



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) Radio, Social Media

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**

| <b>Parameter:</b>   | <b>Standard:</b>   | <b>Did this system meet standard?</b> |                             |
|---|--|---------------------------------------|-----------------------------|
| Escherichia coli<br>(for all samples)   | No detectable <i>Escherichia coli</i> per 100ml  | <input type="checkbox"/> Yes          | <input type="checkbox"/> No |
| Total Coliform Bacteria<br>(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<br>(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)

**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><br/>DATE COMPLETED:</p> | <p>COMPLETED BY:</p> |
|---|----------------------|

# FERNRIDGE ESTATES WATERWORKS

## Facility Information

Location 175 Ingram Street Duncan

Type 15 - 300 Connections

## Facility Sampling History

| Location                | Date         | Total Coliform | E. Coli/Enterococci |
|-------------------------|--------------|----------------|---------------------|
| S2 Reservoir            | 11-Dec-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 04-Dec-2023  | LT1            | LT1                 |
| S2 Reservoir            | 27-Nov-2023  | LT1            | LT1                 |
| S2 Reservoir            | 14-Nov-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 07-Nov-2023  | LT1            | LT1                 |
| S2 Reservoir            | 30- Oct-2023 | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 23- Oct-2023 | LT1            | LT1                 |
| S2 Reservoir            | 16- Oct-2023 | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 10- Oct-2023 | LT1            | LT1                 |
| S2 Reservoir            | 04- Oct-2023 | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 25-Sep-2023  | LT1            | LT1                 |
| S2 Reservoir            | 18-Sep-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 11-Sep-2023  | LT1            | LT1                 |
| S2 Reservoir            | 05-Sep-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 29-Aug-2023  | LT1            | LT1                 |
| S2 Reservoir            | 22-Aug-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 14-Aug-2023  | LT1            | LT1                 |
| S2 Reservoir            | 08-Aug-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 01-Aug-2023  | LT1            | LT1                 |
| S2 Reservoir            | 25-Jul-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 18-Jul-2023  | LT1            | LT1                 |
| S2 Reservoir            | 11-Jul-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 04-Jul-2023  | LT1            | LT1                 |
| S2 Reservoir            | 27-Jun-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 20-Jun-2023  | LT1            | LT1                 |
| S2 Reservoir            | 12-Jun-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 05-Jun-2023  | LT1            | LT1                 |
| S2 Reservoir            | 29-May-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 23-May-2023  | LT1            | LT1                 |
| S2 Reservoir            | 16-May-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 08-May-2023  | LT1            | LT1                 |
| S2 Reservoir            | 01-May-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 25-Apr-2023  | LT1            | LT1                 |
| S2 Reservoir            | 17-Apr-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 11-Apr-2023  | LT1            | LT1                 |
| S2 Reservoir            | 03-Apr-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 27-Mar-2023  | LT1            | LT1                 |
| S2 Reservoir            | 21-Mar-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 13-Mar-2023  | LT1            | LT1                 |
| S2 Reservoir            | 07-Mar-2023  | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 01-Mar-2023  | LT1            | LT1                 |
| S2 Reservoir            | 21-Feb-2023  | LT1            | LT1                 |

# FERNRIDGE ESTATES WATERWORKS

## Facility Information

Location 175 Ingram Street Duncan  
Type 15 - 300 Connections

## Facility Sampling History

| Location                | Date        | Total Coliform | E. Coli/Enterococci |
|-------------------------|-------------|----------------|---------------------|
| S1 1143 Fernridge Drive | 13-Feb-2023 | LT1            | LT1                 |
| S2 Reservoir            | 06-Feb-2023 | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 31-Jan-2023 | LT1            | LT1                 |
| S2 Reservoir            | 24-Jan-2023 | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 17-Jan-2023 | LT1            | LT1                 |
| S2 Reservoir            | 10-Jan-2023 | LT1            | LT1                 |
| S1 1143 Fernridge Drive | 03-Jan-2023 | LT1            | LT1                 |

# FERN RIDGE WATER SYSTEM

## SOURCE - Well

|                             |            |            | <i>Sample ID</i>     | WELL ON<br>FERNRIDGE DR<br>(WTX 27AD3) |
|-----------------------------|------------|------------|----------------------|--|
|                             |            |            | <i>Sampling Date</i> | 04/24/23                               |
|                             |            |            | <i>Sampling Time</i> | 09:45 AM                               |
| <i>Parameter Name</i>       | <i>MAC</i> | <i>AO</i>  | <i>Units</i>         | <i>Result</i>                          |
| Nitrite (N)                 | 1          |            | mg/L                 | <0.0050                                |
| Nitrate (N)                 | 10         |            | mg/L                 | <0.020                                 |
| Conductivity                |            |            | uS/cm                | 220                                    |
| pH                          |            |            | pH                   | 8.07                                   |
| Total Dissolved Solids      |            | 500        | mg/L                 | 150                                    |
| Alkalinity (PP as CaCO3)    |            |            | mg/L                 | <1.0                                   |
| Alkalinity (Total as CaCO3) |            |            | mg/L                 | 99                                     |
| Bicarbonate (HCO3)          |            |            | mg/L                 | 120                                    |
| Carbonate (CO3)             |            |            | mg/L                 | <1.0                                   |
| Hydroxide (OH)              |            |            | mg/L                 | <1.0                                   |
| Chloride (Cl)               |            | 250        | mg/L                 | 2                                      |
| Sulphate (SO4)              |            | 500        | mg/L                 | 12                                     |
| True Colour                 |            | 15         | Col. Unit            | <5.0                                   |
| Nitrate plus Nitrite (N)    |            |            | mg/L                 | <0.020                                 |
| Langelier Index (@ 20C)     |            |            | N/A                  | 0.108                                  |
| Langelier Index (@ 4C)      |            |            | N/A                  | -0.141                                 |
| Saturation pH (@ 20C)       |            |            | N/A                  | 7.96                                   |
| Saturation pH (@ 4C)        |            |            | N/A                  | 8.21                                   |
| Dissolved Fluoride (F)      | 1.5        |            | mg/L                 | 0.1                                    |
| Tannins and Lignins         |            |            | mg/L                 | <0.2                                   |
| Turbidity                   | see remark | see remark | NTU                  | 0.27                                   |
| Total Hardness (CaCO3)      |            |            | mg/L                 | 83.4                                   |
| Total Aluminum (Al)         | 2900       |            | ug/L                 | <3.0                                   |
| Total Antimony (Sb)         | 6          |            | ug/L                 | <0.50                                  |
| Total Arsenic (As)          | 10         |            | ug/L                 | 2.15                                   |
| Total Barium (Ba)           | 2000       |            | ug/L                 | 13.2                                   |
| Total Beryllium (Be)        |            |            | ug/L                 | <0.10                                  |
| Total Bismuth (Bi)          |            |            | ug/L                 | <1.0                                   |
| Total Boron (B)             | 5000       |            | ug/L                 | 347                                    |
| 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                 | <0.20                                  |
| Total Iron (Fe)             |            | 300        | ug/L                 | 16.4                                   |
| Total Lead (Pb)             | 5          |            | ug/L                 | <0.20                                  |
| Total Manganese (Mn)        | 120        | 20         | ug/L                 | <b>22</b>                              |
| Total Molybdenum (Mo)       |            |            | ug/L                 | 3.4                                    |

# FERN RIDGE WATER SYSTEM

## SOURCE - Well

|                                      |            |           | <i>Sample ID</i>     | WELL ON<br>FERNRIDGE DR<br>(WTX 27AD3) |
|--------------------------------------|------------|-----------|----------------------|--|
|                                      |            |           | <i>Sampling Date</i> | 04/24/23                               |
|                                      |            |           | <i>Sampling Time</i> | 09:45 AM                               |
| <i>Parameter Name</i>                | <i>MAC</i> | <i>AO</i> | <i>Units</i>         | <i>Result</i>                          |
| Total Nickel (Ni)                    |            |           | ug/L                 | <1.0                                   |
| Total Selenium (Se)                  | 50         |           | ug/L                 | <0.10                                  |
| Total Silicon (Si)                   |            |           | ug/L                 | 14400                                  |
| Total Silver (Ag)                    |            |           | ug/L                 | <0.020                                 |
| Total Strontium (Sr)                 | 7000       |           | ug/L                 | 615                                    |
| 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                 | 0.3                                    |
| 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                 | 25.9                                   |
| Total Magnesium (Mg)                 |            |           | mg/L                 | 4.51                                   |
| Total Potassium (K)                  |            |           | mg/L                 | 0.117                                  |
| Total Sodium (Na)                    |            | 200       | mg/L                 | 12.8                                   |
| Total Sulphur (S)                    |            |           | mg/L                 | 4.5                                    |
| Total Mercury (Hg)                   | 1          |           | ug/L                 | <0.0019                                |
| Total Total Kjeldahl Nitrogen (Calc) |            |           | mg/L                 | 0.066                                  |
| Total Organic Carbon (C)             |            |           | mg/L                 | <0.50                                  |
| Total Nitrogen (N)                   |            |           | mg/L                 | 0.066                                  |
| Total Ammonia (N)                    |            |           | mg/L                 | <0.015                                 |
| Sulphide (as H <sub>2</sub> S)       |            | 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                                     |
| Fecal Coliforms                      |            |           | CFU/100mL            | <1                                     |
| Non-Coliform (Background)            |            |           | CFU/100mL            | <1                                     |
| Iron Bacteria                        |            |           | CFU/mL               | <25                                    |
| Sulphate reducing bacteria           |            |           | CFU/mL               | <75                                    |