Town of Niverville Public Water System Operation Report 2023

The Town of Niverville strives to provide the highest quality drinking water in sufficient quantity to meet the needs of the residents. It is our goal to provide this water in a safe, cost-effective manner while remaining in compliance with all regulatory requirements governing the provision of potable water.

It is our belief that the public has a right to access information related to the potable water they consume. To that end the following report has been prepared for the Town of Niverville public water system.

Why do we treat our water?

We treat our water to ensure that safe and aesthetically pleasing potable water is supplied to our community. The Town of Niverville is committed to meeting and/or exceeding the water quality standards set by the province.

Where do we get our water from?

The raw water is currently obtained from two supply wells located one mile west of New Bothwell. The wells draw ground water from secured aquifers in the fractured limestone. Both wells were installed in 2017 and are both 200 mm in diameter. The first well has a total depth of 91.4m with a 300 mm welded black steel casing installed to a depth of 27.1 m. The second well has a total depth of 96.6 m with a 300 mm welded black steel casing installed to a depth of 27.4 m. The wells were tested by Friesen Drillers Ltd. to each have an estimated discharge rate of 500 Imperial Gallons Per Minute (IGPM). The raw water from these two wells is pumped via 50Hp submersible pumps that travel 10.5 km to the water treatment plant via a 350 mm High-density polyethylene (HDPE) pipeline.

What is our treatment process?

Raw water is pumped from the fractured limestone aquifer to the water treatment plant. The raw water enters the building where an online turbidimeter monitors the turbidity (clarity) of the water before the water is split between the two treatment process. The flow is split 50/50 with half of the water being directed to two sets of dual train reverse osmosis (RO) skid, while the other half is diverted to three biofilters.

Biofilter Treatment Process

The raw water that flows to the biofilters have online instrumentation which monitors the pH, ORP, temperature, and dissolved oxygen of the water. After these probes, an air sparger is installed in the pipe. The air sparger is used to inject air into the water to increase the dissolved oxygen levels going to the biofilters. This air is important to ensure the good bacteria in each of the biofilters can survive and thrive. These bacteria are what treats the water. There are two large air compressors installed in the building, which feed compressed air to the air sparger. After the air sparger, the flow is directed to three biofilters which run in parallel. When the water plant calls to make water based on the treatment mode, automated valves open to allow the flow of water through the biofilters. Inside each biofilter are layers of different sized gravel and a filtralite material. The bottom third of each filter is layered with different sizes of gravel between 1" inch diameter down to 1/8" inch diameter. The larger sized gravel naturally sits on the bottom of the tank. After the gravel layer is the filtralite material. The filtralite is installed on top of the gravel to about two thirds high in the tank. The last layer in the biofilter tank is for the raw water. The water makes up the remaining third of the filter. There are a couple different pipes installed in this gravel layer. One set of pipes is for the underdrain, while the other is for the air scour. The air scour piping is used during the biofilter backwash cycle. Air is injected through the air scour piping to mix up the material inside the filter. The underdrain piping collects the treated water which flows through the biofilter and is then directed to the treatment header. During the biofilter treatment, water is forced into the biofilter and down through the filtralite material which mainly removes iron and manganese from the water. This water is then collected into the underdrain pipe installed in the gravel layer. This treated water, which is now called filtrate, flows from the bottom of the filter to the treatment header. The filtrate coming out of each biofilter is being monitored for pH, ORP, dissolved oxygen, and turbidity by online instrumentation.

Reverse Osmosis (RO) Treatment Process

The raw water is directed to one of the two reverse osmosis multi train units (RO MTU). The flow direction is dependant on which mode of treatment is being used. Raw water is dosed with an anti-scalant prior to entering the skid. Online instrumentation monitors the conductivity, ORP, and temperature of the incoming water. The raw water then flows through a set of prefilters which remove larger debris and particles (sand, silt etc.) from the water. A booster pump then takes that water and increases the pressure to force the water through the reverse osmosis membranes. These membranes remove any particles and minerals from the water. The water that made it through the membranes is now treated and is called permeate water. The water that did not make it through the membranes is called concentrate. The RO units have a typical recovery rate of about 80%. This means that 80% of the water being pushed through the membrane will come out as permeate while the remaining 20% will be concentrate. The permeate water has online instrumentation monitoring the pH, conductivity, and turbidity before heading to the treatment header.

Treatment Header

The treatment header is where the biofilter filtrate, and the reverse osmosis permeate water meets before entering the reservoir. The RO permeate water is dosed with sodium hydroxide (caustic soda) to bring the pH level up to about 7.40. The permeate water then goes through an internal static mixer, which mixes the chemical that was just added. The permeate water and filtrate water then combine, where an online pH probe monitors the pH level of the treated water that is mixing. This treated water is then injected with aqua mag blended phosphate which is a corrosion inhibitor to limit corrosion on various metal piping. It is then dosed with sodium hypochlorite (chlorine) for the final disinfection before entering the reservoir. Each of the chemical pumps dose a set amount of chemical based on flow. This means that the more water being produced, the higher the chemical will be injected. This is so the pumps can be used for each different mode of treatment. Each chemical is equipped with two chemical pumps which run in a Duty / Standby configuration. This means that if one of the two pumps breaks down, the other pump will take over.

Reservoirs

The Niverville water treatment plant has three, below grade reservoirs with a combined capacity of 3,500 m3 (3,500,000 litre). The size of storage allows the chlorine proper contact time with the water (minimum 20 minutes) to confirm proper disinfection is taken place. Each reservoir is split into two different cells. This gives the operators the ability to isolate specific cells to allow them to be taken offline for cleaning. Interconnection piping between each cell and reservoir allows the flow of water to be directed to bypass any of the cells. Below is the information on each of the three reservoirs.

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Reservoir 1 (Cell 1&2 - 2007) – This reservoir has a 500,000 litre capacity Reservoir 2 (Cell 3&4 - 2010) – This reservoir has a 1,200,000 litre capacity Reservoir 3 (Cell 5&6 - 2023) – This reservoir has a 1,800,000 litre capacity
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Why do we disinfect our water?

The final step in the treatment of safe water is disinfection. Disinfection is the selective destruction or inactivation of disease-causing organisms in water. The *Drinking Water Safety Act* and supporting regulations require that potable water be in contact with chlorine for a minimum of 20 minutes before it enters the distribution system. The Town uses sodium hypochlorite (chlorine) to disinfect our water. The provincial standards mandate that the Town maintains a minimum residual chlorine level of 0.5 mg/L leaving the water plant.

What is our water plant classification and who is certified?

The facility classification and operator certification fall under The Environmental Acts Water and Wastewater Facility Operators Regulations. Currently, the water treatment plant, and the water distribution system are classified as a Class 2 facility. The Town of Niverville has the following operators available.

Water Treatment

Class II – 2 Certified Operators

Class I – 1 Certified Operator

Water Distribution

Class II - 2 Certified Operators

Class I - 1 Certified Operator

What is the 'distribution system'?

The water distribution system is the network of underground pipes used to carry the treated water from the water treatment facility to the homes & businesses within our community. We have both PVC (C-900) and High-density polyethylene (HDPE) piping through parts of the Town. The piping is interconnected (looped) to ensure that fresh safe potable water is continuously supplied. We carry out regular maintenance in the distribution system such as valve maintenance, hydrant flushing and fire hydrant testing in cooperation with the Town of Niverville Volunteer Fire Department.

Who do we serve water to?

The water distribution system is comprised of 1,459 service connections. All (100%) of the homes and businesses connected to the distribution system are metered.

Classification	Size	Number	
Residential (Single / Multi)	5/8", 3/4"	1,423	
Commercial / Institutional	1", 1.5", 2", 3"	36	
Total		1,459	

What are the water rates?

The water rates for the Town of Niverville have not changed since July 2018. The current rate for 1,000 gallons of water is \$11.18. Customers will pay the applicable minimum charge set below which includes the water allowance as listed.

Meter Size	Water Included	Gallons	Customer	Water	Water Total
	1000 of Ratio		Service	Commodity	Quarterly
			Charge	Charge	Minimum
5/8 inch	1	3,000	\$7.37	\$33.54	\$40.91
3/4 inch	2	6,000	\$7.37	\$67.08	\$74.45
1 inch	4	12,000	\$7.37	\$134.16	\$141.53
1 1/2 inch	10	30,000	\$7.37	\$335.40	\$342.77
2 inch	25	75,000	\$7.37	\$838.50	\$845.87
3 inch	45	135,000	\$7.37	\$1,509.30	\$1,516.67

Water Quality Standards

The Town's Operating license identifies that our public water system shall operate in a manner that achieves or exceed the quality/treatment standards specified in the table below.

Parameter	Quality Standard		
Total Coliform	Less than one total coliform bacteria detectable per 100 mL in all treated and distribution water		
E. Coli	Less than one E. Coli bacteria detectable per 100 mL in all treated and distribution 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 always 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		
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		

The parameters for total coliform and E. Coli are tested every two weeks. The remaining parameters from our licence that require testing were completed on February 23, 2021, The Town is required to do this testing every three years.

The Office of Drinking Water has given the deadline for testing these remaining parameters by August 2024. The biweekly sample information, plus the full water analysis report can be found on the Town of Niverville website at https://www.whereyoubelong.ca/town-services/financial-services/utilities/

Below is a summary of the testing results for each parameter listed on our licence.

Parameter	Unit	Guide Limit #1	Guide Limit #2	Spruce Drive - Raw Water	Spruce Drive - Treated Water	
Arsenic (As)	mg/L		0.01	0.00378	0.00162	
Benzene	mg/L		0.005	<0.00050		
Ethylbenzene	mg/L	0.0016	0.14	<0.00050		
Fluoride (F)	mg/L		1.5	0.883	0.196	
Lead (Pb)	mg/L		0.005	0.000371	<0.000050	
Manganese (Mn)	mg/L	0.02	0.12	0.00626	0.00112	
Nitrate (as N)	mg/L		10	<0.0050	0.0066	
Nitrite (as N)	mg/L		1	<0.0010	<0.0010	
Trichloroethylene	mg/L		0.005	<0.00050		
Tetrachloroethylene	mg/L		0.01	<0.00050		
Toluene	mg/L	0.024	0.06	<0.00050		
Total Xylenes	mg/L	0.02	0.09	<0.00064		
Uranium	mg/L		0.02	0.000249	0.000039	

Is our water tested? What for? When?

The Town's operating license identifies that our public water system shall ensure monitoring is completed as set out from the specified table below.

	Water Quality Monitoring		
Parameter	Monitoring Requirement		
Bacteriological (total coliform and E. coli)	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

What do we have in place to alert Operations Staff to water emergencies?

The Town has an operator on-call for sewer &-water emergencies 24 hours a day/ 7 days a week. This person can access the water plants-Supervisory Control and Data Acquisition (SCADA) system via their smart phone or laptop. Operators can check on the status of pumps, valves, sensors, flows, and chemical dosing. All equipment in the water plant has alarm parameters set specifically for that piece of equipment. If any equipment runs outside of those set parameters, an alarm will go off. Once an alarm is triggered, a signal is sent to an auto dialer which will call through a list of preset operators cell phone numbers until the alarm is acknowledged. The Operator can then log on to the SCADA system to determine the cause of the alarm. This allows operators to diagnose issues more efficiently and effectively.

Were there any emergencies, regulatory compliance issues or other operational issues to report for 2023?

On June 11 & 12, 2023 we had an issue maintaining our free chlorine residual exiting the water plant of above 0.50 mg/L. After diagnosing the chlorine feed system, a broken fitting was found near the chlorine injector. Because of this, chlorine was not dosed into the treated water before entering the reservoir. Because chlorine levels were dropping, chlorine was added directly to the reservoir cells to compensate for the drop. By June 13, the chlorine had stabilized across all three reservoirs.

Were there any drinking water safety orders issued?

In the reporting period, no Drinking Water Safety Orders were issued to the Town of Niverville's Spruce Drive water treatment plant.

Were there any boil water advisories?

In the reporting period, no boil water advisories were issued to the Town of Niverville's water treatment plant.

Were there any warnings issued, fines, or charges laid?

In the reporting period, no warnings or fines were issued to the Town of Niverville's water treatment plant.

Were there any major expenses incurred in 2023?

1. The Town of Niverville partnered with the Manitoba Water Service Board on the construction of a new water treatment plant building and reservoir. The project consists of adding a new-dual-train 40 L/sec membrane filtration system and 30 L/sec iron biofiltration system. This was to be housed within a new water treatment plant building on top of a new 1,800 m3 reservoir. This project was designed and engineered by Associated Engineering. Penn-Co Construction was the general contractor. Construction was completed in the Spring of 2023.

Total Project Cost; Approximately 8 million

Future system expansion or expenses expected?

1. A 3rd raw water supply well will be drilled to build redundancy into the raw water supply for the Town of Niverville Treatment Plant.

Estimated Cost: 1.5 million

Who can we call with questions or concerns regarding our drinking water?

All calls regarding water (emergency or not), please call the Town of Niverville directory (204)-388-4600 ext.1111 and leave a message. Staff will listen to the message within a reasonable amount of time and respond accordingly.

How can you find out about this report?

This report will be available on or before March 31 of each year. The Town will also post the link to this report on our Facebook page once available. The link for this report can be found on the Towns website under the resources section at https://www.whereyoubelong.ca/town-services/utilities/

Paper copies are available upon request at the Town Office.

If you wish to leave an email (non-emergency) please send it to ryan@whereyoubelong.ca

Water and Wastewater Facility Operators Certification Program

This is to certify that the

Spruce Drive Water Plant

owned by

Town of Niverville

has been classified as a

Class 2 Water Treatment Facility

in accordance with the Water and Wastewater Facility Operators Regulation under The Environment Act. this 30th day of May 2016. Winnipeg, Manitoba Dated at

Dire

2016-010

Certificate No.:

Manitoba Sustainable Development

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This is to certify that the

Spruce Drive Water Distribution

owned by

Town of Niverville

has been classified as a

Class 2 Water Distribution Facility

in accordance with the Water and Wastewater Facility Operators Regulation under The Environment Act.

Dated at Winnipeg, Manitoba

this 30th d

day of May 2016.

Certificare No.:

2016-011

Director

Manitoba Sustainable Development





OPERATING LICENCE FOR A PUBLIC WATER SYSTEM

LICENCE NUMBER: PWS-11-485-02

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

WATER SYSTEM CODE: 151.25

OPERATION ID: 42862

DECEMBER 1, 2021 EFFECTIVE DATE:

FEBRUARY 28, 2026 EXPIRY DATE:

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

TOWN OF NIVERVILLE: "THE LICENSEE"

FOR THE OPERATION OF THE NIVERVILLE SPRUCE DRIVE PUBLIC WATER SYSTEM, WHICH INCLUDES SECURE WELLS, 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 LICENCES FOR THIS PUBLIC WATER SYSTEM.

Siobhan

Digitally signed by

Burland Ross Date: 2021.11.22 08:43:19

DATE: November 22, 2021

Siobhan Burland Ross, P.Eng.

A/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 resubmit 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 or by a method acceptable to the issuer.

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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			
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			
Fluoride	Less than or equal to 1.5 mg/L			
Lead	Less than or equal to 0.005 mg/L			
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.

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5. WATER QUALITY MONITORING

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

Table 2: Monitoring Schedule

	Table 2. Wolldoning Conduc
Parameter	Monitoring Requirement
Bacteriological (total coliform and <i>E.</i> <i>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) manganese
 - d) total metals
 - e) 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 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.
- 5.5. The Licensee shall ensure that sampling within the distribution system takes place at varied locations acceptable to the drinking water officer.

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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.

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onthly Chlorination Report

Water System Name: Specific Description Water System Code: 151.25						
Month: January Year: 2023 Type of Measurement Device: Hack DR890						
Operator-in-charge (Print): Ryan Dyck Other Operators (Print): Andrew Rempel						
Daily Consumption Units: Cubic Mete						
Flow Meter for Daily Consumption: (circle choice) Raw Treated No Metering						

D - 4			Residua	als (mg/L)	Daily Consumption	
Date	Time	Initials	Free	Total		
1	9100gm	KN	0.85	1,01		
2	7.27cm	AR	0.79	0.92	557	
3	7:20an	AR	0.84	1,02	677	
4	7:22gn	AR	0.79	0.94	601	
5	7:160-	AR	0.82	0.96	634	
6	7.1800	AR	0.75	0.00	601	
7	605AA	CE	0.86	0.94	560	
8	7:01 Am	Tm.	35	1.11	676	
9	7:30 -	AR	0.98	1.16	747	
10	7.41 an	HR	081	097	631	
1	7:050	AR	0.92	1.07	597	
12	7:20 cm	112	0.90	1.06	625	
13	7:450m	AR	0.84	0.99	639	
14	6 Chin	(P	10.0	1.06	533	
15	4:14:00	50	0.87	0.84	1049	
16	9:50an	AR	0.88	1.03	441	

D -4-	Thurs	Indiala	Residua	Residuals (mg/L)		
Date	Time	Initials	Free	Total	Consumption	
17	7:1400	AR	0.90	1.05	534	
18	7:14am	AR	085	1.01	586	
19	7:50m	AR	0.88	1.04	623	
20	7:08cm	AR	1.08	1.25	589	
21	6:00 AM	CE	95	1.05	542	
22	7:05Am	Jm.	- 38	1,03	661	
23	82100	HR	0.87	1.06	769	
24	3.35m	AR	080	1.00	611	
25	9:31an	AR	0.77	0.91	591	
26	3.07an	AR	0.73	0.97	594	
27	9.00m	AR	0.92	1.08	670	
28	6 15am	KP	68.0	1.05	485	
29	6: 40 AM	CE	.96	1.05	662	
30	7 37am	AR	0.84	1.02	764	
31	7,2200	AR	0.93	0.97	601	
			Monthly Co	nsumption	19 225	

Ammonia in Treated Water

Date	Time	Initials	Ammonia (mg/L)	Date	Time	Initials	Ammonia (mg/L)
3	7.50m	AR	000	17	7.2400	HR	0.01
10	7 59	HR	001	24	8.47cm	AR	0.00

Date	Time	Initials	Ammonia (mg/L)
31	7:39am	AR	001

Residuals at Distribution Sample Lecations

				Residua	als (mg/L)
Date	Time	Initials	Location	Free	Total
0	71600	AR	22 Prestund Street	0.23	0.25
24	4:17cm	AR	1 Avena Road	0.78	0.94
				40.40	
					-

					1	
amitted by (Print):	Andrew	Rempel	Signature:	Aver	March	

PLEASE REFER TO OPERATING LICENCE FOR APPLICABLE TREATMENT STANDARDS AND MONITORING REQUIREMENTS. PLEASE CONTACT YOUR DRINKING WATER OFFICER WITH ANY COMMENTS, QUESTIONS OR CONCERNS.



Onthly Chlorination Report

imitted by (Print):_

Water	System N	ame: 🔼	pruce	Vrive	WIP	Water S	/stem	Code: 1	01.20				
Monti	1: Februa	Yes	ır: <u>202</u> 3						ch Di				
Opera	tor-in-cha	rge (Prin	t): Ryan	Dyck		Other Op	erato	rs (Print):	Anch	SW K	(35.	
	onsumption (
-	•			choice) Raw(Treated N	lo Metering							
		1		als (mg/L)				1	_	Resid	duais	(mg/L)	Daily
Date	Time	initials	Free	Total	Consu		Date	Time	Initials	Free		Total	Consumption
1	7.48m	AR	0.88	0.98	613	2	17	7:11 a	JK	.8	5	97	601
2	7:53	AR	0.81	0.99	61		18	6.584	-	2	7	83	557
3	7:30a	AR	0.80	0.92	57		19	5 99		1 07	7-0	.91	635
4	5-55 An	CE	0.83	0.90	565	-	20	9:03A		0.6	1	0-79	721
5	6:30Am		0075	0,85	67	-1	21	8 2Sc	AR	0.6		0.76	724
6	8 yran	AR	0.66	0.77	810	0	22	7:1500	AR	0.6		0.79	550
7	7:38mm	AR	0.74	0.97	55	5	23	7 1500		0.6	5 (0.80	621
8	7:160m	AR	0.80	0.95	574		24	7.179	JK	0.8	4	0.96	617
9	7:1200	AR	0.94	1.10	584		25	6:05 A	1 P	9.0		5.99	543
10	7:15m	AR	0.92	1.08	629	ò	26	6:30A	1 Jm.	29		101	628
1	6.02	KP	0.86	0.93	58	6	27	7:200	M 2K	,,90		1.01	719
12	3.0300	Am	.85	,97			28	7.180		. 85	5	97	630
13	7.26cm	AR	087	1.05	69		129	7.15	AJK		=		608
14	7.54	JK	0.86	1.02	60		30				-		
15	7:16 gm	りた	0.89	,99	58		31				_		- F - A
16	7:19am	JK	0.85	0.96	617	7			Total	Monthly	Const	mption	17,502
Ammo	nia in Treate	d Water											
			Ammonia			1	Amm		oate Tir		nitials	Ammon (mg/L)	
Date	Time	Initials AR	(mg/L)	2 1	Time	AR	O.C		74.08 111	II.C III	HUUND	(1100) 6	
1	7:53cm		0.00		7:45an		0.0					1	
14	7 49ag	MR	000	d &	/ . TOAN	101	U, C					-	
Residu	als at Distril	bution Sa	mple Locat	ions									
Date	Time	Initials		Location		Residua	1						
	11110	1111111111				Free	Tot						
7	7:240	AR		lace man		0.69							
21	915m	AR	25 Pres	stw.ck	S	0.52	0.5	Y					
							-	\rightarrow					
				lipha /			-						
			w				-						

PLEASE REFER TO OPERATING LICENCE FOR APPLICABLE TREATMENT STANDARDS AND MONITORING REQUIREMENTS. PLEASE CONTACT YOUR DRINKING WATER OFFICER WITH ANY COMMENTS, QUESTIONS OR CONCERNS.

Signature: 👱



nthly Chlorination Report

Water System Name: Spruce Drive WT Water System Code: 151.25
Month: March Year: 2023 Type of Measurement Device: Hach DR890
Operator-in-charge (Print): Ryon Dyck Other Operators (Print): Andrew Rennel
Dally Consumption Units: (ub: Melers
Flow Meter for Dally Consumption: (circle choice) Raw Treated No Metering

			Residua	ls (mg/L)	Daily
Date	Time	Initials	Free	Total	Consumption
1	7:15am	コボ	.78	.92	608
2	7:08 am	JK	.80	.89	614
3	7:12 am	JK	.78	.90	621
4	5:53Am	CE	78	. 36	552
5	6.55 AM	dn	.75	90	660
6	7:15am	JK	,81	,94	726
7	7:32an	AR	0.74	0.80	636
8	7:22 mm	JK	1.02	1,09	596
9	7:15am	JK	,97	1.15	595
10	7:48an	JK	1.05	1,23	580
	(41) Kid	P	1.52	132	229
12	7:00 am	5m	1,21	1.38	632
13	7:40 gm	JK	1,28	i 47	737
14	7:15am	JK	1.15	1.40	588
15	7:12 am	ゴド	1.13	1.35	594
16	7:1290	JK	1.12	1.34	636

	1. 141. 1.	Residual	s (mg/L)	Dally
Time	initials	Free	Total	Consumption
7:13am	JK	1.10	1.30	614
	CE	98	1.6	5.43
	KP	0.83	0.97	824
	JK	0.90	1.07	566
	JK	103	1.16	618
	71	097	1.15	604
	JK	0.92	1.09	625
7:15am	ZK	0.84	0.97	616
moso:f	12	0.74	0.86	571
9 4791	JK	0.85	0.98	751
	JK	0.91	0.98	617
	4人	0.84	0.98	606
7:13 am	丁化	0.84	0.92	579
	JK	0.86	0.90	571
	JK	0.82	0.91	585
	7:13am 5:574m 11:09am 7:15am 7:10am 7:15am 7:15am 7:15am 9:47am 7:12am 7:12am	7:13am JK 5:574m CE 11:09am KP 7:15am JK 7:20am JK 7:10am JK 7:15am JK 7:15am JK 7:15am JK 7:12am JK 7:10am JK 7:13am JK 7:17am JK	7:13am JK 1.10 5:574m CE .98 11:09am KP 0.83 7:15am JK 0.90 1:20am JK 1.03 7:10am JK 6.97 7:23am JK 0.92 7:15am JK 0.84 1:02am JK 0.85 7:12am JK 0.85 7:12am JK 0.84 7:13am JK 0.84 7:13am JK 0.84 7:13am JK 0.84	7:13am JK 1.10 1.30 5:574m CE .98 1.16 1:09am KP 0.83 0.97 7:15am JK 0.90 1.07 7:20am JK 0.90 1.16 7:10am JK 0.91 1.15 7:23am JK 0.92 1.09 7:15am JK 0.84 0.97 1:02am JK 0.85 0.98 7:12am JK 0.91 0.98 7:12am JK 0.91 0.98 7:13am JK 0.84 0.98 7:17am JK 0.86 0.90

Ammonia

Ammonia in Treated Water

Date	Time	Initials	Ammonia (mg/L)	Date	Time	Initials	Ammonia (mg/L)	Date	Time	Initi
7	7.47an	AB	0.00	21	7:35 am	ゴK	0.00			
14	7:30 am	3K	0.01	29	7:20am	ブ K	0.01			

ate	Time	Initials	(mg/L)	Date	Time	Initials	(mg/L)	Date	Time	Initials	(mg/L)	1
7	7.47an	AB	0.00	21	7:35 am	ゴK	0.00					1
4	7:30 am	3K	0.01	29	7:20am	ブK	0.01					
sidu	als at Distri	bution Sa	mple Locat	ions								

			imple Locations	Residual	s (mg/L)
Date	Time	Initials	Location	Free	Total
7	7:17am	AR	Avena Road	0.71	0.82
21	6 55 m	AR	829 Branstone	0.83	0.95

mitted by (Print):	Andrew	Rempe	Signature: Art Ann	
interes m. fr. comple			_	

Niverville WTP - Chlorine Report - April 2023

5 Water System Code:

Solo

Instrument Location: Distribution Chlorine

Rempe Other Operators: Andread Lead Operator: Ryon

Daily Usage E) 149 6.26 6.26 72.3 8800 533 6.12 20 577 500 396 437 584 Q Q % Within Standard 0.001 100.0 100,0 100.0 Number of Free Chlorine Readings 100.0 Below Standard 2 288 288 288 288 8640 Distribution Chlorine **Monthly Total** Minimum **Automation Records** 0.88 0.90 0.94 0.96 0.96 0.94 0.84 0.84 0.96 0.91 0.84 0.86 0.90 0.90 0.90 0.87 0.88 0.89 0.82 0.94 0.84 0.77 Chlorine, ppm Average 0.89 0.82 0.82 0.82 0.81 0.84 0.85 0.78 0.86 0.87 0.87 0.88 0.88 0.86 0.86 0.86 0.88 0.95 0.81 Operator Verification 0.89 0.091 0.095 0.093 0.083 0.083 0.083 0.085 0.83 Handheld 0.92 0.93 0.92 0.85 0.85 0.85 0.92 0.75 Total Chlorine 0.93 0.93 0.98 0.91 1.02 1.04 1.14 1,16 Operator Initials 暴 × % × 쥬쭕 ᆂᄬ 요독末국국 ⅀ 녹녹 粪 7:18 AM 6:00 AM 7:20 AM 9:00 AM 7:13 AM 7:12 AM 7:29 AM 3:16 PM 7:38 AM 7:20 AM 7:15 AM 7:24 AM 7:16 AM 7:12 AM 7:35 AM 6:20 AM 7:00 AM 7:22 AM 7:16 AM 7:12 AM 3:20 AM 7:15 AM 7:12 AM 8:05 AM Day of Month 2 = 5 E 7 5 5 7 9

100.09% Compliance with Chlorine Standard:

Submitted by (Print): Darew Zempe

Signature:

Niverville WTP - Chlorine Report - May 2023

Jun 1, 2023

Water System Code: |51,25

Instrument Location:Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Anchrew

Day of Month						i					
of Month				Operator \	Operator Verification	Automativ	Automation Records	Number	Number of Free Chlorine Readings	e Readings	
	Time	Operator Initials	Total Chlorine	Handheid	Display	Average	Minimum	Total	Below Standard	% Within Standard	Daily Usage (m³)
_	7:23 AM	폭	1.21	1.07	1.08	1.07	1.10	288	o	100.0	346
~	7:40 AM	¥	1.23	1.07	1.07	1.08	11.1	288	0	100.0	692
m	7:20 AM	¥	1.22	1.09	1.13	1.11	1.15	288	0	100.0	63
4	7:20 AM	포	1,30	1.12	1,07	1.08	1.12	288	0	100,0	691
l ru	7:05 AM	AR	1.25	1.01	1.06	1.13	1.40	288	0	100.0	P59
ø	7:00 AM	×	1.18	1.04	1.09	1.07	1.10	288	0	100.0	6.51
7	3:20 PM	BM	1.29	1.19	1.02	1.03	1.04	288	0	100.0	1717
œ	7:19 AM	복	1.20	1.06	1.06	1.06	1.10	288	0	100.0	447
6	7:16 AM	폭	1.25	1.09	1.11	1.09	1,12	288	0	100.0	699
10	7:20 AM	¥	1.30	1.09	1.05	1.07	1.10	288	Q	100.0	219
11	7:23 AM	복	1,23	1.06	1:11	1.06	1,11	288	a	100.0	717
12	7:13 AM	녹	1.22	1.06	1,01	1.03	1.07	288	0	100.0	7.80
13	6:58 AM	ŝ	1.20	1.01	1.05	1.05	1.07	288	0	100.0	691
14	7:02 AM	M	0.93	0.84	1.06	1.06	1.07	288	0	100.0	855
15	7:15 AM	¥	1.29	1.11	1.06	1.09	1.15	288	0	100.0	1047
16	7:35 AM	Ж	1.31	1,15	1.16	1.16	1.21	288	0	100.0	467
17	7:15 AM	¥	1.40	1.16	1.19	1.15	1.22	288	0	100.0	826
18	7:20 AM	봈	1.35	1.13	1,16	1.18	3.30	288	-	7.66	269
19	7:18 AM	Ж	1,38	1.09	1.16	1.10	1.18	288	0	100,0	6.70
20	7:20 AM	¥	1.39	1.10	1.04	1.07	1,11	288	٥	100.0	723
21	2:30 PM	BM	1,21	1.00	1.04	1.03	1.06	288	0	100.0	1139
22	3:25 PM	BM	1,35	1.24	0.39	96'0	1.02	288	0	100.0	884
23	7:17 AM	¥	1,46	1,19	0.88	1.08	1.20	288	0	100.0	690
24	7:18 AM	Ж	1.53	1.22	1.12	1,16	1.23	288	0	100.0	BEB
25	7:18 AM	묏	1.57	1.27	1.08	1.21	1.29	288	0	100.0	802
52	7:26 AM	丼	1.57	1,25	125	1.22	1.26	288	0	100.0	929
22	7:28 AM	저	1,61	1.30	1.16	1.19	2.62	288	0	100.0	471
28	5:01 PM	BM	1.42	1.24	0.81	98'0	0.99	288	0	100.0	1773
R	7:15 AM	Ж	1.27	1.07	0.73	0.91	1.07	288	0	100.0	649
30	7:30 AM	꼭	1.28	1.12	0.94	1.04	1,12	288	0	100.0	877
16	7:18 AM	¥	131	1.00		1.09	1.12	288	0	100.0	73.7
							Monthly Total	8928	1		

Submitted by (Print): Andrew Remare

Signature:

CORRECTIVE ACTION REPORT



Water Stewardship

ATER SYSTEM: Niverville WTP	WATER SYSTEM CODE: 151.25
LOCATION OF NON-COMPLIANCE INCIDENT (ex	Water Plant): Water Treatment Plant
OPERATOR: ANDER REMPE	Signature:
TYPE OF NON-COMPLIANCE INCIDENT: INITIAL TEST RESULTS: DESCRIPTION OF CORRECTIVE ACTIONS TAKE	Low disinfectant residual entering the distribution system, 21(1) MR 40/2007 Low disinfectant residual in the distribution system, 22 MR 40/2007 Filtered water turbidity exceeding the turbidity standard, 6(1) MR 41/2007 Low positive total coliform (< 10 CFU/100mL), 3 MR 41/2007 Other DATE: May 18, 2023
On May 18 2023 / clea	ned and calibrated out (Horine analyzer
which caused our read	and calibrated our chlorine analyzer
The state of the s	
_	
42° 84	
	· ·
TEST RESULTS AFTER CORRECTIVE ACTIONS:	DATE:
(attach laboratory results if applicable)	

EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER ON SITUATIONS REQUIRING IMMEDIATE REPORTING.

~'STRIBUTION:

. JRWARD THE ORIGINAL TO YOUR DRINKING WATER OFFICER WITH YOUR MONTHLY DISINFECTION OR TURBIDITY MONITORING REPORT RETAIN A COPY FOR YOUR RECORDS

Contact your Drinking Water Officer with any comments, questions or concerns.

Niverville WTP - Chlorine Report - June 2023

Water System Code: 151.25

Instrument Location Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Andrew Remyael

Operator Time Time Initials Total Chlorine Total Chlorine Handheld Initials Display Automation Records 7:17 AM jK 1.38 1.11 1.09 1.15 1.15 7:15 AM jK 1.38 1.06 1.09 1.13 1.14 2:01 PM BM 1.49 1.30 1.09 1.13 1.13 2:01 PM BM 1.49 1.30 1.09 1.09 1.13 2:01 PM BM 1.49 1.30 1.09 1.13 1.13 2:01 PM BM 1.49 1.10 1.09 1.13 1.13 7:15 AM jK 1.42 1.14 1.03 1.10 1.10 7:55 AM jK 1.42 1.14 1.03 1.04 1.10 7:15 AM jK 0.77 0.65 0.53 0.56 0.56 7:15 AM jK 0.77 0.65 0.63 0.54 0.56 7:12 AM jK 0.77	orine Re	
fonth Tine Cherator Handheid Display Average Minimum Total 7:17 AM JK 1.33 1.06 1.17 1.07 1.09 1.15 288 7:15 AM JK 1.38 1.06 1.09 1.11 2.08 288 7:15 AM JK 1.49 1.10 1.09 1.13 2.28 7:18 AM JK 1.49 1.12 1.09 1.13 2.88 7:18 AM JK 1.42 1.11 1.09 1.10 1.10 2.88 7:55 AM JK 1.42 1.11 1.09 1.06 1.10 2.88 7:55 AM JK 1.42 1.14 1.03 1.06 1.09 1.06 2.88 7:15 AM JK 0.83 0.68 0.73 0.65 0.76 0.89 0.79 0.89 0.70 2.88 7:15 AM JK 0.83 0.68 0.73 0.65 0.73	-	SDL
7:17AM JK 1.35 1.11 1.07 1.09 1.15 2:01 PAM JK 1.33 1.06 1.13 1.11 1.14 2:01 PAM BM 1.48 1.30 1.09 1.03 1.13 2:01 PAM BM 1.18 1.12 1.12 1.09 1.03 1.13 7:15 AM JK 1.45 1.11 1.09 1.06 1.10 1.10 7:52 AM JK 1.47 1.17 1.09 1.06 1.10 1.10 7:52 AM JK 1.45 1.14 1.09 1.06 1.10 1.14 7:52 AM JK 0.83 0.66 0.73 0.65 0.26 0.75 0.66 0.75 0.66 0.73 0.66 0.75 0.76 0.75 0.75 0.75 0.66 0.73 0.66 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Below Standard	% Within Daily Usage Standard (m³)
7:15 AM JK 1.33 1.06 1.13 1.11 1.14 1.14 2:01 PM BM 1.49 1.10 1.09 1.03 1.13 3:46 PM BM 1.49 1.12 1.02 1.03 1.13 7:18 AM JK 1.42 1.14 1.03 1.06 1.10 7:55 AM JK 1.42 1.14 1.03 1.00 1.10 7:55 AM JK 1.17 0.99 1.04 1.00 1.10 7:15 AM JK 0.33 0.65 0.65 0.65 0.76 9:30 AM KP 0.77 0.65 0.65 0.65 0.76 7:15 AM JH 0.77 0.65 0.65 0.65 0.76 7:15 AM JK 0.79 0.65 0.65 0.65 0.77 7:15 AM JK 0.79 0.25 0.65 0.65 0.77 7:18 AM JK 0.79 0.83 <t< td=""><td>0</td><td>100.0</td></t<>	0	100.0
2:01 PM BM 149 130 109 1.09 1.13 3:36 PM BM 1.18 1.12 1.09 1.09 1.13 3:36 PM BM 1.18 1.12 1.09 1.09 1.13 7:18 AM JK 1.42 1.14 1.03 1.07 1.14 7:55 AM JK 1.17 0.99 1.04 1.00 1.10 7:52 AM JK 1.03 0.83 0.88 0.83 0.89 0.79 7:15 AM JK 0.73 0.66 0.73 0.65 0.75 2:15 AM JH 0.38 0.29 0.30 0.36 0.75 7:13 AM JH 0.38 0.29 0.30 0.36 0.75 7:13 AM JK 0.69 0.60 0.58 0.55 0.77 7:13 AM JK 0.59 0.81 0.79 0.65 0.73 0.79 7:18 AM JK 0.56 0	0	100.00
3346 PM BM 1,18 1,12 1,19 1,13 7758 AM JK 1,45 1,11 1,09 1,10 1,10 7755 AM JK 1,42 1,14 1,09 1,10 1,10 7752 AM JK 1,17 0.99 1,04 1,00 1,10 7752 AM JK 1,03 0.83 0.88 0.83 0.89 0.89 7715 AM JK 0,83 0.66 0,73 0.65 0.76 0.89 2115 AM JK 0,47 0,42 0,43 0,42 0,76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.77 0.76 0.77 0.77 0.67 0.77 0.89 0.77 0.69 0.77 0.69 0.67 0.77 0.81 0.77 0.89 0.77 0.77 0.81 0.77 0.81 0.77 0.77 0.81	٥	100.0
7:18 AM JK 145 1,11 1,09 1,06 1,10 7:25 AM JK 1,42 1,14 1,03 1,07 1,14 7:25 AM JK 1,17 0,83 0,88 0,88 0,89 7:28 AM JK 1,07 0,83 0,88 0,88 0,89 7:15 AM JK 0,72 0,65 0,73 0,65 0,76 2:15 AM KP 0,72 0,65 0,73 0,65 0,76 2:15 AM KP 0,72 0,65 0,54 0,56 0,73 2:15 AM JK 0,72 0,65 0,63 0,64 0,52 7:25 AM JK 0,77 0,65 0,63 0,63 0,67 7:35 AM JK 0,79 0,63 0,63 0,67 0,81 7:14 AM JK 0,99 0,81 0,79 0,63 0,67 7:14 AM JK 0,89 0,81 1,34 <td< td=""><td>0</td><td>100.0</td></td<>	0	100.0
7:55 AM JK 1,42 1,14 1,03 1,07 1,14 7:52 AM JK 1,17 0,99 1,04 1,00 1,16 7:38 AM JK 0,133 0,683 0,683 0,893 0,89 7:15 AM JK 0,833 0,655 0,53 0,76 0,76 9:30 AM KP 0,72 0,65 0,59 0,59 0,76 0,76 7:13 AM JK 0,69 0,60 0,58 0,67 0,89 0,77 7:18 AM JK 0,69 0,66 0,58 0,67 0,89 0,77 7:18 AM JK 0,99 0,89 0,67 0,89 1,04 1,39 7:18 AM JK 1,56 1,24 1,24 1,39 1,49 1,49 7:12 AM JK 1,56 1,29 1,32 1,39 1,49 7:12 AM JK 1,56 1,29 1,39 1,49 1,49	0	100.0
752AM JK 1,17 0.99 1.04 1.00 1.06 7:38 AM JK 1,03 0.83 0.88 0.83 0.89 7:15 AM JK 0.83 0.66 0.73 0.65 0.76 9:30 AM KP 0,72 0.65 0.54 0.56 0.76 7:15 AM JH 0.88 0.29 0.30 0.56 0.77 7:13 AM JK 0.69 0.60 0.58 0.67 0.81 7:13 AM JK 0.71 0.65 0.63 0.67 0.81 7:17 AM JK 0.71 0.65 0.63 0.67 0.81 7:12 AM JK 0.71 0.65 0.63 0.67 0.81 7:12 AM JK 1.24 1.24 1.30 1.30 7:12 AM JK 1.56 1.24 1.40 7:12 AM JK 1.56 1.24 1.31 1.35 7:10 AM	0	100.0
7:38 AM JK 1,03 0.83 0.88 0.83 0.89 0.89 7:15 AM JK 0.83 0.66 0,73 0.65 0.76 0.76 2:15 AM KP 0,72 0.65 0.65 0.65 0.56 0.76 0.76 2:15 AM JH 0,38 0.29 0.63 0.44 0.52 0.77 7:25 AM JK 0,69 0.66 0.63 0.65 0.77 7:17 AM JK 0.99 0.81 0.79 0.89 0.77 7:17 AM JK 1.24 1.24 1.40 1.23 1.33 7:12 AM JK 1.56 1.29 1.32 1.43 1.47 7:10 AM JK 1.56 1.29 1.32 1.40 1.41 7:10 AM JK 1.56 1.25 1.33 1.40 1.41 7:10 AM JK 1.56 1.36 1.25 1.31 1.40 <td< td=""><td>0</td><td>100.0 GOLS</td></td<>	0	100.0 GOLS
7:15 AM JK 0.83 0.66 0,73 0.65 0.76 9:30 AM KP 0,72 0.65 0.55 0.54 0.56 2:15 AM BM 0,47 0,65 0,63 0,64 0.56 7:13 AM JK 0,69 0,29 0,36 0,42 0,77 7:25 AM JK 0,67 0,69 0,63 0,67 0,81 7:17 AM JK 0,77 0,65 0,63 0,67 0,81 7:17 AM JK 0,89 0,81 0,79 0,67 0,81 7:12 AM JK 1,56 1,29 1,32 1,33 1,39 7:12 AM JK 1,56 1,44 1,43 1,47 7:12 AM JK 1,50 1,44 1,43 1,40 7:12 AM JK 1,54 1,27 1,34 1,31 7:15 AM JK 1,54 1,34 1,34 1,40 7:15 AM <t< td=""><td>0</td><td>100.0</td></t<>	0	100.0
9:30 AM KP 0,72 0,65 0,65 0,64 0,56 2:15 AM BM 0,47 0,42 0,43 0,44 0,52 7:13 AM JH 0,38 0,29 0,36 0,36 0,42 7:25 AM JK 0,69 0,667 0,63 0,67 0,81 7:18 AM JK 0,99 0,81 0,79 0,89 0,77 7:17 AM JK 1,24 1,10 1,22 1,33 8:05 AM JK 1,56 1,29 1,34 1,40 7:12 AM JK 1,56 1,41 1,34 1,40 7:12 AM JK 1,51 1,27 1,34 1,31 7:12 AM JK 1,51 1,27 1,34 1,34 7:12 AM JK 1,51 1,27 1,34 1,36 7:12 AM JK 1,52 1,34 1,40 7:45 AM JK 1,54 1,34 1,40	0	100,0
2:15 AM BM 0,47 0,42 0,43 0,44 0,52 7:13 AM JH 0,38 0,29 0,36 0,36 0,42 0,42 7:25 AM JK 0,69 0,60 0,58 0,55 0,77 0,77 7:30 AM JK 0,71 0,65 0,63 0,67 0,81 0,77 0,77 7:11 AM AR 1,44 1,24 1,10 1,22 1,33 1,39 1,39 7:12 AM JK 1,56 1,29 1,44 1,37 1,43 1,47 7:12 AM JK 1,56 1,29 1,34 1,47 1,49 1,49 1,49 7:15 AM JK 1,56 1,27 1,34 1,37 1,34 1,40 1,34	0	100.0
7:13 AM JH 0.38 0.29 0.30 0.36 0.42 7:25 AM JK 0.69 0.60 0.58 0.55 0.77 7:30 AM JK 0.71 0.65 0.63 0.67 0.81 7:18 AM JK 0.99 0.81 0.79 0.89 1.04 7:17 AM AR 1.44 1.24 1.10 1.22 1.33 7:27 AM JK 1.56 1.29 1.40 1.43 1.47 7:12 AM JK 1.51 1.27 1.34 1.35 1.40 7:15 AM JK 1.55 1.26 1.31 1.37 1.34 7:15 AM JK 1.55 1.26 1.31 1.37 1.34 7:15 AM JK 1.54 1.30 1.28 1.31 1.40 7:15 AM JK 1.54 1.30 1.28 1.25 1.31 7:45 AM JK 1.54 1.30 1.28 <t< td=""><td>0 2</td><td>1173</td></t<>	0 2	1173
7:25 AM JK 0.69 0.60 0.58 0.55 0.77 7:30 AM JK 0.71 0.65 0.63 0.67 0.81 7:18 AM JK 0.99 0.81 0.79 0.89 1.04 7:18 AM JK 1.56 1.24 1.10 1.22 1.33 7:27 AM JK 1.56 1.29 1.32 1.39 1.47 8:05 AM JK 1.68 1.51 1.34 1.43 1.40 7:12 AM JK 1.51 1.27 1.34 1.34 1.35 7:12 AM JK 1.55 1.25 1.34 1.34 1.34 7:12 AM JK 1.54 1.25 1.34 1.34 1.34 7:15 AM JK 1.54 1.35 1.25 1.34 1.40 7:45 AM JK 1.54 1.30 1.28 1.25 1.29 7:11 AM JK 1.54 1.30 1.23 <t< td=""><td>O C</td><td>3133</td></t<>	O C	3133
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7;18AM JK 0.99 0.81 0.79 0.89 1.04 7;17AM AR 1.44 1.24 1,10 1.22 1.33 1.39 7;27AM JK 1.56 1.29 1.32 1.33 1.47 7;12AM JK 1.68 1.41 1.32 1.43 1.47 7;12AM JK 1.51 1.27 1.34 1.35 1.40 7;15AM JK 1.55 1.26 1.31 1.27 1.34 7;15AM JK 1.54 1.35 1.26 1.34 7;15AM JK 1.54 1.30 1.31 1.40 7;45AM JK 1.54 1.30 1.28 1.26 1.28 7;45AM JK 1.54 1.30 1.28 1.25 1.29 7;11AM JK 1.54 1.30 1.28 1.25 1.29 7;17ASM JK 1.49 1.28 1.25 1.23 1.26	0	100.0
7:11 AM AR 1.44 1.24 1,10 1.22 1.33 7:27 AM JK 1,56 1,29 1,32 1,33 1,39 8:05 AM JH 1,74 1,50 1,44 1,43 1,47 7:12 AM JK 1,68 1,41 1,32 1,49 1,40 7:12 AM JK 1,51 1,27 1,34 1,35 1,40 7:12 AM JK 1,55 1,26 1,31 1,40 1,37 7:45 AM JK 1,54 1,30 1,28 1,26 1,29 7:45 AM JK 1,54 1,30 1,28 1,26 1,29 7:45 AM JK 1,54 1,30 1,28 1,26 1,29 7:11 AM JK 1,55 1,30 1,28 1,26 1,29 7:45 AM JK 1,53 1,29 1,23 1,26 1,29 7:17 AM JK 1,54 1,29 1,23 <t< td=""><td>0</td><td>100.0</td></t<>	0	100.0
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7:10 AM JK 1.51 1.27 1.34 1.31 1.35 7:12 AM JK 1.55 1.26 1.31 1.27 1.34 7:15 AM JK 1.64 1.35 1.25 1.31 1.37 7:10 AM JK 1.57 1.33 1.40 1.31 1.40 7:45 AM JK 1.54 1.30 1.28 1.26 1.28 7:11 AM JK 1.55 1.30 1.23 1.21 1.29 7:45 AM JK 1.53 1.29 1.23 1.26 1.23 7:45 AM JK 1.53 1.29 1.23 1.26 1.23 7:45 AM JK 1.53 1.28 1.25 1.23 1.26 7:17 AM JK 1.49 1.28 1.25 1.33 1.30 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	000
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7:15 AM JK 1.64 1.35 1.25 1.31 1.37 7:10 AM JK 1.57 1.33 1.40 1.31 1.40 7:45 AM JK 1.54 1.30 1.28 1.26 1.28 7:11 AM JK 1.55 1.30 1.23 1.21 1.29 7:17 AM JK 1.53 1.29 1.28 1.23 1.26 7:30 AM JK 1.49 1.28 1.25 1.33 1.36 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
7:10 AM JK 1.57 1.33 1.40 1.31 1.40 7:45 AM JK 1.54 1.30 1.28 1.26 1.28 7:46 AM JH 1.58 1.32 1.25 1.25 1.29 7:11 AM JK 1.55 1.30 1.23 1.21 1.23 7:45 AM JK 1.53 1.28 1.28 1.26 1.36 7:30 AM JK 1.46 1.22 1.27 1.25 1.33 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
7:45 AM JK 1.54 1.30 1.28 1.26 1.28 7:46 AM JH 1.58 1.32 1.28 1.25 1.29 7:11 AM JK 1.55 1.30 1.23 1.21 1.23 7:45 AM JK 1.53 1.29 1.28 1.23 1.26 7:17 AM JK 1.49 1.28 1.22 1.25 1.33 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
7:46 AM JH 1.58 1.32 1.28 1.25 1.29 7:11 AM JK 1.55 1.30 1.23 1.21 1.23 7:45 AM JK 1.53 1.29 1.28 1.23 1.26 7:17 AM JK 1.49 1.28 1.22 1.25 1.33 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	Ó	100.0
7:11 AM JK 1.55 1.30 1.23 1.21 1.23 7:45 AM JK 1.53 1.29 1.28 1.23 1.26 7:17 AM JK 1.49 1.28 1.22 1.25 1.33 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
7:45 AM JK 1.53 1.29 1.28 1.23 1.26 7:17 AM JK 1.49 1.28 1.22 1.25 1.33 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
7:17 AM JK 1.49 1.28 1.25 1.25 1.35 7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
7:30 AM JK 1.46 1.22 1.27 1.25 1.30	0	100.0
	0	100.0
1.38 1.18 1.24 1.22	0	100.0
Monthly Total 8640	8640 0	

Submitted by (Print): Andrew Remose

Signature: Mrs. Mered

CORRECTIVE ACTION REPORT



"ATER SYSTEM: Spruce Drive UTP	WATER SYSTEM CODE: 151.25
LOCATION OF NON-COMPLIANCE INCIDENT (ex. Water	r Plant): Vater Plant
OPERATOR: Andrew Rempel	Signature: And Keerel
TYPE OF NON-COMPLIANCE INCIDENT:	Low disinfectant residual entering the distribution system, 21(1) MR 40/2007
	Low disinfectant residual in the distribution system, 22 MR 40/2007
_	Filtered water turbidity exceeding the turbidity standard, 6(1) MR 41/2007
<u> </u>	Low positive total coliform (< 10 CFU/100mL), 3 MR 41/2007
DANS TO BE DECIMEND.	Other DATE: One 11+12 /2023
INITIAL TEST RESULTS:	
DESCRIPTION OF CORRECTIVE ACTIONS TAKEN (atta	ch additional sheets if required):
On June 8 1 noticed the chi	orine levels stort to drop more than usual.
I increased the flow of chloring	to compensate for the drop. On June 9th
I diagnosed the entire chloring	system and found a broken fitting on the
injection has The litting was	replaced and lested, and the ellorine system
. was losine correctly. Over the	weekend levels were still dropping and the
whose stands use tested	After testing it was determined that the
	country lower than 12% Chlorine borrels
	Chlorine was added to the reservoir, Chlorine
System was then completely inspe	ched and tested to ensure proper closing was
happening. Chlorine levels stor	ted to slabalize on June 13/23
and the second second	
TEST RESULTS AFTER CORRECTIVE ACTIONS:	060 DATE: June 13 2027
(attach laboratory results if applicable)	

EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER ON SITUATIONS REQUIRING IMMEDIATE REPORTING.

DISTRIBUTION:

.: WARD THE ORIGINAL TO YOUR DRINKING WATER OFFICER WITH YOUR MONTHLY DISINFECTION OR TURBIDITY MONITORING REPORT RETAIN A COPY FOR YOUR RECORDS

Contact your Drinking Water Officer with any comments, questions or concerns.

Niverville WTP - Chlorine Report - July 2023

Water System Code: 151.25

Instrument Location. Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators; Andrew Rempel

						Dis	Distribution Chlorine	Je			
				Operator Verification	'erification	Automatic	Automation Records	Number	Number of Free Chlorine Readings	Readings	, ,
Day of Month	Time	Operator Initials	Total Chlorine	Handheid	Display	Average	Minimum	Fotal	Below Standard	% Within Standard	Daily Usage (m³)
	8:47 AM	녹	1.41	1.14	1.23	1.15	1.24	288	O	100.0	අදල
2	8:14 AM	프	1.31	1.08	1.08	1.05	1.11	288	٥	100.0	1066
m	7:17 AM	복	1.16	0.97	0.91	0.79	0,99	288	0	100.0	972
4	7:20 AM	¥	0.74	0.67	0.70	0.54	2.88	288	6	96.9	1266
2	7:22 AM	북	0:00	0.80	0.79	0.78	0.82	288	0	100.0	875
9	7:10 AM	AR	0,94	0.84	0.82	0.89	1.00	288	0	100.0	871
	7:08 AM	HWI	1.15	86.0	96'0	0.99	1.05	288	0	100,0	674
500	10:50 AM	8	1.16	1.00	1.07	1.05	1.11	288	0	100.0	445
6	8:31 AM	Ŧ,	1.39	1.17	1.10	0.98	1.10	288	0	100.0	999
5	7:13 AM	AR	0.76	0,61	0.60	0.95	1,39	288	0	100.0	470
11	7;13 AM	IWH	1.07	1.04	0.86	0.98	1,10	288	a	100.0	79.1
12	7:20 AM	×	1.20	1.04	1.10	1.08	111	288	0	100.0	8001
13	7:11 AM	JWH	1.26	1.09	1.11	1.12	1,15	288	0	100.0	8648.0
14	7:11 AM	HWI	1.37	1.16	1.15	1.18	1.25	882	٥	190.0	8166.6
15	1 7:24 AM	JWH	1,46	1.25	1.27	1,30	1.38	288	0	100.0	8173.6
16	8:02 AM	ı	1.64	1,40	1,35	1.37	1,40	288	0	100.0	7824.5
17	7:14 AM	녹	1.7	1.36	1.41	1.37	1,43	288	0	100.0	8237.9
18	7:41 AM	¥	1.76	1.49	1,40	1.44	1 49	288	0	100.0	7167.2
19	7:55 AM	포	1.77	1.47	1,46	1.47	1.51	288	0	100.0	6954.5
0	7:17 AM	末	1.78	1.52	1.52	1.52	1.54	288	0	100.0	7381.6
21	7:10 AM	푔	1.76	1.53	1,49	1,49	1.53	288	0	100.0	7910.4
2	7:18 AM	JWH	1.72	1.43	1.48	1,46	1.50	288	0	100.0	8648.0
23	7:47 AM	丰	1,64	1.48	136	1,33	1,41	288	0	100.0	9298.5
24	7:10 AM	복	1.54	131	1.29	1,26	1.32	288	0	100.0	9639.3
25	7:31 AM	¥	1.49	1.27	1.23	1,25	1.74	288	0	100.0	6479.7
26	7:10 AM	¥	1,39	1.19	1.07	1.14	1.19	288	0	100.0	7997.6
7.7	7:07 AM	¥	1.29	1.08	1.16	1.08	1,17	288	0	100.0	8664.8
80	7:07 AM	¥	1.18	1.00	0.94	0.98	1.01	288	۵	100.0	8537.7
53	7:10 AM	HMÍ	1.14	0.95	0.39	0.99	1.00	288	0	100.0	8888.1
8	7:30 AM	¥	1.10	0.89	0.93	0.91	1.00	288	0	100.0	11245.0
-	7:30 AM	¥	1.08	0.90	0.89	0.89	0.92	288	0	100.0	10571.4
							Monthly Total	95.00	o		

Submitted by (Print): Andrew Remose

Signature:

CORRECTIVE ACTION REPORT



Water Stewardship

WATER SYSTEM: Spruce Dire WTP	WATER SYSTEM CODE: 151.25
LOCATION OF NON-COMPLIANCE INCIDENT (ex. Wat	er Plant): Water Plant
OPERATOR: Andrew Rempel	Signature:
OPERATOR:	Oliginatura
The second secon	Low disinfectant residual entering the distribution system, 21(1) MR 40/2007
TYPE OF NON-COMPLIANCE INCIDENT:	Low disinfectant residual in the distribution system, 22 MR 40/2007
⊢	Filtered water turbidity exceeding the turbidity standard, 6(1) MR 41/2007
 	=
 	Low positive total coliform (< 10 CFU/100mL), 3 MR 41/2007
	Other 512 44 2023
INITIAL TEST RESULTS:	below standard DATE: July 4 2023
DESCRIPTION OF CORRECTIVE ACTIONS TAKEN (att	ach additional sheets if required):
During the early morning of July	4,2023, our Swan Chloring analyzer had an
Die last course no vale to	flow through. This coused the display reading to
All late the string the string to	il de la
read below 0.50, I took the	unit aport, cleaned and calibrated and put
back online. I verified with th	e handheld unit and found the free chlorine to
1- 067-44 (11-1-4	excreased slightly to roise lead a little higher
be 0,07 Mg/L. CHIOTIAL COSC CHES	130123993 31-3114 10 10130 10130
MAN CASHAN SPAN	
	AND COMMENTS.
	AND COME OF CHARLES
	Ma National Administration of the Control of the Co
TEST RESULTS AFTER CORRECTIVE ACTIONS:	DATE:
(attach laboratory results if applicable)	
(stract reportatory results it obblicable)	

EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER ON SITUATIONS REQUIRING IMMEDIATE REPORTING.

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Contact your Drinking Water Officer with any comments, questions or concerns.

Niverville WTP - Chlorine Report - August 2023

Water System Code: 151.25

Instrument Location, Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Andrew Rempel

Day of Month Trias Inne Trias	_						Ž	Dietalbuchen Ohle				
Time Initials Total Chiorine Handhold Display Avverage Minimum Total Below % Within 723 AM JK 1.12 0.92 0.92 0.93 2.88 0 100.0 723 AM JK 1.12 0.93 0.93 0.93 2.88 0 100.0 723 AM JK 1.12 0.93 0.93 0.93 2.88 0 100.0 723 AM JK 1.13 0.93 0.93 0.93 2.88 0 100.0 722 AM JK 1.14 0.90 0.92 0.93 0.93 2.88 0 100.0 8.23 AM JK 1.12 0.98 0.93 0.93 2.88 0 100.0 7.16 AM JK 0.94 0.82 0.83 0.89 0.89 0.77 0.89 0.77 0.89 0.77 0.89 0.77 0.89 0.77 0.89 0.89 0.77 0.89							2	Seringeron Chief				
Time Operator Time Operator Time Operator Average Minimum Total Standard Standa					Operator	Verification	Automati	on Records	Number	of Free Chlorin	e Readings	
7:18AM JK 11.2 0.93 0.92 0.93 788 0 401000 723-AM JK 1.16 0.91 0.89 0.90 0.83 788 0 1000 723-AM JK 1.16 0.90 0.89 0.99 0.89 0.91 288 0 1000 723-AM JK 1.12 0.99 0.89 0.99 0.89 0.91 288 0 1000 847-AM JHH 1.13 0.99 0.89 0.91 0.93 288 0 1000 728-AM JHH 0.02 0.53 0.63 0.63 0.99 0.70 228 0 1000 778-AM JK 0.99 0.82 0.63 0.63 0.89 0.70 228 0 1000 778-AM JK 0.99 0.82 0.89 0.70 228 0 1000 778-AM JK 0.99 0.82 0.89 <th>of Month</th> <th></th> <th>Operator Initials</th> <th>Total Chlorine</th> <th>Handheld</th> <th>Display</th> <th>Average</th> <th>Minimum</th> <th>Total</th> <th>Below</th> <th>% Within</th> <th>Daily Usage</th>	of Month		Operator Initials	Total Chlorine	Handheld	Display	Average	Minimum	Total	Below	% Within	Daily Usage
723AM AR 116 0.95 0.99 0.93 286 0 1000 725AM JR 1.18 0.90 0.92 0.93 2.88 0 1000 775AM JR 1.12 0.86 0.90 0.89 0.91 288 0 1000 8/47AM JH 1.15 0.89 0.89 0.87 0.89 0.91 288 0 1000 6/5AM JH 0.08 0.69 0.87 0.89 0.70 288 0 1000 6/5AM JH 0.08 0.69 0.77 0.89 0.79 288 0 1000 7/6AM JK 0.94 0.82 0.67 0.89 0.79 0.79 0.89 0 1000 7/18AM JK 0.99 0.77 0.88 0.77 0.89 0 1000 1000 815AM JK 0.99 0.87 0.89 0.89 0 <	-	7:18 AM	복	1.12	0.93	0.92	0.92	0.95	288		1000	(1111)
725AM jk 1148 0.90 0.92 0.91 0.93 288 0 1000 894ZAM jk 1.112 0.69 0.89 0.61 288 0 1000 863ZAM jk 1.15 0.69 0.87 0.89 228 0 1000 663AAM jk 0.67 0.69 0.77 0.89 228 0 1000 772BAM jk 0.67 0.69 0.79 288 0 1000 775BAM jk 0.69 0.77 0.89 228 0 1000 775BAM jk 0.99 0.83 0.84 0.87 288 0 1000 815AM jk 0.99 0.77 0.89 0.87 0.99 0.99 0.99 0.99 0.99 0.90 1000 815AM jk 0.13 0.85 0.84 0.92 288 0 1000 815AM jk	2	7:23 AM	AR	1.16	0.91	0.89	0.90	0.93	288		100.0	200. A
2.25.AM JK 11.2 0.66 0.90 0.88 0.91 228 0 100.00 8.27.AM JKH 1.12 0.89 0.89 0.91 0.93 2288 0 100.00 8.27.AM JH 0.62 0.69 0.67 0.63 0.77 0.89 288 0 100.00 7.28.AM JH 0.62 0.59 0.53 0.53 0.72 0.89 0.70 100.00 7.72.AM JK 0.99 0.82 0.85 0.84 0.95 100.00 7.72.AM JK 0.99 0.82 0.84 0.95 2.88 0 100.00 7.71.BAM JK 0.99 0.77 0.89 0.87 0.89 0.97 0.89 0.97 0.99 0.97 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99	m	7:20 AM	×	1.08	0.90	0.92	0.91	0.93	288		200	4,000
8-24 AM JWH 1.15 0.97 0.91 0.97 2.83 0 100.00 6-50 AM JH 0.08 0.68 0.67 0.69 228 0 100.00 6-50 AM JH 0.63 0.63 0.77 0.69 228 0 100.00 6-50 AM JH 0.67 0.63 0.67 0.69 228 0 100.00 7-15 AM JK 0.69 0.83 0.65 0.73 0.69 288 0 100.00 7-15 AM JK 0.99 0.82 0.84 0.87 0.89 0.77 0.89 0 100.00 7-15 AM JK 0.99 0.77 0.89 0.87 0.89 0 100.00 8-12 AM JKH 0.99 0.77 0.89 0.89 0 100.00 8-12 AM JKH 0.99 0.77 0.89 0.99 0 100.00 8-12 AM JKH 0.1	4	7:25 AM	×	1.12	0.86	0.90	0.88	190	288		2001	4000
843 AM JH 104 088 089 087 089 288 0 1000 728 AM JH 082 069 087 083 077 289 0 1000 728 AM JK 0.97 0.83 0.83 0.84 0.95 288 0 1000 728 AM JK 0.99 0.82 0.83 0.84 0.95 288 0 1000 728 AM JK 0.90 0.82 0.83 0.86 0.95 288 0 1000 728 AM JK 0.90 0.82 0.83 0.86 0.91 288 0 1000 728 AM JK 0.90 0.82 0.83 0.86 0.91 1.00 728 AM JK 1.13 0.98 0.80 0.92 1.09 1.00 82 AM JK 1.13 0.98 0.99 1.09 1.09 1.00 82 AM JK 1.13 0.99 0.94 0.99 1.06 1.09 1.00 82 AM JK 1.13 0.99 0.94 0.99 1.06 1.09 1.00 82 AM JK 1.13 0.99 0.94 0.99 1.06 1.09 1.00 82 AM JK 1.13 0.99 0.91 0.90 1.00 82 AM JK 1.14 0.98 0.99 0.91 0.90 1.00 82 AM JK 1.15 0.90 0.91 0.90 0.90 1.00 83 AM JK 1.15 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	22	8:42 AM	HWL	1.15	0.97	0.91	160	200	260		000	1028.5
650 AM JH 0.82 0.69 0.67 0.63 0.70 246 0 100.0 778 AM AR 0.67 0.53 0.63 0.70 288 0 100.0 718 AM JK 0.99 0.85 0.63 0.84 0.92 288 0 100.0 718 AM JK 0.99 0.82 0.84 0.87 0.89 0 100.0 100.0 718 AM JK 0.99 0.77 0.78 0.87 0.89 0 100.0 100.0 812 AM JKH 0.92 0.79 0.87 0.89 0.99 100.0 100.0 723 AM JK 1.13 0.96 0.92 0.99 1.96 0.99 1.00 100.0 815 AM JK 1.13 0.96 0.95 1.03 1.06 1.00 1.00 815 AM JK 1.13 0.95 0.99 1.06 2.88 0 1.00	9	8:37 AM	포	1.04	0.88	0.80	22.0	000	000	5 (0.001	1002.1
728 AM AR 0.67 0.55 0.33 0.73 0.74 2.68 0 100.0 7:18 AM JK 0.97 0.83 0.85 0.84 0.95 288 0 100.0 7:18 AM JK 0.94 0.82 0.84 0.85 0.87 288 0 100.0 7:18 AM JK 0.99 0.77 0.78 0.79 0.87 288 0 100.0 8:25 AM JWH 0.92 0.79 0.85 0.89 0.89 0 100.0 8:20 AM JWH 0.92 0.79 0.85 0.89 0.99 1.06 288 0 100.0 7:23 AM JK 1.13 0.96 1.02 1.04 1.16 1.02 1.06 2.88 0 100.0 7:25 AM JK 1.13 0.95 0.95 1.06 2.88 0 100.0 7:25 AM JK 1.22 1.02 1.02	7	6:50 AM	Ŧ	0.82	0.69	290	0.63	02.0	700	0	100.0	1101.1
77:16 AM JK 0.97 0.25 0.25 0.75 0.75 0.05 <	00	7:28 AM	Æ	290	0.55	63.0	200	0,00	90%		0.001	1169.8
77:18 AM JK 0.94 0.82 0.64 <	6	7:16 AM	<u>×</u>	0.97	0.00	0.33	0.72	0.96	288	0	100.0	810.2
7.18 AM JK 0.547 0.62 0.80 0.87 288 0 100.0 8.22 AM JWH 0.92 0.77 0.85 0.77 0.89 0.89 0.89 0.99 0.99 0.99 0.89 0.89 0.99 0.99 0.99 0.99 0.99 0.99 0.89 0.99 0	10	7:18 AM	<u> </u>	700	000	0.00	0.84	0.92	288	٥	100.0	778.7
8-23-MM Jr. 0.57 0.77 0.66 0.77 0.80 288 0 100.0 8-15-AM Jr. 0.92 0.79 0.66 0.91 288 0 100.0 8-15-AM Jr. 0.13 0.96 1.02 1.07 1.06 1.88 0 100.0 8-15-AM Jr. 1.13 0.96 1.02 1.07 2.88 0 100.0 8-25-AM Jr. 1.17 1.09 1.02 1.04 1.16 1.06 1.00 100.0 8-15-AM Jr. 1.13 0.95 0.94 0.99 1.46 2.88 0 100.0 8-15-AM Jr. 1.12 0.95 0.94 0.99 1.49 2.88 0 100.0 8-19-AM Jr. 1.12 0.95 0.94 1.02 1.06 1.06 1.00 100.0 8-19-AM Jr. 1.12 0.95 0.94 1.06 1.06	=	7.18 AM	4 5	5 6	7970	0.84	0.80	0.87	288	0	100.0	713,1
8.15AM JMT 0.99 0.85 0.86 0.91 288 0 100.0 7.33AM JH 0.98 0.80 0.92 0.93 0.99 288 0 100.0 8.20AM JK 1.13 0.96 1.02 1.03 1.06 1.00 100.0 8.20AM JK 1.13 0.95 1.02 1.04 1.16 288 0 100.0 8.15AM BD 1.13 0.95 0.95 1.06 288 0 100.0 7.22AM AR 1.12 0.95 0.94 0.99 1.49 288 0 100.0 7.22AM JWH 1.12 0.95 0.94 0.99 1.49 288 0 100.0 7.23AM JK 1.12 1.02 1.02 1.02 1.06 288 0 100.0 7.29AM JK 1.14 0.94 1.02 1.02 1.06 288 0 1	12	MA CE-8	e l	06,0	0.77	0.78	0.77	0.80	288	0	100.0	659.4
CATIONAM JH 0.188 0.80 0.92 0.93 0.99 288 0 100.0 7.33 AM JK 1.13 1.05 1.02 1.01 1.06 288 0 100.0 7.23 AM JK 1.17 1.00 1.02 1.04 1.16 288 0 100.0 7.23 AM JK 1.17 1.00 1.02 1.04 1.16 288 0 100.0 7.23 AM JMH 1.12 0.95 0.99 1.49 288 0 100.0 8.19 AM JMH 1.12 0.95 1.07 1.06 288 0 100.0 7.22 AM JK 1.25 1.03 1.06 1.07 1.06 288 0 100.0 7.22 AM JK 1.14 0.94 1.02 1.06 288 0 100.0 7.24 AM JK 1.14 0.94 1.02 1.06 288 0 100.0 <	i ā	0-4E AA4	LIM	0.92	0.79	0.85	98.0	0.91	288	0	100.0	681.6
1,23 AM	2 3	OCI DAM	ξ.	0.98	0.80	0.92	0.93	0.99	288	0	100.0	808.3
SEZI AMM RD 1,23 1,05 1,05 1,05 1,07 288 0 100.0 7723 AMM JK 1,17 1,00 1,02 1,04 1,16 288 0 100.0 815 AMM JK 1,13 0,95 0,94 0,99 1,06 1,06 1,00 100.0 819 AMM JWH 1,12 0,95 0,94 0,99 1,06 1,06 1,00 100.0 819 AMM JK 1,22 1,02 1,02 1,02 1,08 288 0 100.0 7738 AM JK 1,24 1,06 1,07 1,08 288 0 100.0 7739 AM JK 1,14 0,94 1,02 0,95 0,95 0,95 0,95 0,95 0,95 0,95 0,95 0,95 0,96 0,96 0,90 0,90 0,90 0,90 0,90 0,90 0,90 0,90 0,90 0,90 0,90 0,90	£ 1,	7.33 AM	¥	1,13	0,96	1.02	101	1,06	288	٥	100.0	824.3
77.25 AM JK 1,17 1,00 1,02 1,04 1,16 288 0 100.0 8.15 AM RD 1,13 0,95 0,95 0,99 1,06 288 0 100.0 7.25 AM AR 1,12 0,93 1,01 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,02 1,03 1,00 <td>0 3</td> <td>8:20 AM</td> <td>£</td> <td>1.23</td> <td>1.05</td> <td>1.05</td> <td>1,03</td> <td>1.07</td> <td>288</td> <td>0</td> <td>100.0</td> <td>Rate</td>	0 3	8:20 AM	£	1.23	1.05	1.05	1,03	1.07	288	0	100.0	Rate
8:15 AM RD 113 0.95 0.95 1.06 288 0 100.0 7:25 AM AR 1.12 0.95 0.94 0.99 1.49 288 0 100.0 9:40 AM JWH 1.13 0.93 1.01 1.05 288 0 100.0 7:22 AM JK 1.22 1.02 1.02 1.02 1.06 1.07 1.06 1.00 100.0 7:22 AM JK 1.24 1.03 1.04 1.02 1.06 288 0 100.0 7:24 AM JK 1.14 0.94 1.02 0.92 0.96 288 0 100.0 7:24 AM JK 1.15 0.96 0.91 0.92 0.96 288 0 100.0 7:24 AM JK 1.16 0.96 0.92 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 <td>2 5</td> <td>7:23 AM</td> <td>¥</td> <td>1.17</td> <td>1.00</td> <td>1.02</td> <td>1.04</td> <td>1.16</td> <td>288</td> <td>0</td> <td>100.0</td> <td>2,577</td>	2 5	7:23 AM	¥	1.17	1.00	1.02	1.04	1.16	288	0	100.0	2,577
7.25 AM AR 1.12 0.95 0.94 0,99 1.49 288 0 100.0 9;40 AM JWH 1.13 0.93 1.01 1.02 1.05 288 0 100.0 8:19 AM JK 1.22 1.02 1.02 1.05 1.06 1.07 1.06 288 0 100.0 7:22 AM JK 1.24 1.06 1.04 1.02 1.08 288 0 100.0 7:24 AM JK 1.14 0.94 1.02 0.95 1.02 288 0 100.0 7:20 AM JK 1.16 0.95 0.92 0.95 0.96 0.96 0.90 100.0 8:27 AM JK 1.10 0.93 0.92 0.96 0.98 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0	<u> </u>	8;15 AM	2	1.13	0.95	0.95	660	1.06	288	0	1001	R52 4
9:40 AM JWH 1.13 0.93 1.01 1.03 1.05 288 0 100.0 8:19 AM JK 1.22 1.02 1.02 1.02 1.06 1.07 1.06 1.00 100.0 7:22 AM JK 1.24 1.06 1.04 1.02 1.08 288 0 100.0 7:24 AM JK 1.14 0.94 1.02 0.95 1.02 288 0 100.0 7:24 AM JK 1.15 0.96 0.92 0.95 1.04 288 0 100.0 7:20 AM JK 1.16 0.95 0.95 0.95 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.98 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0 0 100.0	20 5	7:25 AM	AR	1.12	0.95	0.94	0.99	1,49	288	c	1000	2 052
8:19 AM JK 1,22 1,02 1,02 1,02 1,06 28B 0 100.0 7:22 AM JK 1,25 1,03 1,06 1,07 1,09 28B 0 100.0 7:38 AM JK 1,24 1,06 1,04 1,02 1,08 28B 0 100.0 7:24 AM JK 1,14 0,34 1,02 0,95 1,02 28B 0 100.0 7:20 AM JK 1,16 0,36 0,92 0,95 0,96 28B 0 100.0 8:21 AM JWH 1,18 1,00 0,98 0,98 1,00 28B 0 100.0 8:27 AM JH 1,19 1,02 0,95 0,98 0,98 0,98 0,98 0 100.0 8:22 AM JK 1,17 1,01 0,96 0,99 1,03 28B 0 100.0 7:20 AM JK 1,16 0,98 0,95	19	9:40 AM	HWI	1.13	0.93	1.01	1.03	1.05	288	-	1000	A CAS
7.22 AM JK 1.25 1.03 1.06 1.07 1.09 288 0 100.0 7.39 AM JK 1.24 1.06 1.04 1.02 1.08 288 0 100.0 7.19 AM JK 1.14 0.94 1.02 0.95 1.02 288 0 100.0 7.24 AM JK 1.15 0.96 0.91 0.92 0.96 288 0 100.0 8.21 AM JM 1.19 1.00 0.98 0.95 1.00 288 0 100.0 8.22 AM JK 1.17 1.01 0.96 0.99 1.00 288 0 100.0 7.12 AM JK 1.17 1.01 0.96 0.99 1.09 288 0 100.0 7.12 AM AR 1.15 0.98 0.95 1.00 1.03 288 0 100.0 7.20 AM JK 1.16 0.98 0.95 1.00 1.03 288 0 100.0 7.20 AM JK 1.16 0.98 0.95 1.00 1.03 288 0 100.0	2 2	8:19 AM	ೱ	1.22	1.02	1.02	1.02	1.06	288	0	100.0	1008.0
7:38 AM JK 1.24 1.06 1.04 1.02 1.08 288 0 100.0 7:24 AM JK 1.14 0.94 1.02 0.95 1.02 288 0 100.0 7:24 AM JK 1.15 0.96 0.91 0.92 0.96 288 0 100.0 7:20 AM JK 1.10 0.98 0.92 0.96 288 0 100.0 8:31 AM JWH 1.18 1.00 0.98 0.98 1.00 288 0 100.0 8:32 AM JH 1.19 1.02 0.95 0.98 288 0 100.0 7:12 AM JR 1.17 1.01 0.96 0.99 1.03 288 0 100.0 7:12 AM AR 1.15 0.99 1.03 0.96 1.03 288 0 100.0 7:20 AM JK 1.16 0.98 0.95 1.00 1.03 288 0 100.0 7:20 AM JK 1.16 0.98 0.99 1.03 288 0 100.0	17	7:ZZ AM	봈	125	1.03	1.06	1,07	1.09	288	0	ouot	775.4
7:19 AM JK 1.14 0.94 1.02 0.95 1.02 288 0 100.00 7:24 AM JK 1.15 0.96 0.91 0.92 0.96 288 0 100.00 7:20 AM JK 1.10 0.93 0.92 0.99 1.04 288 0 100.00 8:27 AM JMH 1.18 1.00 0.98 0.98 0.98 0.98 0 100.0 8:22 AM JK 1.17 1.01 0.96 0.99 1.03 288 0 100.0 7:12 AM AR 1.15 0.98 0.95 1.00 1.03 288 0 100.0 7:20 AM JK 1.16 0.94 1.03 0.96 1.03 288 0 100.0 7:20 AM JK 1.06 0.89 0.93 0.93 0.93 0.93 0.93 0.93 0 100.0	22	7:38 AM	혹	1.24	1,06	1.04	1.02	1.08	288	0	1000	7605
7:24 AM JK 1.15 0.96 0.91 0.92 0.96 288 0 100.0 7:20 AM JK 1.10 0.93 0.92 0.99 1.04 288 0 100.0 8:31 AM JWH 1.18 1.00 0.98 0.98 1.00 288 0 100.0 8:27 AM JH 1.19 1.02 0.95 0.95 0.98 288 0 100.0 7:12 AM JR 1.15 0.98 0.95 1.03 288 0 100.0 7:20 AM JK 1.15 0.99 1.03 288 0 100.0 7:20 AM JK 1.16 0.98 0.99 0.99 0.99 0.99 0.99 0.99 0.99	23	7:19 AM	룄	1.14	0.94	1.02	0.95	1.02	288	0	100.0	740.9
7:20 AM JK 1,10 0,93 0,92 0,93 1,04 288 0 100.0 8:31 AM JWH 1,18 1,00 0,98 0,98 1,00 288 0 100.0 8:22 AM JH 1,19 1,02 0,95 0,95 0,98 288 0 100.0 7:12 AM AR 1,17 1,01 0,96 0,99 1,03 288 0 100.0 7:20 AM JK 1,16 0,98 0,95 1,03 288 0 100.0 7:20 AM JK 1,06 0,89 0,95 0,95 0,93 288 0 100.0 7:20 AM JK 1,06 0,89 0,95 0,93 288 0 100.0	47	7:24 AM	복	1,15	0.96	0.91	0.92	96'0	288	0	1000	785.6
8:37 AM JWH 1.18 1.00 0.98 1.00 288 0 100.0 8:27 AM JH 1.19 1.02 0.95 0.95 0.98 288 0 100.0 7:12 AM JR 1.17 1.01 0.96 0.99 1.03 288 0 100.0 7:14 AM AR 1.15 0.94 1.03 0.96 1.03 288 0 100.0 7:20 AM JK 1.16 0.89 0.92 0.95 1.00 1.00 100.0	9 2	7:20 AM	¥	1.10	0.93	0.92	0.93	1.04	288	0	100.0	937.0
8:27 AM JH 1.19 1.02 0.95 0.95 0.98 288 0 100.0 8:32 AM JK 1.17 1.01 0.96 0.99 1.03 288 0 100.0 7:12 AM AR 1.15 0.94 1.03 0.96 1.03 288 0 100.0 7:20 AM JK 1.06 0.89 0.92 0.95 1.00 1.03 0.96 1.03 0.96 1.03 0.96 1.03 0.96 0.93 0.99 0.93 0.90 0.90 0.90 0.90 0.90	9 1	8:31 AM	HM	1.10	1.00	0.98	96'0	1.00	288	0	100.0	832.0
BS24M JK 1.17 1.01 0.96 0.99 1.03 288 0 100.0 100.0 1.146 0.98 0.95 1.00 1.03 288 0 100.0 1.00.0 1.15 0.94 1.03 0.96 1.03 288 0 100.0 1.00.0 1.20 AM JK 1.06 0.89 0.92 0.93 288 0 1.00.0 1	/7	8:27 AM	X,	1,19	1.02	0.95	0,95	0.98	288	C	100.0	949 5
7:12AM AR 1.16 0.98 0.95 1.00 1.03 288 0 100.0 7:14AM AR 1.15 0.94 1.03 0.96 1.03 288 0 100.0 7:20 AM JK 1.06 0.89 0.92 0.89 0.93 288 0 100.0	3 3	8:32 AM	¥	1.17	٠ <u>.</u>	0.96	0.99	1.03	288	0	100.0	973.7
7:20 AM AR 1.15 0.94 1.03 0.96 1.03 288 0 100.0 7:20 AM JK 1.06 0.89 0.92 0.89 0.93 288 0 100.0 100.0	20 2	7:12 AM	AR	1.16	0.98	0.95	1.00	1,03	288	0	100.0	857.8
7:2U-AM JK 1.06 0.89 0.92 0.89 0.93 288 0 100.0 Monthly Total 8928 0	3 2	7:14 AM	AR	1.15	0.94	1.03	0.96	1.03	288	0	100.0	947.9
8528	<u></u>	/.20 AM	¥	1.06	0.89	0.92	0.89	0.93	288	0	100.0	840.0
								Monthly Total	8928	0		

Submitted by (Print): And en Rempt

Signature:

Niverville WTP - Chlorine Report - September 2023

Oct 2, 2023

Water System Code: 151.25

Instrument Location Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Andrew Rempel

Operator Time Linitials Total Chlorine Handheld Display Avv 7:31 AM AR 0.99 0.82 0.87 0 10:20 AM JH 1.04 0.88 0.90 0 10:20 AM JH 1.14 0.96 0.99 0 10:15 AM JK 1.23 1.06 1.01 1 7:20 AM JK 1.23 1.06 0.99 0 7:20 AM JK 1.15 0.96 0.99 0 7:20 AM JH 1.16 0.98 0.99 0 7:20 AM JH 1.16 0.98 0.99 0 7:20 AM JH 1.16 0.98 0.99 0 7:20 AM JK 1.28 1.00 1.10 1.14 7:20 AM JK 1.33 1.14 1.14 1.14 7:24 AM JK 1.33 1.14 1.14 1.14 7:27 AM				
Time Initials Total Chlorine Handheld Display 7:18 AM AR 0.99 0.82 0.87 7:51 AM JH 1.04 0.88 0.90 10:20 AM JH 1.14 0.96 0.95 10:15 AM JH 1.120 1.03 1.03 7:47 AW JK 1.23 1.06 1.01 7:20 AM RD 1.15 0.96 0.99 7:20 AM AR 1.16 0.98 0.90 7:20 AM JH 1.11 0.93 0.88 9:27 AM JH 1.16 0.98 0.90 7:20 AM JK 1.33 1.14 1.14 7:20 AM JK 1.34<		Number of Free Chlorine Readings	ne Readings	
7:18 AM AR 0.99 0.82 0.87 7:51 AM JH 1.04 0.88 0.90 0.90 0.95 0.95 0.95 0.95 0.95 0.95	Minimum	Below Total Standard	% Within Standard	Daily Usage (m³)
7:51 AM JH 1.04 0.88 0.90 10:20 AM JH 1.14 0.96 0.95 10:15 AM JH 1.14 0.96 0.95 7:47 AM JK 1.23 1.03 1.07 7:15 AM RD 1.21 1.03 1.07 7:20 AM AR 1.16 0.98 0.90 7:20 AM JH 1.11 0.93 0.88 9:27 AM JH 1.11 0.93 0.88 9:27 AM JH 1.16 0.98 0.90 7:20 AM JK 1.33 1.13 1.10 7:20 AM AR 1.33 1.14 1.16 7:22 AM JK 1.33 1.14 1.16 7:20 AM JK 1.39 1.14 1.14 7:18 AM AR 1.30 1.12 1.13 7:24 AM JK 1.30 1.12 1.13 7:27 AM JK 1.30 1.12 1.13 7:27 AM JK 1.30 1.12 1.13 7:27 AM JK 1.30 1.15 7:27 AM AR 1.69 1.48 1.45 7:12 AM AR 1.69 1.37 1.39 1:55 7:27 AM AR 1.59 1.37 1.39 1:55 7:57 AM AR 1.50 1.25 7:57 AM AR 1.50 1.25 7:57 AM AR 1.50 1.25	0.92	288 0	100.0	948.2
10:20 AM JH 1.14 0.96 0.95 10:15 AM JH 1.20 1,03 1,03 7:47 AM JK 1.23 1,06 1,01 7:15 AM RD 1.21 1,06 1,07 7:20 AM AR 1.15 0,96 0,99 0,99 9:27 AM JH 1.11 0,93 0,68 0,90 7:20 AM JH 1.16 0,98 0,90 0,98 9:27 AM JK 1.28 1,08 1,10 7:20 AM JK 1,33 1,14 1,14 7:20 AM JK 1,33 1,14 1,14 7:22 AM JK 1,33 1,14 1,14 7:18 AM JK 1,34 1,14 1,14 7:22 AM JK 1,34 1,14 1,14 7:22 AM JK 1,39 1,40 1,35 7:22 AM JK 1,59 1,40 1,35 7:22	0.94	288 0	100.0	1048.8
10:15 AM JH 1.20 1.03 1.03 1.01 1.01 1.01 1.01 1.01 1.0	1.00	288 0	100.0	1032.7
7:47 AM JK 1.23 1.06 1.01 7:15 AM RD 1.21 1.08 1.07 7:30 AM RD 1.15 0.96 0.99 7:20 AM JH 1.11 0.93 0.98 9:14 AM JH 1.16 0.93 0.88 9:27 AM JH 1.16 0.93 0.88 9:27 AM JK 1.28 1.08 1.00 7:20 AM JK 1.33 1.14 1.14 7:20 AM JK 1.33 1.14 1.14 7:24 AM JK 1.34 1.10 1.13 7:24 AM JK 1.34 1.10 1.13 7:24 AM JK 1.34 1.10 1.35 7:24 AM JK 1.30 1.21 1.24 8:15 AM JK 1.72 1.24 1.48 7:22 AM JK 1.69 1.48 1.45 7:22 AM JK 1.69 1.48 </td <td>1.06</td> <td>288 0</td> <td>100.0</td> <td>1165.3</td>	1.06	288 0	100.0	1165.3
7:15 AM RD 1,21 1,03 1,07 7:30 AM RD 1,15 0,96 0,99 7:20 AM JH 1,11 0,93 0,98 9:14 AM JH 1,16 0,93 0,88 9:27 AM JH 1,16 0,93 0,90 7:21 AM JK 1,28 1,08 1,10 7:20 AM JK 1,33 1,14 1,14 7:20 AM JK 1,33 1,14 1,14 7:24 AM JK 1,34 1,10 1,13 7:24 AM JK 1,39 1,12 1,14 8:15 AM JK 1,43 1,21 1,14 8:15 AM JK 1,43 1,21 1,48 7:27 AM JK 1,73 1,25 1,48 7:20 AM JK 1,69 1,48 1,48 7:20 AM JK 1,60 1,41 1,48 7:20 AM JK 1,60 1,41 </td <td>1.08</td> <td>288 0</td> <td>100,0</td> <td>762.9</td>	1.08	288 0	100,0	762.9
7:30 AM RD 1.15 0.96 0.99 7:20 AM AR 1.06 0.86 0.97 9:14 AM JH 1.11 0.93 0.88 9:27 AM JH 1.16 0.98 0.90 7:20 AM JK 1.28 1.08 1.10 7:20 AM JK 1.33 1.14 1.14 7:24 AM JK 1.34 1.10 1.13 7:24 AM JK 1.34 1.10 1.13 8:15 AM JK 1.30 1.12 1.24 11:52 AM JK 1.72 1.50 1.48 7:27 AM JK 1.73 1.50 1.48 7:27 AM JK 1.73 1.50 1.48 8:38 AM AR 1.69 1.48 1.45 7:22 AM JK 1.60 1.41 1.34 7:22 AM JK 1.60 1.41 1.34 7:22 AM JK 1.60 1.41<	1.09	288 0	100.0	746.9
7:20 AM AR 1.06 0.86 0.97 9:14 AM JH 1.11 0.93 0.88 9:27 AM JH 1.16 0.98 0.90 7:21 AM JK 1.28 1.08 1.00 7:20 AM JK 1.33 1.14 1.14 7:20 AM JK 1.34 1.11 1.14 7:24 AM JK 1.34 1.12 1.13 8:15 AM JK 1.30 1.12 1.24 11:52 AM JK 1.72 1.24 1.24 7:27 AM JK 1.72 1.50 1.48 7:27 AM JK 1.72 1.50 1.48 7:27 AM JK 1.73 1.45 1.45 7:20 AM JK 1.60 1.41 1.45 7:22 AM JK 1.60 1.41 1.34 7:22 AM JK 1.60 1.41 1.36 7:27 AM JK 1.60 1.41<	1.01	288 0	100.0	787.4
9:74 AM JH 1.11 0.93 0.88 9:27 AM JH 1.16 0.98 0.90 7:21 AM JK 1.28 1.08 1.00 7:20 AM JK 1.33 1.13 1.10 7:20 AM JK 1.33 1.14 1.14 7:18 AM JK 1.34 1.10 1.13 7:24 AM JK 1.30 1.12 1.12 11:52 AM JK 1.72 1.50 1.48 7:27 AM JK 1.72 1.50 1.48 8:35 AM AR 1.69 1.48 1.45 7:20 AM JK 1.60 1.41 1.34 7:20 AM AR 1.69 1.45 1.36 1:59 PM KE 1.59 1.37 1.39 1:59 PM KE 1.59 1.37 1.38 1:35 AM AR 1.50 1.37 1.39 7:27 AM AR 1.59 1.37 1.35 7:27 AM AR 1.59 1.37 1.39 7:27 AM AR 1.59 1.37 1.39 7:27 AM AR 1.59 1.25 7:27 AM AR 1.59 1.25	86.0	288 0	100.0	753.9
9.27 AM JH 1.16 0.98 0.90 7.21 AM JK 1.28 1.08 1.00 7.20 AM JK 1.33 1.14 1.10 7.20 AW JK 1.34 1.14 1.14 7.24 AM JK 1.34 1.12 1.13 8.15 AM JK 1.43 1.21 1.24 11:52 AM JH 1.60 1.40 1.35 7.27 AM JK 1.72 1.50 1.48 7.27 AM JK 1.72 1.50 1.48 8:38 AM AR 1.69 1.48 1.45 7:20 AM JK 1.72 1.48 1.45 7:22 AM JK 1.60 1.41 1.34 7:22 AM JK 1.60 1.41 1.34 7:22 AM JK 1.60 1.41 1.34 7:27 AM JK 1.60 1.41 1.34 7:27 AM JK 1.60 1.41<	0.88	288 0	100.0	819.9
7.21 AM JK 1.28 1,08 1,00 7.20 AM JK 1,33 1,14 1,10 7.20 AW JK 1,34 1,14 1,14 7.24 AM JK 1,34 1,10 1,13 7.24 AM JK 1,30 1,12 1,11 81.5 AM JK 1,40 1,24 1,24 11.52 AM JK 1,72 1,40 1,35 7.27 AM JK 1,72 1,50 1,48 8:38 AM AR 1,69 1,48 1,45 7:20 AM JK 1,72 1,48 1,45 7:20 AM JK 1,60 1,41 1,45 7:20 AM JK 1,60 1,41 1,34 7:20 AM JK 1,60 1,41 1,39 7:20 AM JK 1,60 1,41 1,39 7:27 AM MV 1,59 1,37 1,39 7:27 AM AR 1,50 1,37<	. 76.0	288 0	100.0	910.2
7:20 AM JK 1,33 1,13 1,10 7:20 AM JK 1,34 1,14 1,14 7:18 AW AR 1,34 1,10 1,13 7:24 AW JK 1,30 1,12 1,11 8:15 AW JH 1,60 1,40 1,35 7:27 AM JK 1,72 1,50 1,48 7:27 AM JK 1,72 1,50 1,48 8:38 AM AR 1,69 1,48 1,45 7:20 AM JK 1,73 1,48 1,45 7:22 AM JK 1,60 1,41 1,45 7:12 AM MV 1,60 1,41 1,45 7:12 AM MV 1,59 1,37 1,39 1:39 PM KE 1,54 1,38 1,36 1:48 PM AR 1,52 1,28 1,25 7:27 AM AR 1,52 1,28 1,25 7:27 AM AR 1,52 1,28 </td <td>1.13</td> <td>288 0</td> <td>100.0</td> <td>820.4</td>	1.13	288 0	100.0	820.4
7:20 AM JK 1,33 1,14 1,14 7:18 AM AR 1,34 1,10 1,13 7:24 AM JK 1,30 1,12 1,11 8:15 AM JH 1,60 1,40 1,35 11:52 AM JK 1,72 1,50 1,48 7:27 AM JK 1,72 1,50 1,48 7:27 AM JK 1,73 1,48 1,45 8:38 AM AR 1,69 1,48 1,45 8:38 AM AR 1,69 1,44 1,45 7:20 AM JK 1,60 1,41 1,34 7:20 AM JK 1,60 1,41 1,34 7:20 AM JK 1,60 1,41 1,34 7:12 AM MV 1,59 1,37 1,39 7:20 AM JK 1,60 1,41 1,34 7:22 AM JR 1,59 1,37 1,35 7:27 AM AR 1,52 1,25<	1.13	288 0	100.0	748.5
7:18 AW AR 1.34 1.10 1.13 7:24 AW JK 1.30 1.12 1.11 8:15 AW JK 1.43 1.21 1.24 11:52 AM JH 1.60 1.40 1.35 7:27 AM JK 1.72 1.50 1.48 7:32 AM JK 1.73 1.52 1.51 8:38 AM AR 1.69 1.48 1.45 8:38 AM AR 1.69 1.45 1.45 7:20 AM JK 1.60 1.41 1.34 7:20 AM JK 1.60 1.41 1.34 7:12 AM MV 1.59 1.37 1.39 7:12 AM MK 1.59 1.37 1.36 7:27 AM AR 1.52 1.25 1.25 7:27 AM AR 1.53 1.25 1.25 7:27 AM AR 1.53 1.27 1.22	1.18	288 to	100.0	760.5
7:24 AM JK 1.30 1.12 1.11 8:15 AM JK 1.43 1.21 1.24 11:52 AM JH 1.60 1.40 1.35 7:27 AM JK 1.72 1.50 1.48 7:32 AM JK 1.73 1.52 1.51 8:38 AM AR 1.69 1.48 1.45 8:45 AM AR 1.69 1.45 1.45 7:20 AM JK 1.60 1.41 1.34 7:12 AM MV 1.59 1.37 1.39 7:12 AM KE 1.54 1.35 1.35 7:27 AM AR 1.52 1.28 1.35 7:27 AM AR 1.52 1.25 1.25 7:27 AM AR 1.53 1.25 1.25	1.16	288 0	100.0	756.9
B;15 AM JK 1,43 1,21 1,24 11:52 AM JH 1,60 1,40 1,35 7;27 AM JK 1,72 1,50 1,48 7;42 AM JK 1,73 1,52 1,51 8:38 AM AR 1,69 1,48 1,45 8:45 AM AR 1,69 1,41 1,34 7:20 AM JK 1,60 1,41 1,34 7:12 AM MV 1,59 1,37 1,39 1:38 PM KE 1,54 1,35 1,35 7:27 AM AR 1,52 1,25 1,25 7:16 AM AR 1,53 1,25 1,25 7:16 AM AR 1,53 1,27 1,22	1.20	288 0	100.0	8'869
11:52 AM JH 1:60 1:40 1:35 7:27 AM JK 1,72 1:50 1.48 7:42 AM JK 1,73 1:52 1:51 8:38 AM AR 1:69 1,48 1,45 8:45 AM AR 1:69 1,45 1,45 7:20 AM JK 1:60 1,41 1,34 7:12 AM MV 1,59 1,37 1,39 1:59 PM KE 1,54 1,33 1,36 1:48 PM AR 1,52 1,28 1,25 7:27 AM AR 1,53 1,25 1,25 7:16 AM AR 1,53 1,27 1,25	1,32	288 0	100.0	761.0
7:27 AM JK 1,72 1,50 1,48 7:42 AM JK 1,73 1,52 1,51 8:38 AM AR 1,69 1,48 1,45 8:45 AW AR 1,69 1,45 1,45 7:20 AM JK 1,60 1,41 1,34 7:12 AM M/V 1,59 1,37 1,39 1:38 PM KE 1,54 1,33 1,36 7:27 AM AR 1,52 1,28 1,25 7:16 AM AR 1,53 1,25 1,25	1,43	288 0	100.0	849.6
7:42 AM JK 1,73 1,52 1,51 8:38 AM AR 1,69 1,48 1,45 8:45 AW AR 1,69 1,45 1,45 7:20 AW JK 1,60 1,41 1,34 7:12 AM M/V 1,59 1,37 1,39 1:59 PM KE 1,54 1,33 1,36 7:27 AM AR 1,52 1,28 1,25 7:16 AM AR 1,53 1,25 1,25 7:16 AM AR 1,53 1,27 1,22	1.55	288 0	100.0	793.0
8:38 AM AR 1.69 1.48 1.45 8:45 AM AR 1.68 1.45 1.45 7:20 AM JK 1.60 1.41 1.34 7:12 AM MV 1.59 1.37 1.39 1:59 PM KE 1.54 1.33 1.36 7:27 AM AR 1.52 1.28 1.35 7:27 AM AR 1.46 1.29 1.25 7:16 AM AR 1.53 1.27 1.28	1.57	288 0	100.0	774.8
8:45 AM AR 1.68 1.45 1.45 7:20 AM JK 1,60 1.41 1.34 7:12 AM M/V 1,59 1.37 1,39 1:59 PM KE 1,54 1,33 1,36 1:38 PM AR 1,52 1,28 1,35 7:27 AM AR 1,46 1,29 1,25 7:16 AM AR 1,53 1,27 1,22	1.52	288 0	100.0	825.B
7:20 AM JK 1.60 1.41 1.34 7:12 AM M/V 1.59 1.37 1.39 1:59 PM KE 1.54 1.33 1.36 1:48 PM AR 1.52 1.28 1.25 7:27 AM AR 1.46 1.29 1.25 7:16 AM AR 1.53 1.27 1.22	1.49		100.0	730.4
7:12 AM MV 1.59 1.37 1.39 1:59 PM KE 1.54 1.33 1.36 1:48 PM AR 1.52 1.28 1.35 7:27 AM AR 1.46 1.29 1.25 7:16 AM AR 1.53 1.27 1.22	1.42	288 0	100.0	659.4
1:59 PM KE 1:54 1:33 1:36 1:36 1:36 1:36 1:36 1:36 1:37 1:35 1:35 1:35 1:35 1:35 1:37 1:25 1:25 1:25 1:27 1:22 1:22 1:27 1:22		288 0	100.0	718.9
1:48 PM AR 1:52 1:28 1:35 7:27 AM AR 1:46 1:29 1:25 7:16 AM AR 1:53 1:27 1:22		288 0	100.0	787.9
7:27 AM AR 1.46 1.29 1.25 7:16 AM AR 1.53 1.27 1.22		288 0	100.0	682.5
7:16 AM AR 1.53 1.27 1.22		288 0	100.0	731.2
		288 0	100.0	691.5
7:18 AM	1.25	288 0	100.0	693.5
7:26 AM AR 1.42	1.22	288 0	100.0	655.2
1.45 1.21 1.18 1.17		288 0	100,0	793.5
	Monthly Total	8640 0		Anna Carrier and Anna Carrier

Submitted by (Print): Andrew Rosel

Signature:

Niverville WTP - Chlorine Report - October 2023

Nov 1, 2023

Water System Code: 151.25

Instrument Location:Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Andrew Rempel

Day of Month Time 1 7:50 AM 2 7:20 AM 3 8:08 AM 4 7:27 AM 5 7:25 AM 7 7:13 AM 8 7:57 AM 9 9:27 AM 9 9:27 AM 10 7:20 AM	Operator Initials KE KE JK JK JK SK MV MV KP	Total Chlorine	Operator Verification	erification	Automation Records	on Records	Alternations	Number of Free Chlorine Readions	o Dearling	
	Operator Initials KE	Total Chlorine					MAHINE		e Menter in	
e e e e e e e e e e e e e e e e e e e	A 저 저 저 저 저 X M A A X	76.0	Handheid	Display	Average	Minimum	Total	Below	% Within Standard	Daily Usage (m³)
er en	로 로 로 로 X X Y 4 A X	130	69'0	1.18	1.16	1.21	288	0	100.0	789.7
Charles and the Charles and th	국 국 국 X X 전 3 X		1,08	1.13	1.09	1.14	288	0	100.0	709.5
	포 보 보 X M 4	1.32	1.12	1.08	1.07	1.10	288	0	100.0	673.1
	지 보 X M 4 전 보	1.33	1.12	1.06	1.09	1.12	288	0	100,0	664.6
	NAV MAV	1.32	1,15	1.09	1.14	1.18	288	0	100.0	649.0
	SK MV XP	1.29	1.13	1.16	1.16	1.18	288	0	100.0	678.4
	MY XP	1.27	1.08	1.13	1,12	1,16	288	0	100.0	688.1
	장 포	1.27	1.15	1.12	1.12	1.16	288	0	100.0	705.5
	¥	1,16	1.07	1.14	1.12	1.14	288	0	100.0	2.797
		1.23	1.06	1.10	1.06	1.11	288	0	100.0	650.1
11 7:19 AM	¥	1.22	1,05	1.05	1.05	1.12	288	0	100.0	670.1
12 7:24 AM	¥	1.23	1.05	1.03	1.02	1.05	288	0	100.0	675.2
13 7:20 AM	복	1,18	1.0.1	0,99	0.99	1,01	288	0	100.0	639.9
14 7:10 AM	X	1.18	0.99	1.00	1.00	1.05	288	0	100.0	728.0
15 7:13 AM	MV	1.19	1.00	0.98	1,00	1:03	288	0	100.0	800.3
16 7:25 AM	AR	1.19	1.01	1.01	1.00	1.04	288	0	100.0	696.1
17 7:55 AM	×	1.20	1.04	1.00	1.00	1.08	288	0	100.0	663.6
18 7;12 AM	AR	1.14	0.96	0.96	0.97	66.0	288	0	100,0	642.5
19 7:21 AM		1.15	0.98	0.39	0.99	1.06	288	0	100.0	683.0
20 7:15 AM	¥	1.17	0.97	1,03	1.01	1.03	288	0	100.0	683.0
21 7:20 AM	SK	1.09	0.99	0.99	76.0	1.0,1	288	0	100.0	717.2
22 7:11 AM	MV	1.16	0.98	0.94	0.92	06:0	288	O	100.0	781.8
23 7:15 AM	AR	1,03	0.86	0.85	0.84	0.89	288	0	100.0	690.2
24 7:15 AM	¥	0.98	0.84	0.84	0.84	0.89	288	٥	100.0	697.1
25 7:17 AM	Ж	0.99	0.85	0.86	0.86	0.87	288	0	100.0	676.0
26 7:44 AM	AR	1.04	0.87	0.84	0.83	0.86	288	0	100.0	665.2
27 7:21 AM	¥	1.03	0.88	0.81	0.82	0.85	288	0	100.0	672.9
28 7:23 AM	š	1.04	0.90	0.82	0.80	0.83	288	0	100.0	743.6
29 7:07 AM		0.59	06.0	0.82	0.80	0.83	288	0	100.0	794.B
30 7:14 AM		1.01	0.83	0.82	0.84	0670	288	0	100.0	696.2
31 8:21 AM	AR	1.08	0.88	0.83	0.86	0,88	288	0	100.0	637.0
						Monthly Total	8928	0		

Submitted by (Print): Andrew Remme

Signature:

Niverville WTP - Chlorine Report - November 2023

Dec 1, 2023

Water System Code: 151.25

Instrument Location. Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Andrew Rempel

						2	Distribution Chlorine	ine			
				Operator Verification	erification	Automati	Automation Records		Number of Free Chlorine Readings	Readings	
Day of Month	Time	Operator Initials	Total Chlorine	Handheld	Display	Average	Minimum	Total	Below	% Within Standard	Daily Usage
-	7:15 AM	AR	1.09	06.0	98.0	0.87	0.77	288	0	100.0	674.0
7	7:17 AM	¥	1.19	1.01	0.93	96'0	0.73	288	0	100.0	705.3
m	7:19 AM	AR	1,18	0.99	96'0	96'0	0.80	288	0	100.0	667.0
4	6:51 AM	ઝ	1.2.1	0.99	0.98	0.99	0.94	288	0	100.0	736.7
ro.	7:05 AM	×	1.18	1.04	1.03	1.04	0.86	288	0	100.0	789.6
o	7:18 AM	×	1.23	1.02	1.02	1,03	0.94	288	a	100.0	664.9
7	7:20 AM	¥	1,22	1.06	1.03	1.05	1.00	288	0	100.0	651.7
00	7:20 AM	×	1.27	1.07	1.04	1.06	0.98	288	٥	100,0	645.5
O1	8:43 AM	AR	1.32	1,13	1.09	1,12	1.02	288	0	100,0	641.0
٩	7:17 AM	폭	1.43	1.22	1.18	1.20	0.95	288	0	100.0	652.1
11	11:55 AM	뽀	1.41	1.20	1.17	1.17	1,09	288	0	100.0	715.0
12	7:08 AM	쪼	1.20	1.10	1.14	1.13	1.12	288	0	100.0	755.9
5	7:21 AM	폭	1.22	1.02	1.09	1.04	76'0	288	0	100.0	718.9
14	7:44 AM	복	1,26	1.08	0.97	0.97	96.0	288	0	100.0	664.2
15	7:18 AM	¥	1.23	1.05	0.97	0.98	0.95	288	0	100.0	665.1
5	7:12 AM	AR	1,28	1.07	0.96	1.03	0.81	288	0	100.0	661,4
12	7:20 AM	¥	1,19	1.01	1.02	1.03	0.89	288	0	100.0	648.9
<u>م</u>	7:12 AM	SK	1.09	0.92	1.06	1.04	0.83	288	0	100.0	723.6
<u>5</u>	7:12 AM	₩	1,16	1.0.1	0.98	0,99	0.94	288	0	100,0	750.1
20	7:18 AM	ᆂ	1.10	0.86	0.95	0.90	0.94	539	Q	100.0	699.7
21	7:40 AM	¥	1.06	0.89	0.85	0.86	0.76	288	0	100.0	681,5
22	7:25 AM	¥	1.07	0.90	0.86	0.86	0.73	288	0	100.0	654.2
23	7:20 AM	봈	1,09	0.90	0.89	06.0	0.73	288	0	100.0	651.5
24	7:23 AM	¥	1.14	0.95	0.93	0.92	0.79	288	0	100.0	655.8
27	7:08 AM	×	1.14	1.00	0.89	0.92	0.88	288	0	100.0	700.0
56	6:50 AM	Z.	1.16	0,97	0.91	0.94	0.68	288	0	100.0	773.1
27	7:18 AM	×	1.17	1.00	0,93	96'0	0.91	288	0	100.0	655.8
78	7:40 AM	×	1,11	1.00	0.97	0.97	06'0	288	0	100.0	625.9
29	7:26 AM	AR	1.14	0.92	86'0	0.94	0.83	288	0	100.0	656,5
30	7:14 AM	AR	1.1	0.93	0.89	0,93	0.88	288	٥	100.0	651.7
							Monthly Total	8651	0		

Submitted by (Print): Andrew Remyel

Signature: They Married

Niverville WTP - Chlorine Report - December 2023

Water System Code: 151.25

Instrument Location-Distribution Chlorine

Lead Operator: Ryan Dyck

Other Operators: Andrew Rempel

						ίο	Distribution Chlorine	ine			
				Operator	Operator Verification	Automatic	Automation Records	Number	Number of Free Chlorine Readings	e Readings	
Day of Month	Time	Operator Initials	Total Chlorine	Free Chlorine Handheld	Free Chlorine Display	Average	Minimum	Total	Below Standard	% Within Standard	Daily Usage (m²)
-	7:16 AM	AR	1.13	96'0	0.95	0.97	0.71	288	0	100.0	637.6
2	7:05 AM	SK	1,15	1.04	0.99	0.99	0.94	288	Ó	100.0	732.3
m	6:58 AM	MV	1.15	0.78	0.97	0.98	0.94	288	٥	100.0	7.727
4	7:18 AM	AR	1.20	0.99	1.00	0.99	0.67	288	O	100.0	698.3
ın	7:15 AM	AR	1.17	0.97	0.95	0.95	0,92	288	0	100.0	6.999
9	7:16 AM	AR	1.13	0.94	0.95	0.95	0.80	288	0	100.0	6.699
7	7:12 AM	AR	1.12	0.93	0.97	76'0	0.78	288	0	100.0	659.4
80	7:18 AM	¥₩	1.14	0.97	76'0	0,97	0.93	288	٥	100.0	639.9
đ	11:06 AM	X	1.18	1.04	96'0	9.1	0.81	288	0	100.0	741.9
10	1:57 PM	팦	1:31	1.11	1.06	1.07	06'0	288	0	100.0	790,1
F	8;30 AM	ΑR	1.33	1.10	1.10	1,09	0.83	288	0	100.0	725,4
12	8:15 AM	AR	139	1.17	1.16	1.15	1.08	288	0	100.0	700.2
13	7:17 AM	AR	1,36	1.14	1.15	1.14	1.00	288	0	100.0	0.089
4	7:21 AM	AR	1.39	1.15	1,12	1.11	0.00	288	2	98.3	673.6
15	7:16 AM	AR	1.33	1.10	1,06	1.05	0.86	288	0	100.0	659.2
16	7:53 AM	š	1.38	1.21	1.04	1.05	0.96	288	0	100.0	728.2
17	7:10 AM	MV	1,48	1.24	1.09	1.09	0.92	288	0	100.0	750.4
81	8:15 AM	₩	1.43	1.19	1.06	1,14	1.04	288	0	100.0	680.1
19	7:17 AM	AR	1.40	1.21	1.16	1,19	1.07	288	0	100,0	657.5
20	7:12 AM	AR	1.42	1.21	1.21	1,20	1.10	288	0	100.0	665.6
21	7:12 AM	AR	1,39	1.16	1.14	1.15	0.83	288	0	100.0	667.4
22	7:10 AM	AR	1.39	1,17	1.10	1,09	1.01	288	0	100.0	696,4
23	7:59 AM	AM	1.28	1.09	1,05	1.01	0.94	288	0	100.0	725.3
24	9:23 AM	M	1.24	1.06	0.94	0.93	0.89	288	0	100.0	726.4
25	8:30 AM	5	1,23	1.06	0.89	1.00	0.76	288	0	100.0	655.5
26	5:38 AM	Š	1.28	1.17	1.04	1.01	96'0	288	0	100.0	646.7
27	7:44 AM	¥	1,24	1.05	0.97	1.03	0.86	288	0	100.0	685.6
2.8	7:27 AM	¥	1.26	1.05	1,05	1.04	0.98	288	0	100.0	680.0
53	7:26 AM	¥	1.23	1.04	0.97	1.0.1	0.95	288	Ó	100.0	682.1
æ	8:07 AM	×	1.32	1.14	0.99	1.00	0.98	288	0	100.0	709.3
31	12:37 PM	KE	1.24	1.10	0.97	0.98	0,95	288	0	100.0	711.1
į					Ì		Monthly Total	8978	v		Walter Co.

Submitted by (Print): Anches Rempt

Signature:

CORRECTIVE ACTION REPORT



WATER SYSTEM: Spruce Down WT	P WATER SYSTEM CODE: 151.25
LOCATION OF NON-COMPLIANCE INCIDENT (ex. W	later Plant): Water Plant
OPERATOR: Andrew Rempel	Signature:
TYPE OF NON-COMPLIANCE INCIDENT:	Low disinfectant residual entering the distribution system, 21(1) MR 40/2007 Low disinfectant residual in the distribution system, 22 MR 40/2007 Filtered water turbidity exceeding the turbidity standard, 6(1) MR 41/2007 Low positive total coliform (< 10 CFU/100mL), 3 MR 41/2007 Other DATE: December 14, 2023
INITIAL TEST RESULTS:	DATE: VICENIUC. 17,000
DESCRIPTION OF CORRECTIVE ACTIONS TAKEN (attach additional sheets if required):
5 5	
	cleaned and calibrated our Chlorine
analyzer This caused 5 r	readings to be taken which were below our
050 mg/L Standard	
	HP ACCESS
Name of the state	
F	DATE
TEST RESULTS AFTER CORRECTIVE ACTIONS:	DATE:
(attach laboratory results if applicable)	

EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER ON SITUATIONS REQUIRING IMMEDIATE REPORTING.

DISTRIBUTION:

FORWARD THE ORIGINAL TO YOUR DRINKING WATER OFFICER WITH YOUR MONTHLY DISINFECTION OR TURBIDITY MONITORING REPORT RETAIN A COPY FOR YOUR RECORDS

Contact your Drinking Water Officer with any comments, questions or concerns.

2023 Bi-Weekly Sampling

				Free	Chlorine	(mg/L)
<u>Date</u>	Address	T.C.	E.C	Ammonia	Free	Total
						
Janaury 10th	Raw Water	0	0		0.00	0.00
	Water Treatment Plant	0	0	0.01	0.89	0.97
	22 Prestwick Street	0	0		0.22	0.25
January 24th	Raw Water	0	0		0.00	0.00
	Water Treatment Plant	0	0	0.00	0.80	1.00
	1 Arena Road	0	0		0.78	0.94
February 7th	Raw Water	0	0		0.00	0.00
•	Water Treatment Plant	0	0	0.00	0.74	0.87
	108 Claremont Drive	0	0		0.69	0.80
February 21st	Raw Water	0	0		0.00	0.00
, ,	Water Treatment Plant	0	0	0.00	0.68	0.76
	25 Prestwick Street	0	0		0.52	0.59
March 7th	Raw Water	0	0		0.00	0.00
	Water Treatment Plant	0	0	0.00	0.74	0.80
	1 Arena Road	0	0		0.71	0.82
March 21st	Raw Water	0	0		0.00	0.00
	Water Treatment Plant	0	0	0.00	1.03	1.16
	329 Bronstone Drive	0	0		0.83	0.95
April 4th	Raw Water	< 1	< 1		0.00	0.00
Apin -ten	Water Treatment Plant	< 1	< 1	0.00	0.79	0.98
	29 Foxdale Way	< 1	< 1		0.71	0.84
April 18th	Raw Water	< 1	< 1		0.00	0.00
April 10th	Water Treatment Plant	< 1	< 1	0.01	0.82	0.90
	405 Saint George Place	< 1	< 1		0.76	0.93
May 2nd	Raw Water	< 1	< 1		0.00	0.00
Way Zila	Water Treatment Plant	< 1	< 1	0.00	1.07	1.23
	211 Saint Andrews Way	< 1	< 1	0.00	0.23	0.25
	ELL Julie / Midi City 19 dy		-			5.23
May 16th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.00	1.15	1.31
	329 Bronstone Drive	< 1	< 1		1.02	1.19
May 30th	Raw Water	< 1	< 1		0.00	0.00

	Water Treatment Plant	< 1	< 1	0.00	1.12	1.28
	425 - 6th Ave South	< 1	< 1		1.08	1.28
June 14th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.00	0.65	0.71
	12 Vista Cove	< 1	< 1		0.60	0.74
	12 11010 0010	_	_			
June 27th	Raw Water	< 1	< 1		0.00	0.00
June 27 th	Water Treatment Plant	< 1	< 1	0.00	1.29	1.53
	15 Prestwick Street	<1	< 1	0.00	1.17	1.28
	13 Mestwick Street	-	•		2.27	1.20
July 11th	Raw Water	< 1	< 1		0.00	0.00
July 11th	Water Treatment Plant	< 1	< 1	0.00	1.04	1.07
	38 Prestwick Street	< 1	< 1	0.00	0.34	0.35
	38 Flestwick Street	` 1	`1		0.54	0.55
July 25th	Raw Water	< 1	< 1		0.00	0.00
July 25th	Water Treatment Plant	<1	<1	0.00	1.27	1.49
	425 - 6th Ave South	<1	< 1	0.00	1.28	1.49
	423 - 0til Ave 30ttil	\1	`1		1.20	1.43
August 8th	Raw Water	< 1	< 1		0.00	0.00
August otti	Water Treatment Plant	<1	< 1	0.00	0.55	0.67
	329 Bronstone Drive	< 1	<1	0.00	0.63	0.72
	329 Bronstone Drive	\1	\1		0.03	0.72
August 22nd	Raw Water	< 1	< 1		0.00	0.00
August 22nd	Water Treatment Plant	<1	< 1	0.00	1.06	1.24
		< 1	< 1	0.00	0.82	0.88
	163 Breckenridge Drive	\1	\ <u>1</u>		0.02	0.00
September 5th	Raw Water	< 1	< 1		0.00	0.00
September 5th	Water Treatment Plant	<1	< 1	0.00	1.06	1.23
	29 Murcar Street	<1	< 1	0.00	0.58	0.72
	29 Mulcai Street	`1	`1		0.50	0.72
September 19th	Raw Water	< 1	< 1		0.00	0.00
September 13th	Water Treatment Plant	<1	< 1	0.00	1.52	1.73
	25 Prestwick Street	<1	< 1	0.00	0.98	1.05
	23 Flestwick Street	\1	` 1		0.50	1.03
October 3rd	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	<1	< 1	0.01	1.12	1.32
	329 Bronstone Drive	<1	< 1	0.01	1.13	1.23
	329 BIOHStoffe Drive	\1	`1		1.15	1.25
October 17th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.00	1.04	1.20
	32 Prestwick Street	<1	< 1	0.00	0.89	1.03
	32 FIESLWICK SUPEL	~ 1	` 1		0.03	1.05
October 31st	Raw Water	< 1	< 1		0.00	0.00
October 218t	Water Treatment Plant	<1	< 1	0.00	0.88	1.08
		<1	< 1	0.00	0.80	1.00
	25 Foxdale Way	< I	\1		0.00	1.00

November 14th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.00	1.08	1.26
	1 Murcar Street	< 1	< 1		1.08	1.22
November 28th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.01	1.00	1.11
	329 Bronstone Drive	< 1	< 1		0.95	1.06
December 12th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.01	1.17	1.39
	13 Prestwick Street	< 1	< 1		0.86	0.99
December 27th	Raw Water	< 1	< 1		0.00	0.00
	Water Treatment Plant	< 1	< 1	0.00	1.05	1.24
	425 - 6th Ave South	< 1	< 1		1.01	1.20