Presented to Council

# Spanish Water Treatment

Large Municipal Residential Drinking Water System

## *January 1, 2023 – December 31, 2023*

***O.Reg 170/03 Schedule 22 Summary Report***
***O.Reg 170/03 Section 11 Annual Report***
***&***
***O.Reg 387/04 Annual Record of Water Taking***

Prepared by the Ontario Clean Water Agency
For The Corporation of the Town of Spanish

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

*Drinking-Water System Number:* *220007025*
*Drinking-Water System Name:* *Spanish Drinking Water System*
*Drinking-Water System Owner:* *The Corporation of the Town of Spanish*
*Drinking-Water System Category:* *Large Municipal Residential*

# SECTION 1: INTRODUCTION

This document is prepared in accordance with Section 11 and Schedule 22 of O.Reg.170/03 under the Safe Drinking Water Act and with Section 9 of O.Reg.387/04 under the Ontario Water Resources Act. The reports are prepared by the Ontario Clean Water Agency. Acronyms and definitions can be found at the end of the report.

A copy of the Summary Report must be provided to the members of the municipal council by March 31, 2024.

# SECTION 2: REQUIREMENTS OF THE REPORTS

## Schedule 22 Report

The report must list the requirements of the Act, the regulations, the system's approval and any order that the system **failed to meet** at any time during the period covered by the report. The report must also specify the duration of the failure, and for each failure referred to, describe the measures that were taken to correct the failure.
For the purpose of enabling the owner of the system to assess the rated capability of their system to meet existing and future planned water uses, the following information is required to be included in this report:

- A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
- A comparison of the summary to the rated capacity and flow rates approved in the systems approval.

## Section 11 Report

The annual report must contain the following:

- A brief description of the drinking water system and a list of chemicals used by the system.
- A description of any major expenses incurred during the period covered by the report to install, repair or replace required equipment.
- A summary of all adverse water quality incidents (AWQI) reported to the Ministry
- A summary of corrective actions taken in response all AWQIs
- A summary of all test results required under the regulation, under an approval, municipal drinking water licence or order, including an OWRA order.
- A statement of where a Schedule 22 report will be available for inspection.

The report must be prepared not later than February 28 of the following year.

## Regulation 387 Report

On or before March 31 in every year, every holder of a permit to take water (PTTW) shall submit to a Director the data collected and recorded for the previous year.

A record of annual water taking can be found in Appendix A.

# SECTION 3: SCHEDULE 22 REPORT

## Flows – Treated Noranda Well

In accordance with the Municipal Drinking Water License (MDWL), the Spanish WTP shall not be operated to exceed a maximum flow of 388.8 m3/d to the distribution system.

The daily treated water maximum flow was 362 m3 occurring in June and represents 93% of capacity. In 2023, the total volume of water sent to the distribution system was 71,477 m3

The quantity of treated water supplied during the reporting period **did not** exceed the rated maximum capacity.

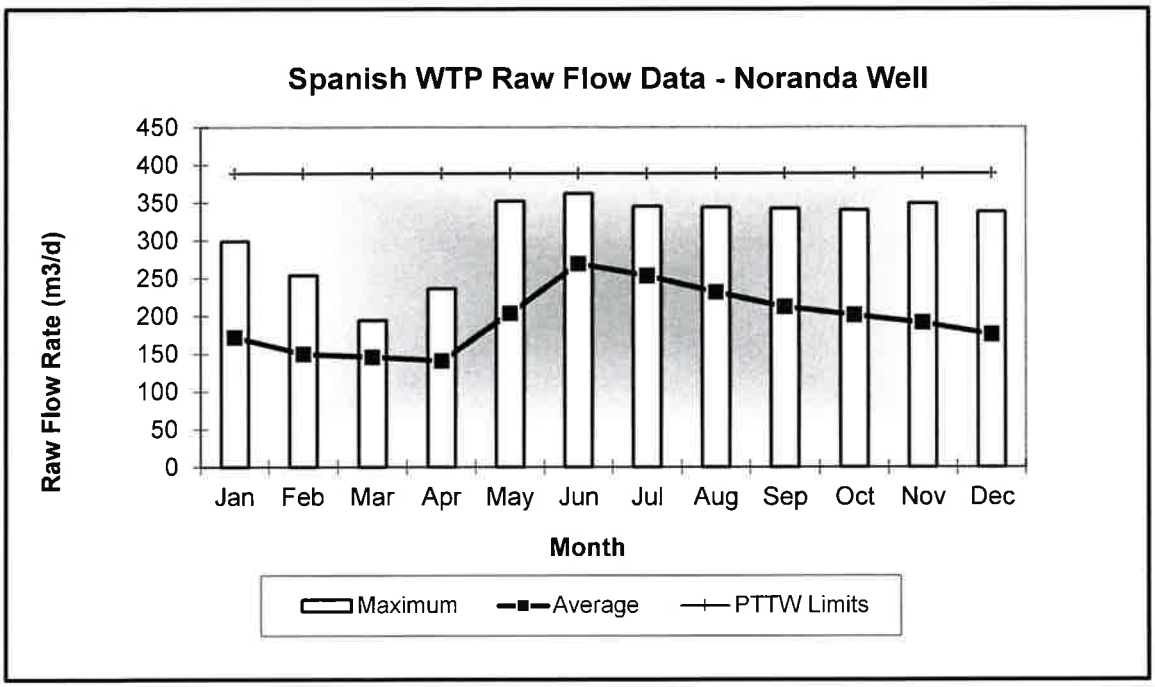
## Flows – Raw Noranda Well

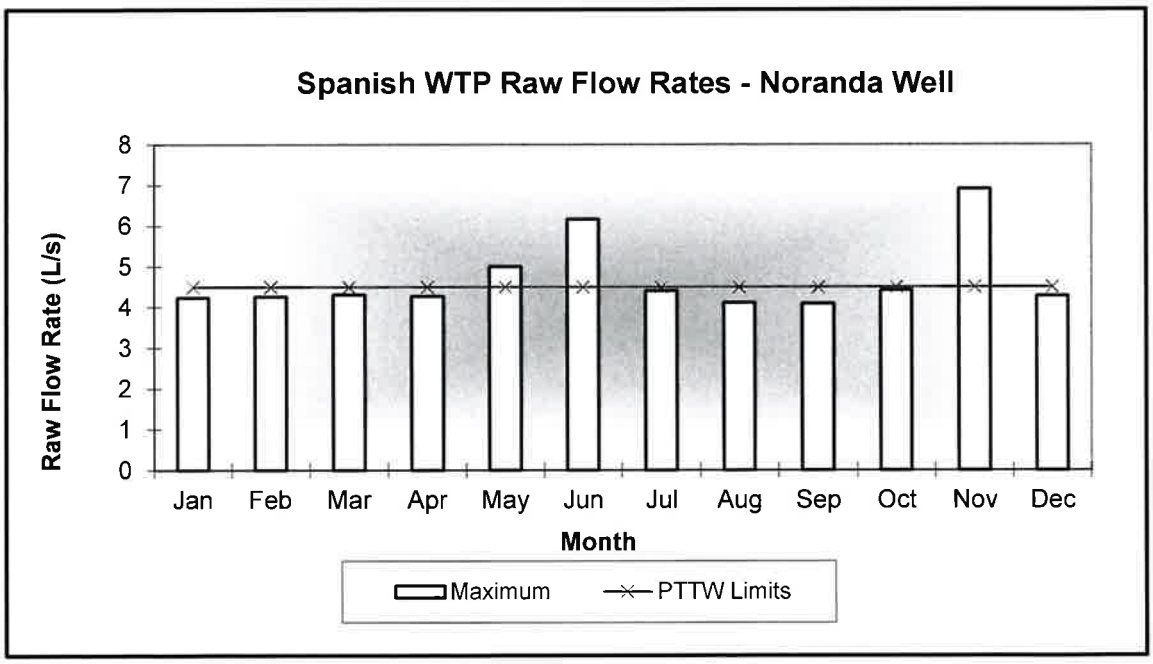
Daily raw maximum instantaneous flow is stated in the PTTW at a maximum rate of flow of 4.5 L/s and a maximum daily volume of 388.8 $m^3$/d.

The average monthly raw water flow for this reporting period was 195.83 $m^3$/d. The maximum daily flow was 362 $m^3$/d representing 93% of water taking limits. In 2023, the total volume of water taken from the environment was 71,477 m3

The rate of water taken **did** exceed limits stipulated within the PTTW. The instantaneous flow rate was exceeded while back flushing was being performed due to low chlorine events.

| | *RAW WATER FLOW DATA – Noranda Well* | | | | | |
|---|---|---|---|---|---|---|
| **Month** | **Total Monthly Flow ( m3)** | **Average Flow (m3/d)** | **Maximum Flow (m3/d)** | **Maximum Flow Rate (L/s)** | **Limits** | |
| | | | | | **L/s** (PTTW) | **$m^3$/d** (PTTW) |
| January | 5,336 | 172.13 | 299 | 4.24 | 4.5 | 388.8 |
| February | 4,191 | 149.68 | 254 | 4.26 | 4.5 | 388.8 |
| March | 4,518 | 145.74 | 194 | 4.31 | 4.5 | 388.8 |
| April | 4,221 | 140.7 | 236 | 4.27 | 4.5 | 388.8 |
| May | 6,313 | 203.65 | 352 | **5** | 4.5 | 388.8 |
| June | 8,079 | 269.3 | 362 | **6.16** | 4.5 | 388.8 |
| July | 7,857 | 253.45 | 345 | 4.4 | 4.5 | 388.8 |
| August | 7,176 | 231.48 | 344 | 4.11 | 4.5 | 388.8 |
| September | 6,365 | 212.17 | 342 | 4.09 | 4.5 | 388.8 |
| October | 6,240 | 201.29 | 340 | 4.42 | 4.5 | 388.8 |
| November | 5,740 | 191.33 | 349 | **6.91** | 4.5 | 388.8 |
| December | 5,441 | 175.52 | 338 | 4.28 | 4.5 | 388.8 |
| **Total** | 71,477 | | | | | |
| **Average** | | 195.83 | | | | |
| **Maximum** | | | 362 | **6.91** | 4.5 | 388.8 |




## Annual Raw Water Review – Noranda Well

| Raw Water Taking | Total Taking m3/d | Average Day m3/d | Max Day m3/d | Max Day % of PTTW allowable 388.8 m3/d |
|---|---|---|---|---|
| 2023 | 71,477 | 195.83 | 362 | 93% |
| 2022 | 68,729 | 188.3 | 365 | 94% |
| 2021 | 79,499 | 217.81 | 378 | 97% |
| 2020 | 79,286 | 216.63 | 356 | 91.5% |
| 2019 | 77,541 | 212.44 | 363 | 93.4% |

## Flows - Treated Goderich Well

In accordance with the Municipal Drinking Water License (MDWL), the Spanish WTP shall not be operated to exceed a maximum flow of 371.52 m3/d to the distribution system.

The daily treated water maximum flow was 260 m3 in July and represents 70% of capacity. In 2023, the total volume of water sent to the distribution system was 16,087 m3

The quantity of treated water supplied during the reporting period **did not** exceed the rated maximum capacity.

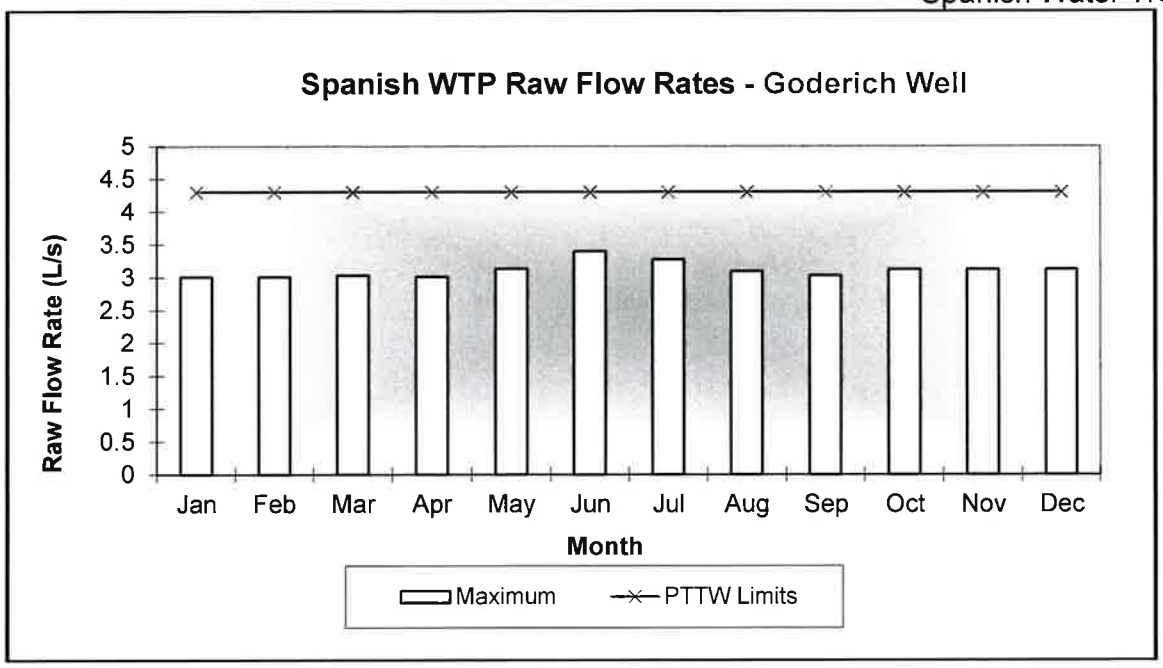
## Flows - Raw Goderich Well

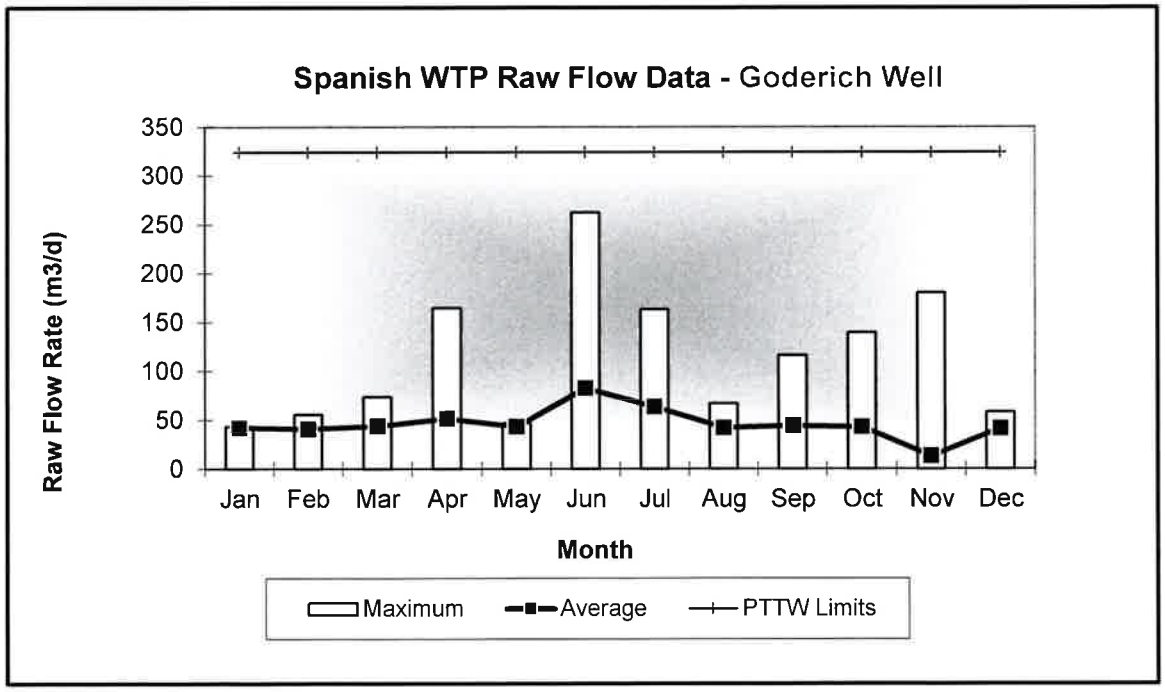
Daily raw maximum instantaneous flow is stated in the PTTW at a maximum rate of flow of 4.3 L/s and a maximum daily volume of 324 $m^3$/d. The permit also limits the time allowed to take water to 18 hours a day.

The average monthly raw water flow for this reporting period was 46.05 $m^3$/d. The maximum daily flow was 262.3 $m^3$/d representing 81% of water taking limits. In 2023, the total volume of water taken from the environment was 16,210.75 m3

The rate of raw water taken **did not** exceed the daily flow and the flow rate limits stipulated within the PTTW.

| | ***RAW WATER FLOW DATA – Goderich Well*** | | | | | |
|---|---|---|---|---|---|---|
| **Month** | **Total Monthly Flow ( m3)** | **Average Flow (m3/d)** | **Maximum Flow (m3/d)** | **Maximum Flow Rate (L/s)** | **Limits** | |
| | | | | | **L/s** (PTTW) | **$m^3$/d** (PTTW) |
| January | 1,300.04 | 41.94 | 43.62 | 3.01 | 4.3 | 324 |
| February | 1,144.25 | 40.87 | 55.65 | 3.01 | 4.3 | 324 |
| March | 1,365.87 | 44.06 | 73.72 | 3.03 | 4.3 | 324 |
| April | 1,542.14 | 51.4 | 164.4 | 3.01 | 4.3 | 324 |
| May | 865.33 | 43.27 | 46.72 | 3.13 | 4.3 | 324 |
| June | 2,471.86 | 82.4 | 362.3 | 3.4 | 4.3 | 324 |
| July | 1,967.17 | 63.46 | 163.06 | 3.27 | 4.3 | 324 |
| August | 1,301.31 | 41.98 | 66.65 | 3.09 | 4.3 | 324 |
| September | 1,281.13 | 44.18 | 116.16 | 3.03 | 4.3 | 324 |
| October | 1,288.19 | 42.94 | 139.43 | 3.12 | 4.3 | 324 |
| November | 396.94 | 13.23 | 180.16 | 3.12 | 4.3 | 324 |
| December | 1,286.52 | 41.5 | 58.16 | 3.12 | 4.3 | 324 |
| **Total** | 16,210.75 | | | | | |
| **Average** | | 46.05 | | | | |
| **Maximum** | | | 262.3 | 3.4 | 4.3 | 324 |




## Annual Raw Water Review – Goderich Well

| Raw Water Taking | Total Taking m3/d | Average Day m3/d | Max Day m3/d | Max Day % of PTTW allowable 324 m3/d |
|---|---|---|---|---|
| 2023 | 16,210.75 | 46.05 | 262.3 | 81% |
| 2022 | 18,215.8 | 49.91 | 260.53 | 80.4% |
| 2021 | 23,678.81 | 64.87 | 215.67 | 66.5% |
| 2020 | 28,295.39 | 77.31 | 214.4 | 66.2% |
| 2019 | 29,939.57 | 82.03 | 238.5 | 73.6% |

## System Failures and Corrective Actions

The latest inspection of the drinking water facility took place on September 26, 2023. The facility scored 4/578 providing a rating of 99.31%.

The following non-compliances were identified in the 2023 inspection report.

**Question ID DWMR1061000. Logbooks were not properly maintained and/or did not contain the required information.**

DWI notes: There were two occasions during the inspection period where an operator failed to document important information in the logbook.

On June 27, 2022, there is an entry in the logbook relating the the Goderich Well being operated in manual mode. It is further indicated that an operator was to be dispatched later that same day to switch the well from manual mode back to auto mode. Based on information gleaned from the next logbook entry, which was June 29, the Goderich well was operating in auto mode; however, there is no logbook entry to indicate when the switch from manual to auto was made or who made the operational change.

On December 24, 2022, there is a logbook entry identifying the ORO and the OIC (same operator), but no additional information was provided. As such, the purpose of the operator's site visit and the subsequent result of the visit are unclear. There must be some notation in the logbook, even if the operator was on site to just check operations and did not make any adjustments.

ACTION REQUIRED
Training shall be provided on the requirements of O. Reg. 128/04 with regards to the operator duties and record keeping requirements. Proof of this training shall be provided to the undersigned Water Compliance Office no later than January 31, 2024.

**Question ID DWMR1115000. Were the inspection questions sufficient to address other non-compliance items identified during the inspection period?**

DWI notes: There was a reported exceedance of the current Permit to Take Water (PTTW #P-300-1073145965), which requires adherence to the following limits:

Goderich Well
- 258 L/min (4.3 L/s)
- 324,000 L/day
- draw water for maximum of 18 hours/day

Noranda Well
- 270 L/min (4.5 L/s)
- 388,800 L/day

On June 11 and 12, 2023, it was reported that the Goderich Well exceeded the daily hours of run time on each day in order to refill the storage tank following maintenance. The well operated for 24 hours on each day, which is an exceedance of the 18 hour per day limit.

The need to use the Goderich well outside the parameters outlined in the PTTW should be reviewed. If it is deemed necessary to use the well in this capacity when the storage tank is taken off line and refilled, the town and their operating authority should consider an amendment to the PTTW

AWQIs reported to the Ministry

| Incident Date | Parameter | Result | Unit of Measure | Corrective Action | Corrective Action Date |
|---|---|---|---|---|---|
| 20-Jul-23 | Sodium | 21.7 | mg/L | AWQI#162695 – Treated water sample for Goderich was 21.7mg/L. This Well has a history of high Sodium and is conducting quarterly Sodium sampling. Public Health Sudbury and Districts was notified and a resample was collected. The resample had a result of 11.6mg/L. | 26-Jul-23 |
| 20-Jul-23 | Sodium | 75.4 | mg/L | AWQI#162693 – Treated water sample for Noranda was 75.4mg/L. This Well has a history of high Sodium and is conducting quarterly Sodium sampling. Public Health Sudbury and Districts was notified and a resample was collected. The resample had a result of 76.4mg/L. | 26-Jul-23 |

## SECTION 4: SECTION 11 REPORT

### Information to be provided

| | |
|---|---|
| Population Served | **696** (Stats Canada 2011) |
| Does your Drinking-Water System serve more than 10,000 people? | **No** |
| Is your annual report available to the public at no charge on a web site on the Internet? | **Yes** |
| Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection. | **The Corporation of the Town of Spanish**<br>**8 Trunk Road**<br>**PO Box 70**<br>**Spanish, ON P0P 2A0** |
| Number of Designated Facilities served: | **0** |
| Did you provide a copy of your annual report to all Designated Facilities you serve? | **NA** |
| Number of Interested Authorities you report to: | **0** |
| Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? | **No** |
| List all Drinking-Water Systems (if any), and their DWS Number which receive all of their drinking water from your system: | ***N/A*** |
| Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water? | ***Yes*** |
| Indicate how you notified system users that your annual report is available, and is free of charge. | ***Public access/notice via the web*** |
| Indicate if you notified system users that your annual report is available and is free of charge using an alternate method | ***YES*** |

## Facility Description

A ground water supply system consisting of two wells serving the town of Spanish. Noranda Well No.1 consists of a drilled well equipped with a submersible pump, a 2 cartridge filter system (5 and 1 micron), a 6 unit UV System and sodium hypochlorite injection system. Goderich Well No.2 consists of a drilled well, equipped with a submersible pump and a sodium hypochlorite dosing system. The pumping stations each have flow monitoring and alarm capabilities. The distribution system is supplied by a tower having a storage volume of 955 cubic meters.

## Chemicals Used

| | |
|---|---|
| Sodium Hypochlorite 12% | Disinfection |

## Significant Expenses

Significant expenses incurred to

[] Install required equipment
[] Repair required equipment
[X] Replace required equipment

| Work Order | Completion Date | Comment |
|---|---|---|
| 2965345 | 13-Mar-23 | *Purchased stock pump and motor for Noranda Well – $9,634.36* |
| 3246918 | 30-April-23 | *Purchased various spare parts for Noranda Well including chemical pump tubing, chlorine probe membrane cap & electrolyte, filter cartridges and UV lamps & sleeves. – $5,120.41* |
| 3244580 | 31-Aug-23 | *Water tower inspection – $10,000* |
| | 30-Nov-23 | *Purchased UPS, pump tubes for analyzers and Noranda well pump replacement – $5,458.31* |
| 3625553 | 31-Dec-23 | *Goderich Well flush to waste valve replacement – $2,571.02* |

## Adverse Water Quality Incidents

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

| Incident Date | Parameter | Result | Unit of Measure | Corrective Action | Corrective Action Date |
|---|---|---|---|---|---|
| 20-Jul-23 | Sodium | 21.7 | mg/L | AWQI#162695 – Treated water sample for Goderich was 21.7mg/L. This Well has a history of high Sodium and is conducting quarterly Sodium sampling. Public Health Sudbury and Districts was notified and a resample was collected. The resample had a result of 11.6mg/L. | 26-Jul-23 |
| 20-Jul-23 | Sodium | 75.4 | mg/L | AWQI#162693 – Treated water sample for Noranda was 75.4mg/L. This Well has a history of high Sodium and is conducting quarterly Sodium sampling. Public Health Sudbury and Districts was notified and a resample was collected. The resample had a result of 76.4mg/L. | 26-Jul-23 |

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03.**

| | No. of Samples | Range of E.Coli | | Range of Total Coliform Results | | Number of HPC | Range of HPC Results | |
|---|---|---|---|---|---|---|---|---|
| | Collected | Min # | Max # | Min # | Max # | Samples | Min # | Max # |
| Noranda Raw Well | 52 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| Goderich Raw Well | 51 | 0 | 0 | 0 | 0 | N/A | N/A | N/A |
| Noranda Treated Water | 52 | 0 | 0 | 0 | 0 | 52 | 0 | 6 |
| Goderich Treated Water | 52 | 0 | 0 | 0 | 0 | 52 | 0 | 4 |
| Distribution | 104 | 0 | 0 | 0 | 0 | 52 | 0 | 2 |

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03**

| Noranda | No. of Samples Collected | Range of Results | | Units of Measure |
|---|---|---|---|---|
| | | Minimum | Maximum | |
| Turbidity, On-Line - Filter 1 | 8760 | 0 | 0.995 | (NTU) |
| Free Chlorine Residual - Treated | 8760 | 0.583 | 4.99 | (mg/L) |

| Goderich | No. of Samples Collected | Range of Results | | Units of Measure |
|---|---|---|---|---|
| | | Minimum | Maximum | |
| Turbidity, Raw Grabs | 102 | 0.388 | 6.93 | NTU |
| Free Chlorine Residual - Treated | 8760 | 0.287 | 1.99 | (mg/L) |

| Distribution | No. of Samples Collected | Range of Results | | Units of Measure |
|---|---|---|---|---|
| | | Minimum | Maximum | |
| Free Chlorine Residual, Distribution | 8760 | 0 | 3.58 | (mg/L) |
| Free Chlorine Residual, Distribution Location 1 | 9 | 1.48 | 1.90 | (mg/L) |
| Free Chlorine Residual, Distribution Location 2 | n/a | n/a | n/a | (mg/L) |
| Free Chlorine Residual, Distribution Location 3 | n/a | n/a | n/a | (mg/L) |
| Free Chlorine Residual, Distribution Location 4 | n/a | n/a | n/a | (mg/L) |

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

| Date of legal instrument issued | Parameter and limits | Month Sampled | Day Sampled | Noranda Result | Goderich Result | Unit of Measure |
|---|---|---|---|---|---|---|
| Sampling is taking place due to failed sodium samples in the treated water | Sodium<br><br>20mg/L for sodium restricted diets | Jan | 16 | | 16.0 | mg/L |
| | | Feb | | | | mg/L |
| | | Mar | 13 | 50.2 | | mg/L |
| | | Apr | 17 | 48.2 | 13.1 | mg/L |
| | | May | | | | mg/L |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 200 mg/L for aesthetic limits | Jun | | | | mg/L |
| | | Jul | 17 | 75.4 | 21.7 | mg/L |
| | | Aug | | | | mg/L |
| | | Sep | | | | mg/L |
| | | Oct | 17 | 66.1 | 10.0 | mg/L |
| | | Nov | | | | mg/L |
| | | Dec | | | | mg/L |

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

| Noranda TREATED WATER | Sample Date (yyyy/mm/dd) | Sample Result | MAC | No. of Exceedances MAC | No. of Exceedances 1/2 MAC |
|---|---|---|---|---|---|
| Antimony: Sb (ug/L) – TW1 | 2023/01/18 | < MDL 0.6 | 6 | No | No |
| Arsenic: As (ug/L) – TW1 | 2023/01/18 | < MDL 0.2 | 10 | No | No |
| Barium: Ba (ug/L) – TW1 | 2023/01/18 | 26.5 | 1000 | No | No |
| Boron: B (ug/L) – TW1 | 2023/01/18 | 25 | 5000 | No | No |
| Cadmium: Cd (ug/L) – TW1 | 2023/01/18 | 0.009 | 5 | No | No |
| Chromium: Cr (ug/L) – TW1 | 2023/01/18 | 0.24 | 50 | No | No |
| Mercury: Hg (ug/L) – TW1 | 2023/01/18 | < MDL 0.01 | 1 | No | No |
| Selenium: Se (ug/L) – TW1 | 2023/01/18 | 0.52 | 50 | No | No |
| Uranium: U (ug/L) – TW1 | 2023/01/18 | 3.45 | 20 | No | No |

| Goderich TREATED WATER | Sample Date (yyyy/mm/dd) | Sample Result | MAC | No. of Exceedances MAC | No. of Exceedances 1/2 MAC |
|---|---|---|---|---|---|
| Antimony: Sb (ug/L) – TW2 | 2021/01/20 | <MDL 0.9 | 6.0 | No | No |
| Arsenic: As (ug/L) – TW2 | 2021/01/20 | 2.1 | 10.0 | No | No |
| Barium: Ba (ug/L) – TW2 | 2021/01/20 | 23.2 | 1000.0 | No | No |
| Boron: B (ug/L) – TW2 | 2021/01/20 | 18.0 | 5000.0 | No | No |
| Cadmium: Cd (ug/L) – TW2 | 2021/01/20 | 0.007 | 5.0 | No | No |
| Chromium: Cr (ug/L) – TW2 | 2021/01/20 | 0.21 | 50.0 | No | No |
| Mercury: Hg (ug/L) – TW2 | 2021/01/20 | <MDL 0.01 | 1.0 | No | No |
| Selenium: Se (ug/L) – TW2 | 2021/01/20 | 0.36 | 50.0 | No | No |
| Uranium: U (ug/L) – TW2 | 2021/01/20 | 1.65 | 20.0 | No | No |

| Noranda TREATED WATER | Sample Date (yyyy/mm/dd) | Sample Result | MAC | No. of Exceedances MAC | No. of Exceedances 1/2 MAC |
|---|---|---|---|---|---|
| Fluoride (mg/L) – TW1 | 2023/01/18 | < MDL 0.06 | 1.5 | No | No |
| Nitrite (mg/L) – TW1 | 2023/01/16 | < MDL 0.003 | 1.0 | No | No |
| Nitrite (mg/L) – TW1 | 2023/04/17 | < MDL 0.003 | 1.0 | No | No |
| Nitrite (mg/L) – TW1 | 2023/07/17 | < MDL 0.003 | 1.0 | No | No |
| Nitrite (mg/L) – TW1 | 2023/10/17 | < MDL 0.003 | 1.0 | No | No |
| Nitrate (mg/L) – TW1 | 2023/01/16 | 0.624 | 10.0 | No | No |
| Nitrate (mg/L) – TW1 | 2023/04/17 | 0.582 | 10.0 | No | No |
| Nitrate (mg/L) – TW1 | 2023/07/17 | 0.945 | 10.0 | No | No |
| Nitrate (mg/L) – TW1 | 2023/10/17 | 0.731 | 10.0 | No | No |

| Goderich TREATED WATER | Sample Date (yyyy/mm/dd) | Sample Result | MAC | No. of Exceedances MAC | 1/2 MAC |
|---|---|---|---|---|---|
| Fluoride (mg/L) – TW2 | 2023/01/18 | 0.14 | 1.5 | No | No |
| Nitrite (mg/L) – TW2 | 2023/01/16 | < MDL 0.003 | 1.0 | No | No |
| Nitrite (mg/L) – TW2 | 2023/04/17 | < MDL 0.003 | 1.0 | No | No |
| Nitrite (mg/L) – TW2 | 2023/07/17 | < MDL 0.003 | 1.0 | No | No |
| Nitrite (mg/L) – TW2 | 2023/10/17 | < MDL 0.003 | 1.0 | No | No |
| Nitrate (mg/L) – TW2 | 2023/01/16 | 0.096 | 10.0 | No | No |
| Nitrate (mg/L) – TW2 | 2023/04/17 | 0.163 | 10.0 | No | No |
| Nitrate (mg/L) – TW2 | 2023/07/17 | 0.203 | 10.0 | No | No |
| Nitrate (mg/L) – TW2 | 2023/10/17 | 0.056 | 10.0 | No | No |

*There is no "MAC" for Sodium. The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

## Summary of Lead testing under Schedule 15.1 during this reporting period

| Location Type | No.of Samples | Range of Results Minimum | Maximum | MAC (ug/L) | Number of Exceedances |
|---|---|---|---|---|---|
| Distribution - Lead Results (ug/L) | n/a | | | 10 | N/A |
| Distribution - Alkalinity (mg/L) | 6 | 88 | 104 | N/A | N/A |
| Distribution - pH In-House | 4 | 6.55 | 7.20 | N/A | N/A |

## Summary of Organic parameters sampled during this reporting period or the most recent results

| NORANDA TREATED WATER | Sample Date (yyyy/mm/dd) | Sample Result | MAC | Number of Exceedances MAC | 1/2 MAC |
|---|---|---|---|---|---|
| 1,1-Dichloroethylene (ug/L)-TW1 | 2023/01/18 | < MDL 0.33 | 14 | No | No |
| 1,2-Dichlorobenzene (ug/L)-TW1 | 2023/01/18 | < MDL 0.41 | 200 | No | No |
| 1,2-Dichloroethane (ug/L)-TW1 | 2023/01/18 | < MDL 0.35 | 5 | No | No |
| 1,4-Dichlorobenzene (ug/L)-TW1 | 2023/01/18 | < MDL 0.36 | 5 | No | No |
| 2,3,4,6-Tetrachlorophenol (ug/L)-TW1 | 2023/01/18 | < MDL 0.2 | 100 | No | No |
| 2,4,6-Trichlorophenol (ug/L)-TW1 | 2023/01/18 | < MDL 0.25 | 5 | No | No |
| 2,4-Dichlorophenol (ug/L)-TW1 | 2023/01/18 | < MDL 0.15 | 900 | No | No |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L)-TW1 | 2023/01/18 | < MDL 0.19 | 100 | No | No |
| 2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L)-TW1 | 2023/01/18 | < MDL 0.12 | 100 | No | No |
| Alachlor (ug/L) -TW1 | 2023/01/18 | < MDL 0.02 | 5 | No | No |
| Atrazine + N-dealkylated metabolites (ug/L)-TW1 | 2023/01/18 | < MDL 0.01 | 5 | No | No |
| Azinphos-methyl (ug/L)-TW1 | 2023/01/18 | < MDL 0.05 | 20 | No | No |
| Benzene (ug/L)-TW1 | 2023/01/18 | < MDL 0.32 | 1 | No | No |
| Benzo(a)pyrene (ug/L)-TW1 | 2023/01/18 | < MDL 0.004 | 0.01 | No | No |
| Bromoxynil (ug/L)-TW1 | 2023/01/18 | < MDL 0.33 | 5 | No | No |
| Carbaryl (ug/L)-TW1 | 2023/01/18 | < MDL 0.05 | 90 | No | No |
| Carbofuran (ug/L) -TW1 | 2023/01/18 | < MDL 0.01 | 90 | No | No |

| | | | | | |
|---|---|---|---|---|---|
| Carbon Tetrachloride (ug/L) -TW1 | 2023/01/18 | < MDL 0.17 | 2 | No | No |
| Chlorpyrifos (ug/L) -TW1 | 2023/01/18 | < MDL 0.02 | 90 | No | No |
| Diazinon (ug/L)-TW1 | 2023/01/18 | < MDL 0.02 | 20 | No | No |
| Dicamba (ug/L)-TW1 | 2023/01/18 | < MDL 0.2 | 120 | No | No |
| Dichloromethane (Methylene Chloride) (ug/L)-TW1 | 2023/01/18 | < MDL 0.35 | 50 | No | No |
| Diclofop-methyl (ug/L)-TW1 | 2023/01/18 | < MDL 0.4 | 9 | No | No |
| Dimethoate (ug/L)-TW1 | 2023/01/18 | < MDL 0.06 | 20 | No | No |
| Diquat (ug/L)-TW1 | 2023/01/18 | < MDL 1 | 70 | No | No |
| Diuron (ug/L)-TW1 | 2023/01/18 | < MDL 0.03 | 150 | No | No |
| Glyphosate (ug/L)-TW1 | 2023/01/18 | < MDL 1 | 280 | No | No |
| Malathion (ug/L)-TW1 | 2023/01/18 | < MDL 0.02 | 190 | No | No |
| Metolachlor (ug/L)-TW1 | 2023/01/18 | < MDL 0.01 | 50 | No | No |
| Metribuzin (ug/L)-TW1 | 2023/01/18 | < MDL 0.02 | 80 | No | No |
| Monochlorobenzene (Chlorobenzene) (ug/L)-TW1 | 2023/01/18 | < MDL 0.3 | 80 | No | No |
| Paraquat (ug/L)-TW1 | 2023/01/18 | < MDL 1 | 10 | No | No |
| PCB (ug/L)-TW1 | 2023/01/18 | < MDL 0.04 | 3 | No | No |
| Pentachlorophenol (ug/L)-TW1 | 2023/01/18 | < MDL 0.15 | 60 | No | No |
| Phorate (ug/L)-TW1 | 2023/01/18 | < MDL 0.01 | 2 | No | No |
| Picloram (ug/L)-TW1 | 2023/01/18 | < MDL 1 | 190 | No | No |
| Prometryne (ug/L)-TW1 | 2023/01/18 | < MDL 0.03 | 1 | No | No |
| Simazine (ug/L)-TW1 | 2023/01/18 | < MDL 0.01 | 10 | No | No |
| Terbufos (ug/L)-TW1 | 2023/01/18 | < MDL 0.01 | 1 | No | No |
| Tetrachloroethylene (ug/L)-TW1 | 2023/01/18 | < MDL 0.35 | 10 | No | No |
| Triallate (ug/L) -TW1 | 2023/01/18 | < MDL 0.01 | 230 | No | No |
| Trichloroethylene (ug/L)-TW1 | 2023/01/18 | < MDL 0.44 | 5 | No | No |
| Trifluralin (ug/L)-TW1 | 2023/01/18 | < MDL 0.02 | 45 | No | No |
| Vinyl Chloride (ug/L)-TW1 | 2023/01/18 | < MDL 0.17 | 1 | No | No |

| GODERICH TREATED WATER | Sample Date (yyyy/mm/dd) | Sample Result | MAC | Number of Exceedances MAC | 1/2 MAC |
|---|---|---|---|---|---|
| Alachlor (ug/L) - TW1 | 2021/01/20 | <MDL 0.02 | 5.0 | No | No |
| Atrazine + N-dealkylated metabolites (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 5.0 | No | No |
| Azinphos-methyl (ug/L) - TW1 | 2021/01/20 | <MDL 0.05 | 20.0 | No | No |
| Benzene (ug/L) - TW1 | 2021/04/28 | <MDL 0.32 | 1.0 | No | No |
| Benzo(a)pyrene (ug/L) - TW1 | 2021/01/20 | <MDL 0.004 | 0.01 | No | No |
| Bromoxynil (ug/L) - TW1 | 2021/01/20 | <MDL 0.33 | 5.0 | No | No |
| Carbaryl (ug/L) - TW1 | 2021/01/20 | <MDL 0.05 | 90.0 | No | No |
| Carbofuran (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 90.0 | No | No |
| Carbon Tetrachloride (ug/L) - TW1 | 2021/01/20 | <MDL 0.17 | 2.0 | No | No |
| Chlorpyrifos (ug/L) - TW1 | 2021/01/20 | <MDL 0.02 | 90.0 | No | No |
| Diazinon (ug/L) - TW1 | 2021/01/20 | <MDL 0.02 | 20.0 | No | No |
| Dicamba (ug/L) - TW1 | 2021/01/20 | <MDL 0.2 | 120.0 | No | No |
| 1,2-Dichlorobenzene (ug/L) - TW1 | 2021/01/20 | <MDL 0.41 | 200.0 | No | No |

| | | | | | |
|---|---|---|---|---|---|
| 1,4-Dichlorobenzene (ug/L) - TW1 | 2021/01/20 | <MDL 0.36 | 5.0 | No | No |
| 1,2-Dichloroethane (ug/L) - TW1 | 2021/01/20 | <MDL 0.35 | 5.0 | No | No |
| 1,1-Dichloroethylene (ug/L) - TW1 | 2021/01/20 | <MDL 0.33 | 14.0 | No | No |
| Dichloromethane (Methylene Chloride) (ug/L) - TW1 | 2021/01/20 | <MDL 0.35 | 50.0 | No | No |
| 2,4-Dichlorophenol (ug/L) - TW1 | 2021/01/20 | <MDL 0.15 | 900.0 | No | No |
| 2,4-Dichlorophenoxy acetic acid (2,4-D) (ug/L) - TW1 | 2021/01/20 | <MDL 0.19 | 100.0 | No | No |
| Diclofop-methyl (ug/L) - TW1 | 2021/01/20 | <MDL 0.4 | 9.0 | No | No |
| Dimethoate (ug/L) - TW1 | 2021/01/20 | <MDL 0.06 | 20.0 | No | No |
| Diquat (ug/L) - TW1 | 2021/01/20 | <MDL 1.0 | 70.0 | No | No |
| Diuron (ug/L) - TW1 | 2021/01/20 | <MDL 0.03 | 150.0 | No | No |
| Glyphosate (ug/L) - TW1 | 2021/01/20 | <MDL 1.0 | 280.0 | No | No |
| Malathion (ug/L) - TW1 | 2021/01/20 | <MDL 0.02 | 190.0 | No | No |
| Metolachlor (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 50.0 | No | No |
| Metribuzin (ug/L) - TW1 | 2021/01/20 | <MDL 0.02 | 80.0 | No | No |
| Monochlorobenzene (Chlorobenzene) (ug/L) - TW1 | 2021/01/20 | <MDL 0.3 | 80.0 | No | No |
| Paraquat (ug/L) - TW1 | 2021/01/20 | <MDL 1.0 | 10.0 | No | No |
| PCB (ug/L) - TW1 | 2021/01/20 | <MDL 0.04 | 3.0 | No | No |
| Pentachlorophenol (ug/L) - TW1 | 2021/01/20 | <MDL 0.15 | 60.0 | No | No |
| Phorate (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 2.0 | No | No |
| Picloram (ug/L) - TW1 | 2021/01/20 | <MDL 1.0 | 190.0 | No | No |
| Prometryne (ug/L) - TW1 | 2021/01/20 | <MDL 0.03 | 1.0 | No | No |
| Simazine (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 10.0 | No | No |
| Terbufos (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 1.0 | No | No |
| Tetrachloroethylene (ug/L) - TW1 | 2021/01/20 | <MDL 0.35 | 10.0 | No | No |
| 2,3,4,6-Tetrachlorophenol (ug/L) - TW1 | 2021/01/20 | <MDL 0.2 | 100.0 | No | No |
| Triallate (ug/L) - TW1 | 2021/01/20 | <MDL 0.01 | 230.0 | No | No |
| Trichloroethylene (ug/L) - TW1 | 2021/01/20 | <MDL 0.44 | 5.0 | No | No |
| 2,4,6-Trichlorophenol (ug/L) - TW1 | 2021/01/20 | <MDL 0.25 | 5.0 | No | No |
| 2-methyl-4-chlorophenoxyacetic acid (MCPA) (ug/L) - TW1 | 2021/01/20 | <MDL 0.12 | 100.0 | No | No |
| Trifluralin (ug/L) - TW1 | 2021/01/20 | <MDL 0.02 | 45.0 | No | No |
| Vinyl Chloride (ug/L) - TW1 | 2021/01/20 | <MDL 0.17 | 1.0 | No | No |

| | | | | | |
|---|---|---|---|---|---|
| DISTRIBUTION WATER | | | | | |
| Trihalomethane: Total (ug/L) Annual Average - DW | 2023/12/31 | 31.8 | 100.0 | No | No |
| HAA Total (ug/L Annual Average – DW | 2023/12/31 | 12.9 | 80.0 | No | No |

## SECTION 5: RAW WATER SUBMISSIONS

Raw water flows were submitted to the Ministry on January 25, 2024.

Certify Submission

**Permit/EASR Registration Number:**
P-300-1073145965

**Permit Holder/Registrant Name:**
CORPORATION OF THE TOWN OF SPANISH

All days with no data entered are considered as days when no water was taken

I agree that days with no data entered are days when no water was taken

Cancel

I, the undersigned, hereby declare that the information provided in this Report is complete and accurate.

First Name
Sarah

Last Name
Beaulieu

Company Name
Ontano Clean Water Agency

Date
25/01/2024

Reporting Year
2023

Your data has been successfully submitted

**Name of Attester**
**First Name:** Sarah
**Last Name:** Beaulieu
**Company:** Ontario Clean Water Agency
**Date Certified/Submitted(yyyy/mm/dd):** 2024/01/25

## SECTION 6: CONCLUSION

The Spanish WTP delivers water that, in all its treated and distribution samples, indicates the water to be free of bacteriological contamination.

Based on information available for the 2023 operating year, the Goderich well was able to meet the demand of water use without exceeding the PTTW or the MDWL.

The Noranda Well exceeded the flow rate limit in May, June and November. The flow rate exceedances occurred while back flushing was being completed due to low chlorine events. Total daily flows were not exceeded during the 2023 operating year.

## List of Acronyms and Definitions

| | |
|---|---|
| Alkalinity | The capacity of water for neutralizing an acid solution |
| AWQI | Adverse Water Quality Incident- when a water sample test result exceeds the Ontario Drinking Water Quality Standards |
| Backwash | Water pumped backwards to clean filters |
| BWA | Boil Water Advisory; Issued when risk of contamination is possible in drinking water |
| CFU | Colony Forming Units |
| Chlorine Residual | A low level of chlorine remaining in water after disinfection occurs |
| DW | Distribution Water |
| DWA | Drinking Water Advisory; Issued when water cannot be consumed by any means |
| DWWP | Drinking Water Works Permit - provides a description of the overall system |
| E.Coli | Bacteria used as indicators to measure the degree of pollution and sanitary quality of water |
| GUDI 170/03 | Groundwater Under Direct Influence – Considered to be surface water under O.Reg |
| HPC | Heterotrophic Plant Count |
| L/s | Litres per Second |
| m3/d | Cubic Metres per Day |
| MAC | Maximum Acceptable Concentration |
| MDL | Minimum Detection Level |
| MDWL requirements | Municipal Drinking Water Licence - relates to the operation and performance |
| mg/L | Miligrams per Litre |
| Ministry | Ministry of the Environment, Conservation and Parks |
| MECP | Ministry of the Environment, Conservation and Parks |
| NDOGN | No Data: Overgrown with Non Target Bacteria |
| NDOGT | No Data: Overgrown with Target Bacteria |
| O.Reg | Ontario Regulation |
| PTTW water | Permit to Take Water – Permit which allows water taking from groundwater or surface |
| RW | Raw Water |
| TC | Total Coliforms |
| TSS | Total Suspended Solids |
| Turbidity | Cloudiness or haziness of water |
| TW | Treated Water |

# Appendix A

# Raw Water Flows

**Ontario** **Regulatory Self-Reporting System** **Ministry of the Environment, Conservation and Parks**

**Client Name:** CORPORATION OF THE TOWN OF SPANISH **Reporting Year:** 2023 **Service:** PTTW **Permit Number:** P-300-1073145965 **Permit Version:** 1.0 **New or Updated Submission:** NEW

**Site Name:** Town of Spanish Goderich Well Supply
**Source ID:** 500000506358 **Source Name:** Goderich Well **Source Type:** Well
**UTM(Zone/Easting/Northing):** 17/396295.0/5116551.0 **Method of Determination:** Metered **Unit of Measure:** Litre

**Description:** Goderich Well **Purpose Category:** Utilities **Specific Category:** Municipal Supply **Activity:** Water Supply

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 41620.0 | 400.0 | 42660.0 | 42600.0 | 46660.0 | 43780.0 | 52860.0 | 40650.0 | 40660.0 | 37650.0 | 11.0 | 43200.0 |
| 2 | 42620.0 | 5400.0 | 42500.0 | 42650.0 | 42625.0 | 82780.0 | 48860.0 | 40650.0 | 40660.0 | 40650.0 | 11.0 | 43160.0 |
| 3 | 43620.0 | 42650.0 | 42660.0 | 44650.0 | 42625.0 | 42780.0 | 48860.0 | 42650.0 | 40800.0 | 40650.0 | 11.0 | 43160.0 |
| 4 | 41650.0 | 41650.0 | 42660.0 | 42750.0 | 41625.0 | 43780.0 | 140860.0 | 43650.0 | 39800.0 | 38660.0 | 11.0 | 58160.0 |
| 5 | 42650.0 | 42650.0 | 42660.0 | 52750.0 | 42625.0 | 44780.0 | 155060.0 | 41650.0 | 78800.0 | 37660.0 | 11.0 | 43130.0 |
| 6 | 41625.0 | 55650.0 | 44660.0 | 42600.0 | | 44000.0 | 163060.0 | 41650.0 | 116160.0 | 38660.0 | 11.0 | 42130.0 |
| 7 | 41625.0 | 42660.0 | 42630.0 | 42620.0 | | 43000.0 | 137060.0 | 41650.0 | 40160.0 | 40650.0 | 11.0 | 43130.0 |
| 8 | 41625.0 | 42660.0 | 42630.0 | 42620.0 | | 145000.0 | 55030.0 | 66650.0 | 40160.0 | 39650.0 | 11.0 | 43150.0 |
| 9 | 42625.0 | 42660.0 | 42630.0 | 42620.0 | | 84000.0 | 45030.0 | 41800.0 | 43660.0 | 39650.0 | 1011.0 | 43150.0 |
| 10 | 41600.0 | 42650.0 | 42625.0 | 42620.0 | | 165300.0 | 47030.0 | 41800.0 | 41660.0 | 40650.0 | 11.0 | 42150.0 |
| 11 | 41600.0 | 42650.0 | 42625.0 | 55620.0 | | 262300.0 | 44660.0 | 41650.0 | 41660.0 | 38360.0 | 11.0 | 48150.0 |
| 12 | 41600.0 | 42650.0 | 42625.0 | 42700.0 | | 251300.0 | 44660.0 | 40650.0 | 38650.0 | 17360.0 | 11.0 | 125.0 |
| 13 | 41650.0 | 43650.0 | 43625.0 | 42700.0 | | 175150.0 | 47660.0 | 41650.0 | 40650.0 | 94360.0 | 11.0 | 30125.0 |
| 14 | 41650.0 | 42570.0 | 42600.0 | 42700.0 | | 175150.0 | 43650.0 | 43650.0 | 38650.0 | 72230.0 | 11.0 | 42125.0 |
| 15 | 41650.0 | 42570.0 | 42600.0 | 42700.0 | | 10150.0 | 42650.0 | 40660.0 | 38650.0 | 46230.0 | 11.0 | 42125.0 |
| 16 | 42650.0 | 42570.0 | 42600.0 | 42700.0 | | 42150.0 | 41650.0 | 40660.0 | 40660.0 | 42230.0 | 11.0 | 42200.0 |
| 17 | 41600.0 | 42600.0 | 73725.0 | 45700.0 | 46720.0 | 41700.0 | 84650.0 | 40660.0 | 39660.0 | 110430.0 | 11.0 | 41200.0 |
| 18 | 42600.0 | 42600.0 | 42725.0 | 164400.0 | 42720.0 | 41700.0 | 42830.0 | 41600.0 | 41660.0 | 139430.0 | 11.0 | 43200.0 |
| 19 | 41600.0 | 42600.0 | 42725.0 | 141400.0 | 42720.0 | 43700.0 | 41830.0 | 40600.0 | 39650.0 | 116430.0 | 11.0 | 42100.0 |
| 20 | 41600.0 | 42600.0 | 43725.0 | 42400.0 | 42720.0 | 60050.0 | 78830.0 | 42600.0 | 40650.0 | 40150.0 | 106011.0 | 44100.0 |
| 21 | 41630.0 | 50600.0 | 42660.0 | 41600.0 | 42720.0 | 42050.0 | 41800.0 | 41600.0 | 39650.0 | 39150.0 | 180160.0 | 42150.0 |
| 22 | 41630.0 | 42700.0 | 50660.0 | 42600.0 | 42720.0 | 88050.0 | 40800.0 | 39660.0 | 40650.0 | 39150.0 | 160.0 | 42150.0 |
| 23 | 42630.0 | 42700.0 | 42660.0 | 42600.0 | 44720.0 | 117050.0 | 42800.0 | 40660.0 | 38630.0 | 45150.0 | 160.0 | 43140.0 |
| 24 | 41600.0 | 42625.0 | 42650.0 | 43600.0 | 43660.0 | 41760.0 | 82800.0 | 39660.0 | 39630.0 | 24000.0 | 160.0 | 42140.0 |
| 25 | 41600.0 | 42625.0 | 42650.0 | 42800.0 | 42660.0 | 41760.0 | 41900.0 | 40650.0 | 41630.0 | 29000.0 | 160.0 | 42140.0 |
| 26 | 41600.0 | 42625.0 | 42650.0 | 57800.0 | 42660.0 | 46760.0 | 40900.0 | 40650.0 | 38720.0 | | 160.0 | 42140.0 |
| 27 | 41600.0 | 51625.0 | 43650.0 | 42660.0 | 42630.0 | 54060.0 | 82100.0 | 41650.0 | 38720.0 | | 160.0 | 43140.0 |
| 28 | 41630.0 | 42660.0 | 42600.0 | 42660.0 | 42630.0 | 123060.0 | 49100.0 | 39650.0 | 41720.0 | | 22200.0 | 42150.0 |
| 29 | 41630.0 | | 42600.0 | 41660.0 | 44630.0 | 54060.0 | 41730.0 | 39650.0 | 38720.0 | | 43200.0 | 43150.0 |
| 30 | 42630.0 | | 42600.0 | 42660.0 | 42630.0 | 20700.0 | 55730.0 | 40650.0 | | | 43200.0 | 42125.0 |
| 31 | 42400.0 | | 42600.0 | | 42630.0 | | 40730.0 | 39650.0 | | | | 42125.0 |

**Site Name:** Town of Spanish Noranda Well Supply
**Source ID:** 500000506359 **Source Name:** Noranda Well **Source Type:** Well
**UTM(Zone/Easting/Northing):** 17/397392.0/5116753.0 **Method of Determination:** Metered **Unit of Measure:** Litre

**Description:** Noranda Well **Purpose Category:** Utilities **Specific Category:** Municipal Supply **Activity:** Water Supply

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 169000.0 | 254000.0 | 99000.0 | 78000.0 | 121000.0 | 351000.0 | 195000.0 | 199000.0 | 237000.0 | 197000.0 | 343000.0 | 170000.0 |
| 2 | 167000.0 | 248000.0 | 194000.0 | 190000.0 | 119000.0 | 166000.0 | 345000.0 | 203000.0 | 255000.0 | 177000.0 | 84000.0 | 158000.0 |
| 3 | 160000.0 | 182000.0 | 93000.0 | 120000.0 | 119000.0 | 227000.0 | 245000.0 | 214000.0 | 286000.0 | 282000.0 | 266000.0 | 188000.0 |
| 4 | 112000.0 | 160000.0 | 167000.0 | 174000.0 | 181000.0 | 352000.0 | 343000.0 | 208000.0 | 342000.0 | 114000.0 | 186000.0 | 151000.0 |
| 5 | 299000.0 | 191000.0 | 97000.0 | 115000.0 | 104000.0 | 224000.0 | 292000.0 | 214000.0 | 341000.0 | 204000.0 | 182000.0 | 164000.0 |
| 6 | 59000.0 | 185000.0 | 173000.0 | 181000.0 | 147000.0 | 249000.0 | 289000.0 | 344000.0 | 200000.0 | 156000.0 | 209000.0 | 119000.0 |
| 7 | 172000.0 | 161000.0 | 101000.0 | 109000.0 | 253000.0 | 49000.0 | 288000.0 | 164000.0 | 339000.0 | 186000.0 | 181000.0 | 185000.0 |
| 8 | 154000.0 | 110000.0 | 193000.0 | 236000.0 | 135000.0 | 188000.0 | 343000.0 | 193000.0 | 119000.0 | 223000.0 | 290000.0 | 110000.0 |
| 9 | 241000.0 | 205000.0 | 92000.0 | 95000.0 | 167000.0 | 327000.0 | 197000.0 | 276000.0 | 240000.0 | 237000.0 | 121000.0 | 181000.0 |
| 10 | 114000.0 | 157000.0 | 156000.0 | 179000.0 | 272000.0 | 352000.0 | 341000.0 | 147000.0 | 179000.0 | 205000.0 | 204000.0 | 117000.0 |
| 11 | 203000.0 | 100000.0 | 111000.0 | 150000.0 | 171000.0 | 362000.0 | 167000.0 | 209000.0 | 209000.0 | 210000.0 | 230000.0 | 160000.0 |
| 12 | 134000.0 | 172000.0 | 171000.0 | 118000.0 | 348000.0 | 351000.0 | 287000.0 | 225000.0 | 204000.0 | 49000.0 | 195000.0 | 277000.0 |
| 13 | 147000.0 | 101000.0 | 127000.0 | 190000.0 | 152000.0 | 349000.0 | 342000.0 | 235000.0 | 188000.0 | 196000.0 | 289000.0 | 83000.0 |
| 14 | 189000.0 | 64000.0 | 153000.0 | 103000.0 | 347000.0 | 268000.0 | 211000.0 | 204000.0 | 142000.0 | 340000.0 | 88000.0 | 160000.0 |
| 15 | 173000.0 | 166000.0 | 146000.0 | 181000.0 | 131000.0 | 137000.0 | 341000.0 | 214000.0 | 165000.0 | 187000.0 | 195000.0 | 192000.0 |
| 16 | 205000.0 | 95000.0 | 188000.0 | 132000.0 | 346000.0 | 186000.0 | 149000.0 | 221000.0 | 213000.0 | 234000.0 | 339000.0 | 165000.0 |
| 17 | 160000.0 | 120000.0 | 155000.0 | 155000.0 | 49000.0 | 348000.0 | 248000.0 | 222000.0 | 176000.0 | 200000.0 | 69000.0 | 144000.0 |
| 18 | 179000.0 | 174000.0 | 105000.0 | 120000.0 | 191000.0 | 246000.0 | 309000.0 | 203000.0 | 213000.0 | 282000.0 | 349000.0 | 247000.0 |
| 19 | 126000.0 | 95000.0 | 181000.0 | 43000.0 | 166000.0 | 348000.0 | 163000.0 | 238000.0 | 197000.0 | 309000.0 | 103000.0 | 108000.0 |
| 20 | 238000.0 | 181000.0 | 178000.0 | 85000.0 | 194000.0 | 346000.0 | 218000.0 | 252000.0 | 182000.0 | 171000.0 | 199000.0 | 185000.0 |
| 21 | 155000.0 | 107000.0 | 136000.0 | 130000.0 | 336000.0 | 232000.0 | 220000.0 | 341000.0 | 193000.0 | 267000.0 | 23000.0 | 189000.0 |
| 22 | 155000.0 | 129000.0 | 111000.0 | 222000.0 | 104000.0 | 347000.0 | 220000.0 | 218000.0 | 221000.0 | 158000.0 | 188000.0 | 121000.0 |
| 23 | 203000.0 | 110000.0 | 187000.0 | 119000.0 | 244000.0 | 158000.0 | 250000.0 | 263000.0 | 200000.0 | 124000.0 | 224000.0 | 314000.0 |
| 24 | 165000.0 | 169000.0 | 181000.0 | 182000.0 | 189000.0 | 347000.0 | 232000.0 | 234000.0 | 205000.0 | 260000.0 | 214000.0 | 85000.0 |
| 25 | 165000.0 | 89000.0 | 98000.0 | 118000.0 | 220000.0 | 346000.0 | 196000.0 | 340000.0 | 207000.0 | 73000.0 | 129000.0 | 202000.0 |
| 26 | 173000.0 | 163000.0 | 172000.0 | 76000.0 | 224000.0 | 226000.0 | 187000.0 | 190000.0 | 187000.0 | 229000.0 | 319000.0 | 178000.0 |
| 27 | 229000.0 | 155000.0 | 177000.0 | 187000.0 | 219000.0 | 123000.0 | 237000.0 | 260000.0 | 201000.0 | 122000.0 | 76000.0 | 155000.0 |
| 28 | 183000.0 | 148000.0 | 103000.0 | 126000.0 | 221000.0 | 326000.0 | 275000.0 | 256000.0 | 146000.0 | 249000.0 | 222000.0 | 231000.0 |
| 29 | 168000.0 | | 167000.0 | 120000.0 | 238000.0 | 204000.0 | 270000.0 | 226000.0 | 185000.0 | 240000.0 | 90000.0 | 183000.0 |
| 30 | 182000.0 | | 117000.0 | 187000.0 | 352000.0 | 344000.0 | 294000.0 | 222000.0 | 193000.0 | 216000.0 | 133000.0 | 181000.0 |
| 31 | 157000.0 | | 189000.0 | | 253000.0 | | 163000.0 | 241000.0 | | 143000.0 | | 338000.0 |

**Name of Attester**
**First Name:** Sarah
**Last Name:** Beaulieu
**Company:** Ontario Clean Water Agency
**Date Certified/Submitted(yyyy/mm/dd):** 2024/01/25