

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)

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? Yes

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

Click here to enter a date.

DATE COMPLETED:

COMPLETED BY:

BALD MOUNTAIN WATER SYSTEM

Facility Information

Location 175 Ingram Street Duncan
Type 301 - 10,000 Connections

Facility Sampling History

Location	Date	Total Coliform	E. Coli/Enterococci
S1 Reservoir	17-Dec-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	17-Dec-2024	LT1	LT1
S4 Lot 8 Lakefront Place	10-Dec-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	02-Dec-2024	LT1	LT1
S1 Reservoir	25-Nov-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	18-Nov-2024	LT1	LT1
S4 Lot 8 Lakefront Place	13-Nov-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	04-Nov-2024	LT1	LT1
S1 Reservoir	29-Oct-2024	LT1	LT1
S4 Lot 8 Lakefront Place	23-Oct-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	15-Oct-2024	LT1	LT1
S1 Reservoir	07-Oct-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	01-Oct-2024	LT1	LT1
S4 Lot 8 Lakefront Place	24-Sep-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	16-Sep-2024	LT1	LT1
S1 Reservoir	10-Sep-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	04-Sep-2024	LT1	LT1
S4 Lot 8 Lakefront Place	27-Aug-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	20-Aug-2024	LT1	LT1
S1 Reservoir	12-Aug-2024	LT1	LT1
S7 Lot 74, Lot 71	12-Aug-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	06-Aug-2024	LT1	LT1
S4 Lot 8 Lakefront Place	29-Jul-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	22-Jul-2024	LT1	LT1
S1 Reservoir	16-Jul-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	09-Jul-2024	LT1	LT1
S4 Lot 8 Lakefront Place	02-Jul-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	25-Jun-2024	LT1	LT1
S1 Reservoir	18-Jun-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	10-Jun-2024	LT1	LT1
S4 Lot 8 Lakefront Place	04-Jun-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	28-May-2024	LT1	LT1
S1 Reservoir	21-May-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	14-May-2024	LT1	LT1
S4 Lot 8 Lakefront Place	07-May-2024	LT1	LT1
S1 Reservoir	29-Apr-2024	LT1	LT1
S4 Lot 8 Lakefront Place	23-Apr-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	15-Apr-2024	LT1	LT1
S1 Reservoir	09-Apr-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	02-Apr-2024	LT1	LT1
S4 Lot 8 Lakefront Place	26-Mar-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	19-Mar-2024	48	LT1
S3 Lot 63 Marble Bay Road	12-Mar-2024	LT1	LT1

BALD MOUNTAIN WATER SYSTEM

Facility Information

Location 175 Ingram Street Duncan
Type 301 - 10,0000 Connections

Facility Sampling History

Location	Date	Total Coliform	E. Coli/Enterococci
S4 Lot 8 Lakefront Place	27-Feb-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	20-Feb-2024	LT1	LT1
S1 Reservoir	12-Feb-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	06-Feb-2024	LT1	LT1
S4 Lot 8 Lakefront Place	29-Jan-2024	LT1	LT1
S1 Reservoir	24-Jan-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	24-Jan-2024	LT1	LT1
S3 Lot 63 Marble Bay Road	09-Jan-2024	LT1	LT1
S4 Lot 8 Lakefront Place	02-Jan-2024	LT1	LT1

Cowichan Valley Reg. Dist. - E
*A PO 23-223 (2023)
*A 175 Ingram Street
Duncan, BC
V9L 1N8

TEL: (250) 746-2530
Group

22Mar24 1:04p
Source: FWS
Type of Sample: Water
No. of Samples: 1
Arrival temp.: 7.0C
RUSH

W179623

<u>Site Code</u>	<u>Date</u>	<u>Time</u>	CFU/100 ml TC_____T-NC	CFU/100 ml FC_____F-NC	CFU/100 mL <u>E.coli</u>
1 S3 Lot 63 Marble Bay	22Mar24		0	0	0

TC = total coliform bacteria

FC = fecal coliform bacteria (aka thermotolerant coliforms)

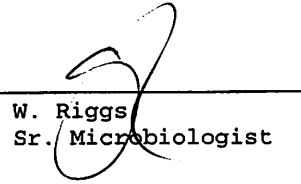
NC = non-coliform bacteria

CFU/100 ml = colony forming units per 100 milli-litres

Results may be adversely affected if samples are submitted to the laboratory more than 24 to 30 hours after collection.

E. coli = Escherichia coli, FDA/BAM 9th ed, Oct 2020

Bergey's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro.,
J.Intern.Systm.Bact.


W. Riggs
Sr. Microbiologist

M.B. LABS LTD
T: 250 656-1334

E: info@mblabs.com

W: www.mblabs.com

BALD MOUNTAIN WATER

SOURCE - East, Middle and West Wells

DISTRIBUTION - S3

			<i>Sample ID</i>	S5-LOT 69-WELL 1 (WTX 27AC4)	S6-LOT 70-WELL 2 (WTX 27AC5)	S7-LOT 71-WELL 3 (WTX 27AC6)	S3-LOT 63- MARBLE BAY RD(WTX 27AC7)
			<i>Sampling Date</i>	03/14/24	03/14/24	03/14/24	03/14/24
			<i>Sampling Time</i>	10:50 AM	11:05 AM	11:15 AM	11:30 AM
<i>Parameter Name</i>	<i>MAC</i>	<i>AO</i>	<i>Units</i>	<i>Result</i>	<i>Result2</i>	<i>Result3</i>	<i>Result4</i>
Nitrite (N)	1		mg/L	<0.0050	0.0101	<0.0050	<0.0050
Nitrate (N)	10		mg/L	1.25	5.25	4.67	4.09
Conductivity			uS/cm	150	270	270	250
pH			pH	6.72	6.81	6.87	6.99
Total Dissolved Solids		500	mg/L	110	180	180	160
Alkalinity (PP as CaCO3)			mg/L	<1.0	<1.0	<1.0	<1.0
Alkalinity (Total as CaCO3)			mg/L	61	92	94	84
Bicarbonate (HCO3)			mg/L	74	110	110	100
Carbonate (CO3)			mg/L	<1.0	<1.0	<1.0	<1.0
Hydroxide (OH)			mg/L	<1.0	<1.0	<1.0	<1.0
Chloride (Cl)		250	mg/L	3.3	9.7	8.6	8.5
Sulphate (SO4)		500	mg/L	1.9	1.3	2.3	1.9
True Colour		15	Col. Unit	<2.0	<2.0	<2.0	<2.0
Nitrate plus Nitrite (N)			mg/L	1.25	5.26	4.67	4.09
Langelier Index (@ 20C)			N/A	-1.59	-1.07	-1.01	-0.987
Langelier Index (@ 4C)			N/A	-1.84	-1.32	-1.26	-1.24
Saturation pH (@ 20C)			N/A	8.31	7.88	7.88	7.98
Saturation pH (@ 4C)			N/A	8.56	8.13	8.14	8.23
Dissolved Fluoride (F)	1.5		mg/L	<0.050	<0.050	<0.050	<0.050
Tannins and Lignins			mg/L	<0.2	<0.2	<0.2	<0.2
Turbidity	see remark	see remark	NTU	32	3.5	2.5	0.27
Total Hardness (CaCO3)			mg/L	66.3	122	123	108
Total Aluminum (Al)	2900		ug/L	<3.0	<3.0	<3.0	<3.0
Total Antimony (Sb)	6		ug/L	<0.50	<0.50	<0.50	<0.50
Total Arsenic (As)	10		ug/L	<0.10	0.17	<0.10	0.11

BALD MOUNTAIN WATER

SOURCE - East, Middle and West Wells

DISTRIBUTION - S3

			<i>Sample ID</i>	S5-LOT 69-WELL 1 (WTX 27AC4)	S6-LOT 70-WELL 2 (WTX 27AC5)	S7-LOT 71-WELL 3 (WTX 27AC6)	S3-LOT 63- MARBLE BAY RD(WTX 27AC7)
			<i>Sampling Date</i>	03/14/24	03/14/24	03/14/24	03/14/24
			<i>Sampling Time</i>	10:50 AM	11:05 AM	11:15 AM	11:30 AM
<i>Parameter Name</i>	<i>MAC</i>	<i>AO</i>	<i>Units</i>	<i>Result</i>	<i>Result2</i>	<i>Result3</i>	<i>Result4</i>
Total Barium (Ba)	2000		ug/L	4.2	10.7	10.2	8.7
Total Beryllium (Be)			ug/L	<0.10	<0.10	<0.10	<0.10
Total Bismuth (Bi)			ug/L	<1.0	<1.0	<1.0	<1.0
Total Boron (B)	5000		ug/L	<50	<50	<50	<50
Total Cadmium (Cd)	7		ug/L	<0.010	0.011	0.018	0.014
Total Chromium (Cr)	50		ug/L	<1.0	<1.0	<1.0	<1.0
Total Cobalt (Co)			ug/L	<0.20	<0.20	<0.20	<0.20
Total Copper (Cu)	2000	1000	ug/L	5.29	0.87	1.33	13.4
Total Iron (Fe)		300	ug/L	1540	237	179	17
Total Lead (Pb)	5		ug/L	4.32	0.5	0.84	0.59
Total Manganese (Mn)	120	20	ug/L	17.2	27.7	12.7	4.7
Total Molybdenum (Mo)			ug/L	<1.0	<1.0	<1.0	<1.0
Total Nickel (Ni)			ug/L	<1.0	<1.0	<1.0	<1.0
Total Selenium (Se)	50		ug/L	<0.10	<0.10	<0.10	<0.10
Total Silicon (Si)			ug/L	11200	13200	11700	12100
Total Silver (Ag)			ug/L	<0.020	<0.020	<0.020	<0.020
Total Strontium (Sr)	7000		ug/L	66.2	107	108	95.9
Total Thallium (Tl)			ug/L	<0.010	<0.010	<0.010	<0.010
Total Tin (Sn)			ug/L	<5.0	<5.0	<5.0	<5.0
Total Titanium (Ti)			ug/L	<5.0	<5.0	<5.0	<5.0
Total Uranium (U)	20		ug/L	<0.10	<0.10	<0.10	<0.10
Total Vanadium (V)			ug/L	<5.0	<5.0	<5.0	<5.0
Total Zinc (Zn)		5000	ug/L	86.9	44.3	33.8	11.9
Total Zirconium (Zr)			ug/L	<0.10	<0.10	<0.10	<0.10
Total Calcium (Ca)			mg/L	17.8	34.2	33.3	29.8

BALD MOUNTAIN WATER

SOURCE - East, Middle and West Wells

DISTRIBUTION - S3

			<i>Sample ID</i>	S5-LOT 69-WELL 1 (WTX 27AC4)	S6-LOT 70-WELL 2 (WTX 27AC5)	S7-LOT 71-WELL 3 (WTX 27AC6)	S3-LOT 63- MARBLE BAY RD(WTX 27AC7)
			<i>Sampling Date</i>	03/14/24	03/14/24	03/14/24	03/14/24
			<i>Sampling Time</i>	10:50 AM	11:05 AM	11:15 AM	11:30 AM
<i>Parameter Name</i>	<i>MAC</i>	<i>AO</i>	<i>Units</i>	<i>Result</i>	<i>Result2</i>	<i>Result3</i>	<i>Result4</i>
Total Magnesium (Mg)			mg/L	5.33	8.99	9.77	8.28
Total Potassium (K)			mg/L	0.449	0.56	0.517	0.503
Total Sodium (Na)		200	mg/L	3.98	4.9	5.03	5.44
Total Sulphur (S)			mg/L	<3.0	<3.0	<3.0	<3.0
Total Mercury (Hg)	1		ug/L	<0.030	<0.030	<0.030	<0.030
Total Total Kjeldahl Nitrogen (Calc)			mg/L	0.11	0.8	0.57	0.41
Total Organic Carbon (C)			mg/L	<0.50	<0.50	<0.50	<0.50
Total Nitrogen (N)			mg/L	1.37	6.06	5.24	4.51
Total Ammonia (N)			mg/L	<0.015	<0.015	<0.015	<0.015
Sulphide (as H2S)		0.05	mg/L	<0.0020	<0.0020	<0.0020	0.013
Total Sulphide		0.05	mg/L	<0.0018	<0.0018	<0.0018	0.013
Total Coliforms	0		CFU/100mL	0	0	0	0
E. coli	0		CFU/100mL	0	0	0	0
Heterotrophic Plate Count			CFU/mL	<1	<1	<1	<1.0
Fecal Coliforms			CFU/100mL	<1	<1	<1	0
Non-Coliform (Background)			CFU/100mL	<1	10	28	<1
Iron Bacteria			CFU/mL	<25	<25	<25	<25
Sulphate reducing bacteria			CFU/mL	<75	<75	<75	<75
Total Trihalomethanes	100		ug/L				<1.0
Bromodichloromethane			ug/L				<1.0
Bromoform			ug/L				<1.0
Dibromochloromethane			ug/L				<1.0
Chloroform			ug/L				<1.0
Dalapon			ug/L				<5.0
Monochloroacetic Acid			ug/L				<5.0

BALD MOUNTAIN WATER

SOURCE - East, Middle and West Wells

DISTRIBUTION - S3

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			<i>Sampling Time</i>	10:50 AM	11:05 AM	11:15 AM	11:30 AM
<i>Parameter Name</i>	<i>MAC</i>	<i>AO</i>	<i>Units</i>	<i>Result</i>	<i>Result2</i>	<i>Result3</i>	<i>Result4</i>
Monobromoacetic Acid			ug/L				<5.0
Dichloroacetic Acid			ug/L				<5.0
Trichloroacetic Acid			ug/L				<5.0
Bromochloroacetic Acid			ug/L				<5.0
Dibromoacetic Acid			ug/L				<5.0
Total Haloacetic Acids	80		ug/L				<5.0