

Report Transmission Cover Page

Bill To: City of Parksville 100 Jensen Avenue E Parksville, BC, Canada V9P 2H3	Project ID: Project Name: Full Spectrum Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1806050 Control Number: Date Received: Apr 8, 2025 Date Reported: Apr 14, 2025 Report Number: 3124256 Report Type: Final Report
Attn: Accounts Payable Sampled By: Barb Silenieks Company: City of Parksville		

Contact	Company	Address
Accounts Payable	City of Parksville	100 Jensen Avenue E Parksville, BC V9P 2H3 Phone: (250) 954-4652 Email: ap@parksville.ca
		Fax:
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	Invoice
Barbara Silenieks	City of Parksville	1116 Herring Gull Way Parksville, BC V9P 1R2 Phone: (250) 951-2489 Email: bsilenieks@parksville.ca
		Fax:
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email	PDF	COA
Email - Merge	PDF	COC / Test Report
Email - Merge	Standard Crosstab Without Tabs	Test Report

Analytical Report

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		Reference Number	1806050-1	1806050-2	1806050-3	
		Sample Date	Apr 07, 2025	Apr 07, 2025	Apr 07, 2025	
		Sample Time	11:50	09:55	11:30	
		Sample Location				
		Sample Description	Englishman River / 5.1 °C	Water Treatment Plant (WTP) / 5.1 °C	Public Works Yard (PWY) / 5.1 °C	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters						
Cyanide	Total	mg/L	<0.002	<0.002	<0.002	0.002
Metals Total						
Calcium	Total	mg/L	6.3	6.3	6.3	0.01
Magnesium	Total	mg/L	0.82	0.87	0.88	0.02
Potassium	Total	mg/L	0.14	0.20	0.16	0.04
Silicon	Total	mg/L	2.4	2.4	2.8	0.005
Sodium	Total	mg/L	2.2	11	12	0.1
Digestion	Preparation		Field Pres, digest as total Hg	Field Pres, digest as total Hg	Field Pres, digest as total Hg	
Mercury	Total	mg/L	<0.00001	<0.00001	<0.00001	0.00001
Microbiological Analysis						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	200.5	<1.0	<1.0	1.0
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	2.0	<1.0	<1.0	1.0
Physical and Aggregate Properties						
Colour	True	Colour units	11	<5	<5	5
Turbidity		NTU	0.90	0.15	0.15	0.1
Routine Water						
Digestion	Dissolved		Lab filtered & preserved 7.14	Lab filtered & preserved 7.72	Lab filtered & preserved 7.85	0.01
pH			Exceeded	Exceeded	Exceeded	
pH - Holding Time						
Electrical Conductivity	at 25 °C	µS/cm	50	87	93	1
T-Alkalinity	as CaCO3	mg/L	16	30	32	5
Chloride	Dissolved	mg/L	3.20	6.46	7.05	0.05
Fluoride	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Nitrate - N	Dissolved	mg/L	0.03	0.04	0.04	0.01
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Sulfate (SO4)	Dissolved	mg/L	1.4	1.6	1.7	0.1
Hardness	as CaCO3 (dissolved)	mg/L	19	18	19	5
Total Dissolved Solids	Calculated	mg/L	30	50	54	1
Langelier Index			-2.2	-1.3	-1.2	
Trace Metals Total						
Aluminum	Total	mg/L	0.077	0.019	0.018	0.001
Antimony	Total	mg/L	0.00002	<0.00002	<0.00002	0.00002
Arsenic	Total	mg/L	0.0002	0.0001	<0.0001	0.0001
Barium	Total	mg/L	0.0042	0.0034	0.0034	0.0001
Boron	Total	mg/L	0.007	0.006	0.008	0.002
Cadmium	Total	mg/L	0.00003	<0.00001	<0.00001	0.00001
Chromium	Total	mg/L	0.00016	0.00016	<0.00005	0.00005

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		Reference Number	1806050-1	1806050-2	1806050-3	
		Sample Date	Apr 07, 2025	Apr 07, 2025	Apr 07, 2025	
		Sample Time	11:50	09:55	11:30	
		Sample Location				
		Sample Description	Englishman River / 5.1 °C	Water Treatment Plant (WTP) / 5.1 °C	Public Works Yard (PWY) / 5.1 °C	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trace Metals Total - Continued						
Copper	Total	mg/L	0.0008	0.0004	0.0032	0.0002
Iron	Total	mg/L	0.081	0.003	0.002	0.002
Lead	Total	mg/L	0.00009	0.00006	0.00016	0.00001
Manganese	Total	mg/L	0.003	0.001	0.001	0.001
Selenium	Total	mg/L	<0.0002	<0.0002	<0.0002	0.0002
Strontium	Total	mg/L	0.024	0.024	0.025	0.0001
Uranium	Total	mg/L	0.00003	<0.00001	<0.00001	0.00001
Zinc	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005

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Attn: Accounts Payable Sampled By: Barb Silenieks Company: City of Parksville		

		Reference Number	1806050-4	1806050-5	
		Sample Date	Apr 07, 2025	Apr 07, 2025	
		Sample Time	10:25	10:35	
		Sample Location			
		Sample Description	Railway Well # 1 / 5.1 °C	Railway Well # 4 / 5.1 °C	
		Matrix	Water	Water	
Analyte	Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Parameters					
Cyanide	Total	mg/L	<0.002	<0.002	0.002
Metals Total					
Calcium	Total	mg/L	34	38	0.01
Magnesium	Total	mg/L	17	18	0.02
Potassium	Total	mg/L	0.82	0.73	0.04
Silicon	Total	mg/L	11	12	0.005
Sodium	Total	mg/L	8.1	7.7	0.1
Digestion	Preparation		Field Pres, digest as total Hg	Field Pres, digest as total Hg	
Mercury	Total	mg/L	<0.00001	<0.00001	0.00001
Microbiological Analysis					
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	<1.0	1.0
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	<1.0	1.0
Physical and Aggregate Properties					
Colour	True	Colour units	<5	<5	5
Turbidity		NTU	0.17	0.19	0.1
Routine Water					
Digestion	Dissolved		Lab filtered & preserved 7.50	Lab filtered & preserved 7.47	0.01
pH			Exceeded	Exceeded	
pH - Holding Time					
Electrical Conductivity	at 25 °C	µS/cm	341	356	1
T-Alkalinity	as CaCO ₃	mg/L	115	132	5
Chloride	Dissolved	mg/L	28.3	21.4	0.05
Fluoride	Dissolved	mg/L	0.02	0.02	0.01
Nitrate - N	Dissolved	mg/L	1.59	0.91	0.01
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	0.01
Sulfate (SO ₄)	Dissolved	mg/L	7.0	12.2	0.1
Hardness	as CaCO ₃ (dissolved)	mg/L	150	162	5
Total Dissolved Solids	Calculated	mg/L	198	209	1
Langelier Index			-0.3	-0.3	
Trace Metals Total					
Aluminum	Total	mg/L	<0.001	0.007	0.001
Antimony	Total	mg/L	<0.00002	<0.00002	0.00002
Arsenic	Total	mg/L	0.0004	0.0004	0.0001
Barium	Total	mg/L	0.018	0.015	0.0001
Boron	Total	mg/L	0.013	0.012	0.002
Cadmium	Total	mg/L	<0.00001	<0.00001	0.00001
Chromium	Total	mg/L	0.00085	0.00046	0.00005

Analytical Report

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Attn: Accounts Payable Sampled By: Barb Silenieks Company: City of Parksville	Proj. Acct. code:	

Reference Number	1806050-4	1806050-5
Sample Date	Apr 07, 2025	Apr 07, 2025
Sample Time	10:25	10:35
Sample Location		
Sample Description	Railway Well # 1 / 5.1 °C	Railway Well # 4 / 5.1 °C
Matrix	Water	Water

Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trace Metals Total - Continued						
Copper	Total	mg/L	0.0008	0.0042		0.0002
Iron	Total	mg/L	0.009	0.009		0.002
Lead	Total	mg/L	0.00010	0.00045		0.00001
Manganese	Total	mg/L	0.006	0.036		0.001
Selenium	Total	mg/L	<0.0002	0.0004		0.0002
Strontium	Total	mg/L	0.099	0.11		0.0001
Uranium	Total	mg/L	0.00032	0.00035		0.00001
Zinc	Total	mg/L	<0.0005	<0.0005		0.0005

Approved by:



Rachel Eden, B. Sc.
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: City of Parksville 100 Jensen Avenue E Parksville, BC, Canada V9P 2H3	Project ID: Project Name: Full Spectrum Project Location: LSD: P.O.:	Lot ID: 1806050 Control Number: Date Received: Apr 8, 2025 Date Reported: Apr 14, 2025 Report Number: 3124256 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	Apr 08, 2025	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* Conductivity, 2510 B	Apr 08, 2025	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* pH - Electrometric Method, 4500-H+ B	Apr 08, 2025	Element Vancouver
Anions by IEC in water (VAN)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Apr 08, 2025	Element Vancouver
Cyanide (Total) in water	US EPA	* US EPA method, 335.3	Apr 14, 2025	Element Edmonton - Roper Road
Mercury Low Level (Total) in water (VAN)	EPA	* Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, 245.7	Apr 09, 2025	Element Vancouver
Metals SemiTrace (Dissolved) in water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Apr 09, 2025	Element Vancouver
Metals SemiTrace (Total) in Water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Apr 09, 2025	Element Vancouver
Total and E-Coli - Colilert - DW (VAN)	APHA	Enzyme Substrate Test, APHA 9223 B	Apr 08, 2025	Element Vancouver
Trace Metals (Total) in Water (VAN)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Apr 09, 2025	Element Vancouver
True Color in water (VAN)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Apr 08, 2025	Element Vancouver
Turbidity - Water (VAN)	APHA	* Turbidity - Nephelometric Method, 2130 B	Apr 08, 2025	Element Vancouver

* Reference Method Modified

References

APHA	Standard Methods for the Examination of Water and Wastewater
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: _____
Project Name: Full Spectrum
Project Location: _____
Legal Location: _____
PO/AFE#: _____
Proj. Acct. Code: _____
Quote #: _____

Invoice To

Company: City of Parksville
Address: _____
Attention: _____
Phone: _____
Cell: _____
E-mail: _____
Government Funded Work YES / NO
SRP # _____
Agreement ID: _____

Report To

Company: City of Parksville
Address: _____
Attention: Barbara Silenicks
Phone: _____
Cell: _____
Fax: _____
E-mail 1: BSilenicks@Parkville.ca
E-mail 2: _____
Copy of Invoice: YES / NO

Additional Reports to

1) Name: _____
E-mail: _____
2) Name: _____
E-mail: _____

Sample Custody

Sampled by: Barb Silenicks
Company: City of Parksville
I authorize Element to proceed with the work indicated on this form:
Signature: BS
Date/Time: April 7 12:35

RUSH Priority

- ☐ Same Day (200%)
☐ Next Day/Two Day (100%)
☐ Three or Four Days (50%)
☒ 5 to 7 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.

Report Results

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

Requirements

- ☐ HCDWQ ☐ 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 start end in cm m	Date/Time sampled	Matrix	Sampling method	#	Enter tests above (✓ relevant samples below)
1	Englishman River		11:50 April 7				✓
2	Water Treatment Plant (WTP)		9:55 April 7				✓
3	Public Works Yard (PWY)		11:30 April 7				✓
4	Railway well #1		10:25 April 7				✓
5	Railway well #4		10:35 April 7				✓
6			10:25				
7							
8							
9							
10							
11							
12							
13							
14							
15							

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 120-06

Lot: 1806050 COC

City of Parksville



Temp. received: 5.1 °C Date/Time stamp: 25 APR 8 9:34

Delivery Method: Puro

Waybill: _____
Received by: BS