

EMERGENCY RESPONSE & CONTINGENCY PLAN 2021

Water System Name: Vanguard Secondary.

Emergency Contacts	Name and Title	Phone	Fax	E-mail
Water System - Primary Contact (person responsible for receiving call from lab and/or FHA)	Terry Walker	Office : 604-534-3294 Cell: 604-841-7299	604-534-0841	tewalker@sd35.bc.ca
Water System - Secondary Contact (Should primary contact be ill or on vacation etc.)	Brad Cairns	Office : 604-534-3294 Cell: 604-830-6367	604-534-0841	brcairns@sd35.bc.ca
Water System Owner	Langley School district #35	Ph: 604-534-3294	604-534-0841	
Fraser Health Authority Contacts				
Environmental Health Officer	Barbara Haworth	604-870-7900	604-870-7901	barb.haworth@fraserhealth.ca
Medical Health Officer	MHO Line 8-4:30	604-587-3828or 1-877-342-6467		
	After Hours Line	604-527-4806		
Fraser Health After Hours Contact (After 4:30 pm or on weekends)	Fraser Health On-Call Staff	604-527-4806		
Emergency Contacts				
Alternate Source of Water i.e. bottled water or bulk supply	Allied Water Supply	604-534-6085		
Plumbing Services	District Facilities	604-534-3294		
Equipment Services i.e. Treatment/pumps	Union Pumps	604-533-3727		
Electrical Services	District Facilities	604-534-3294		
B.C. Hydro		1-888-769-3766		
Other				

Signature:  **Title:** _____

Name: _____ **Date:** FEB 19 2021

Brad Cairns
Manager, Mechanical Systems

Sample Range Report

Fraser Health Authority

Facility Name: *Vanquard sec*
 Date Range: *Qter Elementary* School WS
 Jan 1 2020 to Dec 31 2020

Operator

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Class Room #5.</u>				
<u>3825 244 th St.</u>				
	1-7-2020	L1	L1	
	1-21-2020	L1	L1	
	2-4-2020 9:15:00 AM	LT1	LT1	
	2-18-2020 9:05:00 AM	LT1	LT1	
	3-3-2020 8:25:00 AM	LT1	LT1	
	3-16-2020 9:05:00 AM	LT1	LT1	
	4-6-2020 8:15:00 AM	LT1	LT1	
	4-21-2020 10:15:00 AM	LT1	LT1	
	5-5-2020 8:45:00 AM	LT1	LT1	
	5-26-2020 8:55:00 AM	LT1	LT1	
	6-3-2020 9:05:00 AM	QRWRT	QRWRT	
	6-16-2020 10:05:00 AM	LT1	LT1	
	7-7-2020 10:00:00 AM	LT1	LT1	
	7-28-2020 10:05:00 AM	LT1	LT1	
	8-11-2020 10:10:00 AM	LT1	LT1	
	8-25-2020 8:55:00 AM	LT1	LT1	
	9-8-2020 11:05:00 AM	LT1	LT1	
	9-23-2020 11:05:00 AM	LT1	LT1	
	10-7-2020 9:05:00 AM	LT1	LT1	
	10-19-2020 9:05:00 AM	REJCT DELAY3	REJCT DELAY3	
	10-27-2020 9:05:00	LT1	LT1	

AM			
11-17-2020 9:50:00	LT1	LT1	
AM			
11-24-2020 11:05:00	LT1	LT1	
AM			
12-1-2020 9:05:00	LT1	LT1	
AM			
12-15-2020 9:15:00	<u>LT1</u>	<u>LT1</u>	
AM			
Total Positive:	0	0	0

Staff Room, 3825
244th St.

1-7-2020	L1	L1
1-21-2020	L1	L1
2-4-2020 9:10:00	LT1	LT1
AM		
2-18-2020 9:00:00	LT1	LT1
AM		
3-3-2020 8:20:00	LT1	LT1
AM		
3-16-2020 9:00:00	LT1	LT1
AM		
4-6-2020 8:10:00	LT1	LT1
AM		
4-21-2020 10:10:00	LT1	LT1
AM		
5-5-2020 8:40:00	LT1	LT1
AM		
5-26-2020 8:50:00	LT1	LT1
AM		
6-3-2020 9:00:00	QRWRT	QRWRT
AM		
6-16-2020 10:00:00	LT1	LT1
AM		
7-7-2020 9:55:00	LT1	LT1
AM		
7-28-2020 10:00:00	LT1	LT1
AM		
8-11-2020 10:05:00	LT1	LT1
AM		
8-25-2020 8:30:00	LT1	LT1
AM		
9-8-2020 11:00:00	LT1	LT1
AM		
9-23-2020 11:00:00	LT1	LT1
AM		
10-7-2020 9:00:00	LT1	LT1
AM		
10-19-2020 9:00:00	REJCT DELAY3	REJCT DELAY3
AM		
10-27-2020 9:00:00	LT1	LT1
AM		
11-17-2020 9:45:00	LT1	LT1
AM		

11-24-2020 11:00:00 AM LT1 LT1

12-1-2020 9:00:00 AM LT1 LT1

12-15-2020 9:10:00 AM LT1 LT1

Total Positive: 0 0 0

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

Samples that contain total coliform:	0	0.00% 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:	50	

Comments:

Environmental Health Officer

Feb 11 2021

FOR FURTHER INFORMATION PLEASE CALL: Barb Haworth

Analytical Report

Bill To: School District #35	Project ID:	Lot ID: 1433137
20260 - 64 Avenue	Project Name:	Control Number:
Langley, BC, Canada	Project Location:	Date Received: Jul 7, 2020
V3A 4P7	LSD:	Date Reported: Jul 13, 2020
Attn: Accounts Payable	P.O.: S00023	Report Number: 2528593
Sampled By:	Proj. Acct. code:	
Company:		

Reference Number	1433137-2
Sample Date	July 07, 2020
Sample Time	10:00
Sample Location	Vanguard SEC
Sample Description	Otter Elementary School / 8.8 °C
Sample Matrix	Drinking Water

		Sample Name	Drinking Water			
Analyte		Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
Metals Extractable						
Aluminum	Extractable	mg/L	<0.001	0.001	0.1	Below OG
Antimony	Extractable	mg/L	0.00004	0.00002	0.006	Below MAC
Arsenic	Extractable	mg/L	0.0010	0.0001	0.010	Below MAC
Barium	Extractable	mg/L	0.0090	0.0001	2.0	Below MAC
Boron	Extractable	mg/L	0.004	0.002	5	Below MAC
Cadmium	Extractable	mg/L	<0.00001	0.00001	0.005	Below MAC
Chromium	Extractable	mg/L	0.00013	0.00005	0.05	Below MAC
Copper	Extractable	mg/L	0.016	0.0005	1 AO; 2 MAC	Below AO
Lead	Extractable	mg/L	0.00014	0.00001	0.005	Below MAC
Selenium	Extractable	mg/L	0.0007	0.0002	0.05	Below MAC
Strontium	Extractable	mg/L	0.044	0.0001	7.0	Below MAC
Uranium	Extractable	mg/L	0.00005	0.00001	0.02	Below MAC
Vanadium	Extractable	mg/L	0.0028	0.00005		
Zinc	Extractable	mg/L	0.0028	0.0005	5.0	Below AO
Microbiological Analysis						
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	0.14	0.1	0.1	Above OG
Routine Water						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.43	0.01	7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	136	1		
Calcium	Extractable	mg/L	11	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	1.1	0.04		
Silicon	Extractable	mg/L	12	0.005		
Sodium	Extractable	mg/L	5.1	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	54	5		
Chloride	Dissolved	mg/L	3.07	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.05	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	1.00	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	5.8	0.1	500	Below AO

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2020 (year)

Water System Vanguard Secondary (Otter)

Water System Owner Langley School District

Primary Contact Name (Operator or Manager) Brad Cairns

Phone Number (Operator or Manager) 604-830-6367

E-mail (Operator or Manager) brcairns@sd35.bc.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? 50

What is the minimum required sampling frequency for this system? (#samples/month) 1

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

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	Cleaned and disinfected the reservoir.
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: 18-Feb-2021

COMPLETED BY: Brad Cairns