

CERTIFICATE OF ANALYSIS

REPORTED TO	Aqua Diversities Inc. 621 Upper Park View Road Nelson, BC_V1L 6H6		
ATTENTION	Nathan Ward	WORK ORDER	24H1791
PO NUMBER PROJECT PROJECT INFO	Issac RAW NSWU - ISSAC	RECEIVED / TEMP REPORTED COC NUMBER	2024-08-02 09:01 / 3.4°C 2024-08-20 08:56 No Number

Introduction:

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We've Got Chemistry

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. 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.

👗 Aho

Ahead of the Curve

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

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

Authorized By:

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TEST RESULTS

REPORTED TO Aqua Diversities Inc. PROJECT NSWU - ISSAC				WORK ORDER REPORTED	24H1791 2024-08-2	20 08:56
Analyte	Result	Guideline	RL	Units	Analyzed	Qualifie
EDWTK - ISSAC (24H1791-01) Matrix: W	/ater Sampled: 2	024-08-01 13:00				PRES
Anions						
Chloride	0.12	AO ≤ 250	0.10	mg/L	2024-08-15	
Fluoride	0.68	MAC = 1.5		mg/L	2024-08-15	
Nitrate (as N)	< 0.010	MAC = 10	0.010	mg/L	2024-08-15	HT1
Nitrite (as N)	< 0.010	MAC = 1	0.010	mg/L	2024-08-15	HT1
Sulfate	1.2	AO ≤ 500		mg/L	2024-08-15	
Calculated Parameters						
Hardness, Total (as CaCO3)	26.0	None Required	0.500	mg/L	N/A	
Solids, Total Dissolved	35.2	AO ≤ 500	1.00	mg/L	N/A	
General Parameters						
Alkalinity, Total (as CaCO3)	34.1	N/A	1.0	mg/L	2024-08-17	HT1
Alkalinity, Phenolphthalein (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-08-17	HT1
Alkalinity, Bicarbonate (as CaCO3)	34.1	N/A	1.0	mg/L	2024-08-17	HT1
Alkalinity, Carbonate (as CaCO3)	< 1.0	N/A	1.0	mg/L	2024-08-17	HT1
Alkalinity, Hydroxide (as CaCO3)	< 1.0	N/A		mg/L	2024-08-17	HT1
Conductivity (EC)	66.9	N/A	2.0	-	2024-08-17	
Cyanide, Total	< 0.0020	MAC = 0.2	0.0020	mg/L	2024-08-15	
pH	6.57	7.0-10.5	0.10	pH units	2024-08-17	HT2
Turbidity	0.99	OG < 1	0.10	NTU	2024-08-16	HT1
Microbiological Parameters						
Coliforms, Total	≥ 4	MAC = 0	1	CFU/100 mL	2024-08-14	HT3
Background Colonies	>200	N/A		CFU/100 mL	2024-08-14	HT3
E. coli	< 1	MAC = 0	1	CFU/100 mL	2024-08-14	HT3
Total Metals						
Aluminum, total	0.0552	OG < 0.1	0.0050	mg/L	2024-08-15	
Antimony, total	< 0.00020	MAC = 0.006	0.00020	-	2024-08-15	
Arsenic, total	< 0.00050	MAC = 0.01	0.00050	-	2024-08-15	
Barium, total	0.0370	MAC = 2	0.0050	-	2024-08-15	
Boron, total	< 0.0500	MAC = 5	0.0500	-	2024-08-15	
Cadmium, total	< 0.000010	MAC = 0.007	0.000010	-	2024-08-15	
Calcium, total	9.30	None Required		mg/L	2024-08-15	
Chromium, total	0.00174	MAC = 0.05	0.00050	-	2024-08-15	
Copper, total	< 0.00040	MAC = 2	0.00040		2024-08-15	
Iron, total	0.040	AO ≤ 0.3	0.010		2024-08-15	
Lead, total	< 0.00020	MAC = 0.005	0.00020	-	2024-08-15	
Magnesium, total	0.659	None Required	0.010		2024-08-15	
Manganese, total	0.00131	MAC = 0.12	0.00020		2024-08-15	
Potassium, total	0.62	N/A		mg/L	2024-08-15	
Selenium, total	< 0.00050	MAC = 0.05	0.00050	-	2024-08-15	
Sodium, total	2.43	AO ≤ 200		mg/L	2024-08-15	
Strontium, total	0.148	MAC = 7	0.0010	-	2024-08-15	



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Analyt	te		Result	Guideline	RL	Units	Analyzed	Qualifier
EDWTK	- ISSAC ((24H1791-01) Matrix: Wa	ter Sampled: 20)24-08-01 13:00, C	ontinued			PRES
Total Met	tals, Conti	nued						
Uranium	n, total		0.00647	MAC = 0.02	0.000020	mg/L	2024-08-15	
Zinc, tot	tal		< 0.0040	AO ≤ 5	0.0040	mg/L	2024-08-15	
Sample	e Qualifie	ers:						
HT1	The san	nple was prepared and/or ana	alyzed past the reco	ommended holding ti	ime.			
HT2	The 1 recomm		holding time (fr	rom sampling to	analysis) ha	as been exceed	ed - field	analysis is
HT3	Microbiological analysis was initiated beyond the maximum holding time of 30 hours. Results may not be valid.			um holding time of 3	80 hours. Resul	ts may not be valid.		
	ES Sample has been preserved for CN in the laboratory and the holding time has been extended.							



APPENDIX 1: SUPPORTING INFORMATION

	iversities Inc. - ISSAC	WORK ORDE REPORTED	R 24H1791 2024-08-2	0 08:56
Analysis Description	Method Ref.	Technique	Accredited	Location
Alkalinity in Water	SM 2320 B* (2021)	Titration with H2SO4	\checkmark	Kelowna
Anions in Water	SM 4110 B (2020)	Ion Chromatography	✓	Kelowna
Coliforms, Total in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Conductivity in Water	SM 2510 B (2021)	Conductivity Meter	✓	Kelowna
Cyanide, SAD in Water	ASTM D7511-12	Flow Injection with In-Line UV Digestion and Amperometry	\checkmark	Kelowna
E. coli in Water	SM 9222* (2015)	Membrane Filtration / Chromocult Agar	✓	Kelowna
Hardness in Water	SM 2340 B* (2021)	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Est)	\checkmark	N/A
pH in Water	SM 4500-H+ B (2021)	Electrometry	✓	Kelowna
Solids, Total Dissolved in Wa	ater SM 1030 E (2021)	SM 1030 E		N/A
Total Metals in Water	EPA 200.2 / EPA 6020B	HNO3+HCI Hot Block Digestion / Inductively Coupled Plasma-Mass Spectroscopy (ICP-MS)	\checkmark	Richmond
Turbidity in Water	SM 2130 B (2020)	Nephelometry	\checkmark	Kelowna

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

Glossary of Terms:

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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
>=	Greater than or equal to the specified Result
>2	Greater than the specified Result
AO	Aesthetic Objective
CFU/100	mL Colony Forming Units per 100 millilitres
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
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



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REPORTED TO	Aqua Diversities Inc.
PROJECT	NSWU - ISSAC

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General Comments:

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