

T: +1 (604) 514-3322 F: +1 (604) 514-3323

E: info.vancouver@element.com

W: element.com

**Report Transmission Cover Page** 

Customer

Bill To: Aaron Service

4703 Marine Avenue

Powell River, BC, Canada

Attn: Coranne Anderson

Sampled By: Courtney

Company:

V8A 2L2

Project ID: Savary Shores

Project Name: Improvement District

LSD: Savary Island

339865 P.O.:

Proj. Acct. code:

**Project Location:** 

Lot ID: 1377899

Control Number:

Date Received: Sep 19, 2019 Sep 25, 2019 Date Reported:

Report Number: 2443049

Contact	Company	Address										
Accounts Payable	Aaron Service	4703 Marine Avenue										
		Powell River, BC V8A 2L2										
		Phone: (604) 485-5611 Fax: (604) 485-6858										
		Email: sales@aaronservice.com										
Delivery	<u>Format</u>	<u>Deliverables</u>										
Email - Single Report	PDF	COR										
Email - Single Report	PDF	Invoice										
Email - Single Report	PDF	Test Report										
Coranne Anderson	Aaron Service	4703 Marine Avenue										
		Powell River, BC V8A 2L2										
		Phone: (604) 485-5611 Fax: (604) 485-6858										
		Email: coranne@aaronservice.com										
Delivery	<u>Format</u>	<u>Deliverables</u>										
Email - Merge Reports	PDF	COA										
Email - Merge Reports	PDF	COC / Test Report										
Email - Merge Reports	PDF	COR										
Email - Merge Reports	PDF	Invoice										
Ryan Anderson	Aaron Service	4703 Marine Avenue										
		Powell River, BC V8A 2L2										
		Phone: (604) 485-5611 Fax: (604) 485-6858										
		Email: ryan@aaronservice.com										
Delivery	<u>Format</u>	<u>Deliverables</u>										
Email - Merge Reports	PDF	COC / Test Report										
Trevor Anderson	Aaron Service	4703 Marine Avenue										
		Powell River, BC V8A 2L2										
		Phone: (604) 485-5611 Fax: (604) 485-6858										
		Email: trevor@aaronservice.com										
Delivery	<u>Format</u>	<u>Deliverables</u>										
Email - Merge Reports	PDF	Test Report										

#### **Notes To Clients:**

- Sep 23, 2019 Sample 1377899-1; 6757869: Reduction of analytical volume was necessary for chloride analysis to bring results within the analytical range for sample 1377899-1. Detection limits are adjusted accordingly.
- Sep 25, 2019 The analysis of water sample 1377899-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the June 2019 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The information contained on this and all other pages transmitted, is intended for the addressee only and is considered confidential. If the reader is not the intended recipient, you are hereby notified that any use, dissemination, distribution or copy of this transmission is strictly prohibited. If you receive this transmission by error, or if this transmission is not satisfactory, please notify us by telephone.



T: +1 (604) 514-3322 F: +1 (604) 514-3323

E: info.vancouver@element.com W: element.com

**Analytical Report** 

Bill To: Aaron Service

4703 Marine Avenue

Powell River, BC, Canada

V8A 2L2

Attn: Coranne Anderson

Sampled By: Courtney

Company: Customer Project ID: Savary Shores

Project Name: Improvement District

Project Location: LSD:

Savary Island 339865

Proj. Acct. code:

P.O.:

Lot ID: 1377899

Control Number:

Date Received: Sep 19, 2019 Date Reported: Sep 25, 2019

2443049 Report Number:

**Reference Number** 1377899-1

Sample Date September 18, 2019

Sample Time 09:33

**Sample Location** 

Well # 2-Savary Shores Improvement District / 7.8°C **Sample Description** 

Sample Matrix **Drinking Water** 

		Sample Matrix	Dilliking wate	1			
Analyte		Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
Inorganic Nonmetallic P	arameters						
Tannin & Lignin	as Tannic Acid	mg/L	<0.1	0.1			
Metals Extractable		•					
Aluminum	Extractable	mg/L	<0.001	0.001	0.1	Below OG	
Antimony	Extractable	mg/L	< 0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable	mg/L	< 0.0001	0.0001	0.010	Below MAC	
Barium	Extractable	mg/L	0.0151	0.0001	1	Below MAC	
Boron	Extractable	mg/L	0.015	0.002	5	Below MAC	
Cadmium	Extractable	mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable	mg/L	< 0.00005	0.00005	0.05	Below MAC	
Copper	Extractable	mg/L	< 0.0005	0.0005	1 AO; 2 MAC	Below AO	
Lead	Extractable	mg/L	0.00001	0.00001	0.005	Below MAC	
Selenium	Extractable	mg/L	< 0.0002	0.0002	0.05	Below MAC	
Strontium	Extractable	mg/L	0.1239	0.0001	7.0	Below MAC	
Uranium	Extractable	mg/L	0.00016	0.00001	0.02	Below MAC	
Vanadium	Extractable	mg/L	0.00118	0.00005			
Zinc	Extractable	mg/L	0.0038	0.0005	5.0	Below AO	
Microbiological Analysi	s	_					
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC	
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC	
Physical and Aggregate	Properties						
Colour	True	Colour units	<5	5			
Turbidity		NTU	0.12	0.1	0.1	Below AO	
Routine Water							
pH - Holding Time			Exceeded				
рН	at 25 °C		7.07	0.01	7.0-10.5	Within Range	
Electrical Conductivity		μS/cm at 25 °C	307	1			
Calcium	Extractable	mg/L	14	0.01			
Iron	Extractable	mg/L	< 0.004	0.004	0.3	Below AO	
Magnesium	Extractable	mg/L	6.1	0.02			
Manganese	Extractable	mg/L	<0.001	0.001	0.02 AO; 0.12 MAC	Below AO	
Potassium	Extractable	mg/L	1.7	0.04			
Silicon	Extractable	mg/L	12	0.005			
Sodium	Extractable	mg/L	28	0.1	200	Below AO	
T-Alkalinity	as CaCO3	mg/L	45	5			
Chloride	Dissolved	mg/L	50.8	0.05	250	Below AO	
Fluoride	Dissolved	mg/L	0.08	0.01	1.5	Below MAC	
Nitrate - N	Dissolved	mg/L	2.27	0.01	10	Below MAC	



T: +1 (604) 514-3322 F: +1 (604) 514-3323

E: info.vancouver@element.com

W: element.com

**Analytical Report** 

Bill To: Aaron Service

4703 Marine Avenue

Powell River, BC, Canada

V8A 2L2

Attn: Coranne Anderson

Sampled By: Courtney Company: Customer Project ID: Project Name:

LSD:

P.O.:

Project Location:

Proj. Acct. code:

Savary Shores

Savary Island

339865

Improvement District

Control Number:

Date Received: Sep 19, 2019 Date Reported: Sep 25, 2019

Lot ID: 1377899

Report Number: 2443049

Reference Number

1377899-1

Sample Date Sample Time

September 18, 2019

09:33

**Sample Location** 

**Sample Description** Sample Matrix Well # 2-Savary Shores Improvement District / 7.8°C

**Drinking Water** 

				Nominal Detection	Guideline	Guideline
Analyte		Units	Result	Limit	Limit	Comments
Routine Water - Continu	ed					
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	9.6	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	61	1		
Total Dissolved Solids	Extractable	mg/L	182	1		

Approved by:

Mathieu Simoneau

Nothier



T: +1 (604) 514-3322 F: +1 (604) 514-3323

E: info.vancouver@element.com

W: element.com

# **Methodology and Notes**

Bill To: Aaron Service

4703 Marine Avenue

Powell River, BC, Canada

V8A 2L2

Attn: Coranne Anderson

Sampled By: Courtney Company: Customer Project ID: Savary Shores Project Name:

Improvement District

Project Location:

LSD: Savary Island P.O.: 339865

Proj. Acct. code:

Lot ID: 1377899

Control Number:

Date Received: Sep 19, 2019 Sep 25, 2019 Date Reported:

Report Number: 2443049

#### Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (BC)	APHA	* Alkalinity - Titration Method, 2320 B	Sep 19, 2019	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* Conductivity, 2510 B	Sep 19, 2019	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* pH - Electrometric Method, 4500-H+ B	Sep 19, 2019	Element Vancouver
Anions by IEC in water (VAN)	АРНА	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Sep 19, 2019	Element Vancouver
Metals SemiTrace (Extractable) in water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Sep 20, 2019	Element Vancouver
Tannin and Lignin in water (VAN)	APHA	* Colorimetric Method, 5550 B	Sep 23, 2019	Element Vancouver
Total and E-Coli - Colilert - DW (VAN)	APHA	Enzyme Substrate Test, APHA 9223 B	Sep 19, 2019	Element Vancouver
Trace Metals (extractable) in Water (VAN)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Sep 20, 2019	Element Vancouver
True Color in water (VAN)	APHA	<ul> <li>* Spectrophotometric - Single Wavelength Method, 2120 C</li> </ul>	Sep 19, 2019	Element Vancouver
Turbidity - Water (VAN)	APHA	* Turbidity - Nephelometric Method, 2130 B	Sep 20, 2019	Element Vancouver

<sup>\*</sup> Reference Method Modified

### References

APHA Standard Methods for the Examination of Water and Wastewater

US EPA US Environmental Protection Agency Test Methods

### Guidelines

Guideline Description Health Canada GCDWQ

Guidelines for Canadian Drinking Water Quality, Health Canada, June 2019 Guideline Source

Guideline Comments MAC = Maximum Acceptable Concentration

AO = Aesthetic Objective

OG = Operational Guideline for Water Treatment Plants

(does not apply to private groundwater wells).

Refer to Health Canada for complete guidelines at www.hc-sc.gc.ca

## Comments:

• Sep 23, 2019 - Sample 1377899-1; 6757869: Reduction of analytical volume was necessary for chloride analysis to bring results within the analytical range for sample 1377899-1. Detection limits are adjusted accordingly.

• Sep 25, 2019 - The analysis of water sample 1377899-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the June 2019 Guidelines for Canadian Drinking Water Quality for the parameters tested.

> The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

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.

			· · · · · · · · · · · · · · · · · · ·									anni Mississian e	The state of the s					
	Testing, Invoice To:					Report To: Report R										Regulato	ory	
Exova	calibrating, advising.	Company Aaron Service			Company Aaron Service									Resul	ts	Requirem	ent	
www.exova.com	** a ddyising.	Address 4703 Marine Avenue			Address 4703 Marine Avenue									E-Mail	Х	HCDWQG		
Project Inform	nation 🐘	Powell River, BC V8A 2L2			1	Powell River, BC V8A 2L2								Mail		Ab Tier 1		
Project ID	Govary Shores	Attention Coranne Anderson				Attentio	Attention Coranne Anderson								Online		SPIGEC	
	norovement Diet				Phone 604-485-5611								Fax		BCCSR			
برير Project Location	p.o.c.	Cell			Cell									PDF		Other (list be	low)	
	grany Island	Fax				Fax							_		Excel			
PO/AFE#	229065	E-mail coranne@aaronservice.com				E-mail 1 coranne@aaronservice.com									QA/QC			
· Proj. Acct. Code		Agreement ID 66993				E-mail 2 trevor@aaronservice.com									Sample Custody			
Quote #	***************************************	Copy of Report				Copy of Invoice								(please print)				
		RUSH Pr	ioritv		1							ΠĘ		1	Sampled b	¥: <i>Ĉ</i> Ω	idorel	
Emergency (	contact lab for turnaround a		Name and Administration	o" is requested	, tum around will det	ault to a 10	00% RUSH					e'coli)				<del>_</del>	1	
	orking days (100% surchar			1.130.000	rn around time to ma		Section 2015 Contract					∞	(i)		Company: (	1KX	oner	
	orking days (50% surcharge				RUSH samples. If no licate in the special	12.5	Children Committee Committ	ပွ					무			4	3011 127.	
			a   100 cm²		TERRETORISMENT CONTROL PROPERTY AND A STATE OF THE STATE			ine				10			l authorize E	xova to	proceed with th	ie
Date Requi		Signat						ontai				eal	(includes		work indicate	d on th		
Special	Instructions/Comments (pleas	se include contact	information i	ncluding ph.	# if different from	above).		of C		1200		ер	2		Date:		Initial:	
									0			2	()		The property of the second		n for Lab u	se
Wat test. Can Drinking Water WA DWO						Number Number 17/1/ W99 UVVT T/UVT TOC						M99R (repeat total	M99S		Date/Time stamp:			
,		· ()	7	Depth				ź.	S   O	H-)	$\supset  E $	≥	Σ				<del>9 8:98</del>	
Site I.D.	Date/Time	Sampling Enter tests above Indicate in the space									space allotted ar the correspondir							
Site i.b.	Sample d	Escription .	-	start end in cm m	sampled	Width	method	↓		(√ rele	evant san	nples b	elow)		demoient		mber.	
1 ,	Savary Shore	Trome	ment		2018					1000				T		1. Indi	cate any sample	es that
2	Dist	Jan Jack			17-10	1 1			1	4.55						ł	not packaged we	1
3					9:33						11.00					2. Indi	cate any sample	es not
4					-				$\top$								ed in Exova sup	
5	1, 1011 =# 1	$\sum$							_					1		3 Indi	cate any sample	s that
6	- WUI 6	7									100 mm					4	not clearly labele	1
7 +										1000						1	cate any sample	
8									$\dashv$		- P. S.		$\dashv$	1			ed within the red me or temp.	quired
9									+					+			cate any missing	7 Or
10					<u> </u>	-			+	70.3	47 4562 2014540 2014560	-		+		ł	samples	9 01
10										Ciza-	200400 454500			+		0 1-4		
11							<u> </u>	$\vdash$	+		# # # # # # # # # # # # # # # # # # #				-1220	1	cate any sample eceived broken	es mai
						-		-+	$\overline{}$	73.56 (73.55)			-			7. Indi	cate any sample	es
13						-			+		#### ###			┼		where sufficient vol		
13 14 15						<del>                                     </del>			-1	HEEFT.		$\dashv$		-			ceived cate any sample	es
			NI.		Înc			_				Shir	ping:		D Y/N	receiv	ed in an inappro	
	Environmental Sample				Lot: 1	3778	$99^{\circ\circ}$	ز				-				contai	ner	
•	completion of this form is requ	· · · · · · · · · · · · · · · · · · ·					E E   115		1111				id size p. receiv					
Pleas	e indicate any potenti	ally nazardous	samples							II III		1 611	7. 10001V	~	Delivery Me	ethod:	Consi	•