

Report Transmission Cover Page

Bill To: Sunshine Coast Regional District 1975 Field Road Sechelt, BC, Canada V0N 3A1	Project ID: DW-Sub Package Project Name: Surface Water Project Location: Egmont & Ruby Lake - WTE01 LSD: P.O.: 3005054 Proj. Acct. code:	Lot ID: 1713647 Control Number: Date Received: Feb 15, 2024 Date Reported: Feb 22, 2024 Report Number: 2974285 Report Type: Final Report
Attn: Accounts Payable Sampled By: Brian McIntosh Company: SCRD		

Contact	Company	Address
Accounts Payable	Sunshine Coast Regional District	1975 Field Road Sechelt, BC V0N 3A1 Phone: (604) 885-6800 Fax: Email: accounts.payable@scrd.ca
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice
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<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA
Email - Merge	PDF	COC / Test Report
Email - Merge	Sunshine Coast	Test Report
Codi Abbott	Sunshine Coast Regional District	5920 Mason Road Sechelt, BC V0N 3A8 Phone: (604) 885-6800 Fax: Email: Codi.Abbott@scrd.ca
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA
Email - Merge	PDF	COC / Test Report
Email - Merge	Sunshine Coast	Test Report
Paul Sheridan	Sunshine Coast Regional District	1975 Field Road Sechelt, BC V0N 3A1 Phone: (604) 885-6800 Fax: Email: paul.sheridan@scrd.ca
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA
Email - Merge	PDF	COC / Test Report
Email - Merge	Sunshine Coast	Test Report

Notes To Clients:

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Analytical Report

Bill To: Sunshine Coast Regional District	Project ID: DW-Sub Package	Lot ID: 1713647
1975 Field Road	Project Name: Surface Water	Control Number:
Sechelt, BC, Canada	Project Location: Egmont & Ruby Lake - WTE01	Date Received: Feb 15, 2024
V0N 3A1	LSD:	Date Reported: Feb 22, 2024
Attn: Accounts Payable	P.O.: 3005054	Report Number: 2974285
Sampled By: Brian McIntosh	Proj. Acct. code:	Report Type: Final Report
Company: SCRD		

		Reference Number	1713647-1	1713647-2	1713647-3	
		Sample Date	Feb 13, 2024	Feb 13, 2024	Feb 13, 2024	
		Sample Time	11:25	10:45	10:15	
		Sample Location				
		Sample Description	RL-Raw / Ruby Lake / 8.2 °C	RL-03 / Jervis Inlet / 8.2 °C	EG-Raw / Waugh Lake / 8.2 °C	
		Matrix	Water	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit	
Inorganic Nonmetallic Parameters						
Phosphorus	Total	mg/L	<0.05	<0.05	<0.05	0.05
Metals Total						
Calcium	Total	mg/L	4.1	4.8	3.4	0.01
Magnesium	Total	mg/L	0.68	0.64	0.43	0.02
Potassium	Total	mg/L	0.26	0.29	0.16	0.04
Silicon	Total	mg/L	1.5	1.5	2.1	0.005
Sulfur	Total	mg/L	0.79	0.81	0.51	0.02
Sodium	Total	mg/L	2.7	4.6	1.8	0.1
Mercury	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Physical and Aggregate Properties						
Colour	True	Colour units	<5	<5	7	5
Solids	Total Dissolved	mg/L	24	90	24	5
Turbidity		NTU	0.32	0.42	0.23	0.1
Routine Water						
pH			6.62	6.99	6.48	0.01
pH - Holding Time			Exceeded	Exceeded	Exceeded	
Temp. of observed pH		°C	20.0	20.1	20.1	
Bicarbonate		mg/L	16	19	<5	5
Carbonate		mg/L	<6	<6	10	6
Hydroxide		mg/L	<5	<5	<5	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	13	16	9	5
Bromide	Dissolved	mg/L	<0.02	<0.02	<0.02	0.02
Chloride	Dissolved	mg/L	2.66	5.36	1.03	0.05
Fluoride	Dissolved	mg/L	0.02	<0.01	0.01	0.01
Nitrate - N	Dissolved	mg/L	0.02	0.01	0.07	0.01
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Sulfate (SO4)	Dissolved	mg/L	2.3	2.3	1.4	0.1
Hardness	Total	mg CaCO3/L	13	15	10.2	1
Mono-Aromatic Hydrocarbons - Water						
Benzene		µg/L	<0.5	<0.5	<0.5	0.5
Ethylbenzene		µg/L	<0.5	<0.5	<0.5	0.5
Methyl t-Butyl Ether		µg/L	<0.5	<0.5	<0.5	0.5
Styrene		µg/L	<0.5	<0.5	<0.5	0.5
Toluene		µg/L	<0.5	<0.5	<0.5	0.5
Total Xylenes (m,p,o)		µg/L	<0.5	<0.5	<0.5	0.5
Trace Metals Total						
Tungsten	Total	µg/L	<0.2	<0.2	<0.2	0.2

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V0N 3A1	LSD:	Date Reported: Feb 22, 2024
Attn: Accounts Payable	P.O.: 3005054	Report Number: 2974285
Sampled By: Brian McIntosh	Proj. Acct. code:	Report Type: Final Report
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		Sample Date	Feb 13, 2024	Feb 13, 2024	Feb 13, 2024	
		Sample Time	11:25	10:45	10:15	
		Sample Location				
		Sample Description	RL-Raw / Ruby Lake / 8.2 °C	RL-03 / Jervis Inlet / 8.2 °C	EG-Raw / Waugh Lake / 8.2 °C	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trace Metals Total - Continued						
Aluminum	Total	mg/L	0.009	0.007	0.019	0.001
Antimony	Total	mg/L	0.00004	0.00004	<0.00002	0.00002
Arsenic	Total	mg/L	0.0004	0.0003	0.0003	0.0001
Barium	Total	mg/L	0.0018	0.011	0.0023	0.0001
Beryllium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Bismuth	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Boron	Total	mg/L	0.008	0.009	0.004	0.002
Cadmium	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Chromium	Total	mg/L	0.00009	<0.00005	<0.00005	0.00005
Cobalt	Total	mg/L	<0.00002	<0.00002	<0.00002	0.00002
Copper	Total	mg/L	0.0012	0.0069	0.0021	0.0002
Iron	Total	mg/L	0.007	0.081	0.017	0.002
Lead	Total	mg/L	0.00024	0.00004	0.00020	0.00001
Lithium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Manganese	Total	mg/L	<0.001	0.001	0.004	0.001
Molybdenum	Total	mg/L	0.00049	0.00053	0.00049	0.00002
Nickel	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Silver	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Strontium	Total	mg/L	0.012	0.013	0.011	0.0001
Thallium	Total	mg/L	0.00004	<0.00001	<0.00001	0.00001
Thorium	Total	mg/L	0.00006	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.0001	0.0045	<0.0001	0.0001
Titanium	Total	mg/L	<0.0001	0.0001	0.0001	0.0001
Uranium	Total	mg/L	0.00002	0.00001	0.00001	0.00001
Vanadium	Total	mg/L	<0.00005	0.00015	0.00010	0.00005
Zinc	Total	mg/L	0.0074	0.066	0.0036	0.0005
Zirconium	Total	mg/L	0.0001	<0.0001	<0.0001	0.0001

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V0N 3A1	LSD:	Date Reported: Feb 22, 2024
Attn: Accounts Payable	P.O.: 3005054	Report Number: 2974285
Sampled By: Brian McIntosh	Proj. Acct. code:	Report Type: Final Report
Company: SCRD		

Reference Number 1713647-4
Sample Date Feb 13, 2024
Sample Time 09:25
Sample Location
Sample Description EG-02 / Egmont Hall / 8.2 °C

Matrix Water

Analyte	Units	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters				
Phosphorus Total	mg/L	<0.05		0.05
Metals Total				
Calcium Total	mg/L	3.5		0.01
Magnesium Total	mg/L	0.41		0.02
Potassium Total	mg/L	0.13		0.04
Silicon Total	mg/L	2.0		0.005
Sulfur Total	mg/L	0.50		0.02
Sodium Total	mg/L	4.7		0.1
Mercury Total	mg/L	<0.00001		0.00001
Physical and Aggregate Properties				
Colour True	Colour units	<5		5
Solids Total Dissolved	mg/L	60		5
Turbidity	NTU	0.17		0.1
Routine Water				
pH		6.51		0.01
pH - Holding Time		Exceeded		
Temp. of observed pH	°C	19.9		
Bicarbonate	mg/L	<5		5
Carbonate	mg/L	10		6
Hydroxide	mg/L	<5		5
P-Alkalinity as CaCO ₃	mg/L	<5		5
T-Alkalinity as CaCO ₃	mg/L	10		5
Bromide Dissolved	mg/L	<0.02		0.02
Chloride Dissolved	mg/L	5.44		0.05
Fluoride Dissolved	mg/L	0.02		0.01
Nitrate - N Dissolved	mg/L	0.06		0.01
Nitrite - N Dissolved	mg/L	<0.01		0.01
Sulfate (SO ₄) Dissolved	mg/L	1.4		0.1
Hardness Total	mg CaCO ₃ /L	10.3		1
Mono-Aromatic Hydrocarbons - Water				
Benzene	µg/L	<0.5		0.5
Ethylbenzene	µg/L	<0.5		0.5
Methyl t-Butyl Ether	µg/L	<0.5		0.5
Styrene	µg/L	<0.5		0.5
Toluene	µg/L	<0.5		0.5
Total Xylenes (m,p,o)	µg/L	<0.5		0.5
Trace Metals Total				
Tungsten Total	µg/L	<0.2		0.2

Analytical Report

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1975 Field Road	Project Name: Surface Water	Control Number:
Sechelt, BC, Canada	Project Location: Egmont & Ruby Lake - WTE01	Date Received: Feb 15, 2024
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Sampled By: Brian McIntosh	Proj. Acct. code:	Report Type: Final Report
Company: SCRD		

Reference Number 1713647-4
Sample Date Feb 13, 2024
Sample Time 09:25
Sample Location
Sample Description EG-02 / Egmont Hall
/ 8.2 °C

Matrix Water

Analyte	Units	Results	Results	Nominal Detection Limit
Trace Metals Total - Continued				
Aluminum	Total	mg/L	0.015	0.001
Antimony	Total	mg/L	<0.00002	0.00002
Arsenic	Total	mg/L	0.0002	0.0001
Barium	Total	mg/L	0.0027	0.0001
Beryllium	Total	mg/L	<0.00005	0.00005
Bismuth	Total	mg/L	<0.0001	0.0001
Boron	Total	mg/L	0.003	0.002
Cadmium	Total	mg/L	<0.00001	0.00001
Chromium	Total	mg/L	0.00012	0.00005
Cobalt	Total	mg/L	<0.00002	0.00002
Copper	Total	mg/L	0.012	0.0002
Iron	Total	mg/L	0.022	0.002
Lead	Total	mg/L	0.00015	0.00001
Lithium	Total	mg/L	<0.0005	0.0005
Manganese	Total	mg/L	0.002	0.001
Molybdenum	Total	mg/L	0.00049	0.00002
Nickel	Total	mg/L	<0.0002	0.0002
Selenium	Total	mg/L	<0.0002	0.0002
Silver	Total	mg/L	<0.00001	0.00001
Strontium	Total	mg/L	0.012	0.0001
Thallium	Total	mg/L	<0.00001	0.00001
Thorium	Total	mg/L	<0.00005	0.00005
Tin	Total	mg/L	0.0048	0.0001
Titanium	Total	mg/L	<0.0001	0.0001
Uranium	Total	mg/L	0.00001	0.00001
Vanadium	Total	mg/L	0.00010	0.00005
Zinc	Total	mg/L	0.0075	0.0005
Zirconium	Total	mg/L	<0.0001	0.0001

Approved by:



Darren Crichton, BSc, PChem
Operations Manager

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

Methodology and Notes

Bill To: Sunshine Coast Regional District 1975 Field Road Sechelt, BC, Canada V0N 3A1	Project ID: DW-Sub Package Project Name: Surface Water Project Location: Egmont & Ruby Lake - WTE01 LSD: P.O.: 3005054 Proj. Acct. code:	Lot ID: 1713647 Control Number: Date Received: Feb 15, 2024 Date Reported: Feb 22, 2024 Report Number: 2974285 Report Type: Final Report
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Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (BC)	APHA	* Alkalinity - Titration Method, 2320 B	Feb 15, 2024	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* pH - Electrometric Method, 4500-H+ B	Feb 15, 2024	Element Vancouver
Anions by IEC in water (VAN)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Feb 15, 2024	Element Vancouver
Anions by IEC in water (VAN)	APHA	* Single-Column Ion Chromatography with Electronic Suppression, 4110 C	Feb 15, 2024	Element Vancouver
BTEX-VPH - Water (MS) (VAN)	BCELM	* Volatile Hydrocarbons in Water by GC/FID (2023), VH Water	Feb 15, 2024	Element Vancouver
Mercury Low Level (Total) in water (VAN)	EPA	* Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, 245.7	Feb 20, 2024	Element Vancouver
Metals SemiTrace (Total) in Water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Feb 16, 2024	Element Vancouver
Phosphorus - Total in Water	APHA	* Automated Ascorbic Acid Reduction Method, 4500-P F	Feb 20, 2024	Element Edmonton - Roper Road
Solids Dissolved (Total, Fixed and Volatile) - VAN	APHA	* Total Dissolved Solids Dried at 180 C, 2540 C	Feb 20, 2024	Element Vancouver
Trace Metals (Total) in Water (VAN)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Feb 16, 2024	Element Vancouver
True Color in water (VAN)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Feb 15, 2024	Element Vancouver
Turbidity - Water (VAN)	APHA	* Turbidity - Nephelometric Method, 2130 B	Feb 16, 2024	Element Vancouver

* Reference Method Modified

References

APHA	Standard Methods for the Examination of Water and Wastewater
BCELM	B.C. Environmental Laboratory Manual
EPA	Environmental Protection Agency Test Methods - US
US EPA	US Environmental Protection Agency Test Methods

Please direct any inquiries regarding this report to our Client Services group.

Results relate only to samples as submitted.

The test report shall not be reproduced except in full, without the written approval of the laboratory.

Project Information

Project ID: DW-Sub Package
Project Name: Surface Water
Project Location: Egmont & Ruby Lake - WTE01
Legal Location:
PO/AFE#: 3005054
Proj. Acct. Code:
Quote #:

Invoice To
Company: Sunshine Coast Regional District
Address: 1975 Field Road
Sechelt, BC V0N 3A1, Canada
Attention: Accounts Payable
Phone: (604) 885-6800
Cell:
Fax:
E-mail: accounts.payable@scrd.ca
Agreement ID: 113277
Copy of Report: YES / NO

Report To
Company: Sunshine Coast Regional District
Address: 5920 Mason Road
Sechelt, BC V0N 3A8, Canada
Attention: Codi Abbott
Phone: (604) 885-6800
Cell: (604) 741-3914
Fax:
E-mail 1: Codi.Abbott@scrd.ca
E-mail 2: ashley.gray@scrd.ca
Copy of Invoice: YES / NO

Additional Reports to
1) Name:
E-mail: paul.sheridan@scrd.ca
2) Name:
E-mail:

Sample Custody

Sampled by: Brian McIntosh
Company: SCRD
I authorize Element to proceed with the work indicated on this form:
Signature: [Signature]
Date/Time: Feb. 13/24 3:09pm

RUSH Priority

Report Results

Requirements

- ☐ Same Day (200%)
☐ Next Day/Two Day (100%)
☐ Three or Four Days (50%)
☐ Five to Seven Days (Regular TAT)

When "ASAP" is requested, turn around will default to a 100% RUSH priority, with pricing and turn around time to match. Please contact the lab prior to submitting RUSH samples. If not all samples require RUSH, please indicate in the special instructions.

- ☐ Email ☐ QA/QC
☐ Online ☐ PDF
☐ Fax ☐ Excel

- ☐ HCDWOR ☐ SPIGEC
☐ AB Tier 1 ☐ BCCSR
Other (list below)

Date Required

Special Instructions/Comments (please include contact information including phone number if different from above).

Site I.D.	Sample Description	Depth Range	Unit	Date/Time sampled	Matrix	Sampling method	#	MeOH Field Preserved?	ALK - Alkalinity, total	CBTX1 - BTEXSM in water b	COLO1 - Colour - True	DISP - Environmental Dispos	IEC - Anions screen - water	TDS - Total dissolved solids	TP - Phosphorus - total	TURB - Turbidity	W39BC - BCCSR - Metals (T
1	RL-Raw			Feb 13/24 11:25	Water	grab	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	RL-03			Feb 13/24 10:15	Water	grab	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	EG-Raw			Feb 13/24 10:15	Water	grab	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	EG-02			Feb 13/24 9:25	Water	Grab	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Please indicate any potentially hazardous samples

Submission of this form acknowledges acceptance of Element's Standard of terms and conditions (<https://www.element.com/terms/terms-and-conditions>)

Page 1 of 1 Control #
ED 120-005

Lot: 1713647 ^{COC}



Temp. received: 8.2 °C
Date/Time stamp: 24 FEB 15 10:00
Delivery Method: Courier
Waybill:
Received by: [Signature]