-Trichlorophenol	6.72	0.50 µg/L	10.0		67	60-130			
2,3,4,5 & 2,3,5,6-Tetrachlorophenol	15.1	0.50 µg/L	20.0		76	60-130			
2,3,4,6-Tetrachlorophenol	7.57	0.50 µg/L	10.0		75	60-130			
Pentachlorophenol	7.66	0.50 µg/L	10.0		77	60-130			
Surrogate: 2,4-Dibromophenol	1.88	µg/L	2.00		94	60-130			
Surrogate: 2,4,6-Tribromophenol	1.66	µg/L	2.00		83	60-130			

LCS Dup (B1G3074-BSD1)

Prepared: 2021-07-29, Analyzed: 2021-07-30

2-Chlorophenol	4.48	0.10 µg/L	10.0		45	60-130	4	40	SPK1
3 & 4-Chlorophenol	7.62	0.10 µg/L	20.1		38	60-130	< 1	40	SPK1
4-Chloro-3-Methylphenol	5.52	0.20 µg/L	10.0		55	60-130	4	40	SPK1
2,3-Dichlorophenol	5.87	0.20 µg/L	10.0		59	60-130	8	40	SPK1
2,4 & 2,5-Dichlorophenol	12.1	0.20 µg/L	20.2		60	60-130	5	40	
2,6-Dichlorophenol	6.11	0.20 µg/L	10.0		61	60-130	6	40	
3,4-Dichlorophenol	5.38	0.20 µg/L	10.0		54	60-130	1	40	SPK1
3,5-Dichlorophenol	5.40	0.20 µg/L	10.0		54	60-130	< 1	40	SPK1
2,3,4-Trichlorophenol	6.44	0.50 µg/L	10.0		64	60-130	6	40	
2,3,5-Trichlorophenol	6.48	0.50 µg/L	10.0		65	60-130	6	40	
2,3,6-Trichlorophenol	6.06	0.50 µg/L	10.0		61	60-130	8	40	
2,4,5-Trichlorophenol	6.42	0.50 µg/L	10.0		64	60-130	7	40	
2,4,6-Trichlorophenol	6.53	0.50 µg/L	10.0		65	60-130	5	40	
3,4,5-Trichlorophenol	6.69	0.50 µg/L	10.0		67	60-130	< 1	40	
2,3,4,5 & 2,3,5,6-Tetrachlorophenol	14.5	0.50 µg/L	20.0		72	60-130	4	40	
2,3,4,6-Tetrachlorophenol	6.97	0.50 µg/L	10.0		69	60-130	8	40	
Pentachlorophenol	7.33	0.50 µg/L	10.0		73	60-130	4	40	
Surrogate: 2,4-Dibromophenol	1.73	µg/L	2.00		86	60-130			
Surrogate: 2,4,6-Tribromophenol	1.52	µg/L	2.00		76	60-130			

General Parameters, Batch B1G2408

Blank (B1G2408-BLK1)

Prepared: 2021-07-23, Analyzed: 2021-07-23

Colour, True	< 5.0	5.0 CU							
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LCS (B1G2408-BS1)

Prepared: 2021-07-23, Analyzed: 2021-07-23

Colour, True	20	5.0 CU	20.0		98	90-109			
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APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B1G2414									
Blank (B1G2414-BLK1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Sulfide, Total	< 0.020	0.020 mg/L							
LCS (B1G2414-BS1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Sulfide, Total	0.454	0.020 mg/L	0.420		108	80-120			
General Parameters, Batch B1G2416									
Blank (B1G2416-BLK1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Alkalinity, Total (as CaCO ₃)	< 2.0	2.0 mg/L							
Bicarbonate (HCO ₃)	< 2.0	2.0 mg/L							
Carbonate (CO ₃)	< 2.0	2.0 mg/L							
Hydroxide (OH)	< 2.0	2.0 mg/L							
Blank (B1G2416-BLK2)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Alkalinity, Total (as CaCO ₃)	< 2.0	2.0 mg/L							
Bicarbonate (HCO ₃)	< 2.0	2.0 mg/L							
Carbonate (CO ₃)	< 2.0	2.0 mg/L							
Hydroxide (OH)	< 2.0	2.0 mg/L							
LCS (B1G2416-BS1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Alkalinity, Total (as CaCO ₃)	240	2.0 mg/L	250		96	94-108			
LCS (B1G2416-BS2)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Alkalinity, Total (as CaCO ₃)	241	2.0 mg/L	250		97	94-108			
General Parameters, Batch B1G2417									
Reference (B1G2417-SRM1)				Prepared: 2025-07-23, Analyzed: 2025-07-23					
pH	7.04	0.10 pH units	7.00		101	98-102			
Reference (B1G2417-SRM2)				Prepared: 2025-07-23, Analyzed: 2025-07-23					
pH	7.05	0.10 pH units	7.00		101	98-102			
General Parameters, Batch B1G2429									
Blank (B1G2429-BLK1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Chlorine, Total	< 0.02	0.02 mg/L							
Chlorine, Free	< 0.02	0.02 mg/L							
Duplicate (B1G2429-DUP1)				Source: 21G2679-01		Prepared: 2021-07-23, Analyzed: 2021-07-23			
Chlorine, Total	1.46	0.02 mg/L	1.47			< 1	10		
Chlorine, Free	1.30	0.02 mg/L	1.30			< 1	20		
Reference (B1G2429-SRM1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Chlorine, Total	1.57	0.02 mg/L	1.59		99	91.2-108.8			
Chlorine, Free	1.57	0.02 mg/L	1.59		99	91.2-108.8			
General Parameters, Batch B1G2503									
Blank (B1G2503-BLK1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Turbidity	< 0.10	0.10 NTU							
LCS (B1G2503-BS1)				Prepared: 2021-07-23, Analyzed: 2021-07-23					
Turbidity	39.4	0.10 NTU	40.0		98	90-110			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
General Parameters, Batch B1G2597									
Blank (B1G2597-BLK1)				Prepared: 2021-07-27, Analyzed: 2021-07-27					
Carbon, Total Organic	< 0.50	0.50 mg/L							
Blank (B1G2597-BLK2)				Prepared: 2021-07-27, Analyzed: 2021-07-27					
Carbon, Total Organic	< 0.50	0.50 mg/L							
LCS (B1G2597-BS1)				Prepared: 2021-07-27, Analyzed: 2021-07-27					
Carbon, Total Organic	9.62	0.50 mg/L	10.0		96	78-116			
LCS (B1G2597-BS2)				Prepared: 2021-07-27, Analyzed: 2021-07-27					
Carbon, Total Organic	9.14	0.50 mg/L	10.0		91	78-116			
General Parameters, Batch B1G2660									
Blank (B1G2660-BLK1)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B1G2660-BLK2)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Conductivity (EC)	< 2.0	2.0 µS/cm							
Blank (B1G2660-BLK3)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Conductivity (EC)	< 2.0	2.0 µS/cm							
LCS (B1G2660-BS1)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Conductivity (EC)	979	2.0 µS/cm	1000		98	95-105			
LCS (B1G2660-BS2)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Conductivity (EC)	978	2.0 µS/cm	1000		98	95-105			
LCS (B1G2660-BS3)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Conductivity (EC)	977	2.0 µS/cm	1000		98	95-105			
General Parameters, Batch B1G2890									
Blank (B1G2890-BLK1)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Ammonia, Total (as N)	< 0.050	0.050 mg/L							
LCS (B1G2890-BS1)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Ammonia, Total (as N)	0.203	0.050 mg/L	0.200		101	85-115			
General Parameters, Batch B1G3013									
Blank (B1G3013-BLK1)				Prepared: 2021-07-29, Analyzed: 2021-07-29					
Cyanide, Total	< 0.0020	0.0020 mg/L							
Blank (B1G3013-BLK2)				Prepared: 2021-07-29, Analyzed: 2021-07-29					
Cyanide, Total	< 0.0020	0.0020 mg/L							
LCS (B1G3013-BS1)				Prepared: 2021-07-29, Analyzed: 2021-07-29					
Cyanide, Total	0.0174	0.0020 mg/L	0.0200		87	82-120			
LCS (B1G3013-BS2)				Prepared: 2021-07-29, Analyzed: 2021-07-29					
Cyanide, Total	0.0199	0.0020 mg/L	0.0200		100	82-120			
LCS Dup (B1G3013-BSD1)				Prepared: 2021-07-29, Analyzed: 2021-07-29					
Cyanide, Total	0.0180	0.0020 mg/L	0.0200		90	82-120	3	10	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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General Parameters, Batch B1G3013, Continued

LCS Dup (B1G3013-BSD2)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
Cyanide, Total	0.0207	0.0020 mg/L	0.0200		103	82-120	3	10	
Matrix Spike (B1G3013-MS1)			Source: 21G2679-01		Prepared: 2021-07-29, Analyzed: 2021-07-29				
Cyanide, Total	0.0383	0.0020 mg/L	0.0400	< 0.0020	96	70-130			

General Parameters, Batch B1G3058

Blank (B1G3058-BLK1)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
Nitritotriacetic Acid	< 0.20	0.20 mg/L							
LCS (B1G3058-BS1)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
Nitritotriacetic Acid	1.02	0.20 mg/L	1.00		102	80-120			
LCS Dup (B1G3058-BSD1)			Prepared: 2021-07-29, Analyzed: 2021-07-29						
Nitritotriacetic Acid	1.11	0.20 mg/L	1.00		111	80-120	8	20	
Matrix Spike (B1G3058-MS1)			Source: 21G2679-01		Prepared: 2021-07-29, Analyzed: 2021-07-29				
Nitritotriacetic Acid	2.10	0.20 mg/L	2.04	< 0.20	103	70-130			

Miscellaneous Herbicides, Batch B1H0161

Blank (B1H0161-BLK1)			Prepared: 2021-08-03, Analyzed: 2021-08-03						
Glyphosate	< 0.050	0.050 mg/L							
LCS (B1H0161-BS1)			Prepared: 2021-08-03, Analyzed: 2021-08-03						
Glyphosate	0.243	0.050 mg/L	0.250		97	70-130			
LCS Dup (B1H0161-BSD1)			Prepared: 2021-08-03, Analyzed: 2021-08-03						
Glyphosate	0.253	0.050 mg/L	0.250		101	70-130	4	20	
Matrix Spike (B1H0161-MS1)			Source: 21G2679-01		Prepared: 2021-08-03, Analyzed: 2021-08-03				
Glyphosate	0.155	0.050 mg/L	0.250	< 0.050	62	60-120			

Pesticides, Herbicides, and Fungicides, Batch B1G2858

Blank (B1G2858-BLK1)			Prepared: 2021-07-28, Analyzed: 2021-07-29						
Alachlor	< 0.100	0.100 µg/L							
Aldrin	< 0.006	0.006 µg/L							
Atrazine and metabolites	< 0.100	0.100 µg/L							
Azinphos-methyl	< 0.200	0.200 µg/L							
alpha-BHC	< 0.010	0.010 µg/L							
beta-BHC	< 0.050	0.050 µg/L							
delta-BHC	< 0.050	0.050 µg/L							
gamma-BHC (Lindane)	< 0.050	0.050 µg/L							
Bromacil	< 0.100	0.100 µg/L							
Bromoxynil	< 0.200	0.200 µg/L							
Butachlor	< 0.020	0.020 µg/L							
Captan	< 0.100	0.100 µg/L							
Chlordane (cis + trans)	< 0.050	0.050 µg/L							
Chlorothalonil	< 0.050	0.050 µg/L							
Chlorpyrifos	< 0.010	0.010 µg/L							
Cyanazine	< 0.100	0.100 µg/L							
DDT, Total	< 0.010	0.010 µg/L							
Deltamethrin	< 0.100	0.100 µg/L							
Diazinon	< 0.020	0.020 µg/L							
Dichlorvos	< 0.100	0.100 µg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
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Pesticides, Herbicides, and Fungicides, Batch B1G2858, Continued

Blank (B1G2858-BLK1), Continued

Prepared: 2021-07-28, Analyzed: 2021-07-29

Diclofop-methyl	< 0.100	0.100 µg/L							
Dieldrin	< 0.010	0.010 µg/L							
Dimethoate	< 0.200	0.200 µg/L							
Disulfoton	< 0.100	0.100 µg/L							
Diuron	< 0.200	0.200 µg/L							
Endosulfan I + II	< 0.010	0.010 µg/L							
Endosulfan sulfate	< 0.050	0.050 µg/L							
Endrin	< 0.020	0.020 µg/L							
Endrin aldehyde	< 0.020	0.020 µg/L							
Endrin ketone	< 0.020	0.020 µg/L							
Fenchlorphos (Ronnell)	< 0.100	0.100 µg/L							
Heptachlor	< 0.010	0.010 µg/L							
Heptachlor epoxide	< 0.010	0.010 µg/L							
Linuron	< 0.050	0.050 µg/L							
Malathion	< 0.100	0.100 µg/L							
Methoxychlor	< 0.050	0.050 µg/L							
Methyl parathion	< 0.100	0.100 µg/L							
Metolachlor	< 0.100	0.100 µg/L							
Metribuzin	< 0.200	0.200 µg/L							
Parathion	< 0.100	0.100 µg/L							
Pentachloronitrobenzene	< 0.100	0.100 µg/L							
Permethrin	< 0.010	0.010 µg/L							
Phorate	< 0.100	0.100 µg/L							
Prometon	< 0.300	0.300 µg/L							
Prometryne	< 0.100	0.100 µg/L							
Simazine	< 0.200	0.200 µg/L							
Sulfotep	< 0.100	0.100 µg/L							
Tebuthiuron	< 0.200	0.200 µg/L							
Temephos (Abate)	< 0.500	0.500 µg/L							
Terbufos	< 0.100	0.100 µg/L							
Triallate	< 0.100	0.100 µg/L							
Trifluralin	< 0.200	0.200 µg/L							
Surrogate: Tributyl Phosphate	0.870	µg/L	0.998		87	50-140			
Surrogate: 4-chloro-3-nitrobenzotrifluoride	0.754	µg/L	1.00		75	50-140			

LCS (B1G2858-BS1)

Prepared: 2021-07-28, Analyzed: 2021-07-29

Alachlor	0.770	0.100 µg/L	1.01		76	50-140			
Aldrin	0.699	0.006 µg/L	1.00		70	50-140			
Atrazine	0.733	0.100 µg/L	1.00		73	50-140			
Atrazine-desethyl	1.14	0.100 µg/L	1.01		113	50-140			
Azinphos-methyl	0.888	0.200 µg/L	1.00		89	50-140			
alpha-BHC	0.712	0.010 µg/L	1.01		70	50-140			
beta-BHC	0.777	0.050 µg/L	1.01		77	50-140			
delta-BHC	0.744	0.050 µg/L	1.00		74	50-140			
gamma-BHC (Lindane)	0.730	0.050 µg/L	1.00		73	50-140			
Bromacil	0.860	0.100 µg/L	1.00		86	50-140			
Bromoxynil	0.788	0.200 µg/L	1.02		77	50-140			
Butachlor	0.836	0.020 µg/L	0.998		84	50-140			
Captan	1.35	0.100 µg/L	0.992		137	50-140			
Chlordane (cis + trans)	1.52	0.050 µg/L	2.01		76	50-140			
Chlorothalonil	0.784	0.050 µg/L	0.978		80	50-140			
Chlorpyrifos	0.799	0.010 µg/L	1.00		80	50-140			
Cyanazine	0.869	0.100 µg/L	1.00		87	50-140			
DDT, Total	4.70	0.010 µg/L	5.02		94	50-140			
Deltamethrin	8.57	0.100 µg/L	10.0		86	50-140			
Diazinon	0.780	0.020 µg/L	1.01		77	50-140			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Pesticides, Herbicides, and Fungicides, Batch B1G2858, Continued									
LCS (B1G2858-BS1), Continued					Prepared: 2021-07-28, Analyzed: 2021-07-29				
Dichlorvos	0.779	0.100 µg/L	1.01		77	50-140			
Diclofop-methyl	0.872	0.100 µg/L	1.02		85	50-140			
Dieldrin	0.786	0.010 µg/L	1.00		79	50-140			
Dimethoate	0.552	0.200 µg/L	1.00		55	50-140			
Disulfoton	0.866	0.100 µg/L	1.04		83	50-140			
Diuron	1.02	0.200 µg/L	1.02		100	50-140			
Endosulfan I + II	1.53	0.010 µg/L	2.01		76	50-140			
Endosulfan sulfate	0.801	0.050 µg/L	1.01		79	50-140			
Endrin	0.824	0.020 µg/L	1.01		82	50-140			
Endrin aldehyde	0.848	0.020 µg/L	1.00		85	50-140			
Endrin ketone	0.802	0.020 µg/L	1.01		79	50-140			
Fenchlorphos (Ronnel)	0.735	0.100 µg/L	1.07		69	50-140			
Heptachlor	0.609	0.010 µg/L	1.01		60	50-140			
Heptachlor epoxide	0.782	0.010 µg/L	1.01		77	50-140			
Linuron	0.959	0.050 µg/L	1.01		95	50-140			
Malathion	0.903	0.100 µg/L	1.00		90	50-140			
Methoxychlor	0.774	0.050 µg/L	1.01		77	50-140			
Methyl parathion	0.847	0.100 µg/L	0.998		85	50-140			
Metolachlor	0.814	0.100 µg/L	1.01		81	50-140			
Metribuzin	0.817	0.200 µg/L	1.00		82	50-140			
Parathion	0.997	0.100 µg/L	1.00		100	50-140			
Pentachloronitrobenzene	0.736	0.100 µg/L	1.00		74	50-140			
Permethrin	0.828	0.010 µg/L	1.03		80	50-140			
Phorate	0.762	0.100 µg/L	1.02		75	50-140			
Prometon	0.802	0.300 µg/L	1.00		80	50-140			
Prometryne	0.763	0.100 µg/L	1.00		76	50-140			
Simazine	0.765	0.200 µg/L	1.01		76	50-140			
Sulfotep	0.858	0.100 µg/L	1.00		86	50-140			
Tebuthiuron	0.993	0.200 µg/L	1.01		98	50-140			
Temephos (Abate)	8.28	0.500 µg/L	10.7		77	50-140			
Terbufos	0.799	0.100 µg/L	0.990		81	50-140			
Triallate	0.687	0.100 µg/L	1.02		67	50-140			
Trifluralin	0.822	0.200 µg/L	1.00		82	50-140			
Surrogate: Tributyl Phosphate	0.915	µg/L	0.998		92	50-140			
Surrogate: 4-chloro-3-nitrobenzotrifluoride	0.790	µg/L	1.00		79	50-140			
LCS Dup (B1G2858-BSD1)					Prepared: 2021-07-28, Analyzed: 2021-07-29				
Alachlor	0.782	0.100 µg/L	1.01		77	50-140	2	30	
Aldrin	0.739	0.006 µg/L	1.00		74	50-140	6	30	
Atrazine	0.780	0.100 µg/L	1.00		78	50-140	6	30	
Atrazine-desethyl	1.13	0.100 µg/L	1.01		112	50-140	1	30	
Azinphos-methyl	0.964	0.200 µg/L	1.00		96	50-140	8	30	
alpha-BHC	0.731	0.010 µg/L	1.01		72	50-140	3	30	
beta-BHC	0.791	0.050 µg/L	1.01		78	50-140	2	30	
delta-BHC	0.766	0.050 µg/L	1.00		77	50-140	3	30	
gamma-BHC (Lindane)	0.758	0.050 µg/L	1.00		76	50-140	4	30	
Bromacil	0.894	0.100 µg/L	1.00		89	50-140	4	30	
Bromoxynil	0.782	0.200 µg/L	1.02		77	50-140	< 1	30	
Butachlor	0.907	0.020 µg/L	0.998		91	50-140	8	30	
Captan	1.47	0.100 µg/L	0.992		148	50-140	8	30	SPK1
Chlordane (cis + trans)	1.61	0.050 µg/L	2.01		80	50-140	6	30	
Chlorothalonil	0.798	0.050 µg/L	0.978		82	50-140	2	30	
Chlorpyrifos	0.849	0.010 µg/L	1.00		85	50-140	6	30	
Cyanazine	0.933	0.100 µg/L	1.00		93	50-140	7	30	
DDT, Total	5.09	0.010 µg/L	5.02		101	50-140	8	30	
Deltamethrin	9.04	0.100 µg/L	10.0		90	50-140	5	30	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Pesticides, Herbicides, and Fungicides, Batch B1G2858, Continued									
LCS Dup (B1G2858-BSD1), Continued					Prepared: 2021-07-28, Analyzed: 2021-07-29				
Diazinon	0.759	0.020 µg/L	1.01		75	50-140	3	30	
Dichlorvos	0.783	0.100 µg/L	1.01		78	50-140	< 1	30	
Diclofop-methyl	0.940	0.100 µg/L	1.02		92	50-140	8	30	
Dieldrin	0.834	0.010 µg/L	1.00		83	50-140	6	30	
Dimethoate	0.593	0.200 µg/L	1.00		59	50-140	7	30	
Disulfoton	0.920	0.100 µg/L	1.04		88	50-140	6	30	
Diuron	1.03	0.200 µg/L	1.02		101	50-140	1	30	
Endosulfan I + II	1.63	0.010 µg/L	2.01		81	50-140	6	30	
Endosulfan sulfate	0.859	0.050 µg/L	1.01		85	50-140	7	30	
Endrin	0.914	0.020 µg/L	1.01		90	50-140	10	30	
Endrin aldehyde	0.917	0.020 µg/L	1.00		92	50-140	8	30	
Endrin ketone	0.848	0.020 µg/L	1.01		84	50-140	6	30	
Fenchlorphos (Ronnel)	0.791	0.100 µg/L	1.07		74	50-140	7	30	
Heptachlor	0.669	0.010 µg/L	1.01		66	50-140	9	30	
Heptachlor epoxide	0.812	0.010 µg/L	1.01		80	50-140	4	30	
Linuron	0.984	0.050 µg/L	1.01		97	50-140	3	30	
Malathion	0.942	0.100 µg/L	1.00		94	50-140	4	30	
Methoxychlor	0.823	0.050 µg/L	1.01		81	50-140	6	30	
Methyl parathion	0.887	0.100 µg/L	0.998		89	50-140	5	30	
Metolachlor	0.852	0.100 µg/L	1.01		84	50-140	5	30	
Metribuzin	0.849	0.200 µg/L	1.00		85	50-140	4	30	
Parathion	1.05	0.100 µg/L	1.00		105	50-140	5	30	
Pentachloronitrobenzene	0.865	0.100 µg/L	1.00		87	50-140	16	30	
Permethrin	0.889	0.010 µg/L	1.03		86	50-140	7	30	
Phorate	0.780	0.100 µg/L	1.02		77	50-140	2	30	
Prometon	0.808	0.300 µg/L	1.00		81	50-140	< 1	30	
Prometryne	0.779	0.100 µg/L	1.00		78	50-140	2	30	
Simazine	0.778	0.200 µg/L	1.01		77	50-140	2	30	
Sulfotep	0.876	0.100 µg/L	1.00		88	50-140	2	30	
Tebuthiuron	1.02	0.200 µg/L	1.01		101	50-140	2	30	
Temephos (Abate)	8.49	0.500 µg/L	10.7		79	50-140	2	30	
Terbufos	0.828	0.100 µg/L	0.990		84	50-140	4	30	
Triallate	0.773	0.100 µg/L	1.02		76	50-140	12	30	
Trifluralin	0.853	0.200 µg/L	1.00		85	50-140	4	30	
Surrogate: Tributyl Phosphate	0.923	µg/L	0.998		93	50-140			
Surrogate: 4-chloro-3-nitrobenzotrifluoride	0.754	µg/L	1.00		75	50-140			

Polycyclic Aromatic Hydrocarbons (PAH), Batch B1G2609

Blank (B1G2609-BLK1)			Prepared: 2021-07-26, Analyzed: 2021-07-27						
Acenaphthene	< 0.050	0.050 µg/L							
Acenaphthylene	< 0.200	0.200 µg/L							
Acridine	< 0.050	0.050 µg/L							
Anthracene	0.023	0.010 µg/L							BLK
Benz(a)anthracene	< 0.010	0.010 µg/L							
Benzo(a)pyrene	< 0.010	0.010 µg/L							
Benzo(b+j)fluoranthene	< 0.050	0.050 µg/L							
Benzo(g,h,i)perylene	< 0.050	0.050 µg/L							
Benzo(k)fluoranthene	< 0.050	0.050 µg/L							
2-Chloronaphthalene	< 0.100	0.100 µg/L							
Chrysene	< 0.050	0.050 µg/L							
Dibenz(a,h)anthracene	< 0.010	0.010 µg/L							
Fluoranthene	< 0.030	0.030 µg/L							
Fluorene	< 0.050	0.050 µg/L							
Indeno(1,2,3-cd)pyrene	< 0.050	0.050 µg/L							
1-Methylnaphthalene	< 0.100	0.100 µg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Polycyclic Aromatic Hydrocarbons (PAH), Batch B1G2609, Continued									
Blank (B1G2609-BLK1), Continued					Prepared: 2021-07-26, Analyzed: 2021-07-27				
2-Methylnaphthalene	< 0.100	0.100 µg/L							
Naphthalene	< 0.200	0.200 µg/L							
Phenanthrene	< 0.100	0.100 µg/L							
Pyrene	< 0.020	0.020 µg/L							
Quinoline	< 0.050	0.050 µg/L							
Surrogate: Acridine-d9	4.15	µg/L	4.47		93	50-140			
Surrogate: Naphthalene-d8	3.70	µg/L	4.47		83	50-140			
Surrogate: Perylene-d12	3.77	µg/L	4.47		84	50-140			
LCS (B1G2609-BS1)					Prepared: 2021-07-26, Analyzed: 2021-07-27				
Acenaphthene	4.10	0.050 µg/L	4.44		92	55-137			
Acenaphthylene	4.63	0.200 µg/L	4.44		104	53-140			
Acridine	3.55	0.050 µg/L	4.40		81	50-120			
Anthracene	4.18	0.010 µg/L	4.44		94	64-130			
Benz(a)anthracene	3.76	0.010 µg/L	4.44		85	57-140			
Benzo(a)pyrene	4.54	0.010 µg/L	4.44		102	63-133			
Benzo(b+j)fluoranthene	9.21	0.050 µg/L	8.89		104	60-129			
Benzo(g,h,i)perylene	4.98	0.050 µg/L	4.44		112	52-139			
Benzo(k)fluoranthene	4.41	0.050 µg/L	4.44		99	50-138			
2-Chloronaphthalene	3.66	0.100 µg/L	4.42		83	50-139			
Chrysene	3.93	0.050 µg/L	4.44		89	59-140			
Dibenz(a,h)anthracene	4.76	0.010 µg/L	4.44		107	53-136			
Fluoranthene	4.42	0.030 µg/L	4.44		99	67-135			
Fluorene	4.03	0.050 µg/L	4.44		91	57-134			
Indeno(1,2,3-cd)pyrene	4.88	0.050 µg/L	4.44		110	52-129			
1-Methylnaphthalene	3.96	0.100 µg/L	4.44		89	50-140			
2-Methylnaphthalene	3.99	0.100 µg/L	4.44		90	50-140			
Naphthalene	4.24	0.200 µg/L	4.44		95	50-140			
Phenanthrene	4.22	0.100 µg/L	4.44		95	61-134			
Pyrene	4.50	0.020 µg/L	4.44		101	66-131			
Quinoline	5.13	0.050 µg/L	4.44		116	50-140			
Surrogate: Acridine-d9	3.50	µg/L	4.47		78	50-140			
Surrogate: Naphthalene-d8	3.52	µg/L	4.47		79	50-140			
Surrogate: Perylene-d12	3.64	µg/L	4.47		82	50-140			
LCS Dup (B1G2609-BSD1)					Prepared: 2021-07-26, Analyzed: 2021-07-27				
Acenaphthene	3.93	0.050 µg/L	4.44		88	55-137	4	30	
Acenaphthylene	4.45	0.200 µg/L	4.44		100	53-140	4	30	
Acridine	3.19	0.050 µg/L	4.40		72	50-120	11	30	
Anthracene	4.09	0.010 µg/L	4.44		92	64-130	2	30	
Benz(a)anthracene	3.83	0.010 µg/L	4.44		86	57-140	2	30	
Benzo(a)pyrene	4.29	0.010 µg/L	4.44		96	63-133	6	30	
Benzo(b+j)fluoranthene	8.82	0.050 µg/L	8.89		99	60-129	4	30	
Benzo(g,h,i)perylene	4.57	0.050 µg/L	4.44		103	52-139	9	30	
Benzo(k)fluoranthene	4.20	0.050 µg/L	4.44		94	50-138	5	30	
2-Chloronaphthalene	3.50	0.100 µg/L	4.42		79	50-139	5	30	
Chrysene	4.01	0.050 µg/L	4.44		90	59-140	2	30	
Dibenz(a,h)anthracene	4.34	0.010 µg/L	4.44		98	53-136	9	30	
Fluoranthene	4.28	0.030 µg/L	4.44		96	67-135	3	30	
Fluorene	3.96	0.050 µg/L	4.44		89	57-134	2	30	
Indeno(1,2,3-cd)pyrene	4.51	0.050 µg/L	4.44		102	52-129	8	30	
1-Methylnaphthalene	3.82	0.100 µg/L	4.44		86	50-140	4	30	
2-Methylnaphthalene	3.87	0.100 µg/L	4.44		87	50-140	3	30	
Naphthalene	3.99	0.200 µg/L	4.44		90	50-140	6	30	
Phenanthrene	4.19	0.100 µg/L	4.44		94	61-134	< 1	30	
Pyrene	4.30	0.020 µg/L	4.44		97	66-131	4	30	

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Polycyclic Aromatic Hydrocarbons (PAH), Batch B1G2609, Continued									
LCS Dup (B1G2609-BSD1), Continued				Prepared: 2021-07-26, Analyzed: 2021-07-27					
Quinoline	5.08	0.050 µg/L	4.44		114	50-140	1	30	
Surrogate: Acridine-d9	3.15	µg/L	4.47		70	50-140			
Surrogate: Naphthalene-d8	3.41	µg/L	4.47		76	50-140			
Surrogate: Perylene-d12	3.52	µg/L	4.47		79	50-140			

Total Metals, Batch B1G2818

Blank (B1G2818-BLK1)			Prepared: 2021-07-27, Analyzed: 2021-07-28						
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							

Blank (B1G2818-BLK2)			Prepared: 2021-07-27, Analyzed: 2021-07-28						
Aluminum, total	< 0.0050	0.0050 mg/L							
Antimony, total	< 0.00020	0.00020 mg/L							
Arsenic, total	< 0.00050	0.00050 mg/L							
Barium, total	< 0.0050	0.0050 mg/L							
Boron, total	< 0.0500	0.0500 mg/L							
Cadmium, total	< 0.000010	0.000010 mg/L							
Calcium, total	< 0.20	0.20 mg/L							
Chromium, total	< 0.00050	0.00050 mg/L							
Copper, total	< 0.00040	0.00040 mg/L							
Iron, total	< 0.010	0.010 mg/L							
Lead, total	< 0.00020	0.00020 mg/L							
Magnesium, total	< 0.010	0.010 mg/L							
Manganese, total	< 0.00020	0.00020 mg/L							
Potassium, total	< 0.10	0.10 mg/L							
Selenium, total	< 0.00050	0.00050 mg/L							
Silver, total	< 0.000050	0.000050 mg/L							
Sodium, total	< 0.10	0.10 mg/L							
Strontium, total	< 0.0010	0.0010 mg/L							
Uranium, total	< 0.000020	0.000020 mg/L							
Zinc, total	< 0.0040	0.0040 mg/L							

LCS (B1G2818-BS1)			Prepared: 2021-07-27, Analyzed: 2021-07-28						
Aluminum, total	0.0213	0.0050 mg/L	0.0199		107	80-120			
Antimony, total	0.0199	0.00020 mg/L	0.0200		100	80-120			
Arsenic, total	0.0205	0.00050 mg/L	0.0200		102	80-120			
Barium, total	0.0189	0.0050 mg/L	0.0198		95	80-120			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B1G2818, Continued									
LCS (B1G2818-BS1), Continued					Prepared: 2021-07-27, Analyzed: 2021-07-28				
Boron, total	< 0.0500	0.0500 mg/L	0.0200		104	80-120			
Cadmium, total	0.0205	0.000010 mg/L	0.0199		103	80-120			
Calcium, total	2.12	0.20 mg/L	2.02		105	80-120			
Chromium, total	0.0195	0.00050 mg/L	0.0198		99	80-120			
Copper, total	0.0192	0.00040 mg/L	0.0200		96	80-120			
Iron, total	1.95	0.010 mg/L	2.02		97	80-120			
Lead, total	0.0215	0.00020 mg/L	0.0199		108	80-120			
Magnesium, total	2.14	0.010 mg/L	2.02		106	80-120			
Manganese, total	0.0191	0.00020 mg/L	0.0199		96	80-120			
Potassium, total	2.07	0.10 mg/L	2.02		102	80-120			
Selenium, total	0.0197	0.00050 mg/L	0.0200		98	80-120			
Silver, total	0.0182	0.000050 mg/L	0.0200		91	80-120			
Sodium, total	2.10	0.10 mg/L	2.02		104	80-120			
Strontium, total	0.0190	0.0010 mg/L	0.0200		95	80-120			
Uranium, total	0.0187	0.000020 mg/L	0.0200		93	80-120			
Zinc, total	0.0236	0.0040 mg/L	0.0200		118	80-120			
LCS (B1G2818-BS2)					Prepared: 2021-07-27, Analyzed: 2021-07-28				
Aluminum, total	0.0196	0.0050 mg/L	0.0199		99	80-120			
Antimony, total	0.0197	0.00020 mg/L	0.0200		98	80-120			
Arsenic, total	0.0201	0.00050 mg/L	0.0200		101	80-120			
Barium, total	0.0198	0.0050 mg/L	0.0198		100	80-120			
Boron, total	< 0.0500	0.0500 mg/L	0.0200		105	80-120			
Cadmium, total	0.0205	0.000010 mg/L	0.0199		103	80-120			
Calcium, total	2.12	0.20 mg/L	2.02		105	80-120			
Chromium, total	0.0193	0.00050 mg/L	0.0198		97	80-120			
Copper, total	0.0191	0.00040 mg/L	0.0200		96	80-120			
Iron, total	1.93	0.010 mg/L	2.02		96	80-120			
Lead, total	0.0216	0.00020 mg/L	0.0199		109	80-120			
Magnesium, total	2.09	0.010 mg/L	2.02		104	80-120			
Manganese, total	0.0187	0.00020 mg/L	0.0199		94	80-120			
Potassium, total	2.03	0.10 mg/L	2.02		101	80-120			
Selenium, total	0.0215	0.00050 mg/L	0.0200		107	80-120			
Silver, total	0.0182	0.000050 mg/L	0.0200		91	80-120			
Sodium, total	2.07	0.10 mg/L	2.02		103	80-120			
Strontium, total	0.0187	0.0010 mg/L	0.0200		94	80-120			
Uranium, total	0.0187	0.000020 mg/L	0.0200		94	80-120			
Zinc, total	0.0228	0.0040 mg/L	0.0200		114	80-120			
Reference (B1G2818-SRM1)					Prepared: 2021-07-27, Analyzed: 2021-07-28				
Aluminum, total	0.287	0.0050 mg/L	0.299		96	70-130			
Antimony, total	0.0490	0.00020 mg/L	0.0517		95	70-130			
Arsenic, total	0.125	0.00050 mg/L	0.119		105	70-130			
Barium, total	0.730	0.0050 mg/L	0.801		91	70-130			
Boron, total	3.57	0.0500 mg/L	4.11		87	70-130			
Cadmium, total	0.0496	0.000010 mg/L	0.0503		99	70-130			
Calcium, total	9.62	0.20 mg/L	10.7		90	70-130			
Chromium, total	0.235	0.00050 mg/L	0.250		94	70-130			
Copper, total	0.459	0.00040 mg/L	0.487		94	70-130			
Iron, total	0.486	0.010 mg/L	0.504		97	70-130			
Lead, total	0.286	0.00020 mg/L	0.278		103	70-130			
Magnesium, total	3.92	0.010 mg/L	3.59		109	70-130			
Manganese, total	0.0991	0.00020 mg/L	0.111		89	70-130			
Potassium, total	6.18	0.10 mg/L	5.89		105	70-130			
Selenium, total	0.119	0.00050 mg/L	0.120		99	70-130			
Sodium, total	9.41	0.10 mg/L	8.71		108	70-130			
Strontium, total	0.362	0.0010 mg/L	0.393		92	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Total Metals, Batch B1G2818, Continued									
Reference (B1G2818-SRM1), Continued				Prepared: 2021-07-27, Analyzed: 2021-07-28					
Uranium, total	0.0324	0.000020 mg/L	0.0344		94	70-130			
Zinc, total	2.55	0.0040 mg/L	2.50		102	70-130			
Reference (B1G2818-SRM2)				Prepared: 2021-07-27, Analyzed: 2021-07-28					
Aluminum, total	0.291	0.0050 mg/L	0.299		97	70-130			
Antimony, total	0.0485	0.00020 mg/L	0.0517		94	70-130			
Arsenic, total	0.129	0.00050 mg/L	0.119		108	70-130			
Barium, total	0.723	0.0050 mg/L	0.801		90	70-130			
Boron, total	3.70	0.0500 mg/L	4.11		90	70-130			
Cadmium, total	0.0494	0.000010 mg/L	0.0503		98	70-130			
Calcium, total	9.75	0.20 mg/L	10.7		91	70-130			
Chromium, total	0.237	0.00050 mg/L	0.250		95	70-130			
Copper, total	0.457	0.00040 mg/L	0.487		94	70-130			
Iron, total	0.496	0.010 mg/L	0.504		98	70-130			
Lead, total	0.286	0.00020 mg/L	0.278		103	70-130			
Magnesium, total	3.95	0.010 mg/L	3.59		110	70-130			
Manganese, total	0.0983	0.00020 mg/L	0.111		89	70-130			
Potassium, total	6.33	0.10 mg/L	5.89		108	70-130			
Selenium, total	0.121	0.00050 mg/L	0.120		101	70-130			
Sodium, total	9.43	0.10 mg/L	8.71		108	70-130			
Strontium, total	0.359	0.0010 mg/L	0.393		91	70-130			
Uranium, total	0.0325	0.000020 mg/L	0.0344		95	70-130			
Zinc, total	2.55	0.0040 mg/L	2.50		102	70-130			

Total Metals, Batch B1G2886

Blank (B1G2886-BLK1)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B1G2886-BLK2)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Mercury, total	< 0.000010	0.000010 mg/L							
Blank (B1G2886-BLK3)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Mercury, total	< 0.000010	0.000010 mg/L							
Reference (B1G2886-SRM1)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Mercury, total	0.00553	0.000010 mg/L	0.00581		95	70-130			
Reference (B1G2886-SRM2)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Mercury, total	0.00510	0.000010 mg/L	0.00581		88	70-130			
Reference (B1G2886-SRM3)				Prepared: 2021-07-28, Analyzed: 2021-07-28					
Mercury, total	0.00508	0.000010 mg/L	0.00581		87	70-130			

Volatile Organic Compounds (VOC), Batch B1G2872

Blank (B1G2872-BLK1)				Prepared: 2021-07-29, Analyzed: 2021-07-29					
Benzene	< 0.5	0.5 µg/L							
Bromodichloromethane	< 1.0	1.0 µg/L							
Bromoform	< 1.0	1.0 µg/L							
Carbon tetrachloride	< 0.5	0.5 µg/L							
Chlorobenzene	< 1.0	1.0 µg/L							
Chloroethane	< 2.0	2.0 µg/L							
Chloroform	< 1.0	1.0 µg/L							
Dibromochloromethane	< 1.0	1.0 µg/L							
1,2-Dibromoethane	< 0.3	0.3 µg/L							

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B1G2872, Continued									
Blank (B1G2872-BLK1), Continued					Prepared: 2021-07-29, Analyzed: 2021-07-29				
Dibromomethane	< 1.0	1.0 µg/L							
1,2-Dichlorobenzene	< 0.5	0.5 µg/L							
1,3-Dichlorobenzene	< 1.0	1.0 µg/L							
1,4-Dichlorobenzene	< 1.0	1.0 µg/L							
1,1-Dichloroethane	< 1.0	1.0 µg/L							
1,2-Dichloroethane	< 1.0	1.0 µg/L							
1,1-Dichloroethylene	< 1.0	1.0 µg/L							
cis-1,2-Dichloroethylene	< 1.0	1.0 µg/L							
trans-1,2-Dichloroethylene	< 1.0	1.0 µg/L							
Dichloromethane	< 3.0	3.0 µg/L							
1,2-Dichloropropane	< 1.0	1.0 µg/L							
1,3-Dichloropropene (cis + trans)	< 1.0	1.0 µg/L							
Ethylbenzene	< 1.0	1.0 µg/L							
Methyl tert-butyl ether	< 1.0	1.0 µg/L							
Styrene	< 1.0	1.0 µg/L							
1,1,2,2-Tetrachloroethane	< 0.5	0.5 µg/L							
Tetrachloroethylene	< 1.0	1.0 µg/L							
Toluene	< 1.0	1.0 µg/L							
1,1,1-Trichloroethane	< 1.0	1.0 µg/L							
1,1,2-Trichloroethane	< 1.0	1.0 µg/L							
Trichloroethylene	< 1.0	1.0 µg/L							
Trichlorofluoromethane	< 1.0	1.0 µg/L							
Vinyl chloride	< 1.0	1.0 µg/L							
Xylenes (total)	< 2.0	2.0 µg/L							
Surrogate: Toluene-d8	23.5	µg/L	25.0		94	70-130			
Surrogate: 4-Bromofluorobenzene	23.1	µg/L	24.9		93	70-130			
LCS (B1G2872-BS1)					Prepared: 2021-07-29, Analyzed: 2021-07-29				
Benzene	16.7	0.5 µg/L	20.0		83	70-130			
Bromodichloromethane	15.9	1.0 µg/L	20.0		80	70-130			
Bromoform	21.0	1.0 µg/L	20.1		105	70-130			
Carbon tetrachloride	19.7	0.5 µg/L	20.2		97	70-130			
Chlorobenzene	17.8	1.0 µg/L	20.1		89	70-130			
Chloroethane	20.8	2.0 µg/L	20.0		104	60-140			
Chloroform	16.3	1.0 µg/L	20.1		81	70-130			
Dibromochloromethane	16.1	1.0 µg/L	20.2		80	70-130			
1,2-Dibromoethane	15.9	0.3 µg/L	20.0		80	70-130			
Dibromomethane	16.4	1.0 µg/L	20.0		82	70-130			
1,2-Dichlorobenzene	17.6	0.5 µg/L	20.1		88	70-130			
1,3-Dichlorobenzene	16.6	1.0 µg/L	20.1		83	70-130			
1,4-Dichlorobenzene	15.5	1.0 µg/L	20.1		77	70-130			
1,1-Dichloroethane	19.0	1.0 µg/L	20.1		95	70-130			
1,2-Dichloroethane	13.9	1.0 µg/L	20.0		70	70-130			
1,1-Dichloroethylene	18.3	1.0 µg/L	20.0		91	70-130			
cis-1,2-Dichloroethylene	16.5	1.0 µg/L	20.0		83	70-130			
trans-1,2-Dichloroethylene	16.3	1.0 µg/L	20.0		81	70-130			
Dichloromethane	16.7	3.0 µg/L	20.1		83	70-130			
1,2-Dichloropropane	16.8	1.0 µg/L	20.1		84	70-130			
1,3-Dichloropropene (cis + trans)	31.7	1.0 µg/L	40.0		79	70-130			
Ethylbenzene	23.8	1.0 µg/L	20.0		119	70-130			
Methyl tert-butyl ether	17.4	1.0 µg/L	20.0		87	70-130			
Styrene	19.8	1.0 µg/L	20.0		99	70-130			
1,1,2,2-Tetrachloroethane	19.0	0.5 µg/L	20.1		94	70-130			
Tetrachloroethylene	11.8	1.0 µg/L	20.1		59	70-130			SPK
Toluene	25.0	1.0 µg/L	20.0		125	70-130			
1,1,1-Trichloroethane	20.9	1.0 µg/L	20.0		104	70-130			

APPENDIX 2: QUALITY CONTROL RESULTS

REPORTED TO PROJECT Newell Regional Services Corporation
Schedule 4

WORK ORDER REPORTED 21G2679
2021-08-06 13:58

Analyte	Result	RL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Qualifier
Volatile Organic Compounds (VOC), Batch B1G2872, Continued									
LCS (B1G2872-BS1), Continued				Prepared: 2021-07-29, Analyzed: 2021-07-29					
1,1,2-Trichloroethane	16.4	1.0 µg/L	20.1		82	70-130			
Trichloroethylene	12.4	1.0 µg/L	20.1		62	70-130			SPK
Trichlorofluoromethane	22.1	1.0 µg/L	20.0		110	60-140			
Vinyl chloride	25.6	1.0 µg/L	20.0		128	60-140			
Xylenes (total)	62.7	2.0 µg/L	60.0		105	70-130			
Surrogate: Toluene-d8	22.3	µg/L	25.0		89	70-130			
Surrogate: 4-Bromofluorobenzene	29.4	µg/L	24.9		118	70-130			

QC Qualifiers:

BLK Analyte concentration in the Method Blank is above the Reporting Limit (RL).
 S02 Surrogate recovery outside of control limits. Data accepted based on acceptable recovery of other surrogates.
 SPK The recovery of this analyte was outside of established control limits.
 SPK1 The recovery of this analyte was outside of established control limits. The data was accepted based on performance of other batch QC.

SCHEDULE 4

Table of Physical, Inorganic chemicals, Organic chemicals and Pesticides

Substance	Specific Parameter	Substance	Specific Parameter
Physical Parameters (Primary and Secondary)	Colour; pH; Total Dissolved Solids	Organic Chemicals and Pesticides (Primary)	Atrazine + metabolites; Benzene; Benzo(a)pyrene; Bromoxynil; Carbon Tetrachloride; Chlorpyrifos; Cyanazine; Cyanobacterial toxins (as Total Microcystin); Diazinon; Dicamba; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; 1,2-Dichloroethane; Dichloromethane; 2,4-Dichlorophenol; 2,4-D; Dicrofop-methyl; Diuron; Dimethoate; Ethylbenzene; Glyphosate; Malathion; Methoxychlor; Metolachlor; Metribuzin; Monochlorobenzene; Nitritotriacetic Acid (NTA); Pentachlorophenol; Picloram; Simazine; Terbufos; Tetrachloroethylene; 2,3,4,6-Tetrachlorophenol; Toluene; Trichloroethylene; 2,4,6-Trichlorophenol; Trifluralin; and Vinyl Chloride.
Inorganic chemicals (Primary)	Antimony; Arsenic; Barium; Boron; Bromate; Cadmium; Chloramines; Chromium; Cyanide; Fluoride; Lead; Mercury; Nitrate; Nitrite; Selenium; and Uranium;		
Inorganic and Organic Chemicals (Secondary)	Aluminum; Ammonia; Calcium; Chloride; Copper; Total Hardness; Iron; Magnesium; Manganese; Silver; Sodium; Sulphate; Sulphide; Total Organic Carbon; Xylenes (total); and Zinc;		

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