

EMERGENCY RESPONSE & CONTINGENCY PLAN 2023

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)	Ryan Smith	Office : 604-534-3294 Cell: 604-830-4326	604-534-0841	rsmith@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: Brad Cairns
Manager, Mechanical Systems

Date: MAR 15 2023

Sample Range Report

Fraser Health Authority

Facility Name: Vanguard Secondary School

Date Range: Jan 1 2022 to Dec 31 2022

Operator Terry Walker
Attn Accounts Payable

4875 222nd St

Langley City, BC V3A 3Z7

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Class Room 5, 3825</u>				
<u>244 th St.</u>				
	1-4-2022 9:35:00 AM	LT1	LT1	
	1-25-2022 9:20:00 AM	LT1	LT1	
	2-8-2022 9:30:00 AM	LT1	LT1	
	2-22-2022 8:45:00 AM	LT1	LT1	
	3-8-2022 8:45:00 AM	LT1	LT1	
	3-22-2022 8:40:00 AM	LT1	LT1	
	4-5-2022 8:50:00 AM	LT1	LT1	
	4-26-2022 8:30:00 AM	LT1	LT1	
	5-10-2022 8:35:00 AM	LT1	LT1	
	5-24-2022 8:50:00 AM	LT1	LT1	
	6-7-2022 9:05:00 AM	LT1	LT1	
	6-22-2022 8:30:00 AM	LT1	LT1	
	7-6-2022 7:55:00 AM	LT1	LT1	
	7-19-2022 8:55:00 AM	LT1	LT1	
	8-16-2022 8:00:00 AM	LT1	LT1	
	9-6-2022 8:35:00 AM	LT1	LT1	
	9-20-2022 9:05:00 AM	LT1	LT1	
	10-4-2022 11:35:00 AM	LT1	LT1	
	10-18-2022 8:35:00 AM	LT1	LT1	
	11-8-2022 8:30:00 AM	LT1	LT1	
	11-22-2022 8:40:00 AM	LT1	LT1	
	12-5-2022 8:55:00 AM	LT1	LT1	
	12-19-2022 8:15:00	<u>QRWRT</u>	<u>QRWRT</u>	

AM			
Total Positive:	0	0	0

Staff Room, 3825
244th St.

1-4-2022 9:30:00 AM	LT1	LT1
1-25-2022 9:15:00 AM	LT1	LT1
2-8-2022 9:25:00 AM	LT1	LT1
2-22-2022 8:40:00 AM	LT1	LT1
3-8-2022 8:40:00 AM	LT1	LT1
3-22-2022 8:35:00 AM	LT1	LT1
4-5-2022 8:45:00 AM	LT1	LT1
4-26-2022 8:25:00 AM	LT1	LT1
5-10-2022 8:30:00 AM	LT1	LT1
5-24-2022 8:45:00 AM	LT1	LT1
6-7-2022 9:00:00 AM	LT1	LT1
6-22-2022 8:25:00 AM	LT1	LT1
7-6-2022 7:50:00 AM	LT1	LT1
7-19-2022 8:50:00 AM	LT1	LT1
8-3-2022 8:05:00 AM	LT1	LT1
8-16-2022 7:55:00 AM	LT1	LT1
9-6-2022 8:30:00 AM	LT1	LT1
9-20-2022 9:00:00 AM	LT1	LT1
10-4-2022 11:30:00 AM	LT1	LT1
10-18-2022 8:30:00 AM	LT1	LT1
11-8-2022 8:25:00 AM	LT1	LT1
11-22-2022 8:35:00 AM	LT1	LT1
12-5-2022 8:50:00 AM	LT1	LT1
12-19-2022 8:10:00 AM	<u>QRWRT</u>	<u>QRWRT</u>
Total Positive:	0	0

Class Room,

8-3-2022 8:10:00 AM	<u>LT1</u>	<u>LT1</u>
Total Positive:	0	0

AUDIT - Staff Room,

3825 244th St.

6-7-2022 11:00:00
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:	49	

Comments:



Environmental Health Officer

Feb 27 2023

FOR FURTHER INFORMATION PLEASE CALL: Barb Haworth

Analytical Report

Bill To: School District #35	Project ID:	Lot ID: 1585967
20260 - 64 Avenue	Project Name:	Control Number:
Langley, BC, Canada	Project Location:	Date Received: Jul 19, 2022
V3A 4P7	LSD:	Date Reported: Jul 25, 2022
Attn: Accounts Payable	P.O.: S00023	Report Number: 2769496
Sampled By:	Proj. Acct. code:	
Company:		

Reference Number	1585967-4
Sample Date	July 19, 2022
Sample Time	09:00
Sample Location	
Sample Description	Otter Sch / 11.2 °C Vanguard
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	0.00003	0.00002	0.006	Below MAC
Arsenic	Extractable mg/L	0.0010	0.0001	0.010	Below MAC
Barium	Extractable mg/L	0.0061	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	0.007	Below MAC
Chromium	Extractable mg/L	0.00014	0.00005	0.05	Below MAC
Copper	Extractable mg/L	0.015	0.0005	1 AO; 2 MAC	Below AO
Lead	Extractable mg/L	0.00011	0.00001	0.005	Below MAC
Selenium	Extractable mg/L	0.0006	0.0002	0.05	Below MAC
Strontium	Extractable mg/L	0.044	0.0001	7.0	Below MAC
Uranium	Extractable mg/L	0.00004	0.00001	0.02	Below MAC
Vanadium	Extractable mg/L	0.0026	0.00005		
Zinc	Extractable mg/L	0.0024	0.0005	5.0	Below AO
Physical and Aggregate Properties					
Colour	True	Colour units	<5	5	
Turbidity		NTU	0.22	0.1	0.1/0.3/1.0 OG
Routine Water					
pH - Holding Time		Exceeded			
pH	at 25 °C	7.68	0.01	7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	146	1	
Calcium	Extractable mg/L	11	0.01		
Iron	Extractable mg/L	0.012	0.004	0.3	Below AO
Magnesium	Extractable mg/L	6.9	0.02		
Manganese	Extractable mg/L	0.004	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	5.0	0.1	200	Below AO
T-Alkalinity	as CaCO3 mg/L	57	5		
Chloride	Dissolved mg/L	3.00	0.05	250	Below AO
Fluoride	Dissolved mg/L	0.07	0.01	1.5	Below MAC
Nitrate - N	Dissolved mg/L	0.90	0.01	10	Below MAC
Nitrite - N	Dissolved mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved mg/L	5.3	0.1	500	Below AO
Hardness	as CaCO3 (extractable) mg/L	57	1		
Total Dissolved Solids	Extractable mg/L	104	1	500	Below AO

Analytical Report

Bill To: School District #35	Project ID:	Lot ID: 1585967
20260 - 64 Avenue	Project Name:	Control Number:
Langley, BC, Canada	Project Location:	Date Received: Jul 19, 2022
V3A 4P7	LSD:	Date Reported: Jul 25, 2022
Attn: Accounts Payable	P.O.: S00023	Report Number: 2769496
Sampled By:	Proj. Acct. code:	
Company:		

Reference Number	1585967-8
Sample Date	July 21, 2022
Sample Time	07:45
Sample Location	
Sample Description	Otter Sch / 3.3°C
Sample Matrix	Drinking Water

Analyte		Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
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

Approved by:



Max Hewitt
Operations Manager

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2022 (year)

Water System Vanguard Secondary

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 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? 49

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	Well casing extended new well pump and controls added. (Union Pumps)
Equipment repair or replacement	
Annual maintenance of system	Filters, UV lamps replaced.
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
New system planned with addition to existing school	April 30 2023

Click here to enter a date.

DATE COMPLETED: March 15 2023

COMPLETED BY: Brad cairns