

SYSTEM OVERVIEW

April 1st to June 30th, 2022

OPERATIONAL HIGHLIGHTS

Drinking Water System

- The water treatment system operated well during the second quarter.
- Annual Well inspections completed.

Wastewater Treatment

- The wastewater treatment system performed well during the second quarter.
- North cell lagoon treated with 2200 imperial gallons (IMPG) of ferric sulphate on May 3, 2022.
- South cell lagoon treated with 1600 IMPG of ferric sulphate on May 3, 2022.
- Spring discharge completed from May 10 to June 3. Effluent samples below limits stated in Environmental Compliance Approval (ECA).

CAPITAL PLAN PROGRESS

Drinking Water System

- N/A

Wastewater Treatment

- 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 Report for WWTL

REGULATORY

- All drinking water samples required under O. Regulation 170/03 were collected and tested in the second quarter of 2022 and all results fell within regulatory limits.
- Application to renew Permit to Take Water (PTTW) submitted and new PTTW #7867-CDEJHF received April 14, 2022. Expires April 12, 2032.
- Winter term pH and alkalinity sampling completed April 12, 2022.
- Quarterly trihalomethanes (THM), haloacetic acids (HAA), Nitrate and Nitrite sampling completed April 11, 2022.
- Off-site external Re-Accreditation audit completed April 12, 2022, there were no findings identified. Onsite Re-Accreditation audit completed May 17, 2022. One opportunity for improvement identified and resolved.
- No Ministry of the Environment, Conservation and Parks (MECP) or Ministry of Labour (MOL) inspections were conducted this quarter.
- Annual internal audit and risk assessment review completed June 7, 2022. Three (3) opportunities for improvement (OFIs) identified and resolved.
- Operational Plan updated as per internal/external audit findings.
- All required sewage samples required under the system's ECA collected and tested in the second quarter of 2022.

INCIDENTS AND COMPLAINTS

Powassan Drinking Water System

Incident	N/A
Date	
Details	

Powassan Wastewater System

Incident	North Cell Lagoon Overflow
Date	April 10, 2022
Details	Type of Incident: Overflow SAC Ref No.:1-1RBZSJ Start Date & Time: April 10, 2022 @ 0900 hrs. Termination: April 11, 2022 @ 1300 hrs. Duration: 28 hours Approximate volume: 650 m ³ Details: Continued spring melt coupled with rain filled the North Cell to capacity during the weekend. The lagoon level increased until it began overflowing. Receiver: Genessee Creek Actions: Isolated the North Cell immediately, opened inlet to the South Cell (capacity is approximately 12 inches in South Cell), opened equalization valve

	between cells to bring down level in North Cell and collected single set of samples due to short duration. Reporting: Verbal & written reports to MOE SAC, MOH and EC as required
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HEALTH AND SAFETY

- Staff training completed on Emergency Showers and Eyewash Stations.
- Staff training completed on Ladder Safety.
- Annual health and safety inspection completed for the water treatment plant.
- Staff training completed on FEP Binder.

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: Apr 1, 2022 12:00 AM

Report End Date: Jun 30, 2022 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
2728004	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	4/1/22 12:00 AM	5/4/22 11:51 AM	5/4/22 11:51 AM	Critical Building Intrusion Alarm Testing (1m) 6033 -April 27, 2022. 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
2739172	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	4/1/22 12:00 AM	4/27/22 08:53 PM	4/27/22 08:53 PM	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033 - Work done on April 22, 2022 by Curtis Green. Generator was checked by disconnecting reservoir from grid power. Switch over went well, Gen Set started well. Unit started at 1130 and grid power was restored at 1150. Both battery and oil were found to be in good condition.

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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
2746439	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	4/1/22 12:00 AM	5/4/22 11:53 AM	5/4/22 11:53 AM	Critical Alarm/Dialer Testing (1m) 6033 -Critical Alarm/Dialer Testing (1m) 6033 was completed by Dan Finnigan on April 27, 2022. 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. The 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 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
2746882			6033, Powassan WTP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 6033	COMP	4/1/22 12:00 AM	5/4/22 11:55 AM	5/4/22 11:55 AM	Health And Safety Inspection (1m) 6033 - The monthly H&S Inspection was conducted on April 27, 2022 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 (all tested and working) 9. Emergency Eyewash (tested and working)
2746984			6033, Powassan WTP, Process, Process Control & Monitoring	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	4/1/22 12:00 AM	5/4/22 11:59 AM	5/4/22 11:59 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - April 27, 2022 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: 1.30 mg/L Free Cl2 Handheld analyzer: 1.59 mg/L Free Cl2 The online analyzer required adjustment. The new slope after calibration was 2.00 mA/ppm (within spec).

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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
2748717			6033, Powassan WTP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 6033	COMP	4/1/22 12:00 AM	5/4/22 11:56 AM	5/4/22 11:56 AM	TPM Inspection/Maintenance (1m) 6033 -April 27, 2022. 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.
2748722	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	4/1/22 12:00 AM	5/4/22 12:02 PM	5/4/22 12:02 PM	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033 - April 27, 2022 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 = 1842 Oil Level = Full Coolant Temp=174 Deg.F Battery Voltage= 13.7V Oil Pressure 62 psi Fuel level = approximately 7.5 inches Hrs at start: 5937 hr 35 min Hrs at stop: 5938 hr 44 min

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2750678			6033, Powassan WTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 6033	CLOSE	4/1/22 12:00 AM	4/8/22 08:56 AM	4/8/22 08:56 AM	WISKI Review (1m) 6033 -Enter WISKI data and check trending for abnormalities, etc. WISKI Review (1m) 6033 -WISKI Review (1m) for the month of March 2022 was completed on April 7, 2022 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.
2760692	0000258571	ANALYZER CHLORINE AIT-601 RESERVOIR	6033, Powassan WTP, Process, Storage, Elevated Reservoir	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	4/1/22 12:00 AM	4/27/22 08:49 PM	4/27/22 08:49 PM	
2778512	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	5/1/22 12:00 AM	6/28/22 09:32 AM	6/28/22 09:32 AM	Critical Building Intrusion Alarm Testing (1m) 6033 -May 20, 2022. 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
2789205	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	5/1/22 12:00 AM	6/28/22 09:37 AM	6/28/22 09:37 AM	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033 -May 24, 2022 by Curtis Green. The oil level and the filter condition were checked, then Curtis started the reservoir generator for approximately 20 minutes and performed a power transfer.

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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
2795340	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	5/1/22 12:00 AM	5/22/22 09:04 AM	5/22/22 09:04 AM	Critical Alarm/Dialer Testing (1m) 6033 -Critical Alarm/Dialer Testing (1m) 6033 was completed by Dan Finnigan on May 20, 2022. 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. The 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 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
2795688			6033, Powassan WTP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 6033	COMP	5/1/22 12:00 AM	5/22/22 08:57 AM	5/22/22 08:57 AM	Health And Safety Inspection (1m) 6033 - The monthly H&S Inspection was conducted on May 20, 2022 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 (all tested and working) 9. Emergency Eyewash (tested and working)
2795790			6033, Powassan WTP, Process, Process Control & Monitoring	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	5/1/22 12:00 AM	5/22/22 09:02 AM	5/22/22 09:02 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - May 20, 2022 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: 1.84 mg/L Free Cl2 Handheld analyzer: 1.79 mg/L Free Cl2 The online analyzer was within 0.05 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
2797074			6033, Powassan WTP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 6033	COMP	5/1/22 12:00 AM	5/22/22 08:59 AM	5/22/22 08:59 AM	TPM Inspection/Maintenance (1m) 6033 -May 20, 2022. 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.
2797079	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	5/1/22 12:00 AM	5/22/22 09:07 AM	5/22/22 09:07 AM	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033 - May 20, 2022 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 = 1788 Oil Level = Full Coolant Temp=161 Deg.F Battery Voltage= 13.7V Oil Pressure 60 psi Fuel level = approximately 7.5 inches Hrs at start: 5955 hr 20 min Hrs at stop: 5956 hr 14 min
2798276			6033, Powassan WTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 6033	COMP	5/1/22 12:00 AM	6/21/22 02:45 PM	6/21/22 02:45 PM	-April 26/22: Entered WISKI Data and checked bacti reports up to approximately April 24. WISKI Review (1m) 6033 -Finished entering April data, checked graphs, lab reports, etc.

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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
2806925	0000258571	ANALYZER CHLORINE AIT-601 RESERVOIR	6033, Powassan WTP, Process, Storage, Elevated Reservoir	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	5/1/22 12:00 AM	6/28/22 09:42 AM	6/28/22 09:42 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 - May 24, 2022. Curtis Green performed maintenance on the reservoir cl2 analyzer (checked / topped up electrolyte, flushed cells, etc.) and conducted a single point calibration with the following results: online reading: 1.28 mg/L tested reading: 1.42 mg/L The analyzer was calibrated to the tested result and the new slope was 0.90 mA/ppm.
2820553			6033, Powassan WTP	CAP	Predictive Maintenance	0		Expandable valve wrench and service key	COMP		5/17/22 12:46 PM	5/17/22 12:46 PM	Expandable valve wrench and service key - Expandable valve wrench and service key -Received expandable valve wrench and service key
2822341			Powassan Ground Water Well System	OPER	Predictive Maintenance	0		Flush dw hydrants for Powassan 6033	COMP		5/19/22 11:24 AM	5/19/22 11:24 AM	
2824973			Powassan Ground Water Well System	OPER	Compliance	0		DWQMS Re Accreditation Audit (onsite + plan and report)	COMP		5/31/22 01:55 PM	5/31/22 01:55 PM	DWQMS Re Accreditation Audit (onsite + plan and report) - DRINKING WATER QUALITY MANAGEMENT STANDARD VERSION 2 - 2017
2825706	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	6/1/22 12:00 AM	6/28/22 08:33 AM	6/28/22 08:33 AM	

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2835471	0000296004	GENERATOR NATURAL GAS GENSET McRae Road Reservoir	6033, Powassan WTP, Facility, Power Generation Reservoir	PM	Refurbish/ Replace/Repair	1	MONTHS	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033	COMP	6/1/22 12:00 AM	6/28/22 09:26 AM	6/28/22 09:26 AM	Reservoir Natural Gas Generator Inspection/Functional Test (1m) 6033 -June 22, 2022 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. The generator ran for approximately 356 minutes and there were no issues observed while it was running, other than the hour meter was not working.
2842330	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	6/1/22 12:00 AM	6/28/22 09:23 AM	6/28/22 09:23 AM	Critical Alarm/Dialer Testing (1m) 6033 -Critical Alarm/Dialer Testing (1m) 6033 was completed by Dan Finnigan on June 22, 2022. 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. The 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 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
2842604			6033, Powassan WTP	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 6033	COMP	6/1/22 12:00 AM	6/28/22 08:34 AM	6/28/22 08:34 AM	Health And Safety Inspection (1m) 6033 -The monthly H&S Inspection was conducted on June 22, 2022 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 (all tested and working) 9. Emergency Eyewash (tested and working)
2842798			6033, Powassan WTP, Process, Process Control & Monitoring	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	6/1/22 12:00 AM	6/28/22 09:19 AM	6/28/22 09:19 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 -June 22, 2022 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: 1.46 mg/L Free Cl2 Handheld analyzer: 1.49 mg/L Free Cl2 The online analyzer was within 0.03 mg/L Free Cl2 and therefore did not required adjustment.

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2844399			6033, Powassan WTP	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 6033	COMP	6/1/22 12:00 AM	6/28/22 09:21 AM	6/28/22 09:21 AM	TPM Inspection/Maintenance (1m) 6033 -June 22, 2022. 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.
2844422	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	6/1/22 12:00 AM	6/28/22 09:29 AM	6/28/22 09:29 AM	Wellhouse Diesel Generator Inspection/Functional Test (1m) 6033 -June 22, 2022 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 = 1791 Oil Level = Full Coolant Temp=159 Deg.F Battery Voltage= 13.7V Oil Pressure 57 psi Fuel level = approximately 7.0 inches Hrs at start: 5968 hr 21 min Hrs at stop: 5969 hr 53 min
2845881			6033, Powassan WTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 6033	COMP	6/1/22 12:00 AM	6/21/22 02:47 PM	6/21/22 02:47 PM	WISKI Review (1m) 6033 -WISKI Review (1m) for the month of May 2022 was completed on June 20, 2022 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.

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2856338	0000258571	ANALYZER CHLORINE AIT-601 RESERVOIR	6033, Powassan WTP, Process, Storage, Elevated Reservoir	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 6033	COMP	6/1/22 12:00 AM	6/28/22 08:41 AM	6/28/22 08:41 AM	Analyzer Chlorine Inspection/ Service (1m) 6033 -Analyzer Chlorine Inspection/ Service (1m) at the Reservoir was performed by Dan Finnigan on June 22, 2022. 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 1.03 mA/ppm (within spec). Online = 1.64 mg/L Tested = 1.44 mg/L



Appendix B - Work Order Summary for WWTL

Workorder Summary Report

Report Start Date: Apr 1, 2022 12:00 AM

Report End Date: Jun 30, 2022 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
2739156	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	4/1/22 12:00 AM	5/4/22 11:40 AM	5/4/22 11:40 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - April 20, 2022. 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=1820 Oil Level = Full Coolant Temp=160 Deg.F Battery Voltage= 12.0V Oil Pressure 70 psi Hrs at start: 476.08 Hrs at stop: 476.35
2746338			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	4/1/22 12:00 AM	5/4/22 11:34 AM	5/4/22 11:34 AM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on April 20, 2022 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 (all tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor

Workorder Summary Report

Report Start Date: Apr 1, 2022 12:00 AM

Report End Date: Jun 30, 2022 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
2746387			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	4/1/22 12:00 AM	5/4/22 11:37 AM	5/4/22 11:37 AM	TPM Inspection/Maintenance (1m) 5747 - TPM Inspection/Maintenance (1m) 5747 Completed by Dan Finnigan on April 20, 2022. 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. A mechanic/operator will have a second look shortly. 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.
2746392			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	4/1/22 12:00 AM	5/4/22 11:39 AM	5/4/22 11:39 AM	Critical Alarm/Dialer Testing (1m) 5747 -Conducted by Dan Finnigan on April 27, 2022. 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. This took approximately 10 minutes. The on-call operator received the alarm call-out in less than 5 minutes, and both pumps were turned back on to pump down the level. Both sewage pumps were shut off in Auto when the level returned to normal settings in less than 5 minutes of pumping.

Workorder Summary Report

 Report Start Date: Apr 1, 2022 12:00 AM
 Report End Date: Jun 30, 2022 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
2750683			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	CLOSE	4/1/22 12:00 AM	4/13/22 09:57 AM	4/13/22 09:57 AM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of March 2022 was completed on April 7, 2022 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, and this Work Order closed off.
2776470			Powassan Wastewater Treatment Lagoon	OPER	Predictive Maintenance	0		Powassan Spring 2022 Lagoon Treatment	COMP		5/10/22 02:37 PM	5/10/22 02:37 PM	Powassan Spring 2022 Lagoon Treatment - Tuesday May 03, 2022: Jon S. and Don M. onsite for North Cell and South Cell lagoon treatment: North Cell = 1875 Imp Gal (9 loads x 250 US Gal) South Cell = 1250 Imp Gal (6 loads x 250 US Gal) Total = 3125 Imp Gal (3750 US Gal)
2789189	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	5/1/22 12:00 AM	5/22/22 09:11 AM	5/22/22 09:11 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - May 20, 2022. 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=1840 Oil Level = Full Coolant Temp=170 Deg.F Battery Voltage= 12.0V Oil Pressure 60 psi Hrs at start: 478.90 Hrs at stop: 479.20

Workorder Summary Report

Report Start Date: Apr 1, 2022 12:00 AM

Report End Date: Jun 30, 2022 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
2795274			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	5/1/22 12:00 AM	5/11/22 12:59 PM	5/11/22 12:59 PM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on May 10, 2022 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 (all tested and working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor
2795292			5747, Powassan WWTL	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5747	COMP	5/1/22 12:00 AM	5/11/22 01:01 PM	5/11/22 01:01 PM	
2795297			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	5/1/22 12:00 AM	6/28/22 10:03 AM	6/28/22 10:03 AM	Critical Alarm/Dialer Testing (1m) 5747 -Saturday May 14, 2022: This work order was completed with the activation of a high level alarm during a rain event. The wet well level increased until the alarm float was triggered and True Steel was called and notified the on-call operator. Trending was reviewed and the level did not reach the overflow and both pumps were pumping to bring down the level in the wet well. Sometime later both pumps shut off in Auto and the alarm light was reset.

Workorder Summary Report

 Report Start Date: Apr 1, 2022 12:00 AM
 Report End Date: Jun 30, 2022 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
2798281			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	5/1/22 12:00 AM	7/13/22 09:21 AM	7/13/22 09:21 AM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of April 2022 was completed on July 05, 2022 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.
2835455	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	6/1/22 12:00 AM	6/12/22 08:21 AM	6/12/22 08:21 AM	Diesel Generator Inspection/ Functional Test (1m) 5747 - June 08, 2022. 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=1820 Oil Level = Full Coolant Temp=175 Deg.F Battery Voltage= 12.0V Oil Pressure 60 psi Hrs at start: 484.20 Hrs at stop: 484.45

Workorder Summary Report

 Report Start Date: Apr 1, 2022 12:00 AM
 Report End Date: Jun 30, 2022 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
2842249			5747, Powassan WWTL	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5747	COMP	6/1/22 12:00 AM	6/12/22 08:23 AM	6/12/22 08:23 AM	Health And Safety Inspection (1m) 5747 - Dan Finnigan conducted the monthly H&S Inspection on June 08, 2022 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 (was not working) 6. Emergency Eyewash (bottles are within use before date) 7. Fire Extinguisher 8. CO Monitor A work order will be created to service the emergency lighting kit.
2842287			5747, Powassan WWTL	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5747	COMP	6/1/22 12:00 AM	6/28/22 10:05 AM	6/28/22 10:05 AM	Critical Alarm/Dialer Testing (1m) 5747 -Tuesday June 07, 2022: This work order was completed with the activation of a high level alarm during a rain event. The wet well level increased until the alarm float was triggered and True Steel was called and notified the on-call operator. Trending was reviewed and the level did not reach the overflow and both pumps were pumping to bring down the level in the wet well. Sometime later both pumps shut off in Auto and the alarm light was reset.

Workorder Summary Report

Report Start Date: Apr 1, 2022 12:00 AM
 Report End Date: Jun 30, 2022 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
2845886			5747, Powassan WWTL	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5747	COMP	6/1/22 12:00 AM	7/13/22 09:21 AM	7/13/22 09:21 AM	WISKI Review (1m) 5747 -WISKI Review (1m) for the month of May 2022 was completed on July 05, 2022 by Dan Finnigan. All values were checked and entered, lab data entries were reviewed, WISKI Graphs corrected, and this Work Order closed off.



Appendix C - Call-out Report for WTP

Workorder Summary Report

 Report Start Date: Apr 1, 2022 12:00 AM
 Report End Date: Jun 30, 2022 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
2774293			6033, Powassan WTP	CALL	Inspection	0		6033 Powassan Well House Auxiliary 3 Alarm	COMP		4/7/22 04:00 PM	4/7/22 05:30 PM	
2774626			6033, Powassan WTP	CALL	Inspection	0		6033 Powassan Well House Auxiliary 3 Alarm	COMP		4/11/22 06:43 PM	4/11/22 08:15 PM	6033 Powassan Well House Auxiliary 3 Alarm - 18:43--Notified by True Steel of auxiliary three alarm (well pump failure) 19:50--Arrived at Well House: Well pump #1 faulted on low power. 20:04--Reset Pump #1 (pump two shut down, well pump one started up)
2777162			6033, Powassan WTP	CALL	Inspection	0		6033 Powassan Well House Auxillary 3 Alarm	COMP		4/24/22 11:15 PM	4/25/22 12:00 AM	Powassan Well House Auxillary 3 Alarm -Responded to an Auxiliary 3 Well Pump Failure Alarm. Well Pump 2 Fault 50 Control Power Low Alarm Reset.
2868022			6033, Powassan WTP	CALL	Refurbish/ Replace/Repair	0		Powassan WS Aux 3 Well Pump Power Fail Alarm	COMP		5/26/22 09:43 PM	5/27/22 12:05 PM	Powassan WS Aux 3 Well Pump Power Fail Alarm - May 26/22 21:03--Received Auxiliary 3 Well Pump Failure Alarm via True Steel 21:43--Reviewed trending of pumping cycles, reservoir levels, etc. Reservoir on the drain cycle and power seems to have been restored to well house. Will monitor remotely. May 27/22 @ 12:05--Reset Well pump #1



Appendix D - Call-out Report for WWTL

Workorder Summary Report

 Report Start Date: Apr 1, 2022 12:00 AM
 Report End Date: Jun 30, 2022 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
2822340			5747, Clark SPS	CALL	Compliance	0		Clark Street Pumping Station High Wet Well alarm	COMP	5/14/22 09:40 PM	5/14/22 11:59 PM		
2870653			5747, Clark SPS	CALL	Compliance	0		Clark Street Pumping Station High Wet Well alarm	COMP	6/12/22 11:15 AM	6/12/22 05:00 PM		Clark Street Pumping Station High Wet Well alarm - Sunday June 12/22 11:19--DF: received alarm notification from True Steel re: high wet well level. Checked weather forecast: rain event has ended and clear skies are forecast. Made annotation in Wonderware. 13:51--checked trending. Sunny skies and no rain. 17:00--Checked trending, all good



Appendix E - Performance Assessment Report Water

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

From: 01/04/2022 to 30/06/2022

Report extracted 07/20/2022 11:28

Facility: [6033] POWASSAN DRINKING WATER SYSTEM

Works: [220000576]

	04/2022	05/2022	06/2022	<--Total-->	<--Avg-->	<--Max-->	<--Min-->
Flows:							
Raw Flow: Monthly Total - Raw Well 1 (m³)	5536.92	6238.54	6578.58	18354.04			
Raw Flow: Monthly Total - Raw Well 2 (m³)	5430.13	5968.02	5884.38	17282.53			
Raw Flow: Monthly Avg - Raw Well 1 (m³/d)	184.56	201.24	219.29		201.7		
Raw Flow: Monthly Avg - Raw Well 2 (m³/d)	181	192.52	196.15		189.89		
Raw Flow: Monthly Max - Raw Well 1 (m³/d)	285.61	253.69	754.1			754.1	
Raw Flow: Monthly Max - Raw Well 2 (m³/d)	252.21	284.7	263.41			284.7	
Raw Flow: Monthly Total - Raw Water - Total (m³)	10967.05	12206.56	12462.96	35636.57			
Raw Flow: Monthly Avg - Raw Water - Total (m³/d)	365.57	393.76	415.43		391.59		
Raw Flow: Monthly Max - Raw Water - Total (m³/d)	447.51	476.52	885.51			885.51	
Turbidity:							
Raw: Max Turbidity - Raw Well 1 (NTU)	0.14	0.12	0.1			0.14	
Raw: Max Turbidity - Raw Well 2 (NTU)	0.36	0.16	0.1			0.36	
Chemical Parameters:							
Treated: Max Nitrite - TW2 (mg/L)	< 0.003				<	0.003	
Treated: Max Nitrate - TW2 (mg/L)	1.05					1.05	
Distribution: Max THM - Distribution (µg/l)	1.3					1.3	
Chlorine Residuals:							
Treated: Min Free Cl2 Resid - Treated Water (mg/L)	1.022	1.002	0.911				0.911
Treated: Max Free Cl2 Resid - Treated Water (mg/L)	2.217	2.216	2.256			2.256	
Dist: Min Free Cl2 Resid - Distribution (mg/L)	1.31	1.34	1.39				1.31
Dist: Max Free Cl2 Resid - Distribution (mg/L)	1.84	1.73	1.68			1.84	
Bacti Samples Collected:							
Raw Bacti: # of samples - Raw Well 1	4	5	4	13			
Raw Bacti: # of samples - Raw Well 2	4	5	4	13			
Treated Bacti: # of samples - TW1	2	1	2	5			
Treated Bacti: # of samples - TW2	2	4	2	8			
Dist Bacti: # of samples - Distribution	12	15	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

Powassan Wastewater Treatment Lagoon
Performance Assessment Report Wastewater/Lagoon

Report extracted 07/11/2022 11:02

From: 01/04/2022 to 30/06/2022

Facility: [5747] POWASSAN WASTEWATER TREATMENT LAGOON

Works: [110000613]

	04/2022	05/2022	06/2022	<-Total-->	<-Avg-->	<-Max-->
Flows:						
Raw Flow: Total - Raw (m³)	20744.40	18385.90	18130.40	57260.70		
Raw Flow: Total - St Gregory (m³)	602.00	589.10	565.60	1756.70		
Raw Flow: Total - Clark Street (m³)	20142.40	17796.80	17564.80	55504.00		
Raw Flow: Avg - Raw (m³/d)	691.48	593.09	604.35		629.64	
Raw Flow: Avg - St Gregory (m³/d)	20.07	19.00	18.85		19.31	
Raw Flow: Avg - Clark Street (m³/d)	671.41	574.09	585.49		610.33	
Raw Flow: Max - Raw (m³/d)	847.20	878.70	1291.00			1291.00
Raw Flow: Max - St Gregory (m³/d)	37.80	23.70	22.80			37.80
Raw Flow: Max - Clark Street (m³/d)	826.20	862.10	1271.30			1271.30
Eff. Flow: Total - Eff North (m³)		57842.50	11568.50	69411.00		
Eff. Flow: Total - Eff South (m³)		69410.98		69410.98		
Eff. Flow: Avg - Eff North (m³/d)		4449.42	3856.17		4152.79	
Eff. Flow: Avg - Eff South (m³/d)		6941.10			6941.10	
Eff. Flow: Max - Eff North (m³/d)		4627.40	4627.40			4627.40
Eff. Flow: Max - Eff South (m³/d)		7712.33				7712.33
Carbonaceous Biochemical Oxygen Demand: CBOD:						
Eff: Avg cBOD5 - Eff North (mg/L)		< 4.750	15.000		< 9.875	15.000
Eff: Avg cBOD5 - Eff South (mg/L)		< 11.800			< 11.800	< 11.800
Eff: # of samples of cBOD5 - Eff North (mg/L)		4	1	5		
Eff: # of samples of cBOD5 - Eff South (mg/L)		5		5		
Loading: cBOD5 - Eff North (kg/d)		< 21.135	57.843		< 39.489	57.843
Loading: cBOD5 - Eff South (kg/d)		< 81.905			< 81.905	< 81.905
Biochemical Oxygen Demand: BOD5:						
Raw: Avg BOD5 - Raw (mg/L)	130.000	149.000	166.000		148.333	166.000
Raw: # of samples of BOD5 - Raw (mg/L)	1	1	1	3		
Total Suspended Solids: TSS:						
Raw: Avg TSS - Raw (mg/L)	92.000	124.000	178.000		131.333	178.000
Raw: # of samples of TSS - Raw (mg/L)	1	1	1	3		
Eff: Avg TSS - Eff North (mg/L)		11.750	44.000		27.875	44.000
Eff: Avg TSS - Eff South (mg/L)		17.600			17.600	17.600
Eff: # of samples of TSS - Eff North (mg/L)		4	1	5		
Eff: # of samples of TSS - Eff South (mg/L)		5		5		
Loading: TSS - Eff North (kg/d)		52.281	169.671		110.976	169.671
Loading: TSS - Eff South (kg/d)		122.163			122.163	122.163
Percent Removal: TSS - Eff North (mg/L)		90.524	75.281			90.524
Percent Removal: TSS - Eff South (mg/L)		85.806				85.806
Total Phosphorus: TP:						
Raw: Avg TP - Raw (mg/L)	1.320	2.810	3.660		2.597	3.660
Raw: # of samples of TP - Raw (mg/L)	1	1	1	3		
Eff: Avg TP - Eff North (mg/L)		0.218	0.550		0.384	0.550
Eff: Avg TP - Eff South (mg/L)		0.114			0.114	0.114
Eff: # of samples of TP - Eff North (mg/L)		4	1	5		
Eff: # of samples of TP - Eff South (mg/L)		5		5		
Loading: TP - Eff South (kg/d)		0.791			0.791	0.791
Percent Removal: TP - Eff North (mg/L)		92.260	84.973			92.260
Percent Removal: TP - Eff South (mg/L)		95.943				95.943
Nitrogen Series:						
Raw: Avg TKN - Raw (mg/L)	14.700	18.200	24.900		19.267	24.900
Raw: # of samples of TKN - Raw (mg/L)	1	1	1	3		
Eff: Avg TAN - Eff North (mg/L)		9.925	10.500		10.212	10.500
Eff: Avg TAN - Eff South (mg/L)		4.080			4.080	4.080
Eff: # of samples of TAN - Eff North (mg/L)		4	1	5		
Eff: # of samples of TAN - Eff South (mg/L)		5		5		
Loading: TAN - Eff North (kg/d)		44.161	40.490		42.325	44.161
Loading: TAN - Eff South (kg/d)		28.320			28.320	28.320
Disinfection:						
Eff: GMD E. Coli - Eff North (cfu/100mL)		2.828	2.000		2.414	2.828
Eff: GMD E. Coli - Eff South (cfu/100mL)		2.000			2.000	2.000
Eff: # of samples of E. Coli - Eff North (cfu/100mL)		4	1	5		
Eff: # of samples of E. Coli - Eff South (cfu/100mL)		5		5		