

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2021 (year)

Water System Village of Harrison Hot Springs Water System

Water System Owner Village of Harrison Hot Springs

Primary Contact Name (Operator or Manager) Tyler Simmonds

Phone Number (Operator or Manager) 604-798-5974

E-mail (Operator or Manager) tsimmonds@harrisonhotsprings.ca

DESCRIBE YOUR WATER SUPPLY SYSTEM

What is the Source(s) of Raw Water?

Deep Well Shallow Well Surface Water Other

If other, specify details:

Does the Drinking Water System have Primary Disinfection? Yes No

Chlorination Ultraviolet Light Ozone Other

If other, specify details:

Does the Drinking Water System have Secondary Disinfection? Yes No

Chlorination Other

If other, specify details:

Does the Drinking Water System have Filtration? Yes No

Check all boxes that apply

Cartridge Filter(s) Carbon Filter Sand Filtration Reverse Osmosis Other

If other, specify details: Ultra Filtration Membrane

PUBLIC REPORTING

Emergency Response & Contingency Plan (ERCP)

Is your ERCP up to Date? Yes No

How do you Inform the System Users of the ERCP?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

Drinking Water System Annual Report**How do you Inform the System Users of the Annual Report?**

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

COMPLIANCE WITH OPERATING PERMIT

List the conditions that have been placed on your Operating Permit (if you have conditions, these will be stated on your permit):

Are you in compliance with the conditions listed on your Operating Permit? Yes No N/A

BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

How many bacteriological samples were collected during this reporting period? 102

What is the minimum required sampling frequency for this system? (#samples/month) 8/month

Additional sampling details:

Was the minimum required sampling frequency achieved? Yes No

Comments:

Bacteriological summary attached to this report? Yes No

If no, how do the users of the system view the results?

WATER QUALITY STANDARDS FOR POTABLE WATER

Parameter:	Standard:	Did this system meet standard?	
Escherichia coli (for all samples)	No detectable <i>Escherichia coli</i> per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if only 1 sample collected in a 30 day period)	No detectable total coliform bacteria per 100ml	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if more than 1 sample collected in a 30 day period)	No more than 10% of samples contain total coliform bacteria, and No sample has more than 10 total coliform bacteria per 100ml	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

If the system did not meet any of above Drinking Water Protection Regulation standards, record the results in the table below; attach additional sheets if necessary.

Date	TC/100ml	E.coli/100ml	Reason	Corrective Action
18-Oct-2021	21	LT1	TC present at Spring Park at yard hydrant	Re-sample, LT1 Total Coliform/100ml

CHEMICAL SAMPLING COMPLETED DURING THIS REPORTING PERIOD

Was any chemical sampling conducted during reporting period? Yes No

If no, when were the last chemical samples conducted for this system? (date) Don't Know Never

If yes, did all water samples meet the Guidelines for Canadian Drinking Water Quality? Yes No

If any water samples did not meet the Guidelines for Canadian Drinking Water Quality, record the results in the table below; attach additional sheets if necessary.

Parameter	Result	Corrective Action / Treatment / Comments

ADDITIONAL TESTING

Does the system have analyzers for continuous monitoring? Yes No

If yes, check all boxes that apply:

Chlorine Turbidity Other (details) pH

Are the results available on request? Yes

If any additional testing or sampling was conducted, record results in the table below; attach additional sheets if necessary.

Additional Testing & Reason for Sampling	Corrective Action Taken

WATER QUALITY COMPLAINTS

Were there any water quality complaints in this reporting period? (e.g. taste, odour, colour etc.) Yes No

If yes, complete the table below; attach additional sheets if necessary.

Date	Water Quality Complaint	Corrective Action / Treatment
22-Feb-2021	Discoloration in toilet and sink	More frequent cleaning required
		Only happened in one of the washrooms in house

OPERATIONAL PROBLEMS

Were there any operational problems during this reporting period? (e.g. insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity etc.). Yes No

If yes, complete the table below; attach additional sheets if necessary.

Incident Date	Type of Operational Problem	Corrective Action Taken

MAJOR UPGRADES/REPAIRS & EXPENSES

Were there any major upgrades/repairs or any major costs incurred during this reporting period? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Major Upgrades/Expenses	Details
Improvements required by DWO	
Additions/changes to system	
Purchase or install new equipment	
Equipment repair or replacement	
Annual maintenance of system	
Specialist report	
Other	

FUTURE IMPROVEMENTS

Are there any plans for future improvements? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Future Upgrades or Improvements	Estimated Date of Completion
Reservoir maintenance	30-Nov-2022
Train #1 membrane replacement	30-Nov-2022

DATE COMPLETED: 11-Feb-2022	COMPLETED BY: Tyler Simmonds
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Sample Range Report

Fraser Health Authority

Facility Name: Village Of Harrison Hot Springs WS
Date Range: Jan 1 2021 to Dec 31 2021

Operator Tyler Simmonds
 BOX 160, 495 Hot Springs Rd
 Harrison Hot Springs, BC V0M 1K0

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>290 Esplanade, 290 Esplanade</u>				
	1-4-2021 8:50:00 AM	LT1	LT1	
	2-22-2021 8:15:00 AM	LT1	LT1	
	4-12-2021 8:00:00 AM	LT1	LT1	
	5-31-2021 8:42:00 AM	LT1	LT1	
	7-19-2021 9:25:00 AM	LT1	LT1	
	9-7-2021 8:30:00 AM	LT1	LT1	
	10-25-2021 7:53:00 AM	LT1	LT1	
	12-13-2021 8:00:00 AM	<u>LT1</u>	<u>LT1</u>	
	Total Positive:	0	0	0
<u>843 Myng, 843 Myng</u>				
	2-8-2021 9:00:00 AM	LT1	LT1	
	3-29-2021 8:50:00 AM	LT1	LT1	
	5-17-2021 9:47:00 AM	LT1	LT1	
	7-5-2021 9:31:00 AM	LT1	LT1	
	8-23-2021 9:38:00 AM	LT1	LT1	
	10-12-2021 9:00:00 AM	LT1	LT1	
	11-29-2021 9:15:00 AM	<u>LT1</u>	<u>LT1</u>	
	Total Positive:	0	0	0
<u>526 Driftwood, 526 Driftwood</u>				
	1-11-2021 9:45:00 AM	LT1	LT1	
	3-1-2021 10:30:00 AM	LT1	LT1	

4-19-2021 10:05:00 AM	LT1	LT1	
6-7-2021 9:40:00 AM	LT1	LT1	
7-26-2021 10:22:00 AM	LT1	LT1	
9-13-2021 9:50:00 AM	LT1	LT1	
11-1-2021 10:35:00 AM	LT1	LT1	
12-20-2021 10:00:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

170 Cedar Avenue,
170 Cedar Avenue

2-1-2021 10:00:00 AM	LT1	LT1	
3-22-2021 9:03:00 AM	LT1	LT1	
5-10-2021 8:37:00 AM	LT1	LT1	
6-28-2021 10:05:00 AM	LT1	LT1	
8-16-2021 9:52:00 AM	LT1	LT1	
10-4-2021 9:00:00 AM	LT1	LT1	
11-23-2021 9:50:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Boat Launch
Washrooms,
Harrison Hotsprings

2-8-2021 8:20:00 AM	LT1	LT1	
3-29-2021 8:15:00 AM	LT1	LT1	
5-17-2021 8:20:00 AM	LT1	LT1	
8-23-2021 8:34:00 AM	LT1	LT1	
10-12-2021 8:30:00 AM	LT1	LT1	
11-29-2021 9:00:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

973 Hotsprings Road
Tap, 973 Hotsprings
Road

1-18-2021 9:25:00 AM	LT1	LT1	
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3-8-2021 8:30:00 AM	LT1	LT1	
4-6-2021 12:00:00 PM	LT1	LT1	
4-26-2021 8:55:00 AM	LT1	LT1	
6-14-2021 10:13:00 AM	LT1	LT1	
8-3-2021 11:00:00 AM	LT1	LT1	
9-20-2021 10:00:00 AM	LT1	LT1	
11-8-2021 9:25:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

442 Pine, 442 Pine

2-1-2021 10:30:00 AM	LT1	LT1	
3-22-2021 9:10:00 AM	LT1	LT1	
5-10-2021 8:54:00 AM	LT1	LT1	
6-28-2021 9:58:00 AM	LT1	LT1	
8-16-2021 10:05:00 AM	LT1	LT1	
10-4-2021 9:45:00 AM	LT1	LT1	
11-23-2021 10:05:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Community Gardens,

1-25-2021 8:40:00 AM	LT1	LT1	
3-15-2021 8:55:00 AM	LT1	LT1	
5-3-2021 8:30:00 AM	LT1	LT1	
6-21-2021 9:45:00 AM	LT1	LT1	
8-9-2021 9:21:00 AM	LT1	LT1	
9-27-2021 9:25:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Beach Washrooms,
Harrison Lake beach

1-11-2021 9:50:00 AM	LT1	LT1	
3-1-2021 7:45:00 AM	LT1	LT1	
4-19-2021 7:36:00	LT1	LT1	

AM			
6-7-2021 8:24:00 AM	LT1	LT1	
7-5-2021 7:50:00 AM	LT1	LT1	
7-5-2021 7:50:00 AM	LT1	LT1	
7-26-2021 7:54:00 AM	LT1	LT1	
9-13-2021 7:50:00 AM	LT1	LT1	
11-1-2021 10:15:00 AM	LT1	LT1	
12-20-2021 7:50:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Peace Park,

1-25-2021 9:40:00 AM	LT1	LT1	
3-15-2021 9:40:00 AM	LT1	LT1	
5-3-2021 9:32:00 AM	LT1	LT1	
6-21-2021 10:42:00 AM	LT1	LT1	
8-9-2021 10:05:00 AM	LT1	LT1	
9-27-2021 10:17:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Echo Spring Park,

2-16-2021 9:55:00 AM	LT1	LT1	
4-6-2021 11:45:00 AM	LT1	LT1	
5-25-2021 9:15:00 AM	LT1	LT1	
7-12-2021 9:37:00 AM	LT1	LT1	
8-30-2021 8:50:00 AM	LT1	LT1	
10-18-2021 8:26:00 AM	21	LT1	
12-6-2021 8:18:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	1	0	0

Public Works Office,
Public Works Office

1-18-2021 7:15:00 AM	LT1	LT1	
3-8-2021 8:15:00 AM	LT1	LT1	
4-26-2021 7:12:00 AM	LT1	LT1	

6-14-2021 7:10:00 AM	LT1	LT1	
8-3-2021 9:55:00 AM	LT1	LT1	
9-20-2021 7:30:00 AM	LT1	LT1	
11-8-2021 7:08:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Water Treatment Plant, Water Treatment Plant

2-16-2021 11:10:00 AM	LT1	LT1	
4-6-2021 11:15:00 AM	LT1	LT1	
5-25-2021 9:00:00 AM	LT1	LT1	
7-12-2021 10:43:00 AM	LT1	LT1	
8-30-2021 10:20:00 AM	LT1	LT1	
10-18-2021 7:20:00 AM	LT1	LT1	
12-6-2021 7:15:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

459 Naismith West End, 459 Naismith

1-4-2021 9:50:00 AM	LT1	LT1	
2-22-2021 8:55:00 AM	LT1	LT1	
4-12-2021 9:44:00 AM	LT1	LT1	
5-31-2021 10:42:00 AM	LT1	LT1	
7-19-2021 10:25:00 AM	LT1	LT1	
9-7-2021 9:00:00 AM	LT1	LT1	
10-25-2021 10:35:00 AM	LT1	LT1	
12-13-2021 9:52:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Result Values: E - estimated L - less than G - greater than

Samples that contain total coliform:	1		0.98% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	0		

Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	102	

Comments:

Environmental Health Officer
Jan 27 2022

FOR FURTHER INFORMATION PLEASE CALL: David Fowler



Environmental

CERTIFICATE OF ANALYSIS

Work Order : VA21B2249 **Page** : 1 of 4
Amendment : 1
Client : Village of Harrison Hot Springs
Contact : Tyler Simmonds
Address : PO Box 160 495 Hot Springs Road
 Harrison Hot Springs BC Canada V0M 1K0
Telephone : ---
Project : WTP June 2021
PO : 17787
C-O-C number : ---
Sampler : Tyler
Site :
Quote number : Quote for Harrison Hot Springs
No. of samples received : 4
No. of samples analysed : 4

Laboratory : Vancouver - Environmental
Account Manager : Sneha Sansare
Address : 8081 Lougheed Highway
 Burnaby BC Canada V5A 1W9
Telephone : +1 604 253 4188
Date Samples Received : 17-Jun-2021 13:55
Date Analysis Commenced : 17-Jun-2021
Issue Date : 28-Jun-2021 17:47

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Adam Boettger	Team Leader - LCMS	LCMS, Waterloo, Ontario
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Dee Lee	Analyst	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Microbiology, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference. Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	Description
µg/L	micrograms per litre
µS/cm	Microsiemens per centimetre
CU	colour units (1 CU = 1 mg/L Pt)
mg/L	milligrams per litre
MPN/100mL	most probable number per 100 mL
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID			
					Raw Water	Treated Water	Peace Park	Art Gallery
<i>Client sampling date / time</i>					17-Jun-2021 09:00	17-Jun-2021 09:00	17-Jun-2021 09:00	17-Jun-2021 09:00
					VA21B2249-001	VA21B2249-002	VA21B2249-003	VA21B2249-004
					Result	Result	Result	Result
Physical Tests								
alkalinity, total (as CaCO3)	---	E290	1.0	mg/L	17.2	17.0	17.3	31.4
colour, true	---	E329	5.0	CU	<5.0	<5.0	<5.0	<5.0
conductivity	---	E100	2.0	µS/cm	47.1	51.8	52.5	93.9
pH	---	E108	0.10	pH units	7.42	7.43	7.44	7.49
solids, total dissolved [TDS]	---	E162	10	mg/L	34	38	39	69
turbidity	---	E121	0.10	NTU	0.36	<0.10	<0.10	0.10
hardness (as CaCO3), from total Ca/Mg	---	EC100A	0.60	mg/L	18.2	18.1	18.6	31.2
Anions and Nutrients								
chloride	16887-00-6	E235.Cl	0.50	mg/L	0.72	1.83	1.84	4.82
fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	<0.020	<0.020	<0.020
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.0556	0.0607	0.0620	0.0213
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	5.33	5.35	5.35	6.35
Bacteriological Tests								
coliforms, total	---	E010	1	MPN/100mL	3	<1	<1	<1
coliforms, Escherichia coli [E. coli]	---	E010	1	MPN/100mL	<1	<1	<1	<1
Total Metals								
aluminum, total	7429-90-5	E420	0.0100	mg/L	0.0315	0.0158	0.0143	<0.0100
antimony, total	7440-36-0	E420	0.00050	mg/L	<0.00050	<0.00050	<0.00050	0.00067
arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00024	0.00019	0.00020	<0.00010
barium, total	7440-39-3	E420	0.0200	mg/L	<0.0200	<0.0200	<0.0200	<0.0200
boron, total	7440-42-8	E420	0.100	mg/L	<0.100	<0.100	<0.100	<0.100
cadmium, total	7440-43-9	E420	0.000200	mg/L	<0.000200	<0.000200	<0.000200	<0.000200
calcium, total	7440-70-2	E420	0.100	mg/L	6.18	6.11	6.32	10.9
chromium, total	7440-47-3	E420	0.00200	mg/L	<0.00200	<0.00200	<0.00200	<0.00200
copper, total	7440-50-8	E420	0.00100	mg/L	<0.00100	<0.00100	<0.00100	0.102
iron, total	7439-89-6	E420	0.030	mg/L	<0.030	<0.030	<0.030	<0.030
lead, total	7439-92-1	E420	0.000500	mg/L	<0.000500	<0.000500	<0.000500	0.00188
magnesium, total	7439-95-4	E420	0.100	mg/L	0.679	0.691	0.692	0.981
manganese, total	7439-96-5	E420	0.00200	mg/L	<0.00200	<0.00200	<0.00200	<0.00200



Analytical Results

Sub-Matrix: Water		Client sample ID		Raw Water	Treated Water	Peace Park	Art Gallery	
(Matrix: Water)		Client sampling date / time		17-Jun-2021 09:00	17-Jun-2021 09:00	17-Jun-2021 09:00	17-Jun-2021 09:00	
Analyte	CAS Number	Method	LOR	Unit	VA21B2249-001	VA21B2249-002	VA21B2249-003	VA21B2249-004
					Result	Result	Result	Result
Total Metals								
mercury, total	7439-87-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050
potassium, total	7440-09-7	E420	0.100	mg/L	0.632	0.661	0.657	0.652
selenium, total	7782-49-2	E420	0.00100	mg/L	<0.00100	<0.00100	<0.00100	<0.00100
sodium, total	17341-25-2	E420	2.00	mg/L	<2.00	2.27	2.27	4.38
uranium, total	7440-61-1	E420	0.000100	mg/L	<0.000100	<0.000100	<0.000100	<0.000100
zinc, total	7440-66-6	E420	0.0500	mg/L	<0.0500	<0.0500	<0.0500	1.18
Haloacetic Acids								
bromochloroacetic acid	5589-96-8	E750	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
dibromoacetic acid	631-64-1	E750	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
dichloroacetic acid	79-43-6	E750	1.00	µg/L	12.2	12.3	12.3	12.3
monobromoacetic acid	79-08-3	E750	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
monochloroacetic acid	79-11-8	E750	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
trichloroacetic acid	76-03-9	E750	1.00	µg/L	16.7	18.7	18.7	18.7
haloacetic acids, total [HAA5]		E750	5.00	µg/L	28.9	31.0	31.0	31.0

Please refer to the General Comments section for an explanation of any qualifiers detected.



Environmental

CERTIFICATE OF ANALYSIS

Work Order : VA21C6659 **Page** : 1 of 4

Client : Village of Harrison Hot Springs **Laboratory** : Vancouver - Environmental

Contact : Tyler Simmonds **Account Manager** : Sneha Sansare

Address : PO Box 160 495 Hot Springs Road
Harrison Hot Springs BC Canada V0M 1K0 **Address** : 8081 Lougheed Highway
Burnaby BC Canada V5A 1W9

Telephone : --- **Telephone** : +1 604 253 4188

Project : WTP Nov 2021 **Date Samples Received** : 30-Nov-2021 11:45

PO : 18202 **Date Analysis Commenced** : 30-Nov-2021

C-O-C number : --- **Issue Date** : 13-Dec-2021 16:00

Sampler : Tyler

Site : ---

Quote number : Quote for Harrison Hot Springs

No. of samples received : 3

No. of samples analysed : 3

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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Signatories

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Signatories	Position	Laboratory Department
Dee Lee	Analyst	Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Microbiology, Burnaby, British Columbia
Rebecca Sit	Supervisor - Organics Extractions	Organics, Burnaby, British Columbia



Page : 2 of 4
Work Order : VA21C6659
Client : Village of Harrison Hot Springs
Project : WTP Nov 2021

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µg/L	micrograms per litre
µS/cm	Microsiemens per centimetre
CU	colour units (1 CU = 1 mg/L Pt)
mg/L	milligrams per litre
MPN/100mL	most probable number per 100 mL
NTU	nephelometric turbidity units
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

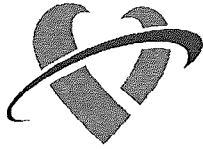
Sub-Matrix: Water (Matrix: Water)		Client sample ID				RAW water	Treated water	Peace Park	
Analyte	CAS Number	Method	LOR	Unit	30-Nov-2021 09:00 VA21C6659-001	30-Nov-2021 09:00 VA21C6659-002	30-Nov-2021 09:00 VA21C6659-003		
					Result	Result	Result		
Physical Tests									
alkalinity, total (as CaCO3)		E290	1.0	mg/L	15.9	16.7	16.9		
colour, true		E329	5.0	CU	<5.0	<5.0	<5.0		
conductivity		E100	2.0	µS/cm	47.1	51.9	52.0		
pH		E108	0.10	pH units	7.38	7.40	7.36		
solids, total dissolved [TDS]		E162	10	mg/L	28	35	38		
turbidity		E121	0.10	NTU	1.46	<0.10	<0.10		
hardness (as CaCO3), from total Ca/Mg		EC100A	0.60	mg/L	19.2	19.1	19.6		
Anions and Nutrients									
chloride	16887-00-6	E235.Cl	0.50	mg/L	0.56	1.76	1.77		
fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	<0.020	<0.020		
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.0586	0.0541	0.0536		
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	<0.0010		
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	4.94	4.93	4.92		
Bacteriological Tests									
coliforms, total		E010	1	MPN/100mL	8	<1	<1		
coliforms, Escherichia coli [E. coli]		E010	1	MPN/100mL	3	<1	<1		
Total Metals									
aluminum, total	7429-90-5	E420	0.0100	mg/L	0.107	<0.0100	<0.0100		
antimony, total	7440-36-0	E420	0.00050	mg/L	<0.00050	<0.00050	<0.00050		
arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00025	0.00018	0.00017		
barium, total	7440-39-3	E420	0.0200	mg/L	<0.0200	<0.0200	<0.0200		
boron, total	7440-42-8	E420	0.100	mg/L	<0.100	<0.100	<0.100		
cadmium, total	7440-43-9	E420	0.000200	mg/L	<0.000200	<0.000200	<0.000200		
calcium, total	7440-70-2	E420	0.100	mg/L	6.51	6.53	6.70		
chromium, total	7440-47-3	E420	0.00200	mg/L	<0.00200	<0.00200	<0.00200		
copper, total	7440-50-8	E420	0.00100	mg/L	<0.00100	0.00108	0.00179		
iron, total	7439-89-6	E420	0.030	mg/L	0.073	<0.030	<0.030		
lead, total	7439-92-1	E420	0.000500	mg/L	<0.000500	<0.000500	<0.000500		
magnesium, total	7439-95-4	E420	0.100	mg/L	0.721	0.685	0.710		
manganese, total	7439-96-5	E420	0.00200	mg/L	<0.00200	<0.00200	<0.00200		



Analytical Results

Sub-Matrix: Water (Matrix: Water)		Client sample ID		RAW water	Treated water	Peace Park
Analyte	CAS Number	Method	LOR	Unit	Client sampling date / time	Result
Total Metals						
mercury, total	7439-97-6	E508	0.0000050	mg/L	30-Nov-2021 09:00	<0.0000050
potassium, total	7440-09-7	E420	0.100	mg/L	30-Nov-2021 09:00	0.657
selenium, total	7782-49-2	E420	0.00100	mg/L	30-Nov-2021 09:00	<0.00100
sodium, total	17341-25-2	E420	2.00	mg/L	30-Nov-2021 09:00	<2.00
uranium, total	7440-61-1	E420	0.000100	mg/L	30-Nov-2021 09:00	<0.000100
zinc, total	7440-68-6	E420	0.0500	mg/L	30-Nov-2021 09:00	<0.0500
Volatile Organic Compounds [THMs]						
bromodichloromethane	75-27-4	E611B	1.0	µg/L	30-Nov-2021 09:00	<1.0
bromoform	75-25-2	E611B	1.0	µg/L	30-Nov-2021 09:00	<1.0
chloroform	67-66-3	E611B	1.0	µg/L	30-Nov-2021 09:00	30.4
dibromochloromethane	124-48-1	E611B	1.0	µg/L	30-Nov-2021 09:00	<1.0
trihalomethanes [THMs], total	----	E611B	2.0	µg/L	30-Nov-2021 09:00	36.2
Volatile Organic Compounds [THMs] Surrogates						
bromofluorobenzene, 4-	460-00-4	E611B	1.0	%	30-Nov-2021 09:00	87.8
difluorobenzene, 1,4-	540-36-3	E611B	1.0	%	30-Nov-2021 09:00	104

Please refer to the General Comments section for an explanation of any qualifiers detected.



fraserhealth

Better health.
Best in health care.

February 1, 2022

Water System Operators

Re: Metals in Drinking Water – “Flush” Message in Annual Reports

Fraser Health has recently revised its metals at the tap “Flush” message and we are asking all water systems to please include the following health message with your next annual reports to your users.

Anytime the water in a particular faucet has not been used for six hours or longer, “flush” your cold-water pipes by running the water until you notice a change in temperature. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.) The more time water has been sitting in your home's pipes, the more lead it may contain.

Use only water from the cold-tap for drinking, cooking, and especially making baby formula. Hot water is likely to contain higher levels of lead.

The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.

Conserving water is still important. Rather than just running the water down the drain you could use the water for things such as watering your plants.

If you have any questions, please contact our Drinking Water Program at 604-870-7903.

Sincerely,

Drinking Water Program
Fraser Health Authority
HPLand@fraserhealth.ca

Fraser Health Authority
Health Protection

Suite 400 2777 Gladwin Rd
Abbotsford BC
V2T 4V1 Canada

Tel (604) 870-7900
Fax (604) 852-1558
www.fraserhealth.ca

Water Sample Schedule 2022

Date	Site 1	Site 2	Site 3	
January				
4	290 Esplanade	459 naismith	98 Rockwell Dr	
11	Beach Washrooms	526 Driftwood		
18	Public Works Office	973 Hotsprings Rd/Tap	98 Rockwell Dr	
25	Peace Park	Community Garden		
Febuary				
1	170 Cedar	442 Pine	98 Rockwell Dr	
8	Boatlaunch Washrooms	843 Myng		
15	Echo (Spring Park)	Water Treatment Plant	98 Rockwell Dr	
22	290 Esplanade	459 naismith		
March				
1	Beach Washrooms	526 Driftwood	98 Rockwell Dr	
8	Public Works Office	973 Hotsprings Rd/Tap		
15	Peace Park	Community Garden	98 Rockwell Dr	
22	170 Cedar	442 Pine		
29	Boatlaunch Washrooms	843 Myng		
April				
5	Echo (Spring Park)	Water Treatment Plant	98 Rockwell Dr	
12	290 Esplanade	459 naismith		
19	Beach Washrooms	526 Driftwood	98 Rockwell Dr	
26	Public Works Office	973 Hotsprings Rd/Tap		
May				
3	Peace Park	Community Garden	98 Rockwell Dr	
10	170 Cedar	442 Pine		
17	Boatlaunch Washrooms	843 Myng	98 Rockwell Dr	
24	Echo (Spring Park)	Water Treatment Plant		
31	290 Esplanade	459 naismith	98 Rockwell Dr	
June				
7	Beach Washrooms	526 Driftwood		
14	Public Works Office	973 Hotsprings Rd/Tap	98 Rockwell Dr	
21	Peace Park	Community Garden		
28	170 Cedar	442 Pine		
July				
5	Boatlaunch Washrooms	843 Myng	98 Rockwell Dr	
12	Echo (Spring Park)	Water Treatment Plant		
19	290 Esplanade	459 naismith	98 Rockwell Dr	
26	Beach Washrooms	526 Driftwood		
August				
2	Public Works Office	973 Hotsprings Rd/Tap	98 Rockwell Dr	
9	Peace Park	Community Garden		
16	170 Cedar	442 Pine	98 Rockwell Dr	
23	Boatlaunch Washrooms	843 Myng		
30	Echo (Spring Park)	Water Treatment Plant		

Water Sample Schedule 2022

September				
6	290 Esplanade	459 naismith	98 Rockwell Dr	
13	Beach Washrooms	526 Driftwood		
20	Public Works Office	973 Hotsprings Rd/Tap	98 Rockwell Dr	
27	Peace Park	Community Garden		
October				
4	170 Cedar	442 Pine	98 Rockwell Dr	
11	Boatlaunch Washrooms	843 Myng		
18	Echo (Spring Park)	Water Treatment Plant	98 Rockwell Dr	
25	290 Esplanade	459 naismith		
November				
1	Beach Washrooms	526 Driftwood	98 Rockwell Dr	
8	Public Works Office	973 Hotsprings Rd/Tap		
15	Peace Park	Community Garden	98 Rockwell Dr	
22	170 Cedar	442 Pine		
29	Boatlaunch Washrooms	843 Myng		
December				
6	Echo (Spring Park)	Water Treatment Plant	98 Rockwell Dr	
13	290 Esplanade	459 naismith		
20	Beach Washrooms	526 Driftwood	98 rockwell Dr	
27	Public Works Office	973 Hotsprings Rd/Tap		