



fraserhealth Better health.
Best in health care.

February 1, 2022

Dear: Water System Operator

Re: Annual Reporting Requirements for Permitted Water Systems

Please find enclosed a copy of the 2021 Range Report for your water system. This report contains a summary of the bacteriological water quality results for the samples submitted through Fraser Health from your water system within the 2021 calendar year. As per the Drinking Water Protection Act the report is required to be made available to all users by June 30th 2022.

Please email HPLand@fraserhealth.ca if you would like to request a copy of the Annual Report Template.

The following are reminders for all water system operators:

- a) As drinking water testing has been deemed an essential service, all health units continue to remain open for sample drop-off on their regular designated days.
- b) Please do not use expired requisition forms as this will result in the samples either not being processed or results not being returned properly from the lab. Please discard all expired requisition forms. The expiration date is located on the bottom of the form.
- c) Please do not modify sample sites or other sections on the requisition forms. Key information is contained in the barcode and the lab is unable to include handwritten information. Please contact HPLand@fraserhealth.ca to request any changes to your requisition forms.
- d) Ensure the lead flush message provided is included with your Annual Report.
- e) The coding system from BCCDC has recently changed.

QRWRT indicates that the sample exceeded the 30 hour hold time. This could be due to courier issues or an incorrect date being recorded by the operator on the requisition forms. Water systems will still be given credit for the sample collected and a qualitative result is provided to Fraser Health. If there is bacteria detected, a separate email will be sent to the operator from Fraser Health.

REJCT DELAY3 indicates that the sample has been rejected as it has been too long in transit. No results will be provided for this sample.

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



fraserhealth

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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
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DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2021

Water System Cultus Lake Integrated Water System

Water System Owner Fraser Valley Regional District

Primary Contact Name (Operator or Manager) Dave Roblin

Phone Number (Operator or Manager) 604 702 5027

E-mail (Operator or Manager) droblin@fvrd.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:

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 of your Operating Permit (Contact the DWO for a copy if needed):

Are you in compliance with your Operating Permit? Yes No

BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

How many bacteriological samples were collected during this reporting period? 164

What is the minimum required sampling frequency for this system? (#samples/month) 14/mnth

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 checked="" 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"/>	<input type="checkbox"/>

Yes

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
12/14/2020	1			FLUSHED

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)

Are the results available on request?

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

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	Flushed annual hydrant and valve maintenance
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

DATE COMPLETED: March 31 2021	COMPLETED BY: Dave Roblin
--------------------------------------	----------------------------------

Sample Range Report

Fraser Health Authority

Facility Name: Cultus Lake Integrated Water System
Date Range: Jan 1 2021 to Dec 31 2021

Operator Dave Roblin
 1 - 45950 Cheam Ave
 Chilliwack, BC V2P 1N6

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>13 3696 Columbia Valley Rd, 3696 Columbia Valley Rd</u>				
	1-12-2021 9:00:00 AM	LT1	LT1	
	2-16-2021 9:00:00 AM	LT1	LT1	
	3-23-2021 10:30:00 AM	LT1	LT1	
	4-27-2021 11:30:00 AM	LT1	LT1	
	6-22-2021 11:15:00 AM	LT1	LT1	
	7-27-2021 10:15:00 AM	LT1	LT1	
	8-31-2021 11:10:00 AM	LT1	LT1	
	9-28-2021 11:50:00 AM	LT1	LT1	
	10-19-2021 12:30:00 PM	LT1	LT1	
	12-7-2021 9:15:00 AM	<u>LT1</u>	<u>LT1</u>	
	Total Positive:	0	0	0
<u>8 Main Well</u>				
	2-2-2021 9:45:00 AM	LT1	LT1	
	3-30-2021 12:20:00 PM	LT1	LT1	
	5-25-2021 12:25:00 PM	LT1	LT1	
	6-29-2021 12:10:00 PM	LT1	LT1	
	9-7-2021 12:30:00 PM	LT1	LT1	
	9-28-2021 12:20:00 PM	LT1	LT1	
	12-7-2021 9:45:00 AM	<u>LT1</u>	<u>LT1</u>	
	Total Positive:	0	0	0

5 Research Lab.
4222 Columbia
Valley Hwy

1-12-2021 8:10:00 AM	LT1	LT1	
1-19-2021 8:45:00 AM	LT1	LT1	
2-23-2021 11:00:00 AM	LT1	LT1	
4-6-2021 10:30:00 AM	LT1	LT1	
5-18-2021 10:45:00 AM	LT1	LT1	
6-15-2021 9:50:00 AM	LT1	LT1	
7-20-2021 10:30:00 AM	LT1	LT1	
9-21-2021 11:20:00 AM	LT1	LT1	
10-12-2021 11:00:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

12 3858 Karen Dr.
3858 Karen Dr

1-5-2021 11:30:00 AM	LT1	LT1	
2-9-2021 9:15:00 AM	LT1	LT1	
3-16-2021 9:45:00 AM	LT1	LT1	
4-20-2021 10:45:00 AM	LT1	LT1	
6-15-2021 10:35:00 AM	LT1	LT1	
7-20-2021 11:00:00 AM	LT1	LT1	
8-24-2021 12:00:00 PM	LT1	LT1	
9-21-2021 10:55:00 AM	LT1	LT1	
10-12-2021 12:10:00 PM	LT1	LT1	
11-9-2021 10:50:00 AM	LT1	LT1	
11-23-2021 9:25:00 AM	LT1	LT1	
11-30-2021 9:25:00 AM	LT1	LT1	
12-20-2021 11:15:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

4 Outside Tap 657
Mountain View, 657
Mountain View

1-12-2021 8:30:00 AM	LT1	LT1	
2-23-2021 11:45:00 AM	LT1	LT1	
3-16-2021 10:25:00 AM	LT1	LT1	
4-6-2021 11:00:00 AM	LT1	LT1	
4-13-2021 11:15:00 AM	LT1	LT1	
4-27-2021 11:50:00 AM	LT1	LT1	
5-18-2021 11:00:00 AM	LT1	LT1	
6-8-2021 11:15:00 AM	LT1	LT1	
7-13-2021 12:15:00 PM	LT1	LT1	
8-17-2021 11:00:00 AM	LT1	LT1	
9-14-2021 12:30:00 PM	LT1	LT1	
10-5-2021 12:00:00 PM	LT1	LT1	
11-2-2021 11:30:00 AM	LT1	LT1	
12-14-2021 9:30:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

1 Cultus Lake
ESSO, 4161
Columbia Valley Rd

5-11-2021 10:30:00 AM	LT1	LT1	
5-25-2021 11:50:00 AM	LT1	LT1	
6-29-2021 11:50:00 AM	LT1	LT1	
8-3-2021 10:00:00 AM	LT1	LT1	
9-7-2021 12:00:00 PM	LT1	LT1	
9-28-2021 12:20:00 PM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

Cabins - Near Water
Slides,

1-26-2021 10:00:00 AM	LT1	LT1	
3-9-2021 11:00:00 AM	LT1	LT1	
3-30-2021 10:14:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

3 180 1st Ave, 180
1st Ave

1-5-2021 12:00:00 PM	LT1	LT1	
1-26-2021 10:30:00 AM	LT1	LT1	
2-2-2021 10:15:00 AM	LT1	LT1	
2-16-2021 9:30:00 AM	LT1	LT1	
3-9-2021 11:45:00 AM	LT1	LT1	
3-30-2021 10:55:00 AM	LT1	LT1	
4-20-2021 11:00:00 AM	LT1	LT1	
5-11-2021 11:15:00 AM	LT1	LT1	
6-1-2021 10:45:00 AM	LT1	LT1	
8-10-2021 10:30:00 AM	LT1	LT1	
10-5-2021 12:30:00 PM	LT1	LT1	
10-26-2021 10:15:00 AM	LT1	LT1	
11-23-2021 9:35:00 AM	LT1	LT1	
12-14-2021 10:00:00 AM	LT1	LT1	
12-20-2021 11:30:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	0	0

7 Washroom near
Cultus Lake Plaza.

1-19-2021 9:30:00 AM	LT1	LT1	
2-9-2021 9:45:00 AM	LT1	LT1	
3-2-2021 8:45:00 AM	LT1	LT1	
3-23-2021 10:50:00 AM	LT1	LT1	
5-4-2021 11:30:00 AM	LT1	LT1	
8-31-2021 11:30:00	LT1	LT1	

AM			
9-21-2021 10:40:00	LT1	LT1	
AM			
10-19-2021 1:00:00	LT1	LT1	
PM			
11-9-2021 11:10:00	LT1	LT1	
AM			
11-30-2021 9:35:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	0	0	0

9 Well 2 Source
Sunshine Blvd

3-2-2021 9:00:00 AM	LT1	LT1	
4-27-2021 1:05:00	LT1	LT1	
PM			
6-1-2021 11:00:00	LT1	LT1	
AM			
7-6-2021 11:25:00	LT1	LT1	
AM			
8-10-2021 10:55:00	LT1	LT1	
AM			
9-14-2021 1:00:00	LT1	LT1	
PM			
10-5-2021 1:00:00	LT1	LT1	
PM			
12-14-2021 10:30:00	<u>1.0</u>	<u>LT1</u>	
AM			
Total Positive:	1	0	0

2 Munroe Standpipe

1-5-2021 11:00:00	LT1	LT1	
AM			
1-12-2021 7:45:00	LT1	LT1	
AM			
1-19-2021 9:10:00	LT1	LT1	
AM			
1-26-2021 9:30:00	LT1	LT1	
AM			
2-2-2021 8:45:00 AM	LT1	LT1	
2-9-2021 9:30:00 AM	LT1	LT1	
2-16-2021 8:30:00	LT1	LT1	
AM			
2-23-2021 10:30:00	LT1	LT1	
AM			
3-2-2021 8:30:00 AM	LT1	LT1	
3-9-2021 10:45:00	LT1	LT1	
AM			
3-16-2021 10:05:00	LT1	LT1	
AM			
3-23-2021 10:00:00	LT1	LT1	
AM			

3-30-2021 10:25:00 AM	LT1	LT1
4-6-2021 10:00:00 AM	LT1	LT1
4-13-2021 10:30:00 AM	LT1	LT1
4-20-2021 10:30:00 AM	LT1	LT1
4-27-2021 1:20:00 PM	LT1	LT1
5-4-2021 10:50:00 AM	LT1	LT1
5-11-2021 10:15:00 AM	LT1	LT1
5-18-2021 10:30:00 AM	LT1	LT1
5-25-2021 11:30:00 AM	LT1	LT1
6-1-2021 10:15:00 AM	LT1	LT1
6-8-2021 10:30:00 AM	LT1	LT1
6-15-2021 9:30:00 AM	LT1	LT1
6-22-2021 11:30:00 AM	LT1	LT1
6-29-2021 11:30:00 AM	LT1	LT1
7-6-2021 11:45:00 AM	LT1	LT1
7-13-2021 11:20:00 AM	LT1	LT1
7-20-2021 10:00:00 AM	LT1	LT1
7-27-2021 9:30:00 AM	LT1	LT1
8-3-2021 11:30:00 AM	LT1	LT1
8-10-2021 9:40:00 AM	LT1	LT1
8-17-2021 10:00:00 AM	LT1	LT1
8-24-2021 11:30:00 AM	LT1	LT1
8-31-2021 10:40:00 AM	LT1	LT1
9-7-2021 11:30:00 AM	LT1	LT1
9-14-2021 12:00:00 PM	LT1	LT1
9-21-2021 10:15:00 AM	LT1	LT1
9-28-2021 11:25:00 AM	LT1	LT1
10-5-2021 11:30:00	LT1	LT1

AM		
10-12-2021 10:40:00	LT1	LT1
AM		
10-19-2021 12:00:00	LT1	LT1
PM		
10-26-2021 10:00:00	LT1	LT1
AM		
11-2-2021 10:45:00	LT1	LT1
AM		
11-9-2021 10:15:00	LT1	LT1
AM		
11-23-2021 9:15:00	LT1	LT1
AM		
11-30-2021 9:15:00	LT1	LT1
AM		
12-7-2021 9:30:00	LT1	LT1
AM		
12-14-2021 9:00:00	LT1	LT1
AM		
12-20-2021 11:45:00	<u>LT1</u>	<u>LT1</u>
AM		
Total Positive:	0	0
		0

6 Sunnyside
Campground, 4165
Columbia Valley
Hwy

5-25-2021 12:05:00	LT1	LT1
PM		
6-1-2021 10:35:00	LT1	LT1
AM		
6-8-2021 10:45:00	LT1	LT1
AM		
6-15-2021 10:10:00	LT1	LT1
AM		
6-22-2021 11:00:00	LT1	LT1
AM		
6-29-2021 12:25:00	LT1	LT1
PM		
7-6-2021 11:15:00	LT1	LT1
AM		
7-13-2021 12:05:00	LT1	LT1
PM		
7-27-2021 10:00:00	LT1	LT1
AM		
8-3-2021 12:00:00	LT1	LT1
PM		
8-10-2021 10:10:00	LT1	LT1
AM		
8-17-2021 10:30:00	LT1	LT1
AM		
8-24-2021 12:00:00	LT1	LT1
PM		
8-31-2021 10:55:00	<u>LT1</u>	<u>LT1</u>

AM
Total Positive: 0 0 0

10 Cultus Lake
Community Centre,
Columbia Valley
Hwy

4-13-2021 10:45:00 AM	LT1 GTR200	LT1 GTR200	
5-4-2021 11:00:00 AM	LT1	LT1	
7-13-2021 11:50:00 AM	OIE	OIE	
7-13-2021 11:50:00 AM	LT1	LT1	
11-2-2021 11:00:00 AM	<u>LT1</u>	<u>LT1</u>	
Total Positive:	0	1	0

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

Samples that contain total coliform:	1		0.61% of total
Samples that contain e. coli:	1		0.61% 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:	164		

Comments:

Environmental Health Officer
Jan 27 2022

FOR FURTHER INFORMATION PLEASE CALL: Jeniene Lutz (604) 870-7900

Analytical Report

Bill To: Fraser Valley Regional District 1 - 45950 Cheam Ave. Chilliwack, BC, Canada V2P 1N6 Attn: Accounts Payable Sampled By: Brett Dyck Company: FVRD	Project ID: Cultus Lake Project Name: Project Location: LSD: P.O.: Proj. Acct. code:	Lot ID: 1576639 Control Number: Date Received: Jun 7, 2022 Date Reported: Jun 10, 2022 Report Number: 2755644
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Reference Number	1576639-1
Sample Date	June 07, 2022
Sample Time	09:00
Sample Location	
Sample Description	3858 Karen / Distribution System
Sample Matrix	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
Metals Extractable					
Aluminum	Extractable mg/L	0.001	0.001	0.1 OG; 2.9 MAC	Below OG
Antimony	Extractable mg/L	0.00013	0.00002	0.006	Below MAC
Arsenic	Extractable mg/L	0.0014	0.0001	0.010	Below MAC
Barium	Extractable mg/L	0.11	0.0001	2.0	Below MAC
Boron	Extractable mg/L	0.018	0.002	5	Below MAC
Cadmium	Extractable mg/L	0.00001	0.00001	0.007	Below MAC
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC
Copper	Extractable mg/L	0.0063	0.0005	1 AO; 2 MAC	Below AO
Lead	Extractable mg/L	0.00003	0.00001	0.005	Below MAC
Selenium	Extractable mg/L	0.0013	0.0002	0.05	Below MAC
Strontium	Extractable mg/L	0.22	0.0001	7.0	Below MAC
Uranium	Extractable mg/L	0.00062	0.00001	0.02	Below MAC
Vanadium	Extractable mg/L	0.00055	0.00005		
Zinc	Extractable mg/L	0.0017	0.0005	5.0	Below AO
Physical and Aggregate Properties					
Colour	True Colour units	<5	5		
Turbidity	NTU	0.16	0.1	0.1/0.3/1.0 OG	
Routine Water					
pH - Holding Time		Exceeded			
pH	at 25 °C	7.90	0.01	7.0-10.5	Within Range
Electrical Conductivity	µS/cm at 25 °C	417	1		
Calcium	Extractable mg/L	67	0.01		
Iron	Extractable mg/L	0.004	0.004	0.3	Below AO
Magnesium	Extractable mg/L	6.5	0.02		
Manganese	Extractable mg/L	0.003	0.001	0.02 AO; 0.12 MAC	Below AO
Potassium	Extractable mg/L	2.0	0.04		
Silicon	Extractable mg/L	7.9	0.005		
Sodium	Extractable mg/L	7.5	0.1	200	Below AO
T-Alkalinity	as CaCO3 mg/L	169	5		
Chloride	Dissolved mg/L	13.7	0.05	250	Below AO
Fluoride	Dissolved mg/L	0.06	0.01	1.5	Below MAC
Nitrate - N	Dissolved mg/L	0.52	0.01	10	Below MAC
Nitrite - N	Dissolved mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved mg/L	28.0	0.1	500	Below AO
Hardness	as CaCO3 (extractable) mg/L	200	1		
Total Dissolved Solids	Extractable mg/L	250	1	500	Below AO