

March 6, 2023

Dear: Water System Operator

**Re: Annual Reporting Requirements for Permitted Water Systems**

---

Please find enclosed a copy of the 2022 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 2022 calendar year. As per the Drinking Water Protection Act the report is required to be made available to all users by June 30<sup>th</sup> 2022.

Please email [david.fowler@fraserhealth.ca](mailto:david.fowler@fraserhealth.ca) if you would like to request a copy of the Annual Report Template.

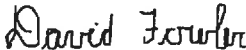
The following are reminders for all water system operators:

- 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 [david.fowler@fraserhealth.ca](mailto:david.fowler@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,



David Fowler  
Environmental Health Officer, Fraser Health Authority  
[David.fowler@fraserhealth.ca](mailto:David.fowler@fraserhealth.ca)

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

**DRINKING WATER SYSTEM ANNUAL REPORT**

**Reporting Period:** January 1<sup>st</sup> to December 31<sup>st</sup>, 2022 (year)

**Water System** Yale Water

**Water System Owner** Fraser Valley Regional District

**Primary Contact Name (Operator or Manager)** Dave Roblin

**Phone Number (Operator or Manager)** 604-798-5426

**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 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? 53

What is the minimum required sampling frequency for this system? (#samples/month) 4

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 checked="" 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
			see sample range rpt	Flushing and disinfecting

**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?  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	flushing and disinfection
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: June 14 2023	COMPLETED BY: Dave Roblin
------------------------------	---------------------------

## Sample Range Report

Fraser Health Authority

**Facility Name:** Yale Water System  
**Date Range:** Jan 1 2022 to Dec 31 2022

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

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Yale 3 Douglas St and Regent St, 30860 Trans Canada Highway</u>				
	1-4-2022 8:30:00 AM	LT1	LT1	
	1-18-2022 8:35:00 AM	21	LT1	
	2-15-2022 9:50:00 AM	LT1	LT1	
	3-15-2022 9:10:00 AM	1	LT1	
	3-22-2022 8:15:00 AM	LT1	LT1	
	4-12-2022 8:10:00 AM	1	LT1	
	4-12-2022 8:10:00 AM	1	LT1	
	5-10-2022 9:50:00 AM	LT1	LT1	
	7-5-2022 9:00:00 AM	2	LT1	
	8-2-2022 9:00:00 AM	LT1	LT1	
	8-30-2022 8:30:00 AM	LT1	LT1	
	9-27-2022 9:30:00 AM	LT1	LT1	
	10-25-2022 8:45:00 AM	LT1	LT1	
	11-22-2022 8:40:00 AM	<u>LT1</u>	<u>LT1</u>	
	<b>Total Positive:</b>	<b>5</b>	<b>0</b>	<b>0</b>
<u>Yale 2 Pumphouse,</u>				
	1-11-2022 11:30:00 AM	LT1	LT1	
	2-8-2022 10:00:00 AM	LT1	LT1	
	3-8-2022 8:40:00 AM	LT1	LT1	
	4-5-2022 9:30:00 AM	21	LT1	
	4-12-2022 8:30:00 AM	LT1	LT1	

5-31-2022 9:20:00 AM	LT1	LT1	
6-28-2022 7:30:00 AM	LT1	LT1	
7-26-2022 8:45:00 AM	LT1	LT1	
8-23-2022 8:50:00 AM	LT1	LT1	
9-20-2022 8:30:00 AM	LT1	LT1	
10-18-2022 8:50:00 AM	LT1	LT1	
11-15-2022 8:00:00 AM	LT1	LT1	
12-13-2022 9:00:00 AM	<u>LT1</u>	<u>LT1</u>	
<b>Total Positive:</b>	<b>1</b>	<b>0</b>	<b>0</b>

Yale 4 Regent St and Bridge St, Yale

1-25-2022 10:15:00 AM	LT1	LT1	
2-22-2022 9:10:00 AM	14	LT1	
3-1-2022 12:15:00 PM	LT1	LT1	
4-19-2022 9:00:00 AM	3	LT1	
5-17-2022 8:55:00 AM	LT1	LT1	
6-14-2022 9:05:00 AM	LT1	LT1	
7-12-2022 8:40:00 AM	2	LT1	
8-9-2022 9:35:00 AM	LT1	LT1	
9-6-2022 9:30:00 AM	LT1	LT1	
10-4-2022 8:45:00 AM	LT1	LT1	
11-1-2022 8:45:00 AM	1	LT1	
11-8-2022 9:15:00 AM	LT1	LT1	
11-29-2022 9:00:00 AM	<u>QRWRT</u>	<u>QRWRT</u>	
<b>Total Positive:</b>	<b>4</b>	<b>0</b>	<b>0</b>

Yale 1 Front St and Victoria St, Front St and Victoria St

2-1-2022 10:55:00 AM	LT1	LT1	
3-29-2022 8:30:00 AM	LT1	LT1	



4-26-2022 9:20:00 AM	2	LT1	
5-3-2022 8:00:00 AM	LT1	LT1	
5-24-2022 9:00:00 AM	LT1	LT1	
6-7-2022 9:00:00 AM	LT1	LT1	
6-21-2022 8:40:00 AM	LT1	LT1	
7-19-2022 9:15:00 AM	LT1	LT1	
8-16-2022 9:15:00 AM	LT1	LT1	
9-13-2022 9:00:00 AM	LT1	LT1	
10-11-2022 9:00:00 AM	LT1	LT1	
11-8-2022 9:30:00 AM	LT1	LT1	
12-6-2022 8:30:00 AM	<u>LT1</u>	<u>LT1</u>	
<b>Total Positive:</b>	<b>1</b>	<b>0</b>	<b>0</b>

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

Samples that contain total coliform:	11		20.75% 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:	1		
Number of samples that contain total coliform in last 30 days:	0/0		
Total number of samples:	53		

**Comments:**

\_\_\_\_\_  
Environmental Health Officer  
Feb 27 2023

FOR FURTHER INFORMATION PLEASE CALL: Jessica Hibbs (604) 870-7900

## Analytical Report

Bill To: Fraser Valley Regional District 1 - 45950 Cheam Ave. Chilliwack, BC, Canada V2P 1N6	Project ID: Chemical/Physical	Lot ID: <b>1654384</b>
Attn: Accounts Payable	Project Name:	Control Number:
Sampled By: M. Teschke	Project Location: Canyon	Date Received: May 30, 2023
Company: FVRD	LSD:	Date Reported: Jun 6, 2023
	P.O.:	Report Number: 2878170
	Proj. Acct. code:	

<b>Reference Number</b>	1654384-4
<b>Sample Date</b>	May 30, 2023
<b>Sample Time</b>	09:30
<b>Sample Location</b>	
<b>Sample Description</b>	Yale WS / Well/Pumphouse / 8.3 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Metals Extractable</b>					
Aluminum	Extractable mg/L	<0.001	0.001	0.1 OG; 2.9 MAC	Below OG
Antimony	Extractable mg/L	0.00006	0.00002	0.006	Below MAC
Arsenic	Extractable mg/L	0.0004	0.0001	0.010	Below MAC
Barium	Extractable mg/L	0.023	0.0001	2.0	Below MAC
Boron	Extractable mg/L	0.007	0.002	5	Below MAC
Cadmium	Extractable mg/L	<0.00001	0.00001	0.007	Below MAC
Chromium	Extractable mg/L	0.00077	0.00005	0.05	Below MAC
Copper	Extractable mg/L	<0.0005	0.0005	1 AO; 2 MAC	Below AO
Lead	Extractable mg/L	0.00002	0.00001	0.005	Below MAC
Selenium	Extractable mg/L	0.0004	0.0002	0.05	Below MAC
Strontium	Extractable mg/L	0.075	0.0001	7.0	Below MAC
Uranium	Extractable mg/L	0.00006	0.00001	0.02	Below MAC
Vanadium	Extractable mg/L	0.00033	0.00005		
Zinc	Extractable mg/L	0.0019	0.0005	5.0	Below AO
<b>Physical and Aggregate Properties</b>					
Colour	Apparent, Potable Colour units	<5	5	15	Below AO
Turbidity	NTU	0.4	0.1	0.1/0.3/1.0 OG	
<b>Routine Water</b>					
pH		7.83	1	7.0-10.5	Within OG Range
Electrical Conductivity	at 25 °C µS/cm	139	1		
Chloride	Dissolved mg/L	2.1	0.4	250	Below AO
Fluoride	mg/L	<0.05	0.05	1.5	Below MAC
Nitrate - N	mg/L	0.08	0.01	10	Below MAC
Nitrite - N	mg/L	<0.005	0.005	1	Below MAC
Sulfate (SO4)	mg/L	5.04	0.2	500	Below AO
T-Alkalinity	as CaCO3 mg/L	67	5		
Total Dissolved Solids	Calculated Value mg/L	74	0.5		
Calcium	Extractable mg/L	20	0.01		
Iron	Extractable mg/L	<0.004	0.004	0.3	Below AO
Magnesium	Extractable mg/L	4.2	0.02		
Manganese	Extractable mg/L	<0.001	0.001	0.02 AO; 0.12 MAC	Below AO
Potassium	Extractable mg/L	0.75	0.04		
Silicon	Extractable mg/L	6.3	0.005		
Sodium	Extractable mg/L	1.9	0.1	200	Below AO
Hardness	as CaCO3 (extractable) mg/L	68	1		