

SYSTEM OVERVIEW

October 1st to December 31st, 2023

OPERATIONAL HIGHLIGHTS

Drinking Water System

- The water treatment system operated well during the fourth quarter.
- Annual generator service completed.
- Category One watermain repair completed at Joseph and King St.

Wastewater Treatment

- The wastewater treatment system performed well during the fourth quarter.
- Annual generator service completed.
- Fall discharge complete, discharge began October 16 and ended November 21.

CAPITAL PLAN PROGRESS

Drinking Water System

- N/A

Wastewater Treatment Lagoon

- N/A

ASSET MANAGEMENT

See Appendix A - Work Order summary for water treatment plant (WTP)

See Appendix B - Work Order summary for wastewater treatment lagoon (WWTL)

CALL-OUT SUMMARY

See Appendix C - Call-out Report for WTP

See Appendix D - Call-out Reports for WWTL

REGULATORY

- All drinking water samples required under O. Regulation 170/03 were collected and tested in the fourth quarter of 2023 and all results fell within regulatory limits.
- Quarterly trihalomethanes (THM), haloacetic acids (HAA), Nitrate and Nitrite sampling completed October 11, 2023.
- Annual Capital and Major Maintenance Recommendations Report completed and submitted.
- Annual Hach instrument calibrations completed on October 31, 2023.
- THM running annual average below limit of 100 ug/L with a result of 3.00 ug/L in the past four quarters.
- HAA running annual average below the proposed limit of 80 ug/L (came into effect January 1, 2023) with a result of <5.3 ug/L.
- No Ministry of the Environment, Conservation and Parks (MECP) or Ministry of Labour (MOL) inspections conducted this quarter.
- DWQMS Management Review completed December 8, 2023.
- All required sewage samples required under the system’s Environmental Compliance Approval (ECA) were collected and tested in the fourth quarter of 2023.
- Lagoon fall discharge completed, all sample results were well below ECA limits and objectives.
- MECP inspection report pending for lagoon, OCWA pointed out numerous inconsistencies and inaccurate details within the inspection report and are in conversations with MECP.

INCIDENTS AND COMPLAINTS

Powassan Drinking Water System

Incident	n/a
Date	
Details	

Powassan Wastewater System

Incident	Spill at Clark St. SLS due to Mechanical Failure
Date	December 28, 2023
Details	SAC Ref No.: 1-4K5U1Z Start Date & Time: December 28, 2023 @ 1645 Termination: December 28, 2023 @ 1735 hrs Duration: 50 minutes Approximate volume: 10 m ³ Details: Generator failure to activate following power outage with delay in alarm notification resulting in station bypass/spill. Receiver: Genesee Creek Actions: Raw sewage superchlorinated entering overflow header. Collection of

	samples not possible due to delay in notification until power restoration at which point station level immediately reduced. Primary and backup alarming evaluation with reconfiguration to ensure multiple notifications and monitoring. Reporting: Verbal reports to MOE SAC and MOH, emailed to EC and MOE SAC as required, also notification made to local MECP inspector Erin Spires and owner via email.
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HEALTH AND SAFETY

- Staff training completed on Critical Risks and Work Planning.
- Staff training completed on Lockout/Tagout.
- Staff training completed on Winter Working and Driving.

POWASSAN DRINKING WATER SYSTEM PERFORMANCE

See Appendix E – Performance Assessment Report Water

POWASSAN WASTEWATER TREATMENT LAGOON – WASTEWATER FLOW SUMMARY

See Appendix F – Performance Assessment Report Wastewater



Appendix A - Work Order Summary for WTP

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 6033*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3576580	0000235294	PANEL ALARM/ DIALER 01 POWASSAN GROUND WATER WELL	6033, Powassan WTP, Process, Lowlift, Well System	PM	Inspection	1	MONTHS	Critical Building Intrusion Alarm Testing (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:26 PM	10/30/23 10:26 PM	Critical Building Intrusion Alarm Testing (1m) 6033 -October 27, 2023. Dan Finnigan performed a test of the well supply building entrance door intrusion alarm by not disarming the alarm when entering the building. This caused an intrusion alarm, which True Steel Alarm Monitoring Service received and notified the on- call operator. This confirms that the building door intrusion alarm is working. DF
3586791	0000296004	GENERATOR NATURAL GAS GENSET McRae Road Reservoir	6033, Powassan WTP, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033	COMP	10/1/23 12:00 AM	10/13/23 08:41 AM	10/13/23 08:41 AM	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033 -October 11, 2023 by Dan Finnigan. The oil level was checked and found to be "full", and the air filter was checked and was clean. The main power to the building was disconnected and the generator started without any issues. Power was transferred to the generator a moment later, and all building functionality was returned. After the test period the power to the building was re-instated, and after a cool-down period the generator shut down.

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 Work Order Class:

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3593044	0000235294	PANEL ALARM/ DIALER 01 POWASSAN GROUND WATER WELL	6033, Powassan WTP, Process, Lowlift, Well System	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:30 PM	10/30/23 10:30 PM	Critical Alarm/Dialer Testing (1m) 603 -Critical Alarm/Dialer Testing (1m) 6033 was completed by Dan Finnigan on October 26, 2023. The Cl2 probe was pulled out of the sample cells to perform a monthly inspection and cleaning and to force an alarm condition for the monthly testing of the low chlorine alarm, the alarm dialer and the well pump interlock lockout. True Steel called to advise they had received an alarm notification re the low chlorine alarm. The Cl2 probe was placed back into the flow thru sample cell after it was inspected, cleaned and the electrolyte topped up. After the low chlorine alarm cleared, the well pump lockout was reset to resume normal operation of the well house. These actions verified proper operation of the low Cl2/instrument alarm, alarm dialer and well pump interlock.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3593491			6033, Powassan WTP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:28 PM	10/30/23 10:28 PM	Health And Safety Inspection (1m) 6033 - The monthly H&S Inspection was conducted on October 26, 2023 and consisted of checking/verifying the following items: 1. Chemical Apron 2. Face Shield 3. Spill Kit(s) X 2: all items were available 4. Chemical secondary containment (intact) 5. Safety Signage (all intact and visible) 6. First aid kit 7. Hearing protection earmuffs 8. Emergency lighting (a new unit was picked up and installed: tested and working) 9. Emergency Eyewash (tested and working)
3593617			6033, Powassan WTP, Process, Process Control & Monitoring	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:33 PM	10/30/23 10:33 PM	Analyzer Chlorine Inspection/ Service (1m) 6033 -October 26, 2023 by Dan Finnigan. During the monthly low chlorine critical alarm / lockout test the analyzer housing was flushed and inspected for damage and wear, and the electrolyte solution level was checked and topped up. A new membrane cap was installed. The probe was re-inserted into the housing and a single point verification was conducted with the following results: Online analyzer: 2.18 mg/L Free Cl2 Handheld analyzer: 1.67 mg/L Free Cl2 The online analyzer required adjustment. The new slope after calibration was 2.19 mA/ppm (within spec).

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3595110			6033, Powassan WTP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:34 PM	10/30/23 10:34 PM	TPM Inspection/Maintenance (1m) 6033 -October 26, 2023. Reviewed trending to ensure both submersible well pump is operating within normal parameters. Started exhaust fan and observed motorized louvers operating properly. Verified chlorine pump on hand, as well as duty chlorine pump operating satisfactorily.
3595115	0000209142	GENERATOR DIESEL POWASSAN GROUND WATER WELL:	6033, Powassan WTP, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:41 PM	10/30/23 10:41 PM	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033 -October 26, 2023 by Dan Finnigan. All fluid levels were checked, belts inspected, battery charging system, etc. The generator was started and the electrical load was transferred to generator power successfully, and transferred back to shore power properly when the test was completed. While running, the system was observed for leaks or any other deficiencies. Electrical volts and amps were recorded, along with the following generator values: RPM's = 1779 Exhaust Temp = 590 Deg. F. Oil Level = Full Coolant Temp=181 Deg.F Battery Voltage= 13.8V Oil Pressure 60 psi Fuel level = approximately 6.0 inches Hrs at start: 6882 hr 43 min Hrs at stop: 6883 hr 38 min

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3596876			6033, Powassan WTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 6033	COMP	10/1/23 12:00 AM	10/30/23 10:43 PM	10/30/23 10:43 PM	WISKI Review (1m) 6033 -WISKI Review (1m) for the month of September 2023 was completed on October 31, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.
3606550	0000258571	ANALYZER CHLORINE AIT-601 RESERVOIR	6033, Powassan WTP, Process, Storage, Elevated Reservoir	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	10/1/23 12:00 AM	10/13/23 08:43 AM	10/13/23 08:43 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - Analyzer Chlorine Inspection/ Service (1m) at the Reservoir was performed by Dan Finnigan on October 11, 2023. Electrolyte levels were checked and filled, air was flushed from the analyzer housing, and readings checked against a pocket colorimeter. A single point calibration was conducted after placing the analyzer probe online. The online analyzer did not need calibration.
3626139	0000235294	PANEL ALARM/ DIALER 01 POWASSAN GROUND WATER WELL	6033, Powassan WTP, Process, Lowlift, Well System	PM	Inspection	1	MONTHS	Critical Building Intrusion Alarm Testing (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:34 AM	11/24/23 08:34 AM	Critical Building Intrusion Alarm Testing (1m) 6033 -November 22, 2023. Dan Finnigan performed a test of the well supply building entrance door intrusion alarm by not disarming the alarm when entering the building. This caused an intrusion alarm, which True Steel Alarm Monitoring Service received and notified the on-call operator. This confirms that the building door intrusion alarm is working. DF
3629448	0000235295	VALVE BACKFLOW PREVENTOR SAMPLE SINK	6033, Powassan WTP, Process	PM	Refurbish/ Replace/Repair	1	YEARS	Backflow Preventer Inspection (1y) 6033	COMP	11/1/23 12:00 AM	12/11/23 11:58 AM	12/11/23 11:58 AM	Backflow Preventer Inspection (1y) 6033 - test bfp with calibration equipment- pass TF Dec8/23

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3629453	0000235296	VALVE BACKFLOW PREVENTOR BACKUP BACKFLOW	6033, Powassan WTP, Process	PM	Refurbish/ Replace/Repair	1	YEARS	Backflow Preventer Inspection (1y) 6033	COMP	11/1/23 12:00 AM	12/11/23 11:59 AM	12/11/23 11:59 AM	Backflow Preventer Inspection (1y) 6033 - test bfp with calibration equipment- pass TF Dec8/23
3634756	0000296004	GENERATOR NATURAL GAS GENSET McRae Road Reservoir	6033, Powassan WTP, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:56 AM	11/24/23 08:56 AM	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033 - On November 22, 2023 the power was interrupted at the reservoir and the backup generator failed. A monthly test run was not possible but Val's Equipment was notified and diagnosed the issue. New parts were ordered and will be replaced once available (see W/O#3665633).
3640546	0000235294	PANEL ALARM/ DIALER 01 POWASSAN GROUND WATER WELL	6033, Powassan WTP, Process, Lowlift, Well System	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:47 AM	11/24/23 08:47 AM	Critical Alarm/Dialer Testing (1m) 6033 -Critical Alarm/Dialer Testing (1m) 6033 was completed by Dan Finnigan on November 22, 2023. The Cl2 probe was pulled out of the sample cells to perform a monthly inspection and cleaning and to force an alarm condition for the monthly testing of the low chlorine alarm, the alarm dialer and the well pump interlock lockout. Telus Alarms called to advise they had received an alarm notification re the low chlorine alarm. The Cl2 probe was placed back into the flow thru sample cell after it was inspected, cleaned and the electrolyte topped up. After the low chlorine alarm cleared, the well pump lockout was reset to resume normal operation of the well house. These actions verified proper operation of the low Cl2/instrument alarm, alarm dialer and well pump interlock.

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3640826			6033, Powassan WTP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:36 AM	11/24/23 08:36 AM	Health And Safety Inspection (1m) 6033 - The monthly H&S Inspection was conducted on November 22, 2023 and consisted of checking/verifying the following items: 1. Chemical Apron 2. Face Shield 3. Spill Kit(s) X 2: all items were available 4. Chemical secondary containment (intact) 5. Safety Signage (all intact and visible) 6. First aid kit 7. Hearing protection earmuffs 8. Emergency lighting (tested and working) 9. Emergency Eyewash (tested and working)
3640928			6033, Powassan WTP, Process, Process Control & Monitoring	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:50 AM	11/24/23 08:50 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - November 22, 2023 by Dan Finnigan. During the monthly low chlorine critical alarm / lockout test the analyzer housing was flushed and inspected for damage and wear, and the electrolyte solution level was checked and topped up. The probe was re-inserted into the housing and a single point verification was conducted with the following results: Online analyzer: 2.00 mg/L Free Cl2 Handheld analyzer: 1.67 mg/L Free Cl2 The online analyzer required adjustment. The new slope after calibration was 1.89 mA/ppm (within spec).

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3642014			6033, Powassan WTP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:44 AM	11/24/23 08:44 AM	TPM Inspection/Maintenance (1m) 6033 -November 22, 2023. Reviewed trending to ensure both submersible well pump is operating within normal parameters. Started exhaust fan and observed motorized louvers operating properly. Verified chlorine pump on hand, as well as duty chlorine pump operating satisfactorily.
3642019	0000209142	GENERATOR DIESEL POWASSAN GROUND WATER WELL:	6033, Powassan WTP, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:43 AM	11/24/23 08:43 AM	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033 - November 22, 2023 by Dan Finnigan. All fluid levels were checked, belts inspected, battery charging system, etc. The generator was started and the electrical load was transferred to generator power successfully, and transferred back to shore power properly when the test was completed. While running, the system was observed for leaks or any other deficiencies. Electrical volts and amps were recorded, along with the following generator values: RPM's = 1839 Oil Level = Full Coolant Temp=176 Deg.F Battery Voltage= 13.8V Oil Pressure 66 psi Fuel level = approximately 6.0 inches Hrs at start: 6896 hr 12 min Hrs at stop: 6897 hr 14 min

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3642928			6033, Powassan WTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 6033	COMP	11/1/23 12:00 AM	11/3/23 09:18 AM	11/3/23 09:18 AM	WISKI Review (1m) 6033 -WISKI Review (1m) for the month of October 2023 was completed on November 03, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.
3650740	0000258571	ANALYZER CHLORINE AIT-601 RESERVOIR	6033, Powassan WTP, Process, Storage, Elevated Reservoir	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	11/1/23 12:00 AM	11/24/23 08:40 AM	11/24/23 08:40 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - Analyzer Chlorine Inspection/ Service (1m) at the Reservoir was performed by Dan Finnigan on November 22, 2023. Electrolyte levels were checked and filled, air was flushed from the analyzer housing, and readings checked against a pocket colorimeter. A single point calibration was conducted after placing the analyzer probe online. Online = 1.22 mg/L Tested = 1.55 mg/L The new slope after calibration was 1.75 mA/ppm (within spec).
3665633			6033, Powassan WTP, Facility, Power Generation	CAP	Refurbish/ Replace/Repair	0		Powassan Reservoir Generator: Fail to Start Troubleshooting	COMP		12/20/23 08:37 AM	12/20/23 08:37 AM	Powassan Reservoir Generator: Fail to Start Troubleshooting - Winter storm caused power outage at the reservoir. Generator failed to start. Technicians called in for troubleshooting.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3667420	0000235294	PANEL ALARM/ DIALER 01 POWASSAN GROUND WATER WELL	6033, Powassan WTP, Process, Lowlift, Well System	PM	Inspection	1	MONTHS	Critical Building Intrusion Alarm Testing (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:46 AM	12/20/23 08:46 AM	Critical Building Intrusion Alarm Testing (1m) 6033 -December 14, 2023. Dan Finnigan performed a test of the well supply building entrance door intrusion alarm by not disarming the alarm when entering the building. This caused an intrusion alarm, which True Steel Alarm Monitoring Service received and notified the on- call operator. This confirms that the building door intrusion alarm is working. DF
3675789	0000296004	GENERATOR NATURAL GAS GENSET McRae Road Reservoir	6033, Powassan WTP, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033	COMP	12/1/23 12:00 AM	12/21/23 01:57 PM	12/21/23 01:57 PM	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033 - Wednesday December 20, 2023. Val's Equipment was onsite to replace the throttle control arm (previously broke off). Once installed the generator was test run until warmed up. Power was disconnected at the reservoir building and the generator started and power was successfully transferred to the backup generator. After approximately 1/2 hour the power was transferred back to regular shore power and the generator shut off in AUTO mode.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3682499	0000235294	PANEL ALARM/ DIALER 01 POWASSAN GROUND WATER WELL	6033, Powassan WTP, Process, Lowlift, Well System	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:43 AM	12/20/23 08:43 AM	Critical Alarm/Dialer Testing (1m) 6033 -Critical Alarm/Dialer Testing (1m) 6033 was completed by Dan Finnigan on December 14, 2023. The Cl2 probe was pulled out of the sample cells to perform a monthly inspection and cleaning and to force an alarm condition for the monthly testing of the low chlorine alarm, the alarm dialer and the well pump interlock lockout. Telus Alarms called to advise they had received an alarm notification re the low chlorine alarm. The Cl2 probe was placed back into the flow thru sample cell after it was inspected, cleaned and the electrolyte topped up. After the low chlorine alarm cleared, the well pump lockout was reset to resume normal operation of the well house. These actions verified proper operation of the low Cl2/instrument alarm, alarm dialer and well pump interlock.

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3682757			6033, Powassan WTP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:38 AM	12/20/23 08:38 AM	Health And Safety Inspection (1m) 6033 -The monthly H&S Inspection was conducted on December 14, 2023 and consisted of checking/verifying the following items: 1. Chemical Apron 2. Face Shield 3. Spill Kit(s) X 2: all items were available 4. Chemical secondary containment (intact) 5. Safety Signage (all intact and visible) 6. First aid kit 7. Hearing protection earmuffs 8. Emergency lighting (tested and working) 9. Emergency Eyewash (tested and working)
3682859			6033, Powassan WTP, Process, Process Control & Monitoring	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:41 AM	12/20/23 08:41 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - December 14, 2023 by Dan Finnigan. The analyzer housing was flushed and inspected for damage and wear, and a single point verification was conducted with the following results: Online analyzer: 1.70 mg/L Free Cl2 Handheld analyzer: 1.71 mg/L Free Cl2 The online analyzer was within 0.01 mg/L Free Cl2 and therefore did not required adjustment.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3683912			6033, Powassan WTP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:44 AM	12/20/23 08:44 AM	TPM Inspection/Maintenance (1m) 6033 -December 14, 2023. Reviewed trending to ensure both submersible well pump is operating within normal parameters. Started exhaust fan and observed motorized louvers operating properly. Verified chlorine pump on hand, as well as duty chlorine pump operating satisfactorily.
3683917	0000209142	GENERATOR DIESEL POWASSAN GROUND WATER WELL:	6033, Powassan WTP, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:51 AM	12/20/23 08:51 AM	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033 - December 14, 2023 by Dan Finnigan. All fluid levels were checked, belts inspected, battery charging system, etc. The generator was started and the electrical load was transferred to generator power successfully, and transferred back to shore power properly when the test was completed. While running, the system was observed for leaks or any other deficiencies. Electrical volts and amps were recorded, along with the following generator values: RPM's = 1770 Oil Level = Full Coolant Temp=181 Deg.F Battery Voltage= 13.8V Oil Pressure 63 psi Fuel level = approximately 6.0 inches Hrs at start: 6899 hr 43 min Hrs at stop: 6901 hr 33 min

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 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3684761			6033, Powassan WTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 6033	COMP	12/1/23 12:00 AM	1/3/24 02:44 PM	1/3/24 02:44 PM	WISKI Review (1m) 6033 -WISKI Review (1m) for the month of November 2023 was completed on January 03, 2024 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.
3692253	0000258571	ANALYZER CHLORINE AIT-601 RESERVOIR	6033, Powassan WTP, Process, Storage, Elevated Reservoir	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	12/1/23 12:00 AM	12/20/23 08:49 AM	12/20/23 08:49 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - Analyzer Chlorine Inspection/ Service (1m) at the Reservoir was performed by Dan Finnigan on December 14, 2023. Electrolyte levels were checked and filled, air was flushed from the analyzer housing, and readings checked against a pocket colorimeter. A single point calibration was conducted after placing the analyzer probe online. The new slope after calibration was 2.05 mA/ppm (within spec). Online = 1.69 mg/L Tested = 1.44 mg/L



Appendix B - Work Order Summary for WWTL

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3586775	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:54 PM	10/30/23 10:54 PM	Diesel Generator Inspection/ Functional Test (1m) 5747 - October 27, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1830 Oil Level = Full Coolant Temp=182 Deg.F Battery Voltage= 12.0 V Oil Pressure 58 psi Hrs at start: 513.4 Hrs at stop: 514.2
3592824	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	COMP	10/1/23 12:00 AM	11/16/23 02:32 PM	11/16/23 02:32 PM	Lagoon Cell 01South Powassan Insp/ Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on October 04, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3592834	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	COMP	10/1/23 12:00 AM	11/16/23 02:35 PM	11/16/23 02:35 PM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on October 04, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3592868	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	COMP	10/1/23 12:00 AM	11/16/23 02:37 PM	11/16/23 02:37 PM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on October 04, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3592927			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:50 PM	10/30/23 10:50 PM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on October 27, 2023 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (a new unit was picked up and installed: tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3592964			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:51 PM	10/30/23 10:51 PM	TPM Inspection/Maintenance (1m) 5747 - Completed by Dan Finnigan on October 27, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3592981			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	10/1/23 12:00 AM	10/30/23 10:57 PM	10/30/23 10:57 PM	Critical Alarm/Dialer Testing (1m) 5747 -A fall rain event that started on October 26th triggered both the Telus Alarms High Wet Well alarm as well as the WIN911 alarm multiple times. The wet well levels were observed both remotely and onsite, and no overflow level was reached. When the rain event ended the pumps continued to draw down the level until the shut off was reached and the alarms were reset.
3596902			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	10/1/23 12:00 AM	10/13/23 08:21 AM	10/13/23 08:21 AM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of September 2023 was completed on October 13, 2023 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.
3625324			Powassan Wastewater Treatment Lagoon	CORR	Compliance	0		Powassan Clark St Flow meter Verification 5747	COMP		10/30/23 09:05 AM	10/30/23 09:05 AM	Powassan Clark St Flow meter Verification 5747 - Powassan Clark St Flow meter Verification 5747 for 2023 Completed by Don Michaud on Thursday October 19, 2023.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3625325			Powassan Wastewater Treatment Lagoon	CORR	Compliance	0		Powassan St Gregory Flow meter Verification 5747	COMP		10/30/23 09:10 AM	10/30/23 09:10 AM	Powassan St Gregory Flow meter Verification 5747 - Powassan St Gregory Flow meter Verification 5747 was completed by Don Michaud on Thursday October 19, 2023.
3634740	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:01 AM	11/16/23 08:01 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - November 08, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1830 Oil Level = Full Coolant Temp=178 Deg.F Battery Voltage= 12.0 V Oil Pressure 53 psi Hrs at start: 514.2 Hrs at stop: 514.7
3640429	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	COMP	11/1/23 12:00 AM	11/16/23 02:41 PM	11/16/23 02:41 PM	
3640439	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	COMP	11/1/23 12:00 AM	11/16/23 02:42 PM	11/16/23 02:42 PM	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on November 01, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3640461	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	COMP	11/1/23 12:00 AM	11/16/23 02:43 PM	11/16/23 02:43 PM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on November 01, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3640479			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:38 AM	11/16/23 08:38 AM	Health And Safety Inspection (1m) 5747 -Dan Finnigan conducted the monthly H&S Inspection on November 08, 2023 which consisted of checking/verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (a new unit was picked up and installed: tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3640492			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:41 AM	11/16/23 08:41 AM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on November 08, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. Pump #1 Output at Clark Street was about half of normal. Don Michaud unplugged the pump on Friday November 10 and output was restored. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3640497			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	11/1/23 12:00 AM	11/16/23 08:45 AM	11/16/23 08:45 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on November 08, 2023. Both sewage pumps were turned off in "hand" and the wet well level was allowed to rise until the High Level alarm setpoint was reached. The Telus alarm was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps shut off in Auto when the level returned to normal.
3642933			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	11/1/23 12:00 AM	12/22/23 09:39 AM	12/22/23 09:39 AM	WISKI Review (1m) 5747 -Entered WISKI Data, calculated flows for lagoon release, reviewed sampling entries, etc.
3665579	0000086556	METER FLOW POWASSAN WWTL (CLARKE STREET) OLD LIFT STN	5747, Clark SPS, Process	PM	Calibration	1	YEARS	Meter Flow Powassan WWTL Clark Street Calibration (1y) 5747	COMP	1/1/24 12:00 AM	1/3/24 02:13 PM	1/3/24 02:13 PM	Completed October 19, 2023 - Report located on Shared Drive

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3665582	0000086563	METER FLOW 1 POWASSAN WWTL. ST.GREGORY SCHOOL PUMPING STATION #2	5747, Faireview SPS, Process	PM	Calibration	1	YEARS	Meter Flow 1 Powassan WWTL St. Gregory Calibration (1y) 5747	COMP	1/1/24 12:00 AM	1/3/24 02:14 PM	1/3/24 02:14 PM	Completed October 19, 2023 - Report located on the shared drive.
3675773	0000296003	GENERATOR NATURAL GAS GENSET Clark Street	5747, Clark SPS, Facility	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:04 AM	12/11/23 08:04 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 -December 05, 2023. Dan Finnigan performed the monthly Generator/ Functional test.. All fluid levels were checked, belts inspected, battery charging system, etc. The generator transfer button was pressed and the start command to the generator was initiated. While running, the system was observed for leaks or any other deficiencies. The following generator values were recorded while running: RPM's= 1875 Oil Level = Full Coolant Temp=165 Deg.F Battery Voltage= 12.2 V Oil Pressure 62 psi Hrs at start: 515.3 Hrs at stop: 516.0
3682387	0000126968	LAGOON CELL 01 SOUTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 01South Powassan Insp/Service (1m/6m/1y) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:10 AM	12/11/23 08:10 AM	Lagoon Cell 01South Powassan Insp/ Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on December 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3682397	0000126967	LAGOON CELL 02 NORTH POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 02 North Powassan Insp/Service (1m/6m/1y) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:11 AM	12/11/23 08:11 AM	Lagoon Cell 02 North Powassan In -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on December 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3682419	0000126969	LAGOON CELL 03 POWASSAN	5747, Powassan WWTL, Process	PM	Inspection	1	MONTHS	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:12 AM	12/11/23 08:12 AM	Lagoon Cell 03 Powassan Inspection/Service (1m/6m/1y) 5747 -Dan Finnigan inspected the associated lagoon during the monthly RAW sewage sample collection on December 05, 2023. The lagoon berm was inspected and found to be in good condition, the level was checked and found to be below the overflow level, and there were no other unusual observations.
3682437			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:00 AM	12/11/23 08:00 AM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on December 05, 2023 which consisted of checking/ verifying the following items: 1. Spill Kit: all items were available 2. Safety Signage (all intact and visible) 3. First aid kit 4. Hearing protection earmuffs 5. Emergency lighting (tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CAP,CORR,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3682448			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:02 AM	12/11/23 08:02 AM	TPM Inspection/Maintenance (1m) 5747 -Completed by Dan Finnigan on December 05, 2023. The operation of all sewage station lift pumps were visually and audibly observed at both St. Gregory's Lift Station and the Clark Street Lift station. Pump #1 at St. Gregory SLS seemed a little noisy but pump output was normal. The control panels were also checked for functionality with nothing unusual noted. Ventilation screens at the Clark Station were in good condition, and there was nothing else to report.
3682453			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	12/1/23 12:00 AM	12/11/23 08:07 AM	12/11/23 08:07 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on December 05, 2023. Both sewage pumps were turned off in "hand" and the wet well level was allowed to rise until the High Level alarm setpoint was reached. The Telus alarm was triggered and messaged the operator and both pumps were turned back on to pump down the level. Both sewage pumps shut off in Auto when the level returned to normal.
3684766			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	12/1/23 12:00 AM	12/22/23 09:48 AM	12/22/23 09:48 AM	WISKI Review (1m) 5747 -Entered WISKI data and calculated lagoon release data for entry. Checked lab uploads, etc.



Appendix C – Call-out Report for WTP

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 6033*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3622370			6033, Powassan WTP, Process, Lowlift	CALL	Inspection	0		6033 Powassan Well House Auxiliary 3 Well Pump Failure Alarm	COMP		10/2/23 11:15 PM	10/3/23 12:00 AM	Powassan Well House Auxiliary 3 Well Pump Failure Alarm - Received Auxiliary 3 Well Pump Failure Alarm. Reviewed HMI with Well Pump 1 Fault. Reset Well Pump 1 Control Panel and HMI Interlock.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 6033*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3623384			6033, Powassan WTP, Facility	CALL	Compliance	0		Powassan Well House Low Chlorine Alarm / Lockout	COMP		10/9/23 08:54 AM	10/9/23 07:00 PM	Powassan Well House Low Chlorine Alarm / Lockout - 08:55--Received notification from True Steel regarding low chlorine alarm. 09:00--Logged onto wonderware remotely to review trending and operations. Trending shows an immediate drop from approximately 1.5 mg/L down to 0.3 mg/L with immediate shut down of well pumps. 14:23--Received an acknowledged auxiliary one – low reservoir level alarm from True Steel 14:30--Arrive to find analyzer drain line leaking. Replaced drain line for normal operations and flushed housing. 14:45--Compared online analyzer to handheld: online analyzer is reading 0.33 mg/L, handheld is reading 0.35 mg/L. Analyzer is within specifications and calibration is not required. 15:00--Removed injection stem and found it to be clogged with solidified chlorine. Cleaned injection stem and tested output of pump. Chlorine discharge line now. Normal. Reinstalled injection line. 15:02--Opened wasting valve for well pump number one and began wasting out the building to remove under chlorinated water from contact tank lines. 15:25--Stopped wasting out the back and shut all valves. 15:32--Analyzer is now reading 1.53 mg/L after wasting. However, analyzer has dropped to 1.13 mg/L. Opened up waste valve once more to waste for another 10 minutes or so. 15:42--Stopped wasting out the back and shut all valves.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 6033*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													15:44--Online analyzer now reading 1.08 mg/L. Confirmed with handheld. Cleared alarms and restarted plant in auto. 15:45--Reservoir level at 3.50 m. Reduced low-level alarm to 3.40 m. 19:00--Logged onto Wonderware to review trending and operations: all normal now.
3625128			6033, Powassan WTP	CALL	Compliance	0		Powassan Well House Auxiliary #3 Alarm (Well Pump Failure)	COMP		10/29/23 09:35 AM	10/29/23 05:00 PM	Powassan Well House Auxiliary #3 Alarm (Well Pump Failure) - 09:35--Received and acknowledged Telus Alarm notification for Auxiliary 3 alarm (well pump failure) 09:45--Logged onto Wonderware to review operations remotely: Well Pump #1 has tripped out after running for a short while but Well Pump #2 has started and is filling the Reservoir. A site visit will be required to reset Pump #1 15:30--Reset Well Pump #1 15:35--Reviewed online data logger back to Friday October 27, 2023 at 07:00 hrs.
3661908			6033, Powassan WTP, Process, Process Control & Monitoring	EMER	Refurbish/ Replace/Repair	0		Powassan Pribusin Radio Repair: Shipping	COMP		11/2/23 08:37 AM	11/2/23 08:37 AM	

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 6033*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3665870			6033, Powassan WTP, Process, Storage	CALL	Compliance	0		Powassan Reservoir Low Level Alarm	COMP		11/22/23 12:12 AM	11/22/23 09:00 AM	Powassan Reservoir Low Level Alarm - 0:12--Received notification from Telus Alarms for Auxiliary 1 alarm (Reservoir Hi/Low). 00:30--Logged onto Wonderware to review trending and operations. Loss of trending from reservoir data indicates possible power interruption. Both Well pumps are off and power was interrupted during a fill cycle. Will need a site visit to verify. 00:45--Checked with Hydro One for area power outages: none reported. 07:00--Reservoir power is out (breaker tripped on Hydro One pole).Generator not running and in alarm for "overcrank". Attempted to start generator: it will start but will not continue to run. 07:25--Turned Well Pump #1 on in HAND 07:48--Notified Hydro One and requested a site visit 07:52--Called Val's Equipment to come onsite and trouble shoot generator issues 09:00--Hydro One has restored power to reservoir building 09:15--Reservoir generator will not run as per Val's Equipment. A new throttle control link will be sourced

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 6033*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3707602			6033, Powassan WTP	CALL	Inspection	0		6033 Powassan Well House Auxiliary 2 Power Loss Alarm	COMP		12/28/23 04:00 PM	12/28/23 07:00 PM	Powassan Well House Auxiliary 2 Power Loss Alarm - Received Auxiliary 2 Power Outage Alarm following area utility grid loss. Received Auxiliary 1 Reservoir Low Level Alarm. Reviewed HMI with Communication Loss with Reservoir. Trending review shows Reservoir Level approximately 4.8 metres when communication interrupted. Communication restored between Well House and Reservoir with Level @ 4.61 metres.



Appendix D – Call-out Report for WWTL

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3622381			5747, Clark SPS, Process	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/8/23 07:00 PM	10/8/23 08:15 PM	Powassan Clark Street SPS High Level Alarm - Received High Wetwell Level Alarm. Reviewed Wonderware with Station Level @ 6.41 metres. Adjusted WIN911 High Level Alarm Setpoint to 9.0 metres.
3622383			5747, Faireview SPS, Process	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/8/23 08:30 PM	10/8/23 11:00 PM	Powassan Clark Street SPS High Level Alarm - Received WIN911 High Wetwell Level Alarm. Milltronics Level displaying 9.87 metres. Inspected Wetwell with Level approximately six feet from overflow. Pumps 1 and 2 displacement averaging 1160 L/min. Precipitation expected to continue into the following day.
3622384			5747, Clark SPS, Process	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/9/23 01:00 AM	10/9/23 04:30 AM	5747 Powassan Clark Street SPS High Level Alarm - Received repeat WIN911 High Wetwell Level Alarm. Inspected Wetwell with Level remaining several feet below overflow. Monitred system remotely. Reviewed Wonderware with Wetwell Level @ 8.48 metres following gradual reduction. 5747 Powassan Clark Street SPS High Level Alarm - Received subsequent repeat High Wetwell Level Alarms with delayed system restore. Wetwell Level from previous weather experiencing heavy precipitation subject to gradual reduction. Early morning residential use negatively impacted station with surcharging resulting in repeat alarming. Wetwell subject to gradual reduction followed by repeat alarming from system users. System monitored remotely.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3623877			5747, Clark SPS, Process	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		10/9/23 06:15 AM	10/9/23 08:00 AM	5747 Powassan Clark Street SPS High Level Alarm -Received subsequent repeat High Wetwell Level Alarms with delayed system restore following previous site inspections with station monitoring for sewage overflow. Wetwell Level from previous weather experiencing heavy precipitation subject to gradual reduction. Early morning residential use negatively impacted station while recovering with surcharging that resulted in alarming. Wetwell subject to gradual reduction followed by repeat alarming from system users during routine activity. System monitored remotely. Station Level fluctuations continued with eventual stabilization to normal operation.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3625126			5747, Clark SPS	CALL	Compliance	0		Powassan Clark St. Sewage Stn Well Well High Level	COMP		10/26/23 10:30 PM	10/27/23 09:30 AM	Powassan Clark St. Sewage Stn Well Well High Level - Thursday October 26, 2023 22:18--Received and acknowledged Telus Alarms High Wet Well level for Clark Street Pumping Station 22:30--Logged onto Wonderware remotely to review trending: Level is slowly rising with decreased precipitation forecast. Will monitor remotely Friday October 27, 2023 01:43--Received and acknowledged Telus Alarms High Wet Well level for Clark Street Pumping Station 01:45--Logged onto Wonderware remotely to review trending: Level is slowly rising and Radar forecast shows rain event slowing down and eventual end within 2 hrs. 02:47--Received and acknowledged WIN911 Alarm for Clark Street High Wet Well Level. Reviewed trending: level has reached blanking level on transducer (approximately 10 feet below overflow and forecast call for intermittent rain in the next several hours. Will monitor remotely and check the station in a few hours. 05:20--Received and acknowledged WIN911 Alarm for Clark Street High Wet Well Level. Reviewed trending: level was pumped down below the WIN911 setpoint then increased again to the blanking level on transducer (approximately 10 feet below overflow). Forecast calls for intermittent rain in the next several hours. 07:30--Onsite to observe wet well level. Level is approximately 6 feet below overflow with no evidence of the level reaching the overflow pipe.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													Observations indicate the level reached approximately 18 inches below overflow through the night. Observation of overflow ditch indicates no outflow into Genesee Creek. Slightly misting and both pumps operating normally to bring down the level.

Workorder Summary Report

 Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3707605			5747, Clark SPS	CALL	Inspection	0		5747 Powassan Clark Street SPS High Level Alarm	COMP		12/28/23 05:30 PM	12/29/23 01:00 AM	5747 Powassan Clark Street SPS High Level Alarm - Received Power Failure Alarm followed by High Level Alarm. Received WIN911 Clark Street High Level Alarm. Received WIN911 Clark Street High Level Alarm with system restore. Reviewed Wonderware with Station Level @ 8.1 metres with Flow @ 1006 L/min. Trending review shows Clark Street SPS Control Power Loss occurring at 1550 hours with Pumps 1 and 2 no longer displacing due to Generator failing to activate. Trending flatlined at 1620 hours until 1735 with utility power restoration. Pumps 1 and 2 immediately activated reducing station level. Performed visual inspection of Wetwell with difficulty determining if Bypass event occurred due to significant moisture. Confirmed presence of Calcium Hypochlorite in perforated assembly immediately located in Overflow Header. Performed inspection of Genesse Creek near Overflow Header observing small quantity of foam confirming event occurrence. Contacted MECP SAC speaking to Environmental Officer Bilal Kidwai with Reference 1-4K5U1Z. Event reported duration from 1645 hours to 1735 with approximate volume 10 cubic metres subject to disinfection from Calcium Hypochlorite stored in perforated assembly located immediately inside Overflow Header. Sampling requirement of 2 sets not possible due to brief time. Contacted NBPSD Health Unit. Contacted by NBPSD Health Unit Inspector Rohan Makdani. Details

Workorder Summary Report

Report Start Date: Oct 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5747*
 Work Order Type: CALL,EMER
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													of the event provided to Inspector. Prepared Environmental Incident Report and transmitted to MECP SAC, MOH, Environment Canada, OCWA and Municipality of Powassan.



Appendix E - Performance Assessment Report Water

**Powassan Drinking Water System
Performance Assessment Report Water**

From: 01/10/2023 to 31/12/2023

Report extracted 01/04/2024 14:34

Facility: [6033] POWASSAN DRINKING WATER SYSTEM

Works: [220000576]

	10/2023	11/2023	12/2023	<--Total-->	<--Avg-->	<--Max-->	<--Min-->
Flows:							
Raw Flow: Monthly Total - Raw Well 1 (m³)	7363.01	7519.61	7492.81	22375.43			
Raw Flow: Monthly Total - Raw Well 2 (m³)	6805.55	6276.86	6324.15	19406.56			
Raw Flow: Monthly Avg - Raw Well 1 (m³/d)	237.52	250.65	241.7		243.29		
Raw Flow: Monthly Avg - Raw Well 2 (m³/d)	219.53	209.23	204		210.92		
Raw Flow: Monthly Max - Raw Well 1 (m³/d)	494.94	639.59	542.93			639.59	
Raw Flow: Monthly Max - Raw Well 2 (m³/d)	361.32	263.09	264.87			361.32	
Raw Flow: Monthly Total - Raw Water - Total (m³)	14168.56	13796.47	13816.96	41781.99			
Raw Flow: Monthly Avg - Raw Water - Total (m³/d)	457.05	459.88	445.71		454.21		
Raw Flow: Monthly Max - Raw Water - Total (m³/d)	557.55	726.77	588.3			726.77	
Turbidity:							
Raw: Max Turbidity - Raw Well 1 (NTU)	0.16	0.14	0.1			0.16	
Raw: Max Turbidity - Raw Well 2 (NTU)	0.12	0.14	0.11			0.14	
Chemical Parameters:							
Treated: Max Nitrite - TW1 (mg/L)	< 0.003				<	0.003	
Treated: Max Nitrate - TW1 (mg/L)	0.865					0.865	
Distribution: Max THM - Distribution (µg/l)	1.7					1.7	
Chlorine Residuals:							
Treated: Min Free Cl2 Resid - Treated Water (mg/L)	1.05	1.018	0.85				0.85
Treated: Max Free Cl2 Resid - Treated Water (mg/L)	2.401	2.453	3.192			3.192	
Dist: Min Free Cl2 Resid - Distribution (mg/L)	1.2	1.31	1.25				1.2
Dist: Max Free Cl2 Resid - Distribution (mg/L)	1.93	1.96	1.92			1.96	
Bacti Samples Collected:							
Raw Bacti: # of samples - Raw Well 1	5	4	4	13			
Raw Bacti: # of samples - Raw Well 2	5	4	4	13			
Treated Bacti: # of samples - TW1	4	3	1	8			
Treated Bacti: # of samples - TW2	1	1	3	5			
Dist Bacti: # of samples - Distribution	15	12	12	39			
Treated Bacti: # of TC exceedances - TW1	0	0	0	0			
Treated Bacti: # of TC exceedances - TW2	0	0	0	0			
Treated Bacti: # of EC exceedances - TW1	0	0	0	0			
Treated Bacti: # of EC exceedances - TW2	0	0	0	0			
Dist Bacti: # of TC exceedances - Distribution	0	0	0	0			
Dist Bacti: # of EC exceedances - Distribution	0	0	0	0			



Appendix F - Performance Assessment Report Wastewater

5747 POWASSAN WASTEWATER TREATMENT LAGOON 110000613

10 / 2023 11 / 2023 12 / 2023 <--Total--> <--Avg--> <--Max-->

Flows

Raw Flow: Total - Raw m ³ /d	18,782.60	16,866.00	16,050.10	51,698.70		
Raw Flow: Total - St Gregory m ³ /d	519.70	504.20	471.00	1,494.90		
Raw Flow: Total - Clark Street m ³ /d	18,262.90	16,361.80	15,579.10	50,203.80		
Raw Flow: Avg - Raw m ³ /d	605.89	562.20	517.75		561.94	
Raw Flow: Avg - St Gregory m ³ /d	16.76	16.81	15.19		16.25	
Raw Flow: Avg - Clark Street m ³ /d	589.13	545.39	502.55		545.69	
Raw Flow: Max - Raw m ³ /d	1,318.00	801.20	670.90			1,318.00
Raw Flow: Max - St Gregory m ³ /d	30.90	22.10	18.70			30.90
Raw Flow: Max - Clark Street m ³ /d	1,297.80	780.80	652.20			1,297.80
Raw Flow: Count - Raw m ³ /d	31.00	30.00	31.00	92.00		
Raw Flow: Count - St Gregory m ³ /d	31.00	30.00	31.00	92.00		
Raw Flow: Count - Clark Street m ³ /d	31.00	30.00	31.00	92.00		
Eff. Flow: Total - Eff Old m ³ /d	27,159.75	876.00	0.00	28,035.75		
Eff. Flow: Total - Eff North m ³ /d	0.00	58,541.90	0.00	58,541.90		
Eff. Flow: Avg - Eff Old m ³ /d	1,697.48	876.00	0.00		1,649.16	
Eff. Flow: Avg - Eff North m ³ /d	0.00	2,787.71	0.00		2,787.71	
Eff. Flow: Max - Eff Old m ³ /d	1,752.25	876.00	0.00			1,752.25
Eff. Flow: Max - Eff North m ³ /d	0.00	2,927.10	0.00			2,927.10
Eff Flow: Count - Eff Old m ³ /d	16.00	1.00	0.00	17.00		
Eff Flow: Count - Eff North m ³ /d	0.00	21.00	0.00	21.00		

Carbonaceous Biochemical Oxygen Demand: CBOD

Eff: Avg cBOD5 - Eff Old mg/L	< 4.75	6.00	0.00		< 5.80	< 6.00
Eff: Avg cBOD5 - Eff North mg/L	0.00	< 4.00	0.00		< 4.00	< 4.00
Eff: # of samples of cBOD5 - Eff Old	4.00	1.00	0.00	5.00		
Eff: # of samples of cBOD5 - Eff North	0.00	6.00	0.00	6.00		
Loading: cBOD5 - Eff Old kg/d	< 8.063	5.256	0.000		< 9.57	< 8.06
Loading: cBOD5 - Eff North kg/d	0.000	< 11.151	0.000		< 6.60	< 11.15

Biochemical Oxygen Demand: BOD5

Performance Assessment Report

From: 01/10/2023 to 31/12/2023

Raw: Avg BOD5 - Raw mg/L	408.00	86.00	220.00		238.00	408.00
Raw: # of samples of BOD5 - Raw	1.00	1.00	1.00	3.00		

Total Suspended Solids: TSS

Raw: Avg TSS - Raw mg/L	161.00	74.00	155.00		130.00	161.00
Raw: # of samples of TSS - Raw	1.00	1.00	1.00	3.00		
Eff: Avg TSS - Eff Old mg/L	28.25	37.00	0.00		33.60	37.00
Eff: Avg TSS - Eff North mg/L	0.00	9.33	0.00		9.33	9.33
Eff: # of samples of TSS - Eff Old	4.00	1.00	0.00	5.00		
Eff: # of samples of TSS - Eff North	0.00	6.00	0.00	6.00		
Loading: TSS - Eff Old kg/d	47.954	32.412	0.000		55.41	47.95
Loading: TSS - Eff North kg/d	0.000	26.019	0.000		15.39	26.02
Percent Removal: TSS - Eff Old %	82.45	50.00	0.00			82.45
Percent Removal: TSS - Eff North %	0.00	87.39	0.00			87.39

Total Phosphorus: TP

Raw: Avg TP - Raw mg/L	3.12	1.78	3.09		2.66	3.12
Raw: # of samples of TP - Raw	1.00	1.00	1.00	3.00		
Eff: Avg TP - Eff Old mg/L	0.54	0.64	0.00		0.59	0.64
Eff: Avg TP - Eff North mg/L	0.00	0.16	0.00		0.16	0.16
Eff: # of samples of TP - Eff Old	4.00	1.00	0.00	5.00		
Eff: # of samples of TP - Eff North	0.00	6.00	0.00	6.00		
Loading: TP - Eff Old kg/d	0.912	0.561	0.000		0.98	0.91
Loading: TP - Eff North kg/d	0.000	0.446	0.000		0.26	0.45
Percent Removal: TP - Eff Old %	82.77	64.04	0.00			82.77
Percent Removal: TP - Eff North %	0.00	91.01	0.00			91.01

Nitrogen Series

Raw: Avg TKN - Raw mg/L	29.80	16.60	23.00		23.13	29.80
Raw: # of samples of TKN - Raw	1.00	1.00	1.00	3.00		
Eff: Avg TAN - Eff Old mg/L	< 0.18	0.90	0.00		< 1.12	< 0.90
Eff: Avg TAN - Eff North mg/L	0.00	4.13	0.00		4.13	4.13
Eff: # of samples of TAN - Eff Old	4.00	1.00	0.00	5.00		
Eff: # of samples of TAN - Eff North	0.00	6.00	0.00	6.00		

Performance Assessment Report
From: 01/10/2023 to 31/12/2023

Loading: TAN - Eff Old kg/d

<	0.297	0.788	0.000		<	1.85	<	0.79
	0.000	11.523	0.000			6.82		11.52

Loading: TAN - Eff North kg/d

Disinfection

Eff: GMD E. Coli - Eff Old cfu/100mL

	9.48	12.00	0.00					
	0.00	8.91	0.00					
	4.00	1.00	0.00		5.00			
	0.00	6.00	0.00		6.00			

Eff: GMD E. Coli - Eff North cfu/100mL

Eff: # of samples of E. Coli - Eff Old

Eff: # of samples of E. Coli - Eff North