

DRINKING WATER SYSTEM ANNUAL REPORT

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

Water System

Water System Owner

Primary Contact Name (Operator or Manager)

Phone Number (Operator or Manager)

E-mail (Operator or Manager)

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) CVRD Engineering Services, 175 Ingram Street, Duncan, BC

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? _____

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

If yes, attach a list of the chemical results

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.

Next scheduled full chemical test (date)

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	
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

<p>Click here to enter a date.</p> <p>DATE COMPLETED:</p>	<p>COMPLETED BY:</p>
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LAMBOURNE ESTATES WATER SYSTEM

Facility Location
Lanes Road Duncan, Sutherland & Cherry Point Road

Facility Information	
Facility Type	15-300 (DWC)

Facility Sampling History

Location	Date	Total Coliform	E. Coli
S-2 4533 Lanes Road, 4533 Lanes	15-Dec-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	8-Dec-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	30-Nov-2020	1	LT1
S-3 Sample Port inside treatment building, Treatment Building	24-Nov-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	17-Nov-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	9-Nov-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	3-Nov-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	28-Oct-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	19-Oct-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	14-Oct-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	6-Oct-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	29-Sep-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	22-Sep-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	15-Sep-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	9-Sep-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	1-Sep-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	25-Aug-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	19-Aug-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	11-Aug-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	4-Aug-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	28-Jul-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	21-Jul-2020	LT1	LT1



S-2 4533 Lanes Road, 4533 Lanes	14-Jul-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	7-Jul-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	29-Jun-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	23-Jun-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	16-Jun-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	9-Jun-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	1-Jun-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	26-May-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	20-May-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	12-May-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	5-May-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	28-Apr-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	21-Apr-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	15-Apr-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	7-Apr-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	30-Mar-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	24-Mar-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	17-Mar-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	2-Mar-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	25-Feb-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	19-Feb-2020	LT1	LT1
S-2 4533 Lanes Road, 4533 Lanes	11-Feb-2020	LT1	LT1
S-1 Chestnut Street- Reservoir, Reservoir	4-Feb-2020	LT1	LT1
S-4 Across 1221 Sutherland Drive, S-4 Across 1221 Sutherland Drive	28-Jan-2020	LT1	LT1
S-3 Sample Port inside treatment building, Treatment Building	20-Jan-2020	L1	LT1
S - 2 Water Treatment Building, Lambourn WS - S-2 Water Treatment Building	14-Jan-2020	L1	L1
S-1 Chestnut Street- Reservoir, Reservoir	7-Jan-2020	L1	L1

Alkalinity (total, as CaCO3)		Sampling Point Name	Criteria	
12/15/2020	136 mg/L	Well #3		
12/15/2020	139 mg/L	Well #4		
Aluminum (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.005 mg/L	Well #3	<=0.1	Operational - Conventional
12/15/2020	< 0.005 mg/L	Well #4	<=0.1	Operational - Conventional
Ammonia (total, as N)		Sampling Point Name	Criteria	
12/15/2020	0.31 mg/L	Well #3		
12/15/2020	0.58 mg/L	Well #4		
Antimony (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.0005 mg/L	Well #3	<=0.006	MAC
12/15/2020	< 0.0005 mg/L	Well #4	<=0.006	MAC
Arsenic (total)		Sampling Point Name	Criteria	
12/15/2020	0.0004 mg/L	Well #3	<=0.010	MAC
12/15/2020	0.0002 mg/L	Well #4	<=0.010	MAC
Barium (total)		Sampling Point Name	Criteria	
12/15/2020	0.0220 mg/L	Well #3	<=2.0	MAC
12/15/2020	0.0209 mg/L	Well #4	<=2.0	MAC
Beryllium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00005 mg/L	Well #3		
12/15/2020	< 0.00005 mg/L	Well #4		
Boron (total)		Sampling Point Name	Criteria	
12/15/2020	0.019 mg/L	Well #3	<=5	MAC
12/15/2020	0.023 mg/L	Well #4	<=5	MAC
Bromide		Sampling Point Name	Criteria	
12/15/2020	< 0.05 mg/L	Well #3		
12/15/2020	< 0.05 mg/L	Well #4		
Cadmium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00001 mg/L	Well #3	<=0.005	MAC
12/15/2020	< 0.00001 mg/L	Well #4	<=0.005	MAC
Calcium (total)		Sampling Point Name	Criteria	
12/15/2020	33.3 mg/L	Well #3		

Calcium (total)		Sampling Point Name	Criteria	
12/15/2020	31.6 mg/L	Well #4		
Chloride		Sampling Point Name	Criteria	
12/15/2020	8.00 mg/L	Well #3	<=250	AO
12/15/2020	6.21 mg/L	Well #4	<=250	AO
Chromium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.0005 mg/L	Well #3	<=0.05	MAC
12/15/2020	< 0.0005 mg/L	Well #4	<=0.05	MAC
Cobalt (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00005 mg/L	Well #3		
12/15/2020	< 0.00005 mg/L	Well #4		
Colour		Sampling Point Name	Criteria	
12/15/2020	< 5 TCU	Well #3	<=15	AO
12/15/2020	7 TCU	Well #4	<=15	AO
Conductivity		Sampling Point Name	Criteria	
12/15/2020	310 uS/cm	Well #3		
12/15/2020	301 uS/cm	Well #4		
Copper (total)		Sampling Point Name	Criteria	
12/15/2020	0.0010 mg/L	Well #3	<=1.0	AO
12/15/2020	0.0006 mg/L	Well #4	<=1.0	AO
Escherichia coli / E. coli (counts)		Sampling Point Name	Criteria	
12/15/2020	< 1 counts/100ml	Well #3	<=0, P	Microbiological Standard
12/15/2020	< 1 counts/100ml	Well #4	<=0, P	Microbiological Standard
Fecal (thermal tolerant) Coliforms (counts)		Sampling Point Name	Criteria	
12/15/2020	< 1 counts/100ml	Well #3	<=0, OG	Microbiological Standard
12/15/2020	< 1 counts/100ml	Well #4	<=0, OG	Microbiological Standard
Fluoride		Sampling Point Name	Criteria	
12/15/2020	0.11 mg/L	Well #3	<=1.5	MAC
12/15/2020	0.13 mg/L	Well #4	<=1.5	MAC
Hardness (total, as CaCO3)		Sampling Point Name	Criteria	
12/15/2020	143 mg/L	Well #3		



Hardness (total, as CaCO3)		Sampling Point Name	Criteria	
12/15/2020	132 mg/L	Well #4		
Heterotrophic Plate Count / HPC		Sampling Point Name	Criteria	
12/15/2020	200 CFU/100ml	Well #3	<=500	User-Defined
12/15/2020	< 200 CFU/100ml	Well #4	<=500	User-Defined
Hydroxide (as OH)		Sampling Point Name	Criteria	
12/15/2020	< 1 mg/L	Well #3		
12/15/2020	< 1 mg/L	Well #4		
Iron (total)		Sampling Point Name	Criteria	
12/15/2020	0.23 mg/L	Well #3	<=0.3	AO
12/15/2020	0.18 mg/L	Well #4	<=0.3	AO
Iron Bacteria (counts)		Sampling Point Name	Criteria	
12/15/2020	< 1 CFU/ml	Well #3		
12/15/2020	< 1 CFU/ml	Well #4		
Langelier Index		Sampling Point Name	Criteria	
12/15/2020	0.05	Well #3		
12/15/2020	0.09	Well #4		
Lead (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00005 mg/L	Well #3	<=0.005	MAC
12/15/2020	0.00021 mg/L	Well #4	<=0.005	MAC
Lithium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.0005 mg/L	Well #3		
12/15/2020	< 0.0005 mg/L	Well #4		
Magnesium (total)		Sampling Point Name	Criteria	
12/15/2020	14.5 mg/L	Well #3		
12/15/2020	12.9 mg/L	Well #4		
Manganese (total)		Sampling Point Name	Criteria	
* 12/15/2020	0.176 mg/L	Well #3	<=0.12	MAC
12/15/2020	0.109 mg/L	Well #4	<=0.12	MAC
Mercury (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00001 mg/L	Well #3	<=0.001	MAC
12/15/2020	< 0.00001 mg/L	Well #4	<=0.001	MAC
Molybdenum (total)		Sampling Point Name	Criteria	
12/15/2020	0.0009 mg/L	Well #3		

Molybdenum (total)		Sampling Point Name	Criteria	
12/15/2020	0.0008 mg/L	Well #4		
Nickel (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.0005 mg/L	Well #3		
12/15/2020	< 0.0005 mg/L	Well #4		
Nitrate (as N)		Sampling Point Name	Criteria	
12/15/2020	0.007 mg/L	Well #3	<=10	MAC
12/15/2020	< 0.005 mg/L	Well #4	<=10	MAC
Nitrite (as N)		Sampling Point Name	Criteria	
12/15/2020	< 0.005 mg/L	Well #3	<=1	MAC
12/15/2020	< 0.005 mg/L	Well #4	<=1	MAC
pH		Sampling Point Name	Criteria	
12/15/2020	8.00 %	Well #3		
12/15/2020	8.03 %	Well #4		
Potassium (total)		Sampling Point Name	Criteria	
12/15/2020	1.7 mg/L	Well #3		
12/15/2020	1.8 mg/L	Well #4		
Selenium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.0005 mg/L	Well #3	<=0.05	MAC
12/15/2020	< 0.0005 mg/L	Well #4	<=0.05	MAC
Silver (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.0001 mg/L	Well #3		
12/15/2020	< 0.0001 mg/L	Well #4		
Sodium (total)		Sampling Point Name	Criteria	
12/15/2020	9.1 mg/L	Well #3	<=200	AO
12/15/2020	10.8 mg/L	Well #4	<=200	AO
Strontium (total)		Sampling Point Name	Criteria	
12/15/2020	0.143 mg/L	Well #3		
12/15/2020	0.147 mg/L	Well #4		
Sulfate Reducing Bacteria		Sampling Point Name	Criteria	
12/15/2020	< 1 CFU/ml	Well #3		
12/15/2020	< 1 CFU/ml	Well #4		
Sulphate		Sampling Point Name	Criteria	
12/15/2020	18.4 mg/L	Well #3	<=500	AO

Sulphate		Sampling Point Name	Criteria	
12/15/2020	12.4 mg/L	Well #4	<=500	AO
Sulphide (total, as S)		Sampling Point Name	Criteria	
12/15/2020	0.02 mg/L	Well #3		
12/15/2020	0.03 mg/L	Well #4		
Tannins and Lignins		Sampling Point Name	Criteria	
12/15/2020	0.1 mg/L	Well #3		
12/15/2020	0.2 mg/L	Well #4		
Thallium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00002 mg/L	Well #3		
12/15/2020	< 0.00002 mg/L	Well #4		
Tin (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00005 mg/L	Well #3		
12/15/2020	< 0.00005 mg/L	Well #4		
Titanium (total)		Sampling Point Name	Criteria	
12/15/2020	0.001 mg/L	Well #3		
12/15/2020	0.002 mg/L	Well #4		
Total Coliforms (counts)		Sampling Point Name	Criteria	
12/15/2020	< 1 counts/100ml	Well #3	<=0, OG	User-Defined
12/15/2020	< 1 counts/100ml	Well #4	<=0, OG	User-Defined
Total Dissolved Solids / TDS		Sampling Point Name	Criteria	
12/15/2020	160 mg/L	Well #3	<=500	AO
12/15/2020	180 mg/L	Well #4	<=500	AO
Total Kjeldahl Nitrogen / TKN		Sampling Point Name	Criteria	
12/15/2020	0.19 mg/L	Well #3		
12/15/2020	0.39 mg/L	Well #4		
Total Organic Carbon / TOC		Sampling Point Name	Criteria	
12/15/2020	< 0.5 mg/L	Well #3		
12/15/2020	0.8 mg/L	Well #4		
Tungsten (total)		Sampling Point Name	Criteria	
12/15/2020	0.0001 mg/L	Well #3		
12/15/2020	0.0002 mg/L	Well #4		
Turbidity		Sampling Point Name	Criteria	
12/15/2020	0.4 NTU	Well #3	<=5	User-Defined

Turbidity		Sampling Point Name	Criteria	
12/15/2020	0.5 NTU	Well #4	<=5	User-Defined
Uranium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.00001 mg/L	Well #3	<=0.02	MAC
12/15/2020	< 0.00001 mg/L	Well #4	<=0.02	MAC
Vanadium (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.001 mg/L	Well #3		
12/15/2020	< 0.001 mg/L	Well #4		
Zinc (total)		Sampling Point Name	Criteria	
12/15/2020	< 0.005 mg/L	Well #3	<=5	AO
12/15/2020	< 0.005 mg/L	Well #4	<=5	AO

Result Legend:

P=present, A=absent, PR=presumptive, ND=non-detect, OR=over-range, OG=overgrown, Y=yes, N=no,
 TNTC=too numerous to count, NR=no result, NT=not tested, IG=ignore, ER=external report, SC=see comment
 < means less than lower detection limit shown
 > means greater than upper detection limit shown
 « means detected & less than number shown
 » means detected & greater than number shown
 * Indicates Criteria is exceeded

