

Public Water System Annual Report

2025

Name of the Public Water System: **St. Malo Public Water System**

Name of Legal Owner: **The Rural Municipality of De Salaberry**

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Water System's Emergency Number: **(204) 746-0407**

Name of Operators: **Al Gauthier & Justin Collette**

Phone during business hours: **(204) 433-7406**

Emergency number: **(204) 746-0407**

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Reference: Resolution No. 2026-085



Dallas Braun,
Chief Administrative Officer
The Rural Municipality of De Salaberry

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Introduction

The 2025 Annual Report for the St. Malo Water and Sewer Utility summarizes the current Public Water System (PWS).

Description of the St. Malo Water System

The St. Malo PWS is a year-round water system that served approximately 1,375 people in 2025. St. Malo is located in the Rural Municipality of De Salaberry, approximately 75 km south of Winnipeg, Manitoba.

Originally, the community of St. Malo had a water distribution system of small piping and several individual wells. The system did not meet Manitoba Conservation guidelines on several accounts. Residents did not receive treated nor disinfected water and there was always a lack of pressure.

In 1990, with financial assistance from Manitoba Water Services Board, a water distribution system was installed throughout most of the community. There were a few locations at the extremities of the distribution system where the existing small diameter polyethylene pipes were reutilized and where some 50 mm extensions have since been installed. A test well was drilled, followed by a production well. A water treatment plant (WTP) was built in 1991; filtered and disinfected water was distributed to the community.

Three major upgrades have since occurred to the water system. In February 2010, construction was completed on a steel building expansion for the water plant. This added an additional 255 m² to the existing water plant building. In January 2012, construction was completed on the installation of a backup diesel generator for the water plant.

General System Characteristics

The community is serviced by a single WTP, supplied by a main production well and a secondary well used for supplementary or backup situations. The system draws raw water from two wells on site.

Well #1 is the main well on the northeast of the water plant building with 200 mm casing and 137 m depth; the pump is at 55 m. A 3-Phase - 20 horsepower (HP) submersible pump draws from a screened sandstone aquifer well with a maximum capacity of 1,365 litres per minute (L/min). Well #2, on the south side of the water plant building, serves as a standby supply. This well's pump has maximum capacity 410 L/min; the pump is exercised about every two months.

Raw water is transferred from Well #1 to the buried oxidation storage reservoir prior to filtration. An appropriate dosage of Sodium Hypochlorite (12%) is added to the oxidation storage reservoir to oxidize iron in the water, at a concentration to facilitate regeneration of the filter media prior to filtration. Oxidized water is transferred with a 2-Stage, 5 HP submersible pump from the raw water chamber to two greensand pressure filters (purpose of greensand: is to remove iron). Following filtration for iron removal, the water is transferred to the first of five cells of the treated water storage reservoirs.

The distribution system consists of generally mixed small diameter piping.

Water Supply Wells

The production well is fitted with a 20 HP, 208V 3-Phase Grundfos submersible pump. The driller's well log rates this well at 1,140 L/min, while the pumping rate used is reported to be 720 L/min.

The backup well is fitted with 5 HP, 208V 3-Phase Grundfos submersible pump. The driller’s well log rates this well at 409 L/min, while the pumping rate used is reported to be 340 L/min.

Water Treatment System

A four-float switch, three-wire system governs the operation of the well supply pump. The four float switches control high level alarm, stop pump, start pump and low-level alarm.

Groundwater is conveyed into a 37.2 m³ raw water contact chamber and treated with 12% sodium hypochlorite for the oxidation and subsequent precipitation of iron, regeneration of the manganese greensand filters and primary disinfection. This drip chlorination is estimated at a concentration of approximately 15 mg/L and fed neat from delivery drums.

Retention time within the raw water contact chamber varies, depending on demand, and is a function of the influent/effluent flow rates. Operators adjust the dosage rates based on free chlorine residual measurements taken post filters, ensuring that sufficient free chlorine residual is present prior to discharge to the reservoir.

The treated water from the contact chamber is then transferred to two manganese greensand pressure filters via a 5 HP Grundfos submersible pump. These pressure filters are reported to be 1.52 m and 1.37 m in diameter, capable of processing 900 L/min and 700 L/min, respectively, of water. Manganese greensand filters are intended for the reduction of iron and manganese in the raw water.

Treated Water Storage

Two reservoirs are in use at the WTP; both are concrete. The first reservoir, originally constructed with the WTP in 1990 provides a treated water storage capacity of 262,000 litres. A second larger reservoir, with 660,250 litres of capacity, was constructed in 2008, underneath an adjacent building intended for WTP process upgrades. There would be maximum three days of water storage, depending on water usage.

Utility Operations storage cell numbering system is shown in Table 1-1:

Table 1-1: Utility Operations Storage Cell Number Scheme

DESCRIPTION	CELL NUMBER
Raw Water	Cell #1
New Storage Reservoir	Cell #2, Cell #3, Cell #4
Original Plant Storage Reservoir	Cell #5 (west), Cell #6 (east)

Both in ground reservoirs operate in unison at the same elevation.

Distribution Network

The distribution network provides water to 571 residential and commercial connections via ~12.5 km of water main lines. These main lines, according to the initial 2010 assessment report, are primarily PVC 1120 SDR 26 Series 160 Potable Water, bell and spigot pipe. The exception to the PVC pipe is ~3,700 m of 50 mm polyethylene water main pipe, generally found on the outer perimeter of the utility service area and in newer developments. The remainder of the pipe lengths reported in the 2010 PWSA report are 5,725 m of 100 mm diameter line, 2,710 m of 150 mm line and 350 m of 200 mm water line.

The distribution pumps include:

- Pump 1: 7.5 HP Grundfos pump Model 150 75-3, rated for 8.52 L/second at 36.58 m.
- Pump 2: 7.5 HP Grundfos pump Model 150S75-4, rated for 11.04 L/second at 36.58 m.
- Pump 3: 2 HP Grundfos pump Model A-1189007 9932, rated for 3.03 L/second at 36.58 m.

In 2021, a number of upgrades were done to the water distribution network in the following areas:

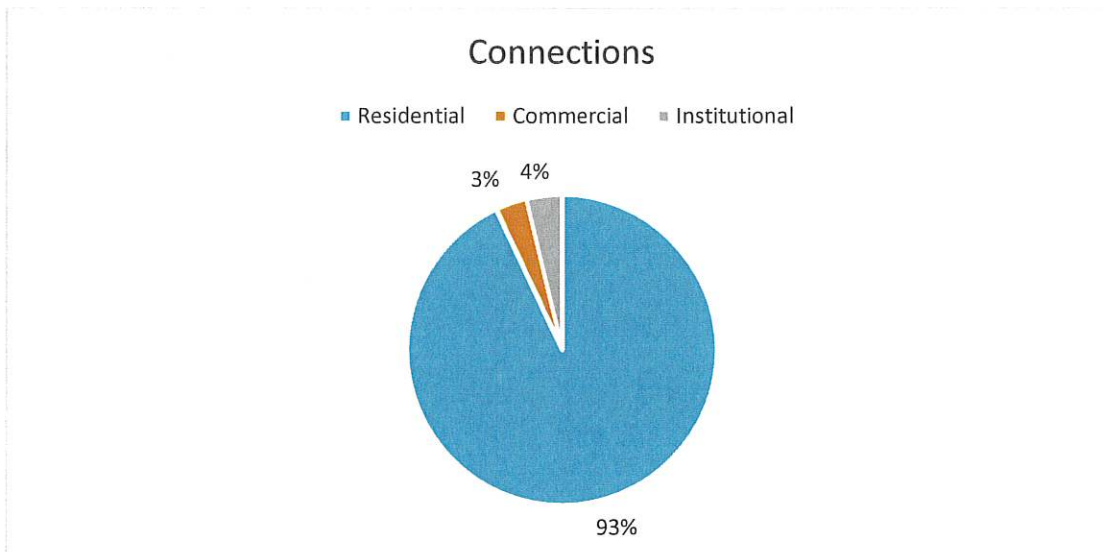
Birch Trail/Benoit Avenue/ Gosselin Street Water Main Looping – Replaced the existing 2-inch and 4-inch water mains with a continuous 6-inch water main (approx. 450 m) to provide for expansion and looping of the water distribution system.

Hebert Street Water Main Replacement – Replaced the existing low-density polyethylene water main (approx. 340m) with a continuous 6-inch water main and replaced the existing lot service connections.

Number of Connections, Population Served and Types of Water Users

The St. Malo Public Water Distribution system is comprised of 571 service connections. All service connections are metered; 539 are residential, 15 are commercial and 17 are institutional. (See Figure 1). The system serves a population of approximately 1,375.

Figure 1



Classification and Certification

The St. Malo water treatment plant is classified as a Class 1 Water Treatment Facility. Utility operator certification as per Manitoba Conservation's Water and Wastewater Facility Operators Regulation under *The Environment Act* are noted below:

- Al Gauthier - Class 1 Water Treatment and Class 2 Water Distribution
- Justin Collette – Class 1 Water Treatment and Class 1 Water Distribution

Disinfection System in Use

The final step in the treatment of safe drinking water is disinfection. Disinfection is the selective destruction or inactivation of potential disease-causing organisms in water.

The Drinking Water Safety Act requires a disinfectant residual of at least:

- 0.5 mg of free chlorine per litre of water is detectable at the point where water enters the distribution system, after a minimum contact time of 20 minutes.
- 0.1 mg of free chlorine per litre of water is detectable at all times at any point in the distribution network.

The St. Malo PWS achieves the required 0.5 mg of free chlorine per litre of water and 20-minute contact time in its underground water storage reservoir as per the Office of Drinking Water and *The Drinking Water Safety Act*. The required 0.1 mg of free chlorine per litre of water is detectable at all times at any point in the PWS distribution network.

Equipment Redundancy and Monitoring Requirements

As required by *The Drinking Water Safety Act*, the St. Malo PWS ensures continuous disinfection is maintained at the plant by keeping all spare parts in stock required for the chemical dosage pump. A complete spare chemical dosage pump is also kept at the WTP.

Utility operators visit the WTP every morning to undertake testing and general operation of the plant is maintained. Regular tasks include free chlorine residual monitoring (at the WTP and throughout the distribution network), chlorine pump adjustment and bulk chemical supply replacement, filter backwashing, recording various pump hour and meter reading, documenting and logging of activities, etc. Chlorination report forms are completed and submitted to the regional Drinking Water Officer at the end of each month.

Disinfectant Residual Overall Performance/Results

In compliance with Sections 21 and 22 of Manitoba Regulation 40/2007 Drinking Water Safety Regulation, the PWS has met 100% of its regulatory requirements in 2025 of monitoring and reporting disinfection residuals leaving the WTP and in the distribution system - refer to Appendix A.

List of Water Quality Standards

The Province of Manitoba has adopted a number of water quality standards from the *Guidelines for Canadian Drinking Water Quality*, developed by Health Canada. The parameters are health-based and express the maximum acceptable concentration for a groundwater supply source. Concentration values in excess of acceptable levels, constitute a health-related issue and require corrective actions.

As per the Rural Municipality of De Salaberry's Operating License for a Public Water System, License No. PWS-10-415-02 (Appendix B), the following tables outlines the quality/treatment standards that the St. Malo Public Water System must operate by:

Parameter	Quality Standard
Total Coliform	Less than one total coliform bacteria detectable per 100 mL in all treated and distributed water
E. coli	Less than one E. coli bacteria detectable per 100 mL in all treated and distributed water
Chlorine Residual	A free chlorine residual of at least 0.5 mg/L in water entering the distribution system following a minimum contact time of 20 minutes A free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system
Arsenic	Less than or equal to 0.01 mg/L
Benzene	Less than or equal to 0.005 mg/L
Ethylbenzene	Less than or equal to 0.14 mg/L
Parameter (cont.)	Quality Standard (cont.)
Fluoride	Less than or equal to 1.5 mg/L
Lead	Less than or equal to 0.005 mg/L in the water distribution system
Manganese	Less than or equal to 0.12 mg/L
Nitrate	Less than or equal to 45 mg/L measured as nitrate (10 mg/L measured as nitrogen)
Nitrite	Less than or equal to 3 mg/L measured as nitrite (1 mg/L measured as nitrogen)
Trichloroethylene	Less than or equal to 0.005 mg/L
Tetrachloroethylene	Less than or equal to 0.01 mg/L
Toluene	Less than or equal to 0.09 mg/L
Total Xylenes	Less than or equal to 0.09 mg/L
Uranium	Less than or equal to 0.02 mg/L

Bacterial testing: The raw water (untreated well water), the disinfected water (leaving the water storage reservoir) and the water in the distribution system is tested every two weeks for the presence of Total Coliform (TC) and E. coli (EC) bacteria. If these bacteria are present in the water, it is an indication that disease causing organisms may also be present. See Appendix A detailing collection dates and testing summary.

Ammonia Testing: The PWS Operating Licence has been modified to include weekly monitoring of free ammonia of treated water entering the distribution system. There is no health-based guideline for ammonia in drinking water. While there seems to be little direct health risk from ammonia in drinking water at the levels normally encountered, the presence of elevated ammonia poses a concern as it causes the interference with the normal chlorination process.

Chlorine demand is increased and reaching break-point and the development of a free chlorine residual consistently above 0.5mg/L becomes difficult. The ammonia concentration in the raw water was 1.33mg/L which could interfere with the chlorination process. The Office of Drinking Water has implemented a weekly monitoring requirement for free ammonia for systems that have ammonia concentrations greater than 0.5mg/L in their raw water.

Concentrations of the weekly reported ammonia in 2025 consistently indicated that break-point was being reached and that the ammonia should not be interfering with the disinfection process.

Break-Point: Break-point coordination is a point where chlorine levels exceed the oxidant demand, and the water begins to build a residual of free available chlorine.

Water Chemical Analysis Report (Appendix C for full Chemical Analysis Report)

The 2025 results for the sampling taken from the St. Malo PWS on September 16, 2025 are summarized in the following table and detailed in the September 16, 2025 Certificate of Analysis Report (Appendix C).

Parameter	Quality standard	Test Results (Raw)	Test results (Treated)	CDWG AO	CDWG MAC
Arsenic	Less than or equal to 0.01 mg/L	0.95	0.099		
Benzine	Less than or equal to 0.005 mg/L	0.00050	-		
Chromium	Less than or equal to 0.05 mg/L	0.090	0.33		
Ethylbenzene	Less than or equal to 0.14 mg/L			0.0016 mg/L	0.14 mg/L
Flouride	Less than or equal to 1.5 mg/L				1.5 mg/L
Lead	Less than or equal to 0.005 mg/L	0.157	0.042		
Manganese	Less than or equal to 0.12 mg/L			20 mg/L	120 mg/L
Nitrate	Less than or equal to 45 mg/L measured as nitrate (10 mg/L measured as nitrogen)				10 mg/L
Nitrate	Less than or equal to 3 mg/L measured as nitrite (1 mg/L measured as nitrogen)				1 mg/L
Selenium	Less than or equal to 0.01 mg/L				50 µg/L
Sodium	Less than or equal to 200 mg/L	228000	238000		
Tetrachloroethylene	Less than or equal to 0.01 mg/L	0.00050	-		
Trichloroethylene	Less than or equal to 0.005 mg/L	0.00050	-		
Toluene	Less than or equal to 0.06 mg/L	0.00050	-		
Total Dissolved Solids (TDS)	Less than or equal to 500 mg/l	924	926		
Total Xylenes	Less than or equal to 0.09 mg/L	0.00050	-		
Uranium	Less than or equal to 0.02 mg/L				20 µg/L

Highlighted in yellow: AO (aesthetic objectives) → Level of substances or characteristics of water that can affect it's acceptance by consumers, cause problems with water distribution systems and fixtures, or interfere with practices for supplying good quality water. They are not health related guidelines but are related to aesthetic aspects of the water.

Operating Licence

In accordance with section 8(1) of *The Drinking Water Safety Act*, the St. Malo PWS maintains an Operating Licence.

The Operating Licence, attached as Appendix B, identifies the terms and conditions under which the water system must be operated to remain in compliance with *The Drinking Water Safety Act* and its supporting regulations.

Water System Incidents and Corrective Actions

St. Malo PWS had no non-compliance incidents or issues in 2025.

Additional Records Required

In 2025, the Manitoba Office of the Drinking Water implemented a tap water quality monitoring plan for lead as a regulatory requirement in the St. Malo Public Water System's Operating Licence. Per this requirement, the St. Malo P.W.S. must arrange 20 site locations per year to perform a Random Daytime (RDT) sampling that will test for lead in the drinking water.

The maximum acceptable concentration (MAC) for total lead in drinking water is 0.005 mg/L (5 µg/L) based on a sample of water taken at the consumers tap using the appropriate sampling protocol for the type of building being sampled. The results of the RDT sample must be sent to each resident the sample is collected from.

All elevated RDT results (above the MAC of 0.005 mg/L) are to be resampled using the 30-Minute Stagnation (30MS) test method. The results of the 30MS sample must also be sent to each resident the sample is collected from. Any 30MS results above the MAC of 0.005mg/L are to be reported upon immediately to the regional Drinking Water Officer.

In 2025 there was 1 original RTD sample above the MAC of 0.005mg/L – refer to Appendix E.

The 30MS sample came back with results within the acceptable range, no further testing was required. – Refer to Appendix E.

Boil Water Advisories and Actions Taken in Response

Five Boil Water Advisories were issued to the St. Malo Water System in 2025.

The first took effect on January 14, 2025. For more information on these advisories, please refer below to Appendix "D".

Warnings Issued/Charges Laid on the System in Accordance with The Drinking Water Safety Act

There were no warnings issued or charges laid on or in relation to the St. Malo PWS in 2025.

Major Expenses Incurred

Water Supply Administration	\$74,656.31
Purification and Treatment	\$19,322.00
Utilities/Insurance/Taxes	\$22,345.84

Transmission and Distribution	\$70,363.34
Other Water Supply Costs	\$21,533.01

Water Rates

Water rates are assessed as per Public Utilities Board Orders 39-21 & 70-24. Under *the Public Utilities Board Act* the board has jurisdiction and authority over certain municipal and other utility matters, including the setting of rates.

Appendices

Collection Date	Sample Identification	TC	EC	HPC
14-Jan-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
14-Jan-25	ST MALO 1 - RAW	0	0	
14-Jan-25	ST MALO 2 - TREATED	0	0	
21-Jan-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
21-Jan-25	ST MALO 1 - RAW	0	0	
21-Jan-25	ST MALO 2 - TREATED	0	0	
4-Feb-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
4-Feb-25	ST MALO 1 - RAW	0	0	
4-Feb-25	ST MALO 2 - TREATED	0	0	
18-Feb-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
18-Feb-25	ST MALO 1 - RAW	0	0	
18-Feb-25	ST MALO 2 - TREATED	0	0	
4-Mar-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
4-Mar-25	ST MALO 1 - RAW	0	0	
4-Mar-25	ST MALO 2 - TREATED	0	0	
18-Mar-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
18-Mar-25	ST MALO 1 - RAW	0	0	
18-Mar-25	ST MALO 2 - TREATED	0	0	
1-Apr-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
1-Apr-25	ST MALO 1 - RAW	0	0	
1-Apr-25	ST MALO 2 - TREATED	0	0	
15-Apr-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
15-Apr-25	ST MALO 1 - RAW	0	0	
15-Apr-25	ST MALO 2 - TREATED	0	0	
29-Apr-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
29-Apr-25	ST MALO 1 - RAW	0	0	
29-Apr-25	ST MALO 2 - TREATED	0	0	
13-May-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
13-May-25	ST MALO 1 - RAW	0	0	
13-May-25	ST MALO 2 - TREATED	0	0	
27-May-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
27-May-25	ST MALO 1 - RAW	0	0	
27-May-25	ST MALO 2 - TREATED	0	0	
10-Jun-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
10-Jun-25	ST MALO 1 - RAW	0	0	
10-Jun-25	ST MALO 2 - TREATED	0	0	
24-Jun-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
24-Jun-25	ST MALO 1 - RAW	0	0	
24-Jun-25	ST MALO 2 - TREATED	0	0	
08-Jul-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
08-Jul-25	ST MALO 1 - RAW	0	0	
08-Jul-25	ST MALO 2 - TREATED	0	0	

22-Jul-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
22-Jul-25	ST MALO 1 - RAW	0	0	
22-Jul-25	ST MALO 2 - TREATED	0	0	
5-Aug-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
5-Aug-25	ST MALO 1 - RAW	0	0	
5-Aug-25	ST MALO 2 - TREATED	0	0	
19-Aug-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
19-Aug-25	ST MALO 1 - RAW	0	0	
19-Aug-25	ST MALO 2 - TREATED	0	0	
2-Sep-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
2-Sep-25	ST MALO 1 - RAW	0	0	
2-Sep-25	ST MALO 2 - TREATED	0	0	
16-Sep-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
16-Sep-25	ST MALO 1 - RAW	0	0	
16-Sep-25	ST MALO 2 - TREATED	0	0	
30-Sep-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
30-Sep-25	ST MALO 1 - RAW	0	0	
30-Sep-25	ST MALO 2 - TREATED	0	0	
14-Oct-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
14-Oct-25	ST MALO 1 - RAW	0	0	
14-Oct-25	ST MALO 2 - TREATED	0	0	
28-Oct-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
28-Oct-25	ST MALO 1 - RAW	0	0	
28-Oct-25	ST MALO 2 - TREATED	0	0	
11-Nov-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
11-Nov-25	ST MALO 1 - RAW	0	0	
11-Nov-25	ST MALO 2 - TREATED	0	0	
25-Nov-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
25-Nov-25	ST MALO 1 - RAW	0	0	
25-Nov-25	ST MALO 2 - TREATED	0	0	
9-Dec-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
9-Dec-25	ST MALO 1 - RAW	0	0	
9-Dec-25	ST MALO 2 - TREATED	0	0	
23-Dec-25	ST MALO 3 - DISTRIBUTION @ 174 ST MALO STREET	0	0	
23-Dec-25	ST MALO 1 - RAW	0	0	
23-Dec-25	ST MALO 2 - TREATED	0	0	

**OPERATING LICENCE FOR
A PUBLIC WATER SYSTEM**

LICENCE NUMBER: PWS-10-415-02

**THE DRINKING WATER SAFETY ACT
CHAPTER D101, C.C.S.M.**

WATER SYSTEM CODE: 217.50
OPERATION ID: 21231
EFFECTIVE DATE: DECEMBER 1, 2020
EXPIRY DATE: NOVEMBER 30, 2025

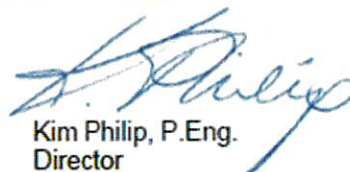
IN ACCORDANCE WITH *THE DRINKING WATER SAFETY ACT*, THIS OPERATING LICENCE IS ISSUED PURSUANT TO SUBSECTION 8(1) TO:

RURAL MUNICIPALITY OF DeSALABERRY: "THE LICENSEE"

FOR THE OPERATION OF THE **ST. MALO PUBLIC WATER SYSTEM**, WHICH INCLUDES SECURE WELL(S), TREATMENT FACILITIES, WATER STORAGE RESERVOIRS, AND DISTRIBUTION LINES, SUBJECT TO THE ATTACHED TERMS AND CONDITIONS.

THIS LICENCE DOES NOT AFFECT THE LICENSEE'S OBLIGATIONS WITH RESPECT TO COMPLIANCE WITH ALL APPLICABLE MUNICIPAL, PROVINCIAL, AND FEDERAL LEGISLATION. THIS LICENCE SUPERSEDES ALL PREVIOUS LICENSES FOR THIS PUBLIC WATER SYSTEM.

DATE: June 18, 2021


Kim Philip, P.Eng.
Director

TERMS AND CONDITIONS

1. GENERAL

- 1.1. The Licensee shall operate the public water system in accordance with all applicable requirements of *The Drinking Water Safety Act* and its regulations, and the requirements of this Licence. In the event that specific terms and conditions of this Licence imposed under the authority of subsection 8(3) of the Act exceed the general requirements of the Act and regulations, the specific requirements of this Licence shall apply.
- 1.2. The Licensee shall obtain approval from the Office of Drinking Water prior to making any significant alterations to the water source, the water treatment process, the water storage facilities, or the water distribution system.
- 1.3. This Licence may be amended by the Director where, in the opinion of the Director, an amendment is necessary and the amendment will not negatively impact the safety of water obtained from the water system, or effective environmental management.
- 1.4. The Licensee may request an amendment to this licence by submitting an amendment application to the Office of Drinking Water.
- 1.5. This Licence may be suspended or cancelled by the Director for any of the reasons identified in Section 11 of *Manitoba Regulation 40/2007, Drinking Water Safety Regulation* or due to a failure to comply with any term or condition of this Licence.
- 1.6. The Licensee shall provide written notice to the Office of Drinking Water of any change in ownership of the water system within seven days of the transfer of ownership.
- 1.7. The Licensee shall provide written notice to the Office of Drinking Water of any changes in the operational status of the water system, such as a permanent cessation of service, or changing the length of service from year-round to seasonal or the opposite.
- 1.8. The Director of the Office of Drinking Water, Medical Officer of Health or Drinking Water Officer may enter any water system facility as necessary to carry out the provisions of *The Drinking Water Safety Act* and its regulations.
- 1.9. The Licensee shall post a copy of the first page of this Licence at the water treatment facility.
- 1.10. The Licensee shall keep a copy of this Licence in its entirety at a location established by the Drinking Water Officer and ensure all operators are familiar with its terms and conditions.
- 1.11. The Licensee shall apply for renewal of this Licence at least 60 days prior to its expiry.

2. OPERATION - GENERAL

- 2.1. The Licensee shall operate all water system facilities, control systems and equipment as efficiently as possible, inspect them on a regular basis, maintain them in good working order, and ensure that the water system is protected from the risks associated with cross-contamination.
- 2.2. The Licensee shall ensure that all chemicals and components that may come into contact with potable water are certified safe for potable water use through AWWA Standards, ANSI/NSF Standard 60 or 61, Health Canada, or other standards acceptable to the Director.
- 2.3. No alternate water source shall be brought into service without the consent of the Drinking Water Officer and the maintenance of adequate cross connection control between the alternate source and the primary source.
- 2.4. The Licensee shall have re-assessments of the water system infrastructure and water supply sources completed by a qualified person, who is not an employee of the water system, in accordance with assessment checklist GW by March 1, 2024, and every five years thereafter. The Licensee may instead have the assessment completed by a qualified professional engineer, who is not an employee of the water system, in accordance with terms of reference for engineering assessments.
- 2.5. The Licensee shall, upon request from the Office of Drinking Water, submit or re-submit a compliance plan, in a form satisfactory to the Director, to address any non-compliance issues identified at the time.

3. OPERATION – EMERGENCIES

- 3.1. The Licensee shall ensure that disinfection is undertaken following construction, repair or maintenance activities on the water system, in accordance with applicable AWWA standards, or Manitoba Water Services Board specifications, or any other standards approved by the Director. A copy of all associated test results must be kept available for review by the Office of Drinking Water for a minimum of 24 months.
- 3.2. The Licensee shall ensure that all equipment used for disinfection is maintained in effective working order and keep available for immediate use all spare parts and chemical supplies as may be necessary to ensure continuous disinfection, including a spare disinfection unit, if necessary.
- 3.3. The Licensee shall immediately notify the Office of Drinking Water of any condition that may affect the ability of the water system to produce or deliver safe drinking water including but not limited to treatment upsets or bypass conditions, contamination of the source water or treated water, a disinfection system failure, or a distribution system failure.
- 3.4. If a Medical Officer of Health, the Director of the Office of Drinking Water, or a Drinking Water Officer issues a water advisory on the water system, the Licensee shall provide notice of the advisory to all water users in accordance with the Advisory Notification Plan.

4. WATER QUALITY/TREATMENT STANDARDS

- 4.1. The Licensee shall operate the water system in a manner that achieves the water quality/treatment standards specified in Table 1, as determined through the monitoring requirements specified in Table 2:

Table 1: Water Quality/Treatment Standards

Parameter	Quality Standard
Total coliform	Less than one total coliform bacteria detectable per 100 mL in all treated and distributed water
<i>E. coli</i>	Less than one <i>E. coli</i> bacteria detectable per 100 mL in all treated and distributed water
Chlorine Residual	A free chlorine residual of at least 0.5 mg/L in water entering the distribution system following a minimum contact time of 20 minutes A free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system
Arsenic	Less than or equal to 0.01 mg/L
Benzene	Less than or equal to 0.005 mg/L
Ethylbenzene	Less than or equal to 0.14 mg/L
Fluoride	Less than or equal to 1.5 mg/L
Lead	Less than or equal to 0.005 mg/L in the water distribution system
Manganese	Less than or equal to 0.12 mg/L
Nitrate	Less than or equal to 45 mg/L measured as nitrate (10 mg/L measured as nitrogen)
Nitrite	Less than or equal to 3 mg/L measured as nitrite (1 mg/L measured as nitrogen)
Trichloroethylene	Less than or equal to 0.005 mg/L
Tetrachloroethylene	Less than or equal to 0.01 mg/L
Toluene	Less than or equal to 0.06 mg/L
Total Xylenes	Less than or equal to 0.09 mg/L
Uranium	Less than or equal to 0.02 mg/L

- 4.2. If a bacteriological standard is not met, the Licensee shall immediately undertake the applicable corrective actions as listed in "Schedule A" of Manitoba Regulation 41/2007, *Drinking Water Quality Standards Regulation*.
- 4.3. If a microbial, chemical, radiological, or physical standard is not met, the Licensee shall immediately undertake the applicable corrective actions specified in "Schedule C" of Manitoba Regulation 41/2007, the *Drinking Water Quality Standards Regulation*.
- 4.4. The Licensee shall maintain in effective working order chlorination and treated water storage equipment and controls designed to achieve a minimum of 20 minutes of chlorine contact time prior to water entering the distribution system.

5. WATER QUALITY MONITORING

5.1. The Licensee shall ensure monitoring is completed as set out in Table 2.

Table 2: Monitoring Schedule

Parameter	Monitoring Requirement
Bacteriological (total coliform and <i>E. coli</i>)	Biweekly sampling program with each set of samples consisting of one raw, one treated, and a minimum of one distribution sample Consecutive sample sets to be separated by at least 12 days
Free Chlorine (treated water)	One sample per day of water entering the distribution system following at least 20 minutes of contact time
Free Chlorine (distribution system)	At the same times and location(s) as bacteriological distribution system sampling
Total Chlorine (treated water)	One sample per day of water entering the distribution system following at least 20 minutes of contact time
Total Chlorine (distribution system)	At the same times and location(s) as bacteriological distribution system sampling
Free Ammonia (treated water)	One sample per week of water entering the distribution system
General Chemistry (parameter list provided by Office of Drinking Water)	One raw and one treated water sample once every three years
Total Metals (distribution system)	One sample taken at the same time(s) as General Chemistry sampling at a mid-point in the distribution system
Lead	As per the instructions of the Drinking Water Officer
Manganese	Monitoring included in the General Chemical and Total Metals analysis
Other Parameters	As per the instructions of the Drinking Water Officer

5.2. The Licensee shall ensure that an accredited laboratory, as specified in section 35 of Manitoba Regulation 40/2007 the *Drinking Water Safety Regulation*, undertake the following analysis required in Table 2:

- a) bacteriological (total coliform and *E. coli*)
- b) general chemistry
- c) total metals
- d) any other parameter required by the Drinking Water Officer

and that all samples are collected, handled, and submitted in a manner that is satisfactory to the accredited laboratory.

5.3. The Licensee shall ensure that parameters listed in Table 2 but not specified in clause 5.2 are measured utilizing certified water quality monitoring equipment and methods approved by the latest edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

5.4. The Licensee shall ensure that raw water samples are taken on an alternating basis in instances where more than one water supply source is used.

5.5. The Licensee shall ensure that all water quality monitoring equipment is properly maintained and calibrated by a qualified person according to manufacturer recommendations and that records are maintained to that effect.

- 5.6. The Licensee shall ensure that sampling within the distribution system takes place at varied locations acceptable to the Drinking Water Officer.

6. RECORD-KEEPING AND REPORTING

- 6.1. The Licensee shall maintain in a secure location all construction drawings for the life of the water system components.
- 6.2. The Licensee shall retain in chronological order for a minimum of 24 months all information specified in subsection 34(2) of *Manitoba Regulation 40/2007, Drinking Water Safety Regulation*.
- 6.3. The Licensee shall ensure the information identified in clause 6.2 is available for inspection by any member of the public during normal business hours at the office of the water supplier or at a location convenient to the users of the system.
- 6.4. The Licensee shall record disinfectant residual measurements on the monthly disinfection report or other forms satisfactory to the Director.
- 6.5. The Licensee shall record other measurements as specified in *Table 2: Monitoring Schedule* on the monthly report forms or other forms satisfactory to the Director.
- 6.6. The Licensee shall keep one copy of all monthly report forms required in this licence, and forward the original copy to the Drinking Water Officer within seven days after the end of each calendar month.
- 6.7. The Licensee shall record all distribution system measurements specified in *Table 2: Monitoring Schedule* on the chain of custody form (laboratory submission form) which accompanies the bacteriological sample bottles to the laboratory.
- 6.8. The Licensee shall ensure that water metering devices at the water treatment plant or storage reservoir are maintained in good working order and that flow meter readings are recorded on a daily basis and such records are made available for inspection by a Drinking Water Officer.
- 6.9. The Licensee shall submit an annual report to the Director by March 31st of each year on the operation of the water system in the immediately preceding calendar year. The report shall include the information as set out in subsection 32(2) of *Manitoba Regulation 40/2007, Drinking Water Safety Regulation*.
- 6.10. The Licensee shall inform the public, in a form satisfactory to the Director, when an annual report has been prepared and identify how a free copy can be obtained.
- 6.11. The Licensee shall make a copy of each annual report available to the public at no charge on an internet website within two weeks of the issuance of the report, unless otherwise approved by the Director. The annual report shall remain available to the public for at least one year.
- 6.12. The Licensee shall maintain and submit an Advisory Notification Plan to the Drinking Water Officer by May 1st of each year. The plan must include a detailed description of communication tools and methods to be used to notify the public of a drinking water emergency, considering key contacts, fan-outs, critical customers, susceptible or difficult-to-reach sub-groups, and template notices where applicable.



CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: WP2515499	Laboratory	: ALS Environmental - Winnipeg
Client	: Manitoba Conservation & Climate	Account Manager	: Sherza Rajack-Ahamed
Contact	: EDD	Address	: 1329 Niakwa Road East, Unit 12
Address	: 14 Fultz Boulevard		: Winnipeg MB Canada R2J 3T4
	: Winnipeg Manitoba Canada R3Y 0L6	Telephone	: +1 204 255 9720
Telephone	:	Date Samples Received	: 09-Sep-2025 13:01
Project	: St. Malo - PWS 217.50	Date Analysis Commenced	: 11-Sep-2025
PO	: ---	Issue Date	: 16-Sep-2025 15:16
C-O-C number	: ---		
Sampler	: ---		
Site	: St. Malo - PWS 217.50		
Quote number	: 2025 WTP Chemistry		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Baxter		Metals, Winnipeg, Manitoba
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Kevin Baxter		Administration, Winnipeg, Manitoba
Michelle Michalchuk		Organics, Winnipeg, Manitoba



CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: WP2515499	Laboratory	: ALS Environmental - Winnipeg
Client	: Manitoba Conservation & Climate	Account Manager	: Sheriza Rajack-Ahamed
Contact	: EDD	Address	: 1329 Niakwa Road East, Unit 12
Address	: 14 Fultz Boulevard		: Winnipeg MB Canada R2J 3T4
	: Winnipeg Manitoba Canada R3Y 0L6	Telephone	: +1 204 255 9720
Telephone	:	Date Samples Received	: 09-Sep-2025 13:01
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<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Baxter		Metals, Winnipeg, Manitoba
Kevin Baxter		Inorganics, Winnipeg, Manitoba
Kevin Baxter		Administration, Winnipeg, Manitoba
Michelle Michalchuk		Organics, Winnipeg, Manitoba



Summary of Guideline Breaches by Sample

SampleID/Client ID	Matrix	Analyte	Analyte Summary	Guideline	Category	Result	Limit
St. Malo 1 - Raw	Water	Solids, total dissolved [TDS]	Based on taste, TDS above 500 mg/L results in excessive scaling in water pipes, water heaters, boilers and appliances; TDS is composed of calcium, magnesium, sodium, potassium, carbonate, bicarbonate, chloride, sulphate and nitrate.	CDWG	AO	924 mg/L	500 mg/L
	Water	Turbidity	For systems that use groundwater, turbidity should generally be below 1.0 NTU. Filtration systems should be designed and operated to reduce turbidity levels as low as reasonably achievable and strive to achieve a treated water turbidity target from individual filters of less than 0.1 NTU.	CDWG	AO	16.3 NTU	1 NTU
	Water	Iron, total	Based on taste and staining of laundry and plumbing fixtures; no evidence exists of dietary iron toxicity in the general population.	CDWG	AO	1170 µg/L	100 µg/L
	Water	Sodium, total	Based on taste; where a sodium-based water softener is used, a separate unsoftened supply for cooking and drinking purposes is recommended.	CDWG	AO	228000 µg/L	200000 µg/L

Work Order : WP2515499
 Client : Manitoba Conservation & Climate
 Project : St. Malo - PWS 217.50



Analytical Results Evaluation

Matrix: Water

				Client sample ID	St. Malo 1 - Raw ----	St. Malo 2 - Treated ----	St. Malo 3 - Distribution 174 St-Malo St ----	----	----	----	----
				Client sampling date / time	09-Sep-2025 10:30	09-Sep-2025 10:30	09-Sep-2025 10:30	----	----	----	----
				Sub-Matrix	Water	Drinking Water	Drinking Water	----	----	----	----
Analyte	CAS Number	Method/Lab	Unit		WP2515499-001	WP2515499-002	WP2515499-003	----	----	----	----
				Result	Result	Result	----	----	----	----	----
Field Tests											
Chlorine, free, field	7782-50-5	EF001/WP	mg/L	----	1.19	1.04	----	----	----	----	----
Chlorine, total, field	7782-50-5	EF001/WP	mg/L	----	1.36	1.2	----	----	----	----	----
Sample Preparation											
Dissolved carbon filtration location	----	EP358/WP	-	lab	lab	----	----	----	----	----	----
Physical Tests											
Absorbance, UV (@ 254nm)	----	E404/WP	AU/cm	0.0520	0.0360	----	----	----	----	----	----
Alkalinity, bicarbonate (as CaCO3)	----	E290/WP	mg/L	335	331	----	----	----	----	----	----
Alkalinity, carbonate (as CaCO3)	----	E290/WP	mg/L	<1.0	<1.0	----	----	----	----	----	----
Alkalinity, hydroxide (as CaCO3)	----	E290/WP	mg/L	<1.0	<1.0	----	----	----	----	----	----
Alkalinity, total (as CaCO3)	----	E290/WP	mg/L	335	331	----	----	----	----	----	----
Colour, true	----	E329/WP	CU	<5.0	<5.0	----	----	----	----	----	----
Conductivity	----	E100/WP	µS/cm	1560	1600	----	----	----	----	----	----
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/WP	mg/L	301	297	----	----	----	----	----	----
Langelier index (@ 4°C)	----	EC105A/WP	-	0.647	0.692	----	----	----	----	----	----
Langelier index (@ 60°C)	----	EC105A/WP	-	1.40	1.44	----	----	----	----	----	----
pH	----	E108/WP	pH units	8.05	8.11	----	----	----	----	----	----
Solids, total dissolved [TDS]	----	E162-L/WP	mg/L	924	926	----	----	----	----	----	----
Turbidity	----	E121/WP	NTU	16.3	<0.10	----	----	----	----	----	----

Work Order : WP2515499
 Client : Manitoba Conservation & Climate
 Project : St. Malo - PWS 217.50



Matrix: Water				St. Malo 1 - Raw	St. Malo 2 - Treated	St. Malo 3 - Distribution 174 St-Malo St	---	---	---	---
Client sample ID				---	---	---	---	---	---	---
Client sampling date / time				09-Sep-2025 10:30	09-Sep-2025 10:30	09-Sep-2025 10:30	---	---	---	---
Sub-Matrix				Water	Drinking Water	Drinking Water	---	---	---	---
Analyte	CAS Number	Method/Lab	Unit	WP2515499-001	WP2515499-002	WP2515499-003	---	---	---	---
				Result	Result	Result	---	---	---	---
Physical Tests										
Transmittance, UV (@ 254nm)	---	E404/WP	% T/cm	86.7	91.6	---	---	---	---	---
Anions and Nutrients										
Ammonia, total (as N)	7664-41-7	E298/WP	mg/L	1.41	0.0053	---	---	---	---	---
Bromide	24959-67-9	E235.Br-L/WP	mg/L	0.16 ^{DLM}	0.073 ^{DLM}	---	---	---	---	---
Chloride	16687-00-6	E235.Cl-L/WP	mg/L	161	181	---	---	---	---	---
Fluoride	16984-48-8	E235.F/WP	mg/L	0.908	1.00	---	---	---	---	---
Nitrate (as N)	14797-55-8	E235.NO3-L/WP	mg/L	<0.0250 ^{DLM}	0.0259	---	---	---	---	---
Nitrite (as N)	14797-85-0	E235.NO2-L/WP	mg/L	<0.0050 ^{DLM}	<0.0020 ^{DLM}	---	---	---	---	---
Sulfate (as SO4)	14808-79-8	E235.SO4/WP	mg/L	244	265	---	---	---	---	---
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	---	E358-L/WP	mg/L	3.15	2.95	---	---	---	---	---
Carbon, total organic [TOC]	---	E355-L/WP	mg/L	2.72	2.86	---	---	---	---	---
Ion Balance										
Anion sum	---	EC101A/WP	meq/L	16.4	17.1	---	---	---	---	---
Cation sum (total)	---	EC101A/WP	meq/L	16.4	16.6	---	---	---	---	---
Ion balance (cations/anions)	---	EC101A/WP	%	100	97.1	---	---	---	---	---
Ion balance (APHA)	---	EC101A/WP	%	0.0	-1.48	---	---	---	---	---
Total Metals										
Aluminum, total	7429-90-6	E420/WP	µg/L	0.96	1.6	1.5	---	---	---	---



Matrix: Water				St. Malo 1 - Raw ----	St. Malo 2 - Treated ----	St. Malo 3 - Distribution 174 St-Malo St ----	---	---	---	---
Client sample ID										
Client sampling date / time				09-Sep-2025 10:30	09-Sep-2025 10:30	09-Sep-2025 10:30				
Sub-Matrix				Water	Drinking Water	Drinking Water				
Analyte	CAS Number	Method/Lab	Unit	WP2515499-001	WP2515499-002	WP2515499-003				
				Result	Result	Result				
Total Metals										
Antimony, total	7440-36-0	E420/WP	µg/L	Not Detected	Not Detected	Not Detected	---	---	---	---
Arsenic, total	7440-38-2	E420/WP	µg/L	0.95	0.099	0.11	---	---	---	---
Barium, total	7440-39-3	E420/WP	µg/L	8.14	7.74	7.58	---	---	---	---
Beryllium, total	7440-41-7	E420/WP	µg/L	0.0026	Not Detected	0.0021	---	---	---	---
Bismuth, total	7440-69-9	E420/WP	µg/L	Not Detected	0.0036	Not Detected	---	---	---	---
Boron, total	7440-42-8	E420/WP	µg/L	934	914	928	---	---	---	---
Cadmium, total	7440-43-9	E420/WP	µg/L	0.0018	0.00061	0.0019	---	---	---	---
Calcium, total	7440-70-2	E420/WP	µg/L	73000	71500	70000	---	---	---	---
Cesium, total	7440-46-2	E420/WP	µg/L	0.052	0.056	0.047	---	---	---	---
Chromium, total	7440-47-3	E420/WP	µg/L	0.090	0.33	0.22	---	---	---	---
Cobalt, total	7440-48-4	E420/WP	µg/L	0.16	0.058	0.054	---	---	---	---
Copper, total	7440-50-8	E420/WP	µg/L	0.63	5.04	11.7	---	---	---	---
Iron, total	7439-89-6	E420/WP	µg/L	1170	3.3	3.2	---	---	---	---
Lead, total	7439-92-1	E420/WP	µg/L	0.157	0.042	0.181	---	---	---	---
Lithium, total	7439-93-2	E420/WP	µg/L	96.8	97.1	96.7	---	---	---	---
Magnesium, total	7439-95-4	E420/WP	µg/L	26900	26700	29000	---	---	---	---
Manganese, total	7439-96-5	E420/WP	µg/L	6.59	0.074	0.18	---	---	---	---
Molybdenum, total	7439-98-7	E420/WP	µg/L	3.61	3.63	3.73	---	---	---	---
Nickel, total	7440-02-0	E420/WP	µg/L	0.49	0.53	0.49	---	---	---	---



Matrix: Water				St. Malo 1 - Raw	St. Malo 2 - Treated	St. Malo 3 - Distribution 174 St-Malo St	---	---	---	---
Client sample ID				---	---	---	---	---	---	---
Client sampling date / time				09-Sep-2025 10:30	09-Sep-2025 10:30	09-Sep-2025 10:30	---	---	---	---
Sub-Matrix				Water	Drinking Water	Drinking Water	---	---	---	---
Analyte	CAS Number	Method/Lab	Unit	WP2515499-001	WP2515499-002	WP2515499-003	---	---	---	---
				Result	Result	Result	---	---	---	---
Total Metals										
Phosphorus, total	7723-14-0	E420/WP	µg/L	24	23	19	---	---	---	---
Potassium, total	7440-09-7	E420/WP	µg/L	14400	14600	14200	---	---	---	---
Rubidium, total	7440-17-7	E420/WP	µg/L	11.4	11.6	11.6	---	---	---	---
Selenium, total	7782-49-2	E420/WP	µg/L	0.023	0.015	0.010	---	---	---	---
Silicon, total	7440-21-3	E420/WP	µg/L	4100	4080	4080	---	---	---	---
Silver, total	7440-22-4	E420/WP	µg/L	Not Detected	Not Detected	0.0024	---	---	---	---
Sodium, total	7440-23-5	E420/WP	µg/L	228000	238000	240000	---	---	---	---
Strontium, total	7440-24-6	E420/WP	µg/L	1480	1540	1550	---	---	---	---
Sulfur, total	7704-34-9	E420/WP	µg/L	97100	95500	99000	---	---	---	---
Tellurium, total	13494-60-9	E420/WP	µg/L	0.098	0.13	0.085	---	---	---	---
Thallium, total	7440-28-0	E420/WP	µg/L	Not Detected	Not Detected	Not Detected	---	---	---	---
Thorium, total	7440-29-1	E420/WP	µg/L	Not Detected	Not Detected	Not Detected	---	---	---	---
Tin, total	7440-31-5	E420/WP	µg/L	Not Detected	0.017	0.013	---	---	---	---
Titanium, total	7440-32-6	E420/WP	µg/L	0.050	0.40	0.045	---	---	---	---
Tungsten, total	7440-33-7	E420/WP	µg/L	Not Detected	Not Detected	Not Detected	---	---	---	---
Uranium, total	7440-61-1	E420/WP	µg/L	0.627	0.601	0.630	---	---	---	---
Vanadium, total	7440-62-2	E420/WP	µg/L	0.053	0.055	0.062	---	---	---	---
Zinc, total	7440-66-6	E420/WP	µg/L	5.9	5.0	25.1	---	---	---	---



Matrix: Water				Client sample ID	St. Malo 1 - Raw	St. Malo 2 - Treated	St. Malo 3 - Distribution 174 St. Malo St	---	---	---	---
				Client sampling date / time	09-Sep-2025 10:30	09-Sep-2025 10:30	09-Sep-2025 10:30	---	---	---	---
				Sub-Matrix	Water	Drinking Water	Drinking Water	---	---	---	---
Analyte	CAS Number	Method/Lab	Unit	WP2515499-001	WP2515499-002	WP2515499-003	---	---	---	---	---
				Result	Result	Result	---	---	---	---	---
Total Metals											
Zirconium, total	7440-67-7	E420/WP	µg/L	Not Detected	Not Detected	Not Detected	---	---	---	---	---
Volatile Organic Compounds											
Benzene	71-43-2	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Bromodichloromethane	75-27-4	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Bromoform	75-25-2	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Chloroform	67-66-3	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Dibromochloromethane	124-46-1	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Dichloromethane	75-09-2	E611D/WP	mg/L	<0.0010	---	---	---	---	---	---	---
Ethylbenzene	100-41-4	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Methyl-tert-butyl ether (MTBE)	1634-04-4	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Tetrachloroethylene	127-18-4	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Toluene	108-88-3	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Trichloroethane, 1,1,1-	71-55-6	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Trichloroethane, 1,1,2-	79-00-5	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Trichloroethylene	79-01-6	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
Xylene, m+p-	179601-23-1	E611D/WP	mg/L	<0.00040	---	---	---	---	---	---	---
Xylene, o-	95-47-6	E611D/WP	mg/L	<0.00030	---	---	---	---	---	---	---
Xylenes, total	1330-20-7	E611D/WP	mg/L	<0.00050	---	---	---	---	---	---	---
BTEX, total	---	E611D/WP	mg/L	<0.0010	---	---	---	---	---	---	---



Matrix: Water				St. Malo 1 - Raw	St. Malo 2 - Treated	St. Malo 3 - Distribution 174 St. Malo St	---	---	---	---
Client sample ID				---	---	---	---	---	---	---
Client sampling date / time				09-Sep-2025 10:30	09-Sep-2025 10:30	09-Sep-2025 10:30	---	---	---	---
Sub-Matrix				Water	Drinking Water	Drinking Water	---	---	---	---
Analyte	CAS Number	Method/Lab	Unit	WP2515499-001	WP2515499-002	WP2515499-003	---	---	---	---
				Result	Result	Result	---	---	---	---
Volatile Organic Compounds Surrogates										
Bromofluorobenzene, 4-	460-00-4	E611D/WP	%	87.5	---	---	---	---	---	---
Difluorobenzene, 1,4-	540-36-3	E611D/WP	%	100	---	---	---	---	---	---

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Summary of Guideline Limits

Analyte	CAS Number	Unit	CDWG AO	CDWG MAC	CDWG OG				
Field Tests									
Chlorine, free, field	7782-50-5	mg/L	---	---	---	---	---	---	---
Chlorine, total, field	7782-50-5	mg/L	---	---	---	---	---	---	---
Sample Preparation									
Dissolved carbon filtration location	---	-	---	---	---	---	---	---	---
Physical Tests									
Absorbance, UV (@ 254nm)		AU/cm	---	---	---	---	---	---	---
Alkalinity, bicarbonate (as CaCO3)	---	mg/L	---	---	---	---	---	---	---
Alkalinity, carbonate (as CaCO3)		mg/L	---	---	---	---	---	---	---
Alkalinity, hydroxide (as CaCO3)		mg/L	---	---	---	---	---	---	---
Alkalinity, total (as CaCO3)		mg/L	---	---	---	---	---	---	---
Colour, true		CU	15 CU	---	---	---	---	---	---
Conductivity	---	µS/cm	---	---	---	---	---	---	---
Hardness (as CaCO3), from total Ca/Mg		mg/L	---	---	---	---	---	---	---
Langelier index (@ 4°C)		-	---	---	---	---	---	---	---
Langelier index (@ 60°C)		-	---	---	---	---	---	---	---
pH	---	pH units	---	---	7 - 10.5 pH units	---	---	---	---
Solids, total dissolved [TDS]		mg/L	500 mg/L	---	---	---	---	---	---
Turbidity	---	NTU	1 NTU	---	---	---	---	---	---
Transmittance, UV (@ 254nm)		% T/cm	---	---	---	---	---	---	---
Anions and Nutrients									
Ammonia, total (as N)	7654-41-7	mg/L	---	---	---	---	---	---	---
Bromide	24859-67-9	mg/L	---	---	---	---	---	---	---
Chloride	16887-00-6	mg/L	250 mg/L	---	---	---	---	---	---



Fluoride	16984-48-8	mg/L	---	1.5 mg/L	---	---	---	---	---
Nitrate (as N)	14797-55-8	mg/L	---	10 mg/L	---	---	---	---	---
Nitrite (as N)	14797-65-0	mg/L	---	1 mg/L	---	---	---	---	---
Sulfate (as SO4)	14808-79-8	mg/L	500 mg/L	---	---	---	---	---	---
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]		mg/L	---	---	---	---	---	---	---
Carbon, total organic [TOC]		mg/L	---	---	---	---	---	---	---
Ion Balance									
Anion sum		meq/L	---	---	---	---	---	---	---
Cation sum (total)		meq/L	---	---	---	---	---	---	---
Ion balance (cations/anions)		%	---	---	---	---	---	---	---
Ion balance (APHA)		%	---	---	---	---	---	---	---
Total Metals									
Aluminum, total	7429-90-5	µg/L	---	2900 µg/L	100 µg/L	---	---	---	---
Antimony, total	7440-36-0	µg/L	---	6 µg/L	---	---	---	---	---
Arsenic, total	7440-38-2	µg/L	---	10 µg/L	---	---	---	---	---
Barium, total	7440-39-3	µg/L	---	2000 µg/L	---	---	---	---	---
Beryllium, total	7440-41-7	µg/L	---	---	---	---	---	---	---
Bismuth, total	7440-69-9	µg/L	---	---	---	---	---	---	---
Boron, total	7440-42-8	µg/L	---	5000 µg/L	---	---	---	---	---
Cadmium, total	7440-43-9	µg/L	---	7 µg/L	---	---	---	---	---
Calcium, total	7440-70-2	µg/L	---	---	---	---	---	---	---
Cesium, total	7440-46-2	µg/L	---	---	---	---	---	---	---
Chromium, total	7440-47-3	µg/L	---	50 µg/L	---	---	---	---	---
Cobalt, total	7440-48-4	µg/L	---	---	---	---	---	---	---
Copper, total	7440-50-8	µg/L	1000 µg/L	2000 µg/L	---	---	---	---	---
Iron, total	7439-89-6	µg/L	100 µg/L	---	---	---	---	---	---
Lead, total	7439-92-1	µg/L	---	5 µg/L	---	---	---	---	---



Lithium, total	7439-93-2	µg/L	---	---	---	---	---	---	---
Magnesium, total	7439-95-4	µg/L	---	---	---	---	---	---	---
Manganese, total	7439-96-5	µg/L	20 µg/L	120 µg/L	---	---	---	---	---
Molybdenum, total	7439-98-7	µg/L	---	---	---	---	---	---	---
Nickel, total	7440-02-0	µg/L	---	---	---	---	---	---	---
Phosphorus, total	7723-14-0	µg/L	---	---	---	---	---	---	---
Potassium, total	7440-09-7	µg/L	---	---	---	---	---	---	---
Rubidium, total	7440-17-7	µg/L	---	---	---	---	---	---	---
Selenium, total	7782-49-2	µg/L	---	50 µg/L	---	---	---	---	---
Silicon, total	7440-21-3	µg/L	---	---	---	---	---	---	---
Silver, total	7440-22-4	µg/L	---	---	---	---	---	---	---
Sodium, total	7440-23-5	µg/L	200000 µg/L	---	---	---	---	---	---
Strontium, total	7440-24-6	µg/L	---	7000 µg/L	---	---	---	---	---
Sulfur, total	7704-34-9	µg/L	---	---	---	---	---	---	---
Tellurium, total	13494-80-9	µg/L	---	---	---	---	---	---	---
Thallium, total	7440-28-0	µg/L	---	---	---	---	---	---	---
Thorium, total	7440-29-1	µg/L	---	---	---	---	---	---	---
Tin, total	7440-31-5	µg/L	---	---	---	---	---	---	---
Titanium, total	7440-32-6	µg/L	---	---	---	---	---	---	---
Tungsten, total	7440-33-7	µg/L	---	---	---	---	---	---	---
Uranium, total	7440-61-1	µg/L	---	20 µg/L	---	---	---	---	---
Vanadium, total	7440-62-2	µg/L	---	---	---	---	---	---	---
Zinc, total	7440-66-6	µg/L	5000 µg/L	---	---	---	---	---	---
Zirconium, total	7440-67-7	µg/L	---	---	---	---	---	---	---
Volatile Organic Compounds									
Benzene	71-43-2	mg/L	---	0.005 mg/L	---	---	---	---	---
Bromodichloromethane	75-27-4	mg/L	---	---	---	---	---	---	---



Bromoform	75-25-2	mg/L	---	---	---	---	---	---	---
Chloroform	67-66-3	mg/L	---	---	---	---	---	---	---
Dibromochloromethane	124-48-1	mg/L	---	---	---	---	---	---	---
Dichloromethane	75-09-2	mg/L	---	0.05 mg/L	---	---	---	---	---
Ethylbenzene	100-41-4	mg/L	0.0016 mg/L	0.14 mg/L	---	---	---	---	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	mg/L	0.015 mg/L	---	---	---	---	---	---
Tetrachloroethylene	127-18-4	mg/L	---	0.01 mg/L	---	---	---	---	---
Toluene	108-88-3	mg/L	0.024 mg/L	0.06 mg/L	---	---	---	---	---
Trichloroethane, 1,1,1-	71-55-6	mg/L	---	---	---	---	---	---	---
Trichloroethane, 1,1,2-	79-00-5	mg/L	---	---	---	---	---	---	---
Trichloroethylene	79-01-6	mg/L	---	0.005 mg/L	---	---	---	---	---
Xylene, m+p-	179601-23-1	mg/L	---	---	---	---	---	---	---
Xylene, o-	95-47-6	mg/L	---	---	---	---	---	---	---
Xylenes, total	1330-20-7	mg/L	0.02 mg/L	0.09 mg/L	---	---	---	---	---
BTEX, total		mg/L	---	---	---	---	---	---	---
Volatile Organic Compounds Surrogates									
Bromofluorobenzene, 4-	460-00-4	%	---	---	---	---	---	---	---
Difluorobenzene, 1,4-	540-36-3	%	---	---	---	---	---	---	---

Key:

CDWG		Canada Guidelines for Canadian Drinking Water Quality (JAN, 2023)
AO		Aesthetic Objective
MAC		Maximum Acceptable Concentrations
OG		Operational Guidance



QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: WP2515499	Page	: 1 of 12
Client	: Manitoba Conservation & Climate	Laboratory	: ALS Environmental - Winnipeg
Contact	: EDD	Account Manager	: Sheriza Rajack-Ahamed
Address	: 14 Fultz Boulevard Winnipeg MB Canada R3Y 0L6	Address	: 1329 Niakwa Road East, Unit 12 Winnipeg, Manitoba Canada R2J 3T4
Telephone	: ---	Telephone	: +1 204 255 9720
Project	: St. Malo - PWS 217.50	Date Samples Received	: 09-Sep-2025 13:01
PO	: ---	Issue Date	: 16-Sep-2025 15:13
C-O-C number	: ---		
Sampler	: ---		
Site	: St. Malo - PWS 217.50		
Quote number	: 2025 WTP Chemistry		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

- Key**
 Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
 CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
 DQO: Data Quality Objective.
 LOR: Limit of Reporting (detection limit).
 RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "—" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers occur - please see following pages for full details.



Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and/or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: Water

Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation			Eval	Analysis Date	Analysis		
			Preparation Date	Holding Times Rec	Actual			Holding Times Rec	Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) St. Malo 1 - Raw	E298	09-Sep-2025	09-Sep-2025	28 days	0 days	✓	12-Sep-2025	28 days	0 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid) St. Malo 2 - Treated	E298	09-Sep-2025	09-Sep-2025	28 days	0 days	✓	12-Sep-2025	28 days	0 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE St. Malo 1 - Raw	E235.Br-L	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE St. Malo 2 - Treated	E235.Br-L	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC (Low Level)										
HDPE St. Malo 1 - Raw	E235.Cl-L	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Anions and Nutrients : Chloride in Water by IC (Low Level)										
HDPE St. Malo 2 - Treated	E235.Cl-L	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE St. Malo 1 - Raw	E235.F	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓



Matrix: Water										
Analyte Group / Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Anions and Nutrients : Fluoride in Water by IC										
HDPE St. Malo 2 - Treated	E235.F	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE St. Malo 1 - Raw	E235.NO3-L	09-Sep-2025	11-Sep-2025	3 days	2 days	✓	11-Sep-2025	3 days	2 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE St. Malo 2 - Treated	E235.NO3-L	09-Sep-2025	11-Sep-2025	3 days	2 days	✓	11-Sep-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE St. Malo 1 - Raw	E235.NO2-L	09-Sep-2025	11-Sep-2025	3 days	2 days	✓	11-Sep-2025	3 days	2 days	✓
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE St. Malo 2 - Treated	E235.NO2-L	09-Sep-2025	11-Sep-2025	3 days	2 days	✓	11-Sep-2025	3 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE St. Malo 1 - Raw	E235.SO4	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE St. Malo 2 - Treated	E235.SO4	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	11-Sep-2025	28 days	2 days	✓
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
HDPE total (nitric acid) St. Malo 2 - Treated	EF001	09-Sep-2025	---	---	---		15-Sep-2025	---	---	
Field Tests : Field pH,EC,Salinity, TDS, Cl2,ClO2,ORP,DO, Turbidity,T,T-P,o-PO4,NH3,Chloramine										
HDPE total (nitric acid) St. Malo 3 - Distribution 174 St-Malo St	EF001	09-Sep-2025	---	---	---		15-Sep-2025	---	---	



Matrix: Water Evaluation: * = Holding time exceedance, ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation			Eval	Analysis Date	Analysis		Eval
			Preparation Date	Holding Times Rec	Actual			Holding Times Rec	Actual	
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid) St. Malo 1 - Raw	E358-L	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	12-Sep-2025	28 days	2 days	✓
Organic / Inorganic Carbon : Dissolved Organic Carbon by Combustion (Low Level)										
Amber glass - dissolved (field filtered/sulfuric acid) St. Malo 2 - Treated	E358-L	09-Sep-2025	11-Sep-2025	28 days	2 days	✓	12-Sep-2025	28 days	2 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) St. Malo 1 - Raw	E355-L	09-Sep-2025	12-Sep-2025	28 days	3 days	✓	12-Sep-2025	28 days	3 days	✓
Organic / Inorganic Carbon : Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)										
Amber glass total (sulfuric acid) St. Malo 2 - Treated	E355-L	09-Sep-2025	12-Sep-2025	28 days	3 days	✓	12-Sep-2025	28 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE St. Malo 1 - Raw	E290	09-Sep-2025	12-Sep-2025	14 days	3 days	✓	12-Sep-2025	14 days	3 days	✓
Physical Tests : Alkalinity Species by Titration										
HDPE St. Malo 2 - Treated	E290	09-Sep-2025	12-Sep-2025	14 days	3 days	✓	12-Sep-2025	14 days	3 days	✓
Physical Tests : Colour (True) by Spectrometer (5 CU)										
HDPE St. Malo 1 - Raw	E329	09-Sep-2025	11-Sep-2025	3 days	2 days	✓	11-Sep-2025	3 days	2 days	✓
Physical Tests : Colour (True) by Spectrometer (5 CU)										
HDPE St. Malo 2 - Treated	E329	09-Sep-2025	11-Sep-2025	3 days	2 days	✓	11-Sep-2025	3 days	2 days	✓
Physical Tests : Conductivity in Water										
HDPE St. Malo 1 - Raw	E100	09-Sep-2025	12-Sep-2025	28 days	3 days	✓	12-Sep-2025	28 days	3 days	✓



Matrix: Water Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Eval	Analysis Date	Analysis		Eval
			Preparation Date	Holding Times		Rec			Actual	Rec	
Physical Tests : Conductivity in Water											
HDPE St. Malo 2 - Treated	E100	09-Sep-2025	12-Sep-2025	28 days	3 days	✓	12-Sep-2025	28 days	3 days	✓	
Physical Tests : pH by Meter											
HDPE St. Malo 1 - Raw	E108	09-Sep-2025	12-Sep-2025	0.25 hrs	82 hrs	* EHTR-FM	12-Sep-2025	0.25 hrs	82 hrs	* EHTR-FM	
Physical Tests : pH by Meter											
HDPE St. Malo 2 - Treated	E108	09-Sep-2025	12-Sep-2025	0.25 hrs	82 hrs	* EHTR-FM	12-Sep-2025	0.25 hrs	82 hrs	* EHTR-FM	
Physical Tests : TDS by Gravimetry (Low Level)											
HDPE St. Malo 1 - Raw	E162-L	09-Sep-2025	---	---	---		15-Sep-2025	7 days	6 days	✓	
Physical Tests : TDS by Gravimetry (Low Level)											
HDPE St. Malo 2 - Treated	E162-L	09-Sep-2025	---	---	---		15-Sep-2025	7 days	6 days	✓	
Physical Tests : Turbidity by Nephelometry											
HDPE St. Malo 1 - Raw	E121	09-Sep-2025	---	---	---		11-Sep-2025	3 days	2 days	✓	
Physical Tests : Turbidity by Nephelometry											
HDPE St. Malo 2 - Treated	E121	09-Sep-2025	---	---	---		11-Sep-2025	3 days	2 days	✓	
Physical Tests : UV Absorbance and Transmittance by Spectrometry											
HDPE St. Malo 1 - Raw	E404	09-Sep-2025	---	---	---		11-Sep-2025	3 days	2 days	✓	
Physical Tests : UV Absorbance and Transmittance by Spectrometry											
HDPE St. Malo 2 - Treated	E404	09-Sep-2025	---	---	---		11-Sep-2025	3 days	2 days	✓	



Matrix: Water Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation			Analysis Date	Analysis		Eval	
			Preparation Date	Holding Times Rec	Actual		Rec	Actual		
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) St. Malo 1 - Raw	E420	09-Sep-2025	15-Sep-2025	180 days	6 days	✓	15-Sep-2025	180 days	6 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) St. Malo 2 - Treated	E420	09-Sep-2025	15-Sep-2025	180 days	6 days	✓	15-Sep-2025	180 days	6 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) St. Malo 3 - Distribution 174 St-Malo St	E420	09-Sep-2025	15-Sep-2025	180 days	6 days	✓	15-Sep-2025	180 days	6 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate) St. Malo 1 - Raw	E611D	09-Sep-2025	12-Sep-2025	14 days	3 days	✓	12-Sep-2025	14 days	3 days	✓

Legend & Qualifier Definitions

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended
 Rec. HT: ALS recommended hold time (see units).



Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: Water

Evaluation: ✖ = QC frequency outside specification, ✔ = QC frequency within specification.

Analytical Methods	Method	QC Lot #	Count		Frequency (%)		Evaluation
			QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)							
Conductivity in Water	E100	2218674	0	18	0.0	5.0	✖
pH by Meter	E108	2218676	1	20	5.0	5.0	✔
Turbidity by Nephelometry	E121	2212289	1	20	5.0	5.0	✔
TDS by Gravimetry (Low Level)	E162-L	2216154	1	19	5.2	5.0	✔
Bromide in Water by IC (Low Level)	E235.Br-L	2215337	0	4	0.0	5.0	✖
Chloride in Water by IC (Low Level)	E235.Cl-L	2215338	1	6	16.6	5.0	✔
Fluoride in Water by IC	E235.F	2215333	1	20	5.0	5.0	✔
Nitrite in Water by IC (Low Level)	E235.NO2-L	2215340	1	6	16.6	5.0	✔
Nitrate in Water by IC (Low Level)	E235.NO3-L	2215339	1	6	16.6	5.0	✔
Sulfate in Water by IC	E235.SO4	2215336	1	20	5.0	5.0	✔
Alkalinity Species by Titration	E290	2218675	1	16	6.2	5.0	✔
Ammonia by Fluorescence	E298	2214672	1	20	5.0	5.0	✔
Colour (True) by Spectrometer (5 CU)	E329	2213948	1	20	5.0	5.0	✔
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2215729	1	20	5.0	5.0	✔
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	2215633	1	20	5.0	5.0	✔
UV Absorbance and Transmittance by Spectrometry	E404	2215590	1	16	6.2	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2218732	1	18	5.5	5.0	✔
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2215758	1	15	6.6	5.0	✔
Laboratory Control Samples (LCS)							
Conductivity in Water	E100	2218674	1	18	5.5	5.0	✔
pH by Meter	E108	2218676	1	20	5.0	5.0	✔
Turbidity by Nephelometry	E121	2212289	1	20	5.0	5.0	✔
TDS by Gravimetry (Low Level)	E162-L	2216154	1	19	5.2	5.0	✔
Bromide in Water by IC (Low Level)	E235.Br-L	2215337	1	4	25.0	5.0	✔
Chloride in Water by IC (Low Level)	E235.Cl-L	2215338	1	6	16.6	5.0	✔
Fluoride in Water by IC	E235.F	2215333	1	20	5.0	5.0	✔
Nitrite in Water by IC (Low Level)	E235.NO2-L	2215340	1	6	16.6	5.0	✔
Nitrate in Water by IC (Low Level)	E235.NO3-L	2215339	1	6	16.6	5.0	✔
Sulfate in Water by IC	E235.SO4	2215336	1	20	5.0	5.0	✔
Alkalinity Species by Titration	E290	2218675	1	16	6.2	5.0	✔
Ammonia by Fluorescence	E298	2214672	1	20	5.0	5.0	✔
Colour (True) by Spectrometer (5 CU)	E329	2213948	1	20	5.0	5.0	✔
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2215729	1	20	5.0	5.0	✔
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	2215633	1	20	5.0	5.0	✔
UV Absorbance and Transmittance by Spectrometry	E404	2215590	1	16	6.2	5.0	✔
Total Metals in Water by CRC ICPMS	E420	2218732	1	18	5.5	5.0	✔



Matrix: Water Evaluation: * = QC frequency outside specification; ✓ = QC frequency within specification

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		Evaluation
			QC	Regular	Actual	Expected	
Analytical Methods							
Laboratory Control Samples (LCS) - Continued							
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2215758	1	15	6.6	5.0	✓
Method Blanks (MB)							
Conductivity in Water	E100	2218674	1	18	5.5	5.0	✓
Turbidity by Nephelometry	E121	2212289	1	20	5.0	5.0	✓
TDS by Gravimetry (Low Level)	E162-L	2216154	1	19	5.2	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	2215337	1	4	25.0	5.0	✓
Chloride in Water by IC (Low Level)	E235.Cl-L	2215338	1	6	16.6	5.0	✓
Fluoride in Water by IC	E235.F	2215333	1	20	5.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	2215340	1	6	16.6	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	2215339	1	6	16.6	5.0	✓
Sulfate in Water by IC	E235.SO4	2215336	1	20	5.0	5.0	✓
Alkalinity Species by Titration	E290	2218675	1	16	6.2	5.0	✓
Ammonia by Fluorescence	E298	2214672	1	20	5.0	5.0	✓
Colour (True) by Spectrometer (5 CU)	E329	2213948	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2215729	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	2215633	1	20	5.0	5.0	✓
UV Absorbance and Transmittance by Spectrometry	E404	2215590	1	16	6.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2218732	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2215758	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Bromide in Water by IC (Low Level)	E235.Br-L	2215337	0	4	0.0	5.0	* ✗
Chloride in Water by IC (Low Level)	E235.Cl-L	2215338	1	6	16.6	5.0	✓
Fluoride in Water by IC	E235.F	2215333	1	20	5.0	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	2215340	1	6	16.6	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	2215339	1	6	16.6	5.0	✓
Sulfate in Water by IC	E235.SO4	2215336	1	20	5.0	5.0	✓
Ammonia by Fluorescence	E298	2214672	1	20	5.0	5.0	✓
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L	2215729	1	20	5.0	5.0	✓
Dissolved Organic Carbon by Combustion (Low Level)	E358-L	2215633	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	2218732	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	2215758	1	15	6.6	5.0	✓



Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by 'mod').

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Conductivity in Water	E100 ALS Environmental - Winnipeg	Water	APHA 2510 (mod)	Conductivity, also known as Electrical Conductivity (EC) or Specific Conductance, is measured by immersion of a conductivity cell with platinum electrodes into a water sample. Conductivity measurements are temperature-compensated to 25°C.
pH by Meter	E108 ALS Environmental - Winnipeg	Water	APHA 4500-H (mod)	pH is determined by potentiometric measurement with a pH electrode, and is conducted at ambient laboratory temperature (normally 20 ± 5°C). For high accuracy test results, pH should be measured in the field within the recommended 15 minute hold time.
Turbidity by Nephelometry	E121 ALS Environmental - Winnipeg	Water	APHA 2130 B (mod)	Turbidity is measured by the nephelometric method, by measuring the intensity of light scatter under defined conditions.
TDS by Gravimetry (Low Level)	E162-L ALS Environmental - Winnipeg	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Bromide in Water by IC (Low Level)	E235.Br-L ALS Environmental - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Chloride in Water by IC (Low Level)	E235.CL-L ALS Environmental - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F ALS Environmental - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L ALS Environmental - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L ALS Environmental - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC	E235.SO4 ALS Environmental - Winnipeg	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

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Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Alkalinity Species by Titration	E290 ALS Environmental - Winnipeg	Water	APHA 2320 B (mod)	Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.
Ammonia by Fluorescence	E298 ALS Environmental - Winnipeg	Water	Method Fialab 100, 2018	Ammonia in water is determined by automated continuous flow analysis with membrane diffusion and fluorescence detection, after reaction with OPA (ortho-phthalaldehyde). This method is approved under US EPA 40 CFR Part 136 (May 2021)
Colour (True) by Spectrometer (5 CU)	E329 ALS Environmental - Winnipeg	Water	APHA 2120 C (mod)	Colour (True Colour) is determined by filtering a sample through a 0.45 micron membrane filter followed by analysis of the filtrate using the platinum-cobalt colourimetric method. Colour measurements can be highly pH dependent, and apply to the pH of the sample as received (at time of testing), without pH adjustment.
Total Organic Carbon (Non-Purgeable) by Combustion (Low Level)	E355-L ALS Environmental - Winnipeg	Water	APHA 5310 B (mod)	Total Organic Carbon (Non-Purgeable), also known as NPOC (total), is a direct measurement of TOC after an acidified sample has been purged to remove carbonate-based Inorganic Carbon (IC). Analysis is by high temperature combustion with infrared detection of CO ₂ . Forms of carbon associated with inorganic or organic molecules (e.g. SCN and CN) are included in NPOC if they are not removed by purging under acidic conditions. Notably, NPOC excludes most volatile organic compounds and free cyanide. For samples where the majority of Total Carbon is inorganic, this method provides greater accuracy and reliability versus the TOC by subtraction method (TC minus TIC).
Dissolved Organic Carbon by Combustion (Low Level)	E358-L ALS Environmental - Winnipeg	Water	APHA 5310 B (mod)	Dissolved Organic Carbon (Non-Purgeable), also known as NPOC (dissolved), is a direct measurement of DOC after a filtered (0.45 micron) sample has been acidified and purged to remove inorganic carbon (IC). Analysis is by high temperature combustion with infrared detection of CO ₂ . NPOC does not include volatile organic species that are purged off with IC. For samples where the majority of DC (dissolved carbon) is comprised of IC (which is common), this method is more accurate and more reliable than the DOC by subtraction method (i.e. DC minus DIC).
UV Absorbance and Transmittance by Spectrometry	E404 ALS Environmental - Winnipeg	Water	APHA 5910 B (mod)	UV Absorbance is determined by first filtering a sample through a 0.45 micron filter, followed by UV absorbance measurement in a quartz cell at 254 nm. The analysis is carried out without pH adjustment.
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Winnipeg	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
VOCs (Eastern Canada List) by Headspace GC-MS	E611D ALS Environmental - Winnipeg	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.



Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Winnipeg	Water	APHA 2340B	"Hardness (as CaCO ₃), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed as CaCO ₃ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because hardness is a property of water due to dissolved divalent cations. In non-turbid waters, Hardness from total Ca/Mg is normally comparable to Dissolved Hardness, but may be biased high if particulate forms of Ca or Mg are present.
Ion Balance using Total Metals	EC101A ALS Environmental - Winnipeg	Water	APHA 1030E	Cation Sum (using total metals), Anion Sum, and Ion Balance are calculated based on guidance from APHA Standard Methods (1030E Checking Correctness of Analysis). Minor ions are included where data is present. Ion Balance cannot be calculated accurately for waters with very low electrical conductivity (EC).
Saturation Index using Laboratory pH (Ca-T)	EC105A ALS Environmental - Winnipeg	Water	APHA 2330B	Langelier Index provides an indication of scale formation potential at a given pH and temperature, and is calculated as per APHA 2330B Saturation Index. Positive values indicate oversaturation with respect to CaCO ₃ . Negative values indicate undersaturation of CaCO ₃ . This calculation uses laboratory pH measurements and provides estimates of Langelier Index at temperatures of 4, 15, 20, 25, 66, and 77°C. Ryznar Stability Index is an alternative index used for scale formation and corrosion potential.
Field pH,EC,Salinity, TDS, Cl ₂ ,ClO ₂ ,ORP,DO, Turbidity,T,T-P,o-PO ₄ ,NH ₃ ,Chloramine	EF001 ALS Environmental - Winnipeg	Water	Field Measurement (Client Supplied)	Field pH,EC,Salinity, TDS, Cl ₂ ,ClO ₂ ,ORP,DO, Turbidity,T,T-P,o-PO ₄ ,NH ₃ or Chloramine measurements provided by client and recorded on ALS report may affect the validity of results.
Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP268 ALS Environmental - Winnipeg	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.
Preparation for Total Organic Carbon by Combustion	EP355 ALS Environmental - Winnipeg	Water		Preparation for Total Organic Carbon by Combustion
Preparation for Dissolved Organic Carbon for Combustion	EP358 ALS Environmental - Winnipeg	Water	APHA 5310 B (mod)	Preparation for Dissolved Organic Carbon
VOCs Preparation for Headspace Analysis	EP581 ALS Environmental - Winnipeg	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into a GC-MS-FID.



QUALITY CONTROL REPORT

Work Order	: WP2515499	Page	: 1 of 13
Client	: Manitoba Conservation & Climate	Laboratory	: ALS Environmental - Winnipeg
Contact	: EDD	Account Manager	: Sheriza Rajack-Ahamed
Address	: 217.50 - St. Malo - PWS Box 398	Address	: 1329 Niakwa Road East, Unit 12
	: St. Malo MB Canada R0A 1T0		: Winnipeg, Manitoba Canada R2J 3T4
Telephone	: ---	Telephone	: +1 204 255 9720
Project	: St. Malo - PWS 217.50	Date Samples Received	: 09-Sep-2025 13:01
PO	: ---	Date Analysis Commenced	: 09-Sep-2025
C-O-C number	: ---	Issue Date	: 16-Sep-2025 15:13
Sampler	: ---		
Site	: St. Malo - PWS 217.50		
Quote number	: 2025 WTP Chemistry		
No. of samples received	: 3		
No. of samples analysed	: 3		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Baxter	Supervisor - Inorganic	Winnipeg Administration, Winnipeg, Manitoba
Kevin Baxter	Supervisor - Inorganic	Winnipeg Inorganics, Winnipeg, Manitoba
Kevin Baxter	Supervisor - Inorganic	Winnipeg Metals, Winnipeg, Manitoba
Michelle Michalchuk	Analyst	Winnipeg Organics, Winnipeg, Manitoba



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

- Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
- CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
- DQO = Data Quality Objective.
- LOR = Limit of Reporting (detection limit).
- RPD = Relative Percent Difference
- # = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "--" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.



Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific)

Sub-Matrix: Water					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 2212289)											
WP2515483-012	Anonymous	Turbidity	---	E121	0.10	NTU	10.1	10.2	0.560%	15%	---
Physical Tests (QC Lot: 2213948)											
WP2514694-001	Anonymous	Colour, true	---	E329	5.0	CU	<5.0	<5.0	0	Diff <2x LOR	---
Physical Tests (QC Lot: 2215590)											
WP2514694-001	Anonymous	Absorbance, UV (@ 254nm)	---	E404	0.0050	AU/cm	0.0750	0.0760	1.27%	20%	---
Physical Tests (QC Lot: 2216154)											
WP2515499-001	St. Malo 1 - Raw	Solids, total dissolved [TDS]	---	E162-L	15.0	mg/L	924	908	1.69%	20%	---
Physical Tests (QC Lot: 2218675)											
WP2515511-004	Anonymous	Alkalinity, total (as CaCO3)	---	E290	1.0	mg/L	172	173	0.290%	20%	---
Physical Tests (QC Lot: 2218676)											
WP2515511-004	Anonymous	pH	---	E108	0.10	pH units	7.95	7.99	0.758%	4%	---
Anions and Nutrients (QC Lot: 2214672)											
WP2515504-001	Anonymous	Ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0083	0.0082	0.00009	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2215333)											
WP2515491-001	Anonymous	Fluoride	16984-48-8	E235.F	0.020	mg/L	0.518	0.487	5.79%	20%	---
Anions and Nutrients (QC Lot: 2215336)											
WP2515491-001	Anonymous	Sulfate (as SO4)	14808-79-9	E235.SO4	0.30	mg/L	40.2	40.2	0.0714%	20%	---
Anions and Nutrients (QC Lot: 2215338)											
WP2515491-001	Anonymous	Chloride	16887-00-6	E235.CL	0.10	mg/L	2.93	2.91	0.642%	20%	---
Anions and Nutrients (QC Lot: 2215339)											
WP2515491-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	<0.0050	<0.0050	0	Diff <2x LOR	---
Anions and Nutrients (QC Lot: 2215340)											
WP2515491-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	---
Organic / Inorganic Carbon (QC Lot: 2215633)											
WP2515483-001	Anonymous	Carbon, dissolved organic [DOC]	---	E358-L	0.50	mg/L	5.54	5.30	4.51%	20%	---
Organic / Inorganic Carbon (QC Lot: 2215729)											
WP2515475-002	Anonymous	Carbon, total organic [TOC]	---	E355-L	0.50	mg/L	5.44	5.37	1.24%	20%	---
Total Metals (QC Lot: 2218732)											
WP2515361-005	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.136	0.140	3.09%	20%	---
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00012	0.00012	0.000002	Diff <2x LOR	---

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Sub-Matrix: Water					Laboratory Duplicate (DUPLICATE) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 2218732) - continued											
WP2515361-005	Anonymous	Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00004	0.00001	0.471%	20%	---
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.00031	0.00020	1.16%	20%	---
		Beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	---
		Bismuth, total	7440-09-9	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	---
		Boron, total	7440-42-8	E420	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	---
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	---
		Calcium, total	7440-70-2	E420	0.050	mg/L	9.42	9.38	0.836%	20%	---
		Cesium, total	7440-46-2	E420	0.000010	mg/L	0.000011	0.000014	0.00003	Diff <2x LOR	---
		Chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	---
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	---
		Copper, total	7440-50-8	E420	0.00050	mg/L	0.00080	0.00079	0.00008	Diff <2x LOR	---
		Iron, total	7439-89-6	E420	0.010	mg/L	0.302	0.297	1.82%	20%	---
		Lead, total	7439-02-1	E420	0.000050	mg/L	0.000113	0.000111	0.00002	Diff <2x LOR	---
		Lithium, total	7439-03-2	E420	0.0010	mg/L	0.0019	0.0017	0.002	Diff <2x LOR	---
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	2.72	2.61	4.06%	20%	---
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.0131	0.0129	1.78%	20%	---
		Molybdenum, total	7439-68-7	E420	0.000050	mg/L	0.000195	0.000192	0.00003	Diff <2x LOR	---
		Nickel, total	7440-02-0	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	---
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	---
		Potassium, total	7440-09-7	E420	0.050	mg/L	0.817	0.820	0.406%	20%	---
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00202	0.00185	0.00016	Diff <2x LOR	---
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.000103	0.000110	0.00007	Diff <2x LOR	---
		Silicon, total	7440-21-3	E420	0.10	mg/L	2.33	2.29	1.49%	20%	---
		Silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	---
		Sodium, total	7440-23-5	E420	0.050	mg/L	1.44	1.39	3.96%	20%	---
		Sroutium, total	7440-24-6	E420	0.00020	mg/L	0.0238	0.0239	0.710%	20%	---
		Sulfur, total	7704-34-9	E420	0.50	mg/L	0.69	0.59	0.10	Diff <2x LOR	---
		Tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	---
		Thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	---
		Thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	---
		Tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	---
		Titanium, total	7440-32-6	E420	0.00030	mg/L	0.00438	0.00453	3.30%	20%	---
		Tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	---
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000088	0.000094	0.00009	Diff <2x LOR	---



Sub-Matrix: Water					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 2218732) - continued											
WP2515381-005	Anonymous	Vanadium, total	7440-82-2	E420	0.00050	mg/L	0.00071	0.00074	0.00003	Diff <2x LOR	---
		Zinc, total	7440-06-6	E420	0.0030	mg/L	0.0031	0.0030	0.00010	Diff <2x LOR	---
		Zirconium, total	7440-67-7	E420	0.00020	mg/L	0.00023	0.00023	0.000003	Diff <2x LOR	---
Volatile Organic Compounds (QC Lot: 2215758)											
WP2515499-001	St. Malo 1 - Raw	Benzene	71-43-2	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Bromodichloromethane	75-27-4	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Bromoform	75-25-2	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Chloroform	67-66-3	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Dibromochloromethane	124-48-1	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Dichloromethane	75-09-2	E811D	1.0	µg/L	<0.0010 mg/L	<1.0	0	Diff <2x LOR	---
		Ethylbenzene	100-41-4	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Methyl-tert-butyl ether [MTBE]	1634-04-4	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Tetrachloroethylene	127-18-4	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Toluene	108-88-3	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Trichloroethane, 1,1,1-	71-65-6	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Trichloroethane, 1,1,2-	79-00-5	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Trichloroethylene	79-01-0	E811D	0.50	µg/L	<0.00050 mg/L	<0.50	0	Diff <2x LOR	---
		Xylene, m+p-	179601-23-1	E811D	0.40	µg/L	<0.00040 mg/L	<0.40	0	Diff <2x LOR	---
		Xylene, o-	65-47-6	E811D	0.30	µg/L	<0.00030 mg/L	<0.30	0	Diff <2x LOR	---



Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the QDO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 2212289)						
Turbidity	---	E121	0.1	NTU	<0.10	---
Physical Tests (QCLot: 2213948)						
Colour, true	---	E329	5	CU	<5.0	---
Physical Tests (QCLot: 2215590)						
Absorbance, UV (@ 254nm)	---	E404	0.005	AU/cm	<0.0050	---
Physical Tests (QCLot: 2216154)						
Solids, total dissolved [TDS]	---	E162-L	3	mg/L	<3.0	---
Physical Tests (QCLot: 2218674)						
Conductivity	---	E100	1	µS/cm	<1.0	---
Physical Tests (QCLot: 2218675)						
Alkalinity, total (as CaCO3)	---	E268	1	mg/L	<1.0	---
Anions and Nutrients (QCLot: 2214672)						
Ammonia, total (as N)	7664-41-7	E208	0.005	mg/L	<0.0050	---
Anions and Nutrients (QCLot: 2215333)						
Fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	---
Anions and Nutrients (QCLot: 2215336)						
Sulfate (as SO4)	14809-76-8	E235.SO4	0.3	mg/L	<0.30	---
Anions and Nutrients (QCLot: 2215337)						
Bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	---
Anions and Nutrients (QCLot: 2215338)						
Chloride	16887-00-8	E235.Cl-L	0.1	mg/L	<0.10	---
Anions and Nutrients (QCLot: 2215339)						
Nitrate (as N)	14797-65-8	E235.NO3-L	0.005	mg/L	<0.0050	---
Anions and Nutrients (QCLot: 2215340)						
Nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	---
Organic / Inorganic Carbon (QCLot: 2215633)						
Carbon, dissolved organic [DOC]	---	E358-L	0.5	mg/L	<0.50	---
Organic / Inorganic Carbon (QCLot: 2215729)						
Carbon, total organic [TOC]	---	E355-L	0.5	mg/L	<0.50	---
Total Metals (QCLot: 2218732)						
Aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	---
Antimony, total	7440-38-0	E420	0.0001	mg/L	<0.00010	---



Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 2218732) - continued						
Arsenic, total	7440-39-2	E420	0.0001	mg/L	<0.00010	---
Barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	---
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	---
Bismuth, total	7440-66-9	E420	0.00005	mg/L	<0.000050	---
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	---
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	---
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	---
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	---
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	---
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	---
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	---
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	---
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	---
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	---
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	---
Manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	---
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	---
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	---
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	---
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	---
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	---
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	---
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	---
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	---
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	---
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	---
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	---
Tellurium, total	13464-80-9	E420	0.0002	mg/L	<0.00020	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	---
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	---
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	---
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	---
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	---
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	---
Vanadium, total	7440-02-2	E420	0.0005	mg/L	<0.00050	---

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Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 2218732) - continued						
Zinc, total	7440-65-6	E420	0.003	mg/L	<0.0030	---
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	---
Volatile Organic Compounds (QCLot: 2215758)						
Benzene	71-43-2	E011D	0.5	µg/L	<0.50	---
Bromodichloromethane	75-27-4	E011D	0.5	µg/L	<0.50	---
Bromoform	75-25-2	E011D	0.5	µg/L	<0.50	---
Chloroform	67-66-3	E011D	0.5	µg/L	<0.50	---
Dibromochloromethane	124-48-1	E011D	0.5	µg/L	<0.50	---
Dichloromethane	75-09-2	E011D	1	µg/L	<1.0	---
Ethylbenzene	100-41-4	E011D	0.5	µg/L	<0.50	---
Methyl-tert-butyl ether [MTBE]	1634-04-4	E011D	0.5	µg/L	<0.50	---
Tetrachloroethylene	127-18-4	E011D	0.5	µg/L	<0.50	---
Toluene	108-88-3	E011D	0.5	µg/L	<0.50	---
Trichloroethane, 1,1,1-	71-55-6	E011D	0.5	µg/L	<0.50	---
Trichloroethane, 1,1,2-	79-00-5	E011D	0.5	µg/L	<0.50	---
Trichlorobenzene	79-01-6	E011D	0.5	µg/L	<0.50	---
Xylene, m+p-	179601-23-1	E011D	0.4	µg/L	<0.40	---
Xylene, o-	95-47-6	E011D	0.3	µg/L	<0.30	---



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		Qualifier
					Target Concentration	LCS	Low	High	
Physical Tests (QCLot: 2212289)									
Turbidity	---	E121	0.1	NTU	200 NTU	97.0	85.0	115	---
Physical Tests (QCLot: 2213948)									
Colour, true	---	E329	5	CU	250 CU	102	85.0	115	---
Physical Tests (QCLot: 2215590)									
Absorbance, UV (@ 254nm)	---	E404	0.005	AU/cm	0.544 AU/cm	98.9	85.0	115	---
Physical Tests (QCLot: 2216154)									
Solids, total dissolved [TDS]	---	E182-L	3	mg/L	1000 mg/L	97.2	85.0	115	---
Physical Tests (QCLot: 2218674)									
Conductivity	---	E100	1	µS/cm	1410 µS/cm	90.5	90.0	110	---
Physical Tests (QCLot: 2218675)									
Alkalinity, total (as CaCO3)	---	E200	1	mg/L	100 mg/L	102	85.0	115	---
Physical Tests (QCLot: 2218676)									
pH	---	E108	---	pH units	7 pH units	101	98.0	102	---
Anions and Nutrients (QCLot: 2214672)									
Ammonia, total (as N)	7694-41-7	E298	0.005	mg/L	0.2 mg/L	104	85.0	115	---
Anions and Nutrients (QCLot: 2215333)									
Fluoride	18084-48-8	E235.F	0.02	mg/L	1 mg/L	99.7	90.0	110	---
Anions and Nutrients (QCLot: 2215338)									
Sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	98.4	90.0	110	---
Anions and Nutrients (QCLot: 2215337)									
Bromide	24659-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	90.0	85.0	115	---
Anions and Nutrients (QCLot: 2215338)									
Chloride	16887-00-6	E235.Cl-L	0.1	mg/L	100 mg/L	97.0	90.0	110	---
Anions and Nutrients (QCLot: 2215339)									
Nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	97.2	90.0	110	---
Anions and Nutrients (QCLot: 2215340)									
Nitrite (as N)	14797-55-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	104	90.0	110	---
Organic / Inorganic Carbon (QCLot: 2215633)									
Carbon, dissolved organic [DOC]	---	E358-L	0.5	mg/L	8.57 mg/L	105	80.0	120	---
Organic / Inorganic Carbon (QCLot: 2215729)									



Sub-Matrix: Water					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		Qualifier
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	
Organic / Inorganic Carbon (QCLot: 2215729) - continued									
Carbon, total organic [TOC]	---	E355-L	0.5	mg/L	8.57 mg/L	105	80.0	120	---
Total Metals (QCLot: 2218732)									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	104	80.0	120	---
Antimony, total	7440-38-0	E420	0.0001	mg/L	1 mg/L	107	80.0	120	---
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	101	80.0	120	---
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	102	80.0	120	---
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	109	80.0	120	---
Bismuth, total	7440-69-0	E420	0.00005	mg/L	1 mg/L	98.3	80.0	120	---
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	109	80.0	120	---
Cadmium, total	7440-43-0	E420	0.000005	mg/L	0.1 mg/L	99.1	80.0	120	---
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	108	80.0	120	---
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	105	80.0	120	---
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	102	80.0	120	---
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	98.8	80.0	120	---
Copper, total	7440-50-9	E420	0.0005	mg/L	0.25 mg/L	99.2	80.0	120	---
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	98.2	80.0	120	---
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	95.2	80.0	120	---
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	112	80.0	120	---
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	108	80.0	120	---
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	102	80.0	120	---
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	104	80.0	120	---
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	99.0	80.0	120	---
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	107	80.0	120	---
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	95.0	80.0	120	---
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	101	80.0	120	---
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	97.0	80.0	120	---
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	105	80.0	120	---
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	93.7	80.0	120	---
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	101	80.0	120	---
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	105	80.0	120	---
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	100.0	80.0	120	---
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	104	80.0	120	---
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	98.9	80.0	120	---
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	95.1	80.0	120	---
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	102	80.0	120	---



Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike Target Concentration	Recovery (%) LCS	Recovery Limits (%)		Qualifier
							Low	High	
Total Metals (QCLot: 2218732) - continued									
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	97.9	80.0	120	---
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	99.8	80.0	120	---
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	98.8	80.0	120	---
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	98.8	80.0	120	---
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	99.4	80.0	120	---
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	103	80.0	120	---
Volatile Organic Compounds (QCLot: 2215758)									
Benzene	71-43-2	E911D	0.5	µg/L	100 µg/L	97.9	70.0	130	---
Bromodichloromethane	75-27-4	E911D	0.5	µg/L	100 µg/L	93.8	70.0	130	---
Bromoform	75-25-2	E911D	0.5	µg/L	100 µg/L	91.4	70.0	130	---
Chloroform	67-69-3	E911D	0.5	µg/L	100 µg/L	98.3	70.0	130	---
Dibromochloromethane	124-48-1	E911D	0.5	µg/L	100 µg/L	87.3	70.0	130	---
Dichloromethane	75-09-2	E911D	1	µg/L	100 µg/L	82.7	70.0	130	---
Ethylbenzene	100-41-4	E911D	0.5	µg/L	100 µg/L	101	70.0	130	---
Methyltert-butyl ether [MTBE]	1634-04-4	E911D	0.5	µg/L	100 µg/L	102	70.0	130	---
Tetrachloroethylene	127-18-4	E911D	0.5	µg/L	100 µg/L	107	70.0	130	---
Toluene	108-68-3	E911D	0.5	µg/L	100 µg/L	100	70.0	130	---
Trichloroethane, 1,1,1-	71-55-6	E911D	0.5	µg/L	100 µg/L	92.6	70.0	130	---
Trichloroethane, 1,1,2-	79-00-6	E911D	0.5	µg/L	100 µg/L	81.4	70.0	130	---
Trichloroethylene	79-01-6	E911D	0.5	µg/L	100 µg/L	96.9	70.0	130	---
Xylene, m+p-	179601-23-1	E911D	0.4	µg/L	200 µg/L	104	70.0	130	---
Xylene, o-	95-47-6	E911D	0.3	µg/L	100 µg/L	98.0	70.0	130	---



Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		Qualifier
					Concentration	Target		MS	Low	
Anions and Nutrients (QCLot: 2214672)										
WP2515504-001	Anonymous	Ammonia, total (as N)	7664-41-7	E208	0.109 mg/L	0.1 mg/L	109	75.0	125	---
Anions and Nutrients (QCLot: 2215333)										
WP2515491-001	Anonymous	Fluoride	16984-48-8	E235.F	0.955 mg/L	1 mg/L	95.5	75.0	125	---
Anions and Nutrients (QCLot: 2215336)										
WP2515491-001	Anonymous	Sulfate (as SO4)	14808-70-9	E235.SO4	96.4 mg/L	100 mg/L	96.4	75.0	125	---
Anions and Nutrients (QCLot: 2215338)										
WP2515491-001	Anonymous	Chloride	16887-00-0	E235.Cl-L	98.8 mg/L	100 mg/L	98.8	75.0	125	---
Anions and Nutrients (QCLot: 2215339)										
WP2515491-001	Anonymous	Nitrate (as N)	14797-55-8	E235.NO3-L	2.47 mg/L	2.5 mg/L	98.9	75.0	125	---
Anions and Nutrients (QCLot: 2215340)										
WP2515491-001	Anonymous	Nitrite (as N)	14797-65-0	E235.NO2-L	0.520 mg/L	0.5 mg/L	104	75.0	125	---
Organic / Inorganic Carbon (QCLot: 2215633)										
WP2515483-002	Anonymous	Carbon, dissolved organic [DOC]	---	E358-L	5.11 mg/L	5 mg/L	102	70.0	130	---
Organic / Inorganic Carbon (QCLot: 2215729)										
WP2515475-003	Anonymous	Carbon, total organic [TOC]	---	E358-L	5.08 mg/L	5 mg/L	102	70.0	130	---
Total Metals (QCLot: 2218732)										
WP2515391-005	Anonymous	Aluminum, total	7429-60-5	E420	0.199 mg/L	0.2 mg/L	99.4	70.0	130	---
		Antimony, total	7440-39-0	E420	0.0224 mg/L	0.02 mg/L	112	70.0	130	---
		Arsenic, total	7440-39-2	E420	0.0204 mg/L	0.02 mg/L	102	70.0	130	---
		Barium, total	7440-39-3	E420	0.0168 mg/L	0.02 mg/L	99.0	70.0	130	---
		Beryllium, total	7440-41-7	E420	0.0417 mg/L	0.04 mg/L	104	70.0	130	---
		Bismuth, total	7440-69-9	E420	0.00008 mg/L	0.01 mg/L	90.8	70.0	130	---
		Boron, total	7440-42-8	E420	0.108 mg/L	0.1 mg/L	108	70.0	130	---
		Cadmium, total	7440-43-9	E420	0.00402 mg/L	0.004 mg/L	100	70.0	130	---
		Calcium, total	7440-70-2	E420	ND mg/L	---	ND	70.0	130	---
		Cesium, total	7440-46-2	E420	0.0105 mg/L	0.01 mg/L	105	70.0	130	---
		Chromium, total	7440-47-3	E420	0.0304 mg/L	0.04 mg/L	98.5	70.0	130	---
		Cobalt, total	7440-48-4	E420	0.0168 mg/L	0.02 mg/L	99.2	70.0	130	---
		Copper, total	7440-50-8	E420	0.0193 mg/L	0.02 mg/L	96.7	70.0	130	---
		Iron, total	7439-89-6	E420	1.98 mg/L	2 mg/L	99.2	70.0	130	---
		Lead, total	7439-92-1	E420	0.0184 mg/L	0.02 mg/L	92.0	70.0	130	---
		Lithium, total	7439-93-2	E420	0.104 mg/L	0.1 mg/L	104	70.0	130	---
		Magnesium, total	7439-96-4	E420	ND mg/L	---	ND	70.0	130	---
		Manganese, total	7439-96-5	E420	0.0166 mg/L	0.02 mg/L	98.0	70.0	130	---
		Molybdenum, total	7439-98-7	E420	0.0213 mg/L	0.02 mg/L	106	70.0	130	---



Sub-Matrix: Water					Matrix Spike (MS) Report					
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Spike		Recovery (%)	Recovery Limits (%)		Qualifier
					Concentration	Target	MS	Low	High	
Total Metals (QCLot: 2218732) - continued										
WP2515361-005	Anonymous	Nickel, total	7440-02-0	E420	0.0391 mg/L	0.04 mg/L	97.7	70.0	130	---
		Phosphorus, total	7723-14-0	E420	9.97 mg/L	10 mg/L	99.7	70.0	130	---
		Potassium, total	7440-09-7	E420	3.79 mg/L	4 mg/L	94.0	70.0	130	---
		Rubidium, total	7440-17-7	E420	0.0105 mg/L	0.02 mg/L	97.6	70.0	130	---
		Selenium, total	7782-49-2	E420	0.0410 mg/L	0.04 mg/L	102	70.0	130	---
		Silicon, total	7440-21-3	E420	9.66 mg/L	10 mg/L	96.6	70.0	130	---
		Silver, total	7440-22-4	E420	0.00413 mg/L	0.004 mg/L	103	70.0	130	---
		Sodium, total	7440-23-5	E420	1.60 mg/L	2 mg/L	85.1	70.0	130	---
		Strontium, total	7440-24-6	E420	ND mg/L	---	ND	70.0	130	---
		Sulfur, total	7704-34-9	E420	20.6 mg/L	20 mg/L	103	70.0	130	---
		Tellurium, total	13494-80-9	E420	0.0451 mg/L	0.04 mg/L	113	70.0	130	---
		Thallium, total	7440-28-0	E420	0.00366 mg/L	0.04 mg/L	91.4	70.0	130	---
		Thorium, total	7440-29-1	E420	0.0189 mg/L	0.02 mg/L	94.6	70.0	130	---
		Tin, total	7440-31-5	E420	0.0214 mg/L	0.02 mg/L	107	70.0	130	---
		Titanium, total	7440-32-6	E420	0.0417 mg/L	0.04 mg/L	104	70.0	130	---
		Tungsten, total	7440-33-7	E420	0.0201 mg/L	0.02 mg/L	101	70.0	130	---
		Uranium, total	7440-61-1	E420	0.00393 mg/L	0.04 mg/L	96.7	70.0	130	---
		Vanadium, total	7440-62-2	E420	0.0978 mg/L	0.1 mg/L	97.8	70.0	130	---
		Zinc, total	7440-69-6	E420	0.387 mg/L	0.4 mg/L	96.7	70.0	130	---
		Zirconium, total	7440-67-7	E420	0.0436 mg/L	0.04 mg/L	109	70.0	130	---
Volatile Organic Compounds (QCLot: 2215758)										
WP2515499-001	St. Malo 1 - Raw	Benzene	71-43-2	E611D	105 µg/L	100 µg/L	105	60.0	140	---
		Bromodichloromethane	75-27-4	E611D	97.6 µg/L	100 µg/L	97.6	60.0	140	---
		Bromoform	75-25-2	E611D	92.6 µg/L	100 µg/L	92.6	60.0	140	---
		Chloroform	67-66-3	E611D	105 µg/L	100 µg/L	105	60.0	140	---
		Dibromochloromethane	124-48-1	E611D	90.5 µg/L	100 µg/L	90.5	60.0	140	---
		Dichloromethane	75-09-2	E611D	97.4 µg/L	100 µg/L	97.4	60.0	140	---
		Ethylbenzene	105-41-4	E611D	111 µg/L	100 µg/L	111	60.0	140	---
		Methyl-tert-butyl ether (MTBE)	1634-04-4	E611D	109 µg/L	100 µg/L	109	60.0	140	---
		Tetrachloroethylene	127-18-4	E611D	118 µg/L	100 µg/L	118	60.0	140	---
		Toluene	108-88-3	E611D	110 µg/L	100 µg/L	110	60.0	140	---
		Trichloroethane, 1,1,1-	71-55-6	E611D	101 µg/L	100 µg/L	101	60.0	140	---
		Trichloroethane, 1,1,2-	79-00-6	E611D	83.6 µg/L	100 µg/L	83.6	60.0	140	---
		Trichloroethylene	79-01-6	E611D	105 µg/L	100 µg/L	105	60.0	140	---
		Xylene, m+p-	179601-23-1	E611D	229 µg/L	200 µg/L	114	60.0	140	---
		Xylene, o-	95-47-8	E611D	107 µg/L	100 µg/L	107	60.0	140	---

Chain of Custody (COC)
Manitoba Drinking Water Systems

Regular Service (default):	<input type="checkbox"/> Regular Service (is 5-7 Days):
Unless otherwise requested	<input type="checkbox"/> 1 Day, rush / priority <input type="checkbox"/> 2 Day, rush / priority <input type="checkbox"/> 3 Day, rush / priority

Email PDF copy to:
 DWO: Sarah Bellisle
 DWO Address: Unit B-284 Reimer Ave., Steinbach, MB R5G
 DWO Phone: (204) 371-5065
 COA Email: odw.invoices@gov.mb.ca
 EDD Email: wqemsdata@gov.mb.ca

Report to Operator (email PDF):
 Contact: Alain Gauthier
 Address: Box 398, St. Malo, MB R0A 1T0
 Phone: (204) 433-7406
 Email: stmalopw@rmdesalaberry.mb.ca

Report to Owner (email PDF):
 Contact: Denise Parent
 Address: Box 40, St-Pierre-Jolys, MB R0A1V0
 Phone: (204) 433-7406
 Email: cao@rmdesalaberry.mb.ca

If an update in Owner or Operator contact information is required, please contact your Drinking Water Officer

Client / Project Information:	Lab:	Account:	Agency Code: 382	Report Type: EMS (Lab-MWS)	Project: DWQ-C
Operation Name: ST. MALO - PWS					
Operation Code: 217.50			Expected Sample Time:	January-2025	
Operation ID: 21231					
Sampled by: A. Gauthier					

Please record Free & Total Chlorine residuals for Distribution By-product Sampling
DO NOT COPY or RE-USE this form. Sample Number are unique to the Office of Drinking Water and provided by Drinking Water Officer.

Sample Number	Station Number	Sample Identification	Free Chlorine (mg/L)	Total Chlorine (mg/L)	Sample Date dd-mmm-yyyy	Sample Time hh:mm	Sample Matrix	Sample Type	MB-VOC-PWS-V2013	MB-MET-T-CCMS	MB-CH-PWS-V2013	# of Containers
2501S85010	MB05OED041	St. Malo 1 - Raw			09/09/2025	10:30 AM	6	1	X			6
2501S85011	MB05OED042	St. Malo 2 - Treated	1.19	1.36	09/09/2025	10:30 AM	10	1	X			4
2501S85012	MB05OED043	St. Malo 3 - Distribution 174 St-MALO ST	1.04	1.20	09/09/2025	10:30 AM	9	1	X			1

Environmental Division
Winnipeg
Work Order Reference
WP2515499

Failure to complete all portions of this form may delay analysis.
 Please fill in this form LEGIBLY.
 Sample Matrix: 6-Raw Water, 9-Distribute
 Sample Type: 1-Grab Sample
 By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified by the Laboratory.
 For ALL other testing, please use Laboratory specific forms.

Relinquished By:	Date & Time:	Validated By (lab use only):	Sample Condition (lab use only):	Temperature	Samples Received in Good Condition?
Received By: (lab use only)	Date & Time: (lab use only)			14.5	Y / N

Sup 9/25 1:01



Telephone: +1 204 255 0720

PUBLIC NOTICE

BOIL WATER ADVISORY FOR THE ST. MALO PUBLIC WATER SYSTEM

Issued by the Medical Officer of Health, Manitoba Health and
the Office of Drinking Water, Manitoba Environment and Climate Change

January 14, 2025

Scheduled maintenance to the water system will lead to the loss of water pressure in the St. Malo public water system distribution system. Distribution depressurization can compromise the safety of the water supply. A boil water advisory is being issued starting at **1 pm on January 14, 2025** to ensure the protection of public health.

RECOMMENDATIONS

Until further notice, all water used for consumption should be brought to a rolling boil for at least one minute before it is used for:

- Drinking and ice making
- Preparing beverages, such as infant formula
- Preparing food, including washing fruits and vegetables
- Brushing teeth

It is **not** necessary to boil tap water used for other household purposes, such as laundry or washing dishes. Adults and older children that are able to avoid swallowing the water can wash, bathe, or shower. Young children should be sponge bathed. If boiling is not practical, an alternate and safe supply of water should be used for consumptive purposes; i.e. bottled water. [Boil Water Advisory Fact Sheet #1 - Boil Water Advisory For Manitoba Water System Users](#) contains additional information on water use and can be found on the website below.

All commercial, public and permitted facilities (ex: restaurants, health care facilities, day cares, personal care homes and other private facilities that provide food and water services) must follow water use recommendations from the [Boil Water Advisory Fact Sheet #3 – Boil Water Advisory For Commercial/Public Facilities](#). A copy of this Fact Sheet is available on the website below.

To avoid burn injuries from hot water, caution should be taken. Please keep young children away from boiling water. Place kettles and pots away from counter and stove edges.

Please share this information with other people who use the tap water, especially those who may not have received this notice directly (ex: renters, tenants, staff, or clients). This notice can also be posted in common areas where people tend to gather.

DURATION

The Boil Water Advisory will remain in effect until the water supplied by this water system no longer presents a risk to public health. You will be notified when the advisory has been rescinded.

If you have any questions or concerns, please contact RM of De Salaberry at 204-433-7406 or the Regional Drinking Water Officer at 204-371-5065, or Health Links at 204-788-8200 (toll free at 1-888-315-9257).

To review Fact Sheets on water use, please go to www.manitoba.ca/drinkingwater or <http://www.gov.mb.ca/health/publichealth/environmentalhealth/water.html>



Health, Seniors and Active Living

Dr. Mahmoud Khodaveisi
Medical Officer of Health
180 Centenaire Dr. Southport MB R0H 1N1
www.manitoba.ca

January 16, 2025

Code: 217.50

Rural Municipality of De Salaberry
Denise Parent, Chief Administrative Officer
Box 40
St-Pierre-Jolys MB R0A 1V0
cao@rmdesalaberry.mb.ca

RE: BOIL WATER ADVISORY ISSUED TO ST. MALO PUBLIC WATER SYSTEM

Dear Denise Parent:

Drinking Water Officer, Sarah Belisle has advised me that the St. Malo public water system has met all conditions for rescinding the boil water advisory and that bacteriological testing results meet regulatory standards.

I am therefore rescinding the boil water advisory that was placed on the St. Malo public water system on January 14, 2025.

Please ensure all water users are notified that the advisory has been rescinded and that normal water usage can be resumed. A copy of this letter can be provided as notification. Notices posted in public locations such as washrooms are to be removed.

Should you have any questions, please contact Sarah Belisle, Regional Drinking Water Officer at 204-371-5065.

Sincerely,

Dr. Mahmoud Khodaveisi
Medical Officer of Health
Southern Health – Santé Sud

cc:

Sacha Janzen – A/Director, Office of Drinking Water
Marc Balcaen – A/Manager, Field Operations, Office of Drinking Water
Dr. Davinder Singh - Medical Officer of Health
Alain Gauthier, Operator stmalopw@rmdesalaberry.mb.ca
Public Health Inspector - healthprotection@gov.mb.ca
Southern Health-Santé Sud Emergency Preparedness Program
(DisasterManagement@southernhealth.ca)



Health, Seniors and Active Living

Dr. Davinder Singh
Medical Officer of Health
180 Centenaire Dr. Southport MB R0H 1N1
www.manitoba.ca

March 27, 2025

Code: 217.50

Rural Municipality of De Salaberry
Denise Parent, Chief Administrative Officer
Box 40
St-Pierre-Jolys MB R0A 1V0
cao@rmdesalaberry.mb.ca

RE: BOIL WATER ADVISORY ISSUED TO ST. MALO PUBLIC WATER SYSTEM – SCHEDULED MAINTENANCE

Dear Denise Parent:

Scheduled maintenance to the water system will lead to the loss of water pressure in the St. Malo public water system distribution system. Distribution depressurization can compromise the safety of the water supply. A boil water advisory is being issued starting at **10 pm on April 1, 2025** to ensure the protection of public health. The pressure will be restored at 6 am on April 2 but the advisory will remain in place until bacteriological testing results meet regulatory standards.

Section 17(1) of *The Drinking Water Safety Act* states that:

A boil water advisory may be issued by a medical officer if the person issuing the advisory reasonably believes that water from a water system is or may be unsafe for domestic purposes unless it is boiled or otherwise disinfected.

I am requesting that you as owner of the water supply immediately advise all water users affected by the boil water advisory, reaching as many individuals and organizations in the fastest and most feasible way possible, by distributing the attached notice. Emphasis should be placed on public facilities with vulnerable users such as hospitals, personal care homes, day cares, and schools. In addition, a copy of the notice must be posted on your website and updated accordingly.

Water users must be advised that all water used for consumption be brought to a rolling boil for at least one minute. This includes water used for drinking, preparing food, making ice, washing vegetables and fruit, brushing teeth, and making infant formula. As an alternative, individuals may also choose to use a known safe source of water such as bottled water. Water may be used for general domestic purposes including hand washing, bathing and showering (provided the water is not swallowed), dishwashing and laundry.

Copies of the following Fact Sheets should be made available to the public at the municipal office:

- Boil Water Advisory Fact Sheet #1 – Boil Water Advisory For Drinking Water Only



- Boil Water Advisory Fact Sheet #3 – Boil Water Advisory for Commercial/Public Facilities

Fact sheets can be obtained from your Regional Drinking Water Officer, or are available at www.manitoba.ca/drinkingwater.

This Boil Water Advisory will remain in effect until the following actions are taken:

- Maintenance has been completed, distribution system pressures and chlorine residuals have returned to normal operating levels.
- Submit two sets of bacteriological tests, including a **minimum of one treated and three distribution samples**. These tests must be collected at least 24 hours apart, and the results from the consecutive tests must meet regulatory standards.
- Comply with any other directives issued by the Office of Drinking Water or Medical Officer of Health.

Once the above conditions are met to the satisfaction of the Medical Officer of Health the advisory will be rescinded. The Office of Drinking Water needs to be contacted to confirm rescind conditions have been met prior to removing notices. At that time you will be issued a rescind letter to give notice to all water users that the conditions that led to the issuance of the advisory have been successfully addressed, the advisory has been rescinded and they can resume normal use of the water.

Should you have any questions, please contact Sarah Belisle, Regional Drinking Water Officer at 204-371-5065.

Sincerely,

Dr. Davinder Singh
Medical Officer of Health
Southern Health – Santé Sud

cc:

Sacha Janzen – Director, Office of Drinking Water
Marc Balcaen – Manager, Field Operations, Office of Drinking Water
Dr. Mahmoud Khodaveisi - Medical Officer of Health
Wajed Shah – Regional Drinking Water Officer, Office of Drinking Water
Alain Gauthier, Operator stmalopw@rmdesalaberry.mb.ca
Public Health Inspector - healthprotection@gov.mb.ca
Southern Health-Santé Sud Emergency Preparedness Program
(DisasterManagement@southernhealth.ca)



Health, Seniors and Active Living

Dr. Davinder Singh
Medical Officer of Health
180 Centenaire Dr. Southport MB R0H 1N1
www.manitoba.ca

April 4, 2025

Code: 217.50

Rural Municipality of De Salaberry
Denise Parent, Chief Administrative Officer
Box 40
St-Pierre-Jolys MB R0A 1V0
cao@rmdesalaberry.mb.ca

RE: RESCIND BOIL WATER ADVISORY ISSUED TO ST. MALO PUBLIC WATER SYSTEM

Dear Denise Parent:

Drinking Water Officer, Wajed Shah has advised me that the St. Malo public water system has met all conditions for rescinding the boil water advisory and that bacteriological testing results meet regulatory standards.

I am therefore rescinding the boil water advisory that was placed on the St. Malo public water system on April 1, 2025.

Please ensure all water users are notified that the advisory has been rescinded and that normal water usage can be resumed. A copy of this letter can be provided as notification. Notices posted in public locations such as washrooms are to be removed.

Should you have any questions, please contact Wajed Shah at 204-408-8807.

Sincerely,

Dr. Davinder Singh
Medical Officer of Health
Southern Health – Santé Sud

cc:

Sacha Janzen – Director, Office of Drinking Water
Marc Balcaen – Manager, Field Operations, Office of Drinking Water
Sarah Belisle – Regional Drinking Water Officer, Office of Drinking Water
Dr. Mahmoud Khodaveisi - Medical Officer of Health
Alain Gauthier, Operator stmalopw@rmdesalaberry.mb.ca
Public Health Inspector - healthprotection@gov.mb.ca
Southern Health-Santé Sud Emergency Preparedness Program
(DisasterManagement@southernhealth.ca)



Health, Seniors and Active Living

Dr. Mahmoud Khodaveisi
Medical Officer of Health
180 Centenaire Dr. Southport MB R0H 1N1
www.manitoba.ca

May 1, 2025

Code: 217.50

Rural Municipality of De Salaberry
Denise Parent, Chief Administrative Officer
Box 40
St-Pierre-Jolys MB R0A 1V0
cao@mdesalaberry.mb.ca

RE: BOIL WATER ADVISORY ISSUED TO ST. MALO PUBLIC WATER SYSTEM – SCHEDULED MAINTENANCE

Dear Denise Parent:

Scheduled maintenance to the water system will lead to the loss of water pressure in the St. Malo public water system distribution system. Distribution depressurization can compromise the safety of the water supply. A boil water advisory is being issued starting at 10 pm on May 6, 2025 to ensure the protection of public health. The pressure will be restored once maintenance work is completed but the advisory will remain in place until bacteriological testing results meet regulatory standards.

Section 17(1) of *The Drinking Water Safety Act* states that:

A boil water advisory may be issued by a medical officer if the person issuing the advisory reasonably believes that water from a water system is or may be unsafe for domestic purposes unless it is boiled or otherwise disinfected.

I am requesting that you as owner of the water supply immediately advise all water users affected by the boil water advisory, reaching as many individuals and organizations in the fastest and most feasible way possible, by distributing the attached notice. Emphasis should be placed on public facilities with vulnerable users such as hospitals, personal care homes, day cares, and schools. In addition, a copy of the notice must be posted on your website and updated accordingly.

Water users must be advised that all water used for consumption be brought to a rolling boil for at least one minute. This includes water used for drinking, preparing food, making ice, washing vegetables and fruit, brushing teeth, and making infant formula. As an alternative, individuals may also choose to use a known safe source of water such as bottled water. Water may be used for general domestic purposes including hand washing, bathing and showering (provided the water is not swallowed), dishwashing and laundry.

Copies of the following Fact Sheets should be made available to the public at the municipal office:

- Boil Water Advisory Fact Sheet #1 – Boil Water Advisory For Drinking Water Only

- Boil Water Advisory Fact Sheet #3 – Boil Water Advisory for Commercial/Public Facilities

Fact sheets can be obtained from your Regional Drinking Water Officer, or are available at www.manitoba.ca/drinkingwater.

This Boil Water Advisory will remain in effect until the following actions are taken:

- Maintenance has been completed, distribution system pressures and chlorine residuals have returned to normal operating levels.
- Submit two sets of bacteriological tests, including a **minimum of one treated and three distribution samples**. These tests must be collected at least 24 hours apart, and the results from the consecutive tests must meet regulatory standards.
- Comply with any other directives issued by the Office of Drinking Water or Medical Officer of Health.

Once the above conditions are met to the satisfaction of the Medical Officer of Health the advisory will be rescinded. The Office of Drinking Water needs to be contacted to confirm rescind conditions have been met prior to removing notices. At that time you will be issued a rescind letter to give notice to all water users that the conditions that led to the issuance of the advisory have been successfully addressed, the advisory has been rescinded and they can resume normal use of the water.

Should you have any questions, please contact Sarah Belisle, Regional Drinking Water Officer at 204-371-5065.

Sincerely,



Dr. Mahmoud Khodaveisi
Medical Officer of Health
Southern Health – Santé Sud

cc:

Sacha Janzen – Director, Office of Drinking Water
Marc Balcaen – Manager, Field Operations, Office of Drinking Water
Dr. Davinder Singh - Medical Officer of Health
Alain Gauthier, Operator stmalopw@rmdesalaberry.mb.ca
Public Health Inspector - healthprotection@gov.mb.ca
Southern Health-Santé Sud Emergency Preparedness Program
(DisasterManagement@southernhealth.ca)

PUBLIC NOTICE

BOIL WATER ADVISORY FOR THE ST. MALO PUBLIC WATER SYSTEM

Issued by the Medical Officer of Health, Manitoba Health and
the Office of Drinking Water, Manitoba Environment and Climate Change

May 20, 2025

Scheduled maintenance to the water system will lead to the loss of water pressure in the St. Malo public water system distribution system. Distribution depressurization can compromise the safety of the water supply. A boil water advisory is being issued starting at 1:30 pm on May 20, 2025 to ensure the protection of public health. The pressure will be restored once maintenance work is completed but the advisory will remain in place until bacteriological testing results meet regulatory standards.

RECOMMENDATIONS

Until further notice, all water used for consumption should be brought to a rolling boil for at least one minute before it is used for:

- Drinking and ice making
- Preparing beverages, such as infant formula
- Preparing food, including washing fruits and vegetables
- Brushing teeth

It is not necessary to boil tap water used for other household purposes, such as laundry or washing dishes. Adults and older children that are able to avoid swallowing the water can wash, bathe, or shower. Young children should be sponge bathed. If boiling is not practical, an alternate and safe supply of water should be used for consumptive purposes; i.e. bottled water. [Boil Water Advisory Fact Sheet #1 - Boil Water Advisory For Manitoba Water System Users](#) contains additional information on water use and can be found on the website below.

All commercial, public and permitted facilities (ex: restaurants, health care facilities, day cares, personal care homes and other private facilities that provide food and water services) must follow water use recommendations from the [Boil Water Advisory Fact Sheet #3 – Boil Water Advisory For Commercial/Public Facilities](#). A copy of this Fact Sheet is available on the website below.

To avoid burn injuries from hot water, caution should be taken. Please keep young children away from boiling water. Place kettles and pots away from counter and stove edges.

Please share this information with other people who use the tap water, especially those who may not have received this notice directly (ex: renters, tenants, staff, or clients). This notice can also be posted in common areas where people tend to gather.

DURATION

The Boil Water Advisory will remain in effect until the water supplied by this water system no longer presents a risk to public health. You will be notified when the advisory has been rescinded.

If you have any questions or concerns, please contact RM of De Salaberry at 204-433-7406 or the Regional Drinking Water Officer at 204-371-5065, or Health Links at 204-788-8200 (toll free at 1-888-315-9257).

To review Fact Sheets on water use, please go to www.manitoba.ca/drinkingwater or <http://www.gov.mb.ca/health/publichealth/environmentalhealth/water.html>

November 9, 2025.

Code: 217.50

Rural Municipality of De Salaberry
Box 40
St-Pierre-Jolys, MB. R0A 1V0

RE: BOIL WATER ADVISORY ISSUED TO A PORTION OF THE ST.MALO WATER SYSTEM

Dear Denise Parent:

A line break on November 9, 2025, has led to the loss of water pressure in the a portion of the St. Malo distribution system affecting Lerang st, and Lafournaise st.. Distribution depressurization can compromise the safety of the water supply; therefore, a boil water advisory has been issued to ensure public health protection.

Section 17(2) of *The Drinking Water Safety Act* states that:

A boil water advisory may be issued by the director or a drinking water officer, without Medical Officer of Health consultation if the person issuing the advisory reasonably believes that water from a water system is or may be unsafe for domestic purposes unless it is boiled or otherwise disinfected and public health would be better protected by quickly issuing an advisory. The Medical Officer of Health has been notified of the advisory via copy of this letter.

I am requesting that you as owner of the water supply immediately advise all water users affected by the boil water advisory, reaching as many individuals and organizations in the fastest and most feasible way possible, by distributing the attached notice. Emphasis should be placed on public facilities with vulnerable users such as hospitals, personal care homes, day cares, and schools. In addition, a copy of the notice must be posted on your website and updated accordingly.

Water users must be advised that all water used for consumption be brought to a rolling boil for at least one minute. This includes water used for drinking, preparing food, making ice, washing vegetables and fruit, brushing teeth, and making infant formula. As an alternative, individuals may also choose to use a known safe source of water such as bottled water. Water may be used for general domestic purposes including hand washing, bathing and showering (provided the water is not swallowed), dishwashing and laundry.

Copies of the following Fact Sheets should be made available to the public:

- Boil Water Advisory Fact Sheet #1 – Boil Water Advisory For Drinking Water Only
- Boil Water Advisory Fact Sheet #3 – Boil Water Advisory for Commercial/Public Facilities

Fact sheets can be obtained from your Regional Drinking Water Officer, or are available at www.manitoba.ca/drinkingwater.

This Boil Water Advisory will remain in effect until the following actions are taken:

- There has been sufficient time or flushing following restoration of water services to ensure that any remaining potentially contaminated water in the distribution system has been eliminated;
- One set of bacteriological tests, including a minimum of three distribution samples from the affected area with results meeting regulatory standards; One sample upstream of the repair, one sample downstream of the repair, and one sample as close to the repair as possible.
- Comply with any other directives issued by the Office of Drinking Water or Medical Officer of Health.

Once the above conditions are met to the satisfaction of the Medical Officer of Health the advisory will be rescinded. The Office of Drinking Water needs to be contacted to confirm rescind conditions have been met prior to removing notices. At that time you will be issued a rescind letter to give notice to all water users that the conditions that led to the issuance of the advisory have been successfully addressed, the advisory has been rescinded and the water is safe for consumption.

Should you have any questions, please contact me at 204-391-1811.

During regular business hours please contact your normally assigned drinking water officer, Sarah Beslisle at 204-371-5065.

Sincerely,

Ed Sexton

Digitally signed by Ed
Sexton
Date: 2025.11.09
11:28:01 -0600

Regional Drinking Water Officer

cc:

Tim Hilderman – InterlakeEastern Regional Medical Officer of Health

Sacha Janzen – A/Director, Office of Drinking Water

Marc Balcaen – A/Manager, Field Operations, Office of Drinking Water

Caitlin Van Alstyne – Senior/Regional Drinking Water Officer, Office of Drinking Water

Public Health Inspector - healthprotection@gov.mb.ca

Southern Health Emergency Preparedness Program (DisasterManagement@southernhealth.ca)



CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: WP2509863	Laboratory	: ALS Environmental - Winnipeg
Client	: Rural Municipality of De Salaberry	Account Manager	: Riya Gill
Contact	: Chantel Wintoniw	Address	: 1329 Nialkwa Road East, Unit 12
Address	: PO Box 40		: Winnipeg MB Canada R2J 3T4
	: St-Pierre-Jolys Manitoba Canada RDA 1V0	Telephone	: +1 204 255 9720
Telephone	: ---	Date Samples Received	: 26-Jun-2025 11:06
Project	: ---	Date Analysis Commenced	: 02-Jul-2025
PO	: ---	Issue Date	: 07-Jul-2025 10:26
C-O-C number	: ---		
Sampler	: ---		
Site	: ---		
Quote number	: 2025 Lead Monitoring Program		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Kevin Baxter		Metzls, Winnipeg, Manitoba



No Breaches Found

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key:

LOR: Limit of Reporting (detection limit).

Unit	Description
mg/L	milligrams per litre

>: greater than.

<: less than.

Red shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).

For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.



Analytical Results Evaluation

Matrix: Water				Client sample ID	Carm. Bud Bouchard 126 Benoit Ave	Michel Trudel 104 Benoit Ave	Rachael Prefeau 80 ru de L'eglise	Emilie Cateiller 172 St-Malo St	Derrick Callette 1 Place Maynard	Rachael Laroche 10 Allée du Paradis	Guy Larivière 203 St-Malo St
Client sampling date / time				25-Jun-2025 07:45	25-Jun-2025 10:00	25-Jun-2025 10:15	25-Jun-2025 10:15	25-Jun-2025 12:15	25-Jun-2025 12:45	25-Jun-2025 10:30	
Sub-Matrix				Water	Water	Water	Water	Water	Water	Water	
Analyte	CAS Number	Method/Lab	Unit	WP2608863-001	WP2608863-002	WP2608863-003	WP2608863-004	WP2608863-005	WP2608863-006	WP2608863-007	
Total Metals				Result	Result	Result	Result	Result	Result	Result	
Lead, total	7439-82-1	E420 Pb/WP	mg/L	0.000254	0.00834	0.000670	0.00203	0.000865	0.000652	0.00160	

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Water				Client sample ID	David Callette 184 St-Malo St	---	---	---	---	---	---
Client sampling date / time				25-Jun-2025 10:30	---	---	---	---	---	---	
Sub-Matrix				Water	---	---	---	---	---	---	
Analyte	CAS Number	Method/Lab	Unit	WP2608863-008	---	---	---	---	---	---	
Total Metals				Result	---	---	---	---	---	---	
Lead, total	7439-82-1	E420 Pb/WP	mg/L	0.00170	---	---	---	---	---	---	

Please refer to the General Comments section for an explanation of any result qualifiers detected.



CERTIFICATE OF ANALYSIS

Work Order	: WP2509863	Laboratory	: ALS Environmental - Winnipeg
Client	: Rural Municipality of De Salaberry	Account Manager	: Riya Gill
Contact	: Chantal Wintoniw	Address	: 1329 Niakwa Road East, Unit 12
Address	: PO Box 40		: Winnipeg MB Canada R2J 3T4
	: St-Pierre-Jolys Manitoba Canada R0A 1V0	E-mail	: rya.gill@alsglobal.com
Telephone	: ---	Telephone	: +1 204 255 9720
Project	: ---	Date Samples Received	: 25-Jun-2025 11:05
PO	: ---	Date Analysis Commenced	: 02-Jul-2025
C-O-C number	: ---	Issue Date	: 07-Jul-2025 10:26
Sampler	: ---		
Site	: ---		
Quota number	: 2025 Lead Monitoring Program		
No. of samples received	: 8		
No. of samples analysed	: 8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Kevin Baxter		Metals, Winnipeg, Manitoba



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (-) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	Description
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED ON SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Work Order : WP2509863
 Client : Rural Municipality of De Salaberry
 Project : ---



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID				
					Carm _ Sud Bouhard 126 Benoit Ave	Michel Trudel 104 Benot Ave	Rachel Prefeau 80 ru de L'eglise	Emilie Catellier 172 St-Malo St	Derrick Callette 1 Place Maynard
					Client sampling date / time				
Analyte	CAS Number	Method/Lab	LOR	Unit	25-Jun-2025 07:46	25-Jun-2025 10:00	25-Jun-2025 10:15	25-Jun-2025 10:15	25-Jun-2025 12:15
					WP2608863-001	WP2608863-002	WP2608863-003	WP2608863-004	WP2608863-005
					Result	Result	Result	Result	Result
Total Metale									
Lead, total	7439-92-1	E420.Pb/WP	0.000050	mg/L	0.000264	0.00824	0.000670	0.00203	0.000865

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID				
					Rachel Laroche 10 Allée du Paradis	Guy Larviere 203 St Malo St	David Callette 184 St Malo St	---	---
					Client sampling date / time				
Analyte	CAS Number	Method/Lab	LOR	Unit	25-Jun-2025 12:45	25-Jun-2025 10:30	25-Jun-2025 10:30	---	---
					WP2608863-008	WP2608863-007	WP2608863-008	---	---
					Result	Result	Result	---	---
Total Metale									
Lead, total	7439-92-1	E420.Pb/WP	0.000050	mg/L	0.000682	0.00160	0.00170	---	---

Please refer to the General Comments section for an explanation of any qualifiers detected.



QUALITY CONTROL INTERPRETIVE REPORT

Work Order	:WP2509863	Page	: 1 of 6
Client	:Rural Municipality of De Salaberry	Laboratory	: ALS Environmental - Winnipeg
Contact	:Chantel Wintoniw	Account Manager	: Riya Gill
Address	:PO Box 40	Address	: 1329 Niakwa Road East, Unit 12
	:St-Pierre-Jolys MB Canada R0A 1V0		:Winnipeg, Manitoba Canada R2J 3T4
Telephone	:---	Telephone	: +1 204 255 9720
Project	:---	Date Samples Received	: 26-Jun-2025 11:06
PO	:---	Issue Date	: 07-Jul-2025 10:24
C-O-C number	:---		
Sampler	:---		
Site	:---		
Quote number	:2025 Lead Monitoring Program		
No. of samples received	:8		
No. of samples analysed	:8		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

- Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
- CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
- DGO: Data Quality Objective.
- LOR: Limit of Reporting (detection limit).
- RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "—" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.



Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and/or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ADTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: Water Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analysis Group / Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation			Eval	Analysis Date	Analysis		
			Preparation Date	Holding Times Rec	Actual			Holding Times Rec	Actual	Eval
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Carm _ Bud Bouchard 125 Benoit Ave	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) David Callette 194 St Malo St	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Derrick Callette 1 Place Maynard	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Emilie Casteller 173 St-Malo St	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Guy Lariviere 203 St Malo St	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Michel Trudel 104 Benoit Ave	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔
Total Metals : Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Rachel Laroche 10 Alee du Paradis	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔



Matrix: Water Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group: Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation			Analysis				
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Total Metals: Total Lead in Water by CRC ICPMS										
HDPE total (nitric acid) Rachel Preteau 80 ru de L'Église	E420.Pb	25-Jun-2025	02-Jul-2025	180 days	7 days	✔	02-Jul-2025	180 days	7 days	✔

Legend & Qualifier Definitions

Rec. HT: ALD recommended hold time (see units).



Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: Water

Evaluation: + = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type	Method	QC Lot #	Count		Frequency (%)		Evaluation
			QC	Regular	Actual	Expected	
Laboratory Duplicates (DUFP)							
Total Lead in Water by CRD ICPMS	E420 Pb	2084636	1	8	12.5	5.0	✓
Laboratory Control Samples (LCS)							
Total Lead in Water by CRD ICPMS	E420 Pb	2084636	1	8	12.5	5.0	✓
Method Blanks (MB)							
Total Lead in Water by CRD ICPMS	E420 Pb	2084636	1	8	12.5	5.0	✓
Matrix Spikes (MS)							
Total Lead in Water by CRD ICPMS	E420 Pb	2084636	1	8	12.5	5.0	✓



Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Lead in Water by CRC ICPMS	E420.Pb ALS Environmental - Winnipeg	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS.



QUALITY CONTROL REPORT

Work Order	:WP2509863	Page	: 1 of 3
Client	:Rural Municipality of De Galaberry	Laboratory	:ALS Environmental - Winnipeg
Contact	:Chantel Wintoniw	Account Manager	:Riya Gill
Address	:PO Box 40	Address	:1329 Niakwa Road East, Unit 12
	:St-Pierre-Jolys MB Canada RDA 1VD		:Winnipeg, Manitoba Canada R2J 3T4
Telephone	:---	Telephone	:+1 204 255 9720
Project	:---	Date Samples Received	:26-Jun-2025 11:06
PO	:---	Date Analysis Commenced	:02-Jul-2025
C-O-C number	:---	Issue Date	:07-Jul-2025 10:25
Dampler	:---		
Site	:---		
Quote number	:2025 Lead Monitoring Program		
No. of samples received	:8		
No. of samples analysed	:8		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Kevin Baxter	Supervisor - Inorganic	Winnipeg Metals, Winnipeg, Manitoba



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

- Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
- CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
- DQO = Data Quality Objective.
- LOR = Limit of Reporting (detection limit).
- RPD = Relative Percent Difference
- # = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "—" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: Water					Laboratory Duplicate (DUP) Report							
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier	
Total Metals (QC Lot: 2084636)												
WP2509663-001	Client: Bud Bouchard 125 Stenoil Ave	Lead, total	7439-02-1	E420.Pb	0.000050	mg/L	0.000264	0.000268	0.000005	Diff <2x LOR	---	

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Water							
Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier	
Total Metals (QC Lot: 2084636)							
Lead, total	7439-02-1	E420.Pb	0.00005	mg/L	<0.000050	---	



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Water

Laboratory Control Sample (LCS) Report									
Analyte	CAS Number	Method	LOD	Unit	Spike	Recovery (%)	Recovery Limits (%)		Qualifier
					Target Concentration	LCS	Low	High	
Total Metals (CCLo: 2084636)									
Lead, total	7439-92-1	E420.Pb	0.00005	mg/L	0.5 mg/L	105	80.0	120	—

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MD DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND = Recovery not determined, background level >= 1x spike level.

Sub-Matrix: Water

Matrix Spike (MS) Report										
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Spike		Recovery (%)	Recovery Limits (%)		Qualifier
					Concentration	Target	MS	Low	High	
Total Metals (CCLo: 2084636)										
WP2509863-001	Cerm. Blvd Bouchard 125 Benoit Ave	Lead, total	7439-92-1	E420.Pb	0.0183 mg/L	0.02 mg/L	91.5	70.0	130	—



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

- Anonymous - Refers to samples which are not part of this work order, but which formed part of the QC process lot.
- CAS Number - Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
- DQO - Data Quality Objective.
- LOR - Limit of Reporting (detection limit).
- RPD - Relative Percent Difference
- # - Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "-" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: Water					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 2131320)											
WP2511866-001	Anonymous	Lead, total	7439-92-1	E420 Pb	0.000050	mg/L	0.000282	0.000286	0.000004	Diff <= LOR	---

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Water							
Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier	
Total Metals (QCLot: 2131320)							
Lead, total	7439-92-1	E420 Pb	0.00005	mg/L	<0.000050	---	



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report					
					Spike		Recovery (%)		Recovery Limits (%)	
					Target Concentration	LCS	Low	High	Qualifier	
Total Metals (QCLot: 2131320)										
Lead, total	7439-92-1	E420 Pb	0.00005	mg/L	0.5 mg/L	102	80.0	120	---	

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level => 1x spike level.

Sub-Matrix: Water

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Matrix Spike (MS) Report					
					Spike		Recovery (%)		Recovery Limits (%)	
					Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 2131320)										
WP2511866-002	Anonymous	Lead, total	7439-92-1	E420 Pb	0.0192 mg/L	0.02 mg/L	95.8	70.0	130	---



Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here (lab use only)

COC Number

Environmental Division
Winnipeg
Work Order Reference
WP2511870



Telephone: +1 204 269 9720

Report To Contact and company name below will appear on the final report Company: Rural Municipality of De Salaberry Contact: Charlel Wintoniw Phone: 204-433-7406 ext 7 Company address below will appear on the final report Street: Box 40, 406 Sabourin Street City/Province: St Pierre-Jolys, MB Postal Code: R9A 1V0 Invoice To: Same as Report To <input type="checkbox"/> YES <input type="checkbox"/> NO Copy of Invoice with Report <input type="checkbox"/> YES <input type="checkbox"/> NO Company: Contact:		Report Format / Distribution Select Report Format: <input type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> ECD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX (Email 1 or Fax: acao@rmdesalaberry.mb.ca Email 2: info@rmdesalaberry.mb.ca Email 3:		Select Service Level Below - Contact your AM Regular [R] <input type="checkbox"/> Standard TAT if received by 3 4 day [P4-20%] <input type="checkbox"/> 3 day [P3-25%] <input type="checkbox"/> 2 day [P2-50%] <input type="checkbox"/> Date and Time Required for all CAP TATs: For tests that can not be performed according to the service level set: Analysis Re:	
Project Information ALS Account # / Quote #: 2025 Lead Monitoring Program Job #: A/E/Cost Center: PO# PG / AFE: Meter/Misc Code: Routing Code: LSD: Requestor: Location:		Oil and Gas Required Fields (client use) ALS Contact: Sampler:		NUMBER OF CONTAINERS Indicate Filtered (F), Preserved (P) or Filtered and Preserved (FP) below Lead in DW (E-42-P) Analysis Re:	
ALS Lab Work Order # (lab use only):		Oil and Gas Required Fields (client use)		SAMPLES ON HOLD SUSPECTED HAZARD (see Special Instructions)	
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mm-yy)	Time (hr:mm)	Sample Type	
	Int + Katie Kirby 46 Tetrault	23-07-25	11:00 AM	Lead	
	Michele Trudel 104 Benoit re sample x2	23-07-25	2:30 PM	Lead	
Drinking Water (DW) Samples (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input type="checkbox"/> NO		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)		SAMPLE CONDITION AS RECEIVED (lab use only) Frozen <input type="checkbox"/> SIF Observations Yes <input type="checkbox"/> No <input type="checkbox"/> Ice Packs <input type="checkbox"/> Ice Cubes <input type="checkbox"/> Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/> Cooling Initiated <input type="checkbox"/> INITIAL COOLER TEMPERATURES °C: 14.5 C FINAL COOLER TEMPERATURES °C:	
SHIPMENT RELEASE (client use) Released by: Justin Collette Date: July 24/25 Time: 2:00 PM		INITIAL SHIPMENT RECEPTION (lab use only) Received by: GK Date: July 24 2025 Time: 1:50 PM		FINAL SHIPMENT RECEPTION (lab use only)	

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION
 WHITE - LABORATORY COPY YELLOW - CLIENT COPY
 Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.
 1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

