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Report Transmission Cover Page

Bill To: City of Parksville

Project ID:

Lot ID: 1479191

1116 Herring Gull Way Parksville, BC, Canada Project Name: **Project Location:**

Control Number:

V9P 1R2

Date Received: Mar 11, 2021

Attn: Accounts Payable

LSD: P.O.:

Date Reported: Mar 17, 2021

Sampled By: Barbara Silenieks

Proj. Acct. code:

Report Number: 2602307

Company: City of Parksville

Contact	Company	Address			
Accounts Payable	City of Parksville	1116 Herring Gull Way			
		Parksville, BC V9P 1R2			
		Phone: (250) 951-2489	Fax:		
		Email: ap@parksville.ca			
Delivery	<u>Format</u>	<u>Deliverables</u>			
Email - Single Report	PDF	Invoice			
Barbara Silenieks	City of Parksville	1116 Herring Gull Way			
		Parksville, BC V9P 1R2			
		Phone: (250) 951-2489	Fax:		
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Delivery	<u>Format</u>	<u>Deliverables</u>			
Email - Single Report	PDF	COA			
Email - Single Report	PDF	COC / Test Report			

Full Spectrum

4101

Notes To Clients:

- Mar 11, 2021 Upon receipt, samples 1479191-1-3 had exceeded recommended temperature for bacterial analysis.
- Mar 11, 2021 Upon receipt, samples 1479191-1-3 had exceeded the 30 hour recommended hold time for microbiology testing. Excess time between sampling and testing may affect the validity of the test result.

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Analytical Report

Company:

Bill To: City of Parksville

1116 Herring Gull Way

Parksville, BC, Canada

City of Parksville

V9P 1R2 Attn: Accounts Payable

Sampled By: Barbara Silenieks

Project Name: Full Spectrum Project Location:

Project ID:

LSD:

P.O.: 4101

Proj. Acct. code:

Lot ID: 1479191

Control Number:

Date Received: Mar 11, 2021 Date Reported: Mar 17, 2021

2602307 Report Number:

Reference Number Sample Date Sample Time

1479191-1 Mar 09, 2021 09:45

1479191-2 Mar 09, 2021

1479191-3 Mar 09, 2021

09:25

09:55

Sample Location Sample Description

WTP / Water Treatment Plant /

River Intake / Englishman River / Works Yard / 12.6 °C

PW Yard / Public

12.6 °C 12.6 °C

		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Inorganic Nonmetallic Pa	arameters					
Cyanide	Total	mg/L	< 0.002	< 0.002	<0.002	0.002
Metals Total						
Calcium	Total	mg/L	4.8	5.1	5.2	0.01
Magnesium	Total	mg/L	0.73	0.80	0.74	0.02
Potassium	Total	mg/L	0.15	0.20	0.16	0.04
Silicon	Total	mg/L	2.4	2.9	2.5	0.005
Sodium	Total	mg/L	9.2	2.3	10	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	0.00005
Physical and Aggregate	Properties					
Colour	True	Colour units	<5	16	<5	5
Turbidity		NTU	<0.10	3.50	<0.10	0.1
Routine Water						
Digestion	Dissolved		Lab filtered & preserved	Lab filtered & preserved	Lab filtered & preserved	
pH - Holding Time			Exceeded	Exceeded	Exceeded	
рН	at 25 °C		7.90	7.08	7.59	0.01
Electrical Conductivity		μS/cm at 25 °C	79	45	78	1
T-Alkalinity	as CaCO3	mg/L	28	13	27	5
Chloride	Dissolved	mg/L	6.79	3.52	6.86	0.05
Fluoride	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Nitrate - N	Dissolved	mg/L	0.04	0.05	0.05	0.01
Nitrite - N	Dissolved	mg/L	<0.01	<0.01	<0.01	0.01
Sulfate (SO4)	Dissolved	mg/L	1.5	1.3	1.6	0.1
Hardness	as CaCO3 (dissolved)	mg/L	16	16	16	5
Total Dissolved Solids	Calculated	mg/L	49	29	48	1
Langelier Index			-1.3	-2.4	-1.6	
Trace Metals Total						
Aluminum	Total	mg/L	0.011	0.33	0.018	0.001
Antimony	Total	mg/L	< 0.00002	< 0.00002	< 0.00002	0.00002
Arsenic	Total	mg/L	< 0.0001	0.0002	<0.0001	0.0001
Barium	Total	mg/L	0.0031	0.0050	0.0029	0.0001
Boron	Total	mg/L	0.006	0.007	0.007	0.002
Cadmium	Total	mg/L	< 0.00001	<0.0001	<0.00001	0.00001
Chromium	Total	mg/L	0.00006	0.00049	0.00011	0.00005
Copper	Total	mg/L	0.0003	0.0034	0.0043	0.0002



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Parksville, BC, Canada

V9P 1R2

Attn: Accounts Payable

Sampled By: Barbara Silenieks Company: City of Parksville

Project ID:

Project Name: Full Spectrum

Project Location:

LSD:

P.O.: 4101

Proj. Acct. code:

Lot ID: 1479191

Control Number:

Date Received: Mar 11, 2021 Mar 17, 2021 Date Reported:

Report Number: 2602307

Reference Number 1479191-1 1479191-2 1479191-3 Sample Date Mar 09, 2021 Mar 09, 2021 Mar 09, 2021 Sample Time 09:45 09:25 09:55

Sample Location

Sample Description WTP / Water Treatment Plant /

River Intake / Englishman River /

PW Yard / Public Works Yard / 12.6 °C

12.6 °C

12.6 °C

		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trace Metals Total -	Continued					
Iron	Total	mg/L	0.006	0.32	0.014	0.002
Lead	Total	mg/L	<0.00001	0.00004	0.00013	0.00001
Manganese	Total	mg/L	0.002	0.006	0.002	0.001
Selenium	Total	mg/L	<0.0002	< 0.0002	< 0.0002	0.0002
Strontium	Total	mg/L	0.022	0.024	0.022	0.0001
Uranium	Total	mg/L	<0.00001	0.00001	<0.00001	0.00001
Zinc	Total	mg/L	0.0006	0.0011	0.0020	0.0005

Approved by:

Anthony Neumann, MSc General Manager

Anthony Weuman



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Methodology and Notes

Bill To: City of Parksville

Project ID: Project Name:

Full Spectrum

4101

Lot ID: 1479191

Parksville, BC, Canada

1116 Herring Gull Way

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V9P 1R2 Attn: Accounts Payable Project Location:

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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	Mar 11, 2021	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* Conductivity, 2510 B	Mar 11, 2021	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* pH - Electrometric Method, 4500-H+ B	Mar 11, 2021	Element Vancouver
Anions by IEC in water (VAN)	АРНА	 * Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B 	Mar 11, 2021	Element Vancouver
Cyanide (Total) in water	US EPA	* US EPA method, 335.3	Mar 17, 2021	Element Edmonton - Roper Road
Mercury Low Level (Total) in water (VAN)	EPA	* Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, 245.7	Mar 17, 2021	Element Vancouver
Metals SemiTrace (Dissolved) in water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Mar 12, 2021	Element Vancouver
Metals SemiTrace (Total) in Water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Mar 12, 2021	Element Vancouver
Trace Metals (Total) in Water (VAN)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Mar 12, 2021	Element Vancouver
True Color in water (VAN)	APHA	 * Spectrophotometric - Single Wavelength Method, 2120 C 	Mar 11, 2021	Element Vancouver
Turbidity - Water (VAN)	APHA	* Turbidity - Nephelometric Method, 2130 B	Mar 11, 2021	Element Vancouver

^{*} Reference Method Modified

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

Comments:

References

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Please direct any inquiries regarding this report to our Client Services group. Results relate only to samples as submitted.

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