

**DRINKING WATER SYSTEM ANNUAL REPORT**

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

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**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?**

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**WATER QUALITY STANDARDS FOR POTABLE WATER**

<b>Parameter:</b>	<b>Standard:</b>	<b>Did this system meet standard?</b>	
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, <b>and</b> 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.**

<b>Date</b>	<b>TC/100ml</b>	<b>E.coli/100ml</b>	<b>Reason</b>	<b>Corrective Action</b>

**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) UV Intensity Alarm

**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><b>Click here to enter a date.</b></p> <p><b>DATE COMPLETED:</b></p>	<p><b>COMPLETED BY:</b></p>
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## APPENDIX A

### WATER SYSTEM OPERATING CONDITIONS FOR

#### YUBOU WATER SYSTEM

Youbou Community Lane

Youbou, BC, V0R 3E1

#### Drinking Water Treatment


The water supplier is required to treat the source water supply in adherence with VIHA's Policy No. 3.3 "*Drinking Water Treatment for Surface Water Supplies*".

Summarize monthly and annual records of turbidity monitoring and include in annual report.

#### Sampling and Monitoring

The water supplier must monitor Trihalomethanes (THMs) of the treated surface water on a running annual average based on quarterly samples to ensure the Maximum Acceptable Concentration (MAC) of 0.100 mg/L outlined in the *Guidelines for Canadian Drinking Water Quality (GCDWQ)* is not exceeded. These results are to be summarized and submitted to the District Environmental Health Officer (EHO).

Date: December 1, 2010

  
Environmental Health Officer

# Youbou Water System

## Facility Information

Location 175 Ingram Street Duncan

Type 301 - 10,000 Connections

## Facility Sampling History

Location	Date	Total Coliform	E. Coli/Enterococci
S12 9696 Creekside Road	19-Dec-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	19-Dec-2023	LT1	LT1
S14 9314 Creekside Drive	11-Dec-2023	LT1	LT1
S15 Youbou Reservoir	11-Dec-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	11-Dec-2023	LT1	LT1
S1 10705 Youbou Road	05-Dec-2023	LT1	LT1
S12 9696 Creekside Road	05-Dec-2023	LT1	LT1
S5 8131 SaSeenOs Road	05-Dec-2023	LT1	LT1
S14 9314 Creekside Drive	27-Nov-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	27-Nov-2023	LT1	LT1
S1 10705 Youbou Road	22-Nov-2023	LT1	LT1
S12 9696 Creekside Road	22-Nov-2023	LT1	LT1
S14 9314 Creekside Drive	15-Nov-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	15-Nov-2023	LT1	LT1
S12 9696 Creekside Road	06-Nov-2023	LT1	LT1
S15 Youbou Reservoir	06-Nov-2023	LT1	LT1
S5 8131 SaSeenOs Road	06-Nov-2023	LT1	LT1
S14 9314 Creekside Drive	31- Oct-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	31- Oct-2023	LT1	LT1
S1 10705 Youbou Road	24- Oct-2023	LT1	LT1
S12 9696 Creekside Road	24- Oct-2023	LT1	LT1
S14 9314 Creekside Drive	17- Oct-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	17- Oct-2023	LT1	LT1
S12 9696 Creekside Road	10- Oct-2023	LT1	LT1
S5 8131 SaSeenOs Road	10- Oct-2023	LT1	LT1
S14 9314 Creekside Drive	03- Oct-2023	LT1	LT1
S15 Youbou Reservoir	03- Oct-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	03- Oct-2023	LT1	LT1
S1 10705 Youbou Road	26-Sep-2023	LT1	LT1
S12 9696 Creekside Road	26-Sep-2023	LT1	LT1
Well 3 Creekside Drive,	26-Sep-2023	LT1	LT1
S14 9314 Creekside Drive	19-Sep-2023	LT1	LT1
S15 Youbou Reservoir	19-Sep-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	19-Sep-2023	LT1	LT1
S12 9696 Creekside Road	12-Sep-2023	LT1	LT1
S5 8131 SaSeenOs Road	12-Sep-2023	LT1	LT1
S14 9314 Creekside Drive	05-Sep-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	05-Sep-2023	LT1	LT1
S1 10705 Youbou Road	29-Aug-2023	LT1	LT1
S12 9696 Creekside Road	29-Aug-2023	LT1	LT1
S15 Youbou Reservoir	29-Aug-2023	LT1	LT1
S14 9314 Creekside Drive	21-Aug-2023	LT1	LT1
S5 8131 SaSeenOs Road	21-Aug-2023	LT1	LT1
S12 9696 Creekside Road	15-Aug-2023	LT1	LT1

# Youbou Water System

## Facility Information

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

## Facility Sampling History

Location	Date	Total Coliform	E. Coli/Enterococci
S3 Intersection of Coon Creek and Willow Road	15-Aug-2023	LT1	LT1
S14 9314 Creekside Drive	09-Aug-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	09-Aug-2023	LT1	LT1
S1 10705 Youbou Road	31-Jul-2023	LT1	LT1
S12 9696 Creekside Road	31-Jul-2023	LT1	LT1
S14 9314 Creekside Drive	24-Jul-2023	LT1	LT1
S15 Youbou Reservoir	24-Jul-2023	LT1	LT1
S5 8131 SaSeenOs Road	24-Jul-2023	LT1	LT1
S12 9696 Creekside Road	17-Jul-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	17-Jul-2023	LT1	LT1
S14 9314 Creekside Drive	10-Jul-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	10-Jul-2023	LT1	LT1
S1 10705 Youbou Road	05-Jul-2023	LT1	LT1
S12 9696 Creekside Road	05-Jul-2023	LT1	LT1
S14 9314 Creekside Drive	26-Jun-2023	LT1	LT1
S5 8131 SaSeenOs Road	26-Jun-2023	LT1	LT1
S12 9696 Creekside Road	19-Jun-2023	QRWRT	QRWRT
S15 Youbou Reservoir	19-Jun-2023	QRWRT	QRWRT
S3 Intersection of Coon Creek and Willow Road	19-Jun-2023	QRWRT	QRWRT
S1 10705 Youbou Road	13-Jun-2023	LT1	LT1
S14 9314 Creekside Drive	13-Jun-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	13-Jun-2023	LT1	LT1
S12 9696 Creekside Road	06-Jun-2023	QRWRT	QRWRT
S5 8131 SaSeenOs Road	06-Jun-2023	QRWRT	QRWRT
S14 9314 Creekside Drive	30-May-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	30-May-2023	LT1	LT1
S1 10705 Youbou Road	24-May-2023	LT1	LT1
S12 9696 Creekside Road	24-May-2023	LT1	LT1
S15 Youbou Reservoir	24-May-2023	LT1	LT1
Well 4 Youbou Water,	24-May-2023	LT1	LT1
S14 9314 Creekside Drive	16-May-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	16-May-2023	LT1	LT1
S12 9696 Creekside Road	08-May-2023	LT1	LT1
S5 8131 SaSeenOs Road	08-May-2023	LT1	LT1
S14 9314 Creekside Drive	02-May-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	02-May-2023	LT1	LT1
S1 10705 Youbou Road	24-Apr-2023	LT1	LT1
S12 9696 Creekside Road	24-Apr-2023	LT1	LT1
S15 Youbou Reservoir	24-Apr-2023	LT1	LT1
S14 9314 Creekside Drive	18-Apr-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	18-Apr-2023	LT1	LT1
S12 9696 Creekside Road	11-Apr-2023	LT1	LT1
S5 8131 SaSeenOs Road	11-Apr-2023	LT1	LT1
S14 9314 Creekside Drive	04-Apr-2023	LT1	LT1

# Youbou Water System

## Facility Information

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

## Facility Sampling History

Location	Date	Total Coliform	E. Coli/Enterococci
S3 Intersection of Coon Creek and Willow Road	04-Apr-2023	LT1	LT1
S1 10705 Youbou Road	28-Mar-2023	QRWRT	QRWRT
S12 9696 Creekside Road	28-Mar-2023	QRWRT	QRWRT
S15 Youbou Reservoir	28-Mar-2023	QRWRT	QRWRT
S14 9314 Creekside Drive	20-Mar-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	20-Mar-2023	LT1	LT1
S12 9696 Creekside Road	13-Mar-2023	LT1	LT1
S5 8131 SaSeenOs Road	13-Mar-2023	LT1	LT1
S1 10705 Youbou Road	06-Mar-2023	LT1	LT1
S14 9314 Creekside Drive	06-Mar-2023	LT1	LT1
S12 9696 Creekside Road	01-Mar-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	01-Mar-2023	LT1	LT1
S12 9696 Creekside Road	27-Feb-2023	QRWRT	QRWRT
S7 Arnold Road PRV/Booster Station	27-Feb-2023	QRWRT	QRWRT
S12 9696 Creekside Road	14-Feb-2023	LT1	LT1
S5 8131 SaSeenOs Road	14-Feb-2023	LT1	LT1
S14 9314 Creekside Drive	06-Feb-2023	LT1	LT1
S15 Youbou Reservoir	06-Feb-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	06-Feb-2023	LT1	LT1
S1 10705 Youbou Road	30-Jan-2023	LT1	LT1
S12 9696 Creekside Road	30-Jan-2023	LT1	LT1
Well 3 Creekside Drive,	30-Jan-2023	LT1	LT1
S14 9314 Creekside Drive	23-Jan-2023	LT1	LT1
S7 Arnold Road PRV/Booster Station	23-Jan-2023	LT1	LT1
S12 9696 Creekside Road	16-Jan-2023	LT1	LT1
S5 8131 SaSeenOs Road	16-Jan-2023	LT1	LT1
S14 9314 Creekside Drive	09-Jan-2023	LT1	LT1
S3 Intersection of Coon Creek and Willow Road	09-Jan-2023	LT1	LT1
S1 10705 Youbou Road	04-Jan-2023	LT1	LT1
S12 9696 Creekside Road	04-Jan-2023	LT1	LT1
S15 Youbou Reservoir	04-Jan-2023	LT1	LT1



# YOUBOU WATER SYSTEM

## DISTRIBUTION - S8

			<b>Sample ID</b>	S8 8242 Price Road (WTX 27AF4)
			<b>Sampling Date</b>	03/07/23
			<b>Sampling Time</b>	08:20 AM
<b>Parameter Name</b>	<b>MAC</b>	<b>AO</b>	<b>Units</b>	<b>Result</b>
Nitrite (N)	1		mg/L	<0.0050
Nitrate (N)	10		mg/L	<0.020
Conductivity			uS/cm	72
pH			pH	7.4
Total Dissolved Solids		500	mg/L	40
Alkalinity (PP as CaCO3)			mg/L	<1.0
Alkalinity (Total as CaCO3)			mg/L	35
Bicarbonate (HCO3)			mg/L	42
Carbonate (CO3)			mg/L	<1.0
Hydroxide (OH)			mg/L	<1.0
Chloride (Cl)		250	mg/L	1.3
Sulphate (SO4)		500	mg/L	1.8
True Colour		15	Col. Unit	14.2
Nitrate plus Nitrite (N)			mg/L	<0.020
Langelier Index (@ 20C)			N/A	-0.636
Langelier Index (@ 4C)			N/A	-0.956
Saturation pH (@ 20C)			N/A	8.97
Saturation pH (@ 4C)			N/A	9.29
Dissolved Fluoride (F)	1.5		mg/L	<0.050
Tannins and Lignins			mg/L	<0.2
Turbidity	see remark	see remark	NTU	<0.10
Total Hardness (CaCO3)			mg/L	30.4
Total Aluminum (Al)	2900		ug/L	<3.0
Total Antimony (Sb)	6		ug/L	<0.50
Total Arsenic (As)	10		ug/L	0.2
Total Barium (Ba)	2000		ug/L	13
Total Beryllium (Be)			ug/L	<0.10
Total Bismuth (Bi)			ug/L	<1.0
Total Boron (B)	5000		ug/L	<50
Total Cadmium (Cd)	7		ug/L	<0.010
Total Chromium (Cr)	50		ug/L	<1.0
Total Cobalt (Co)			ug/L	<0.20
Total Copper (Cu)	2000	1000	ug/L	6.42
Total Iron (Fe)		300	ug/L	<5.0
Total Lead (Pb)	5		ug/L	<0.20
Total Manganese (Mn)	120	20	ug/L	<1.0
Total Molybdenum (Mo)			ug/L	<1.0

# YUBOU WATER SYSTEM

## DISTRIBUTION - S8

			<b>Sample ID</b>	S8 8242 Price Road (WTX 27AF4)
			<b>Sampling Date</b>	03/07/23
			<b>Sampling Time</b>	08:20 AM
<b>Parameter Name</b>	<b>MAC</b>	<b>AO</b>	<b>Units</b>	<b>Result</b>
Total Nickel (Ni)			ug/L	<1.0
Total Selenium (Se)	50		ug/L	<0.10
Total Silicon (Si)			ug/L	2140
Total Silver (Ag)			ug/L	<0.020
Total Strontium (Sr)	7000		ug/L	24.6
Total Thallium (Tl)			ug/L	<0.010
Total Tin (Sn)			ug/L	<5.0
Total Titanium (Ti)			ug/L	<5.0
Total Uranium (U)	20		ug/L	<0.10
Total Vanadium (V)			ug/L	<5.0
Total Zinc (Zn)		5000	ug/L	<5.0
Total Zirconium (Zr)			ug/L	<0.10
Total Calcium (Ca)			mg/L	11
Total Magnesium (Mg)			mg/L	0.699
Total Potassium (K)			mg/L	0.139
Total Sodium (Na)		200	mg/L	1.92
Total Sulphur (S)			mg/L	<3.0
Total Mercury (Hg)	1		ug/L	<0.0019
Total Total Kjeldahl Nitrogen (Calc)			mg/L	0.025
Total Organic Carbon (C)			mg/L	<0.50
Total Nitrogen (N)			mg/L	0.025
Total Ammonia (N)			mg/L	<0.015
Sulphide (as H2S)		0.05	mg/L	<0.0020
Total Sulphide		0.05	mg/L	<0.0018
Total Coliforms	0		CFU/100mL	0
E. coli	0		CFU/100mL	0
Heterotrophic Plate Count			CFU/mL	<1.0
Fecal Coliforms			CFU/100mL	0
Non-Coliform (Background)			CFU/100mL	<1
Iron Bacteria			CFU/mL	<25
Sulphate reducing bacteria			CFU/mL	<75
Total Trihalomethanes	100		ug/L	6.7
Bromodichloromethane			ug/L	1.2
Bromoform			ug/L	<1.0
Dibromochloromethane			ug/L	<1.0
Chloroform			ug/L	5.6
Dalapon			ug/L	<5.0

# YOUBOU WATER SYSTEM

## DISTRIBUTION - S8

			<b>Sample ID</b>	S8 8242 Price Road (WTX 27AF4)
			<b>Sampling Date</b>	03/07/23
			<b>Sampling Time</b>	08:20 AM
<b>Parameter Name</b>	<b>MAC</b>	<b>AO</b>	<b>Units</b>	<b>Result</b>
Monochloroacetic Acid			ug/L	<5.0
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