SYSTEM OVERVIEW	August 1st to September 30th , 2019

OPERATIONAL HIGHLIGHTS

Drinking Water System

- The water treatment system operated well during the third quarter.
- New outpost panel installed.
- 10" high density poly-ethaline (HDPE) watermain pipe found to be lifted from the riverbed. It was marked with buoys along shore.
- Internet and OCWA network equipment installed.
- Alarm monitoring systems transferred to OCWA.
- Stroma onsite to replace distribution pressure gauge, this allowed for pressure trending to continue.
- Stroma installed the blown programmable logic controller (PLC) module at the reservoir which restored the secondary level indicator.
- Excavation completed on the east shoreline to determine needs for watermain river crossing repair.

Wastewater Treatment

- The wastewater treatment system performed well during the third quarter.
- New outpost panel installed.
- Alarm monitoring systems transferred to OCWA.
- Xylem planning to service impellors and wear rings on pumps at all 7 stations.
- Lightning strike must have fried the outputs on the flow meter. The flow meter is still working; however, there is no output signal from it. Require flow meter servicing.

CAPITAL PLAN PROGRESS

Drinking Water System

- Singer valve on well pump #1 was serviced. Diaphragm found to have a tear and a regulator port was clogged with rust.
- Repairs to reservoir communication equipment completed. Isolator was added to the phone line. New drawings were prepared showing the system updates.

- Repaired hydrant #113 at the fire hall.

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 third quarter of 2019 and all results fell within regulatory limits.
- Ontario Clean Water Agency (OCWA) became Operating Authority on August 1, 2019.
- The Ministry of the Environment, Conservation and Parks (MECP) performed an annual inspection on September 25, 2019. The inspection included a physical assessment of the Mattawa Water Treatment Plant and a document review. The inspection report is pending.
- No Ministry of Labour (MOL) inspections conducted this quarter.
- Remote monitoring system Wonderware, process data management (PDM) program WISKI and asset management program Maximo set up for both water and wastewater facilities.
- Maximo started generating work orders for WTP in September 2019.
- Maximo started generating work orders for the Lagoon in October 2019.
- OCWA log books now in use for both water and wastewater facilities.
- Quarterly trihalomethanes (THM), haloacetic acids (HAA), Nitrate and Nitrite sampling completed July 10, 2019.
- Converted Operational Plan to DWQMS 2.0, endorsement completed July 24, 2019.
- Applied for Limited Scope Transitional Audit and sent nine elements to SAI Global for external off-site audit, no non-conformances identified with one OFI, which has been addressed. Date of Limited Scope Transitional Audit Report was July 30, 2019.
- 36 month risk assessment rewrite completed August 20, 2019.
- Spill Response and Loss of Service Contingency Test completed September 11, 2019.

- Internal audit completed on DWQMS 2.0 on September 11, 2019. Three Minor Non-Conformances (Mn) and four Opportunities for Improvement (OFI) were identified and have been addressed.
- Operational Plan updated as per internal and external audit findings.
- Application for Full Scope to be sent into SAI Global on October 10, 2019.
- LST Certificate of Accreditation on DWQMS 2.0 issued October 11, 2019.
- Full Scope Accreditation onsite audit scheduled for June 2020.
- Summer term lead, pH and alkalinty sampling completed October 15, 2019.
- All required sewage samples required under the system's C of A were collected and tested in the third quarter of 2019.
- Enrolled Mattawa Wastewater Treatment Lagoon in the Wastewater Systems Effluent Regulations (WSER) and began sampling for $CBOD_5$ in August as per WSER. Annual reporting to be completed by February 14, 2020.

INCIDENTS AND COMPLAINTS

Mattawa Drinking Water System

Incident	Community Complaint – 551 Rankin St.
Date	September 16, 2019
Details	551 Rankin St. - Complainant (Corinna Groulx) mentioned rusty water causing tap, bathtub, sink and toilet to get a red/rusty tinge. Complaint was made to the Town of Mattawa. Town has requested sampling of turbidity and microbiological sampling in order to proceed. Sample results zero for EC and TC. As many distribution systems, old cast iron water mains in the area.

Incident	Community Complaint – 175 Champlain St.
Date	October 1, 2019
Details	175 Champlain St. - Complainant (Noella Tremblay) mentioned metallic taste and odour once in a while. The longer the tap runs it clears up slowly. Town performs flushing and water quality improves. Stays clear approximately 1.5 months after. Town performed directional flushing on September 30, 2019. As many distribution systems, some of the cast iron pipes are old.

Mattawa Wastewater System

- Nothing to report for the Drinking Water System in the 3rd Quarter.

HEALTH AND SAFETY

- Staff training completed on OCWA's Electrical Safety Program.
- Staff training completed on OCWA's PPE Requirements.
- Staff training completed on Site Specific Emergency Procedures.
- Staff training completed on OCWA's Safety Manual.
- Staff training completed on SDS/MSDS.
- Staff training completed on lockout/tagout.
- Staff training completed on WHMIS 2015.
- Staff training completed on Transportation of Dangerous Goods.
- Staff training completed on First Aid.
- Various safety signs posted at Well House and Lagoon Building.
- OCWA's QEMS Policy and OHSS Policy posted at facilities.

MATTAWA DRINKING WATER SYSTEM PERFORMANCE

See Appendix E – Performance Assessment Report Water

MATTAWA WASTEWATER TREATMENT LAGOON – WASTEWATER FLOW SUMMARY

See Appendix F – Performance Assessment Report Wastewater

Appendix A - Work Order Summary for WTP

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Aug 1, 2019 12:00 AM
Report End Date:	Sep 30, 2019 11:59 PM
Location:	1517*
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
1378812			1517, Mattawa DWS	CAP	Refurbish/ Replace/Repair	0		Hydrant Repair Mattawa DW 1517	BUSCOMP		8/12/19 12:19 PM	9/3/19 08:10 AM	- Parts required for hydrant repair at Pine & Gorman St. air hydrant - Unable to remove bonnet from body on m67 mcavity hydrant. had to take flange bolts apart to access internal parts. Traffic coupler missing bolt and came apart. removed lower rod and noticed drip lever badly bent. used new rod and seat valve from used hydrant in Mattawa pw yard. replaced lower rod assembly and replaced bolt in coupler, double nutted and reinstalled body. operated and pressure tested hydrant. all good. TF Aug 30/19
1420660			1517, Mattawa DWS	PM	Inspection	1	MONTHS	Turbidity Analyzer Calibration (1m) 1517	COMP	9/11/19 12:00 AM	9/3/19 01:15 PM	9/3/19 01:30 PM	Turbidity Analyzer Calibration (1m) 1517 - Compared the portable turbidity meter against the standards, all results were within 5% range of acceptability.
1420697			1517, Mattawa DWS	PM	Compliance	1	MONTHS	HPC`s for Dstribution sampling (1m) 1517	COMP	9/11/19 12:00 AM	9/3/19 08:30 AM	9/3/19 09:30 AM	HPC`s for Dstribution sampling (1m) 1517 - Completed monthly HPC's first sample set of the month.
1420703			1517, Mattawa DWS	PM	Inspection	1	MONTHS	Well #1 / Well #2 Turbidity Calibration (1m) 1517	COMP	9/11/19 12:00 AM	10/25/19 11:27 AM	10/25/19 11:27 AM	Well #1 / Well #2 Turbidity Calibration (1m) 1517 - Well # 1 & 2 monthly turbidity was collected.
1420704	0000328760	GENERATOR ELECTRIC DIESEL	1517, Mattawa DWS	PM	Refurbish/ Replace/Repair	1	MONTHS	Monthly Generator Test (1m) 1517	COMP	9/11/19 12:00 AM	10/25/19 11:25 AM	10/25/19 11:25 AM	Monthly Generator Test (1m) 1517 - Generator was running due to power failure, this was used as the monthly generator check,
1420707	0000328770	UV LIGHT REACTOR #1	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UV Reference Sensor check (UV#1) (1m) 1517	COMP	9/11/19 12:00 AM	10/25/19 11:17 AM	10/25/19 11:17 AM	UV Reference Sensor check (UV#1) (1m) 1517 - Complete monthly UV Reference sensor check on UV # 1. Passed all values within allowable ranges.

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Aug 1, 2019 12:00 AM
Report End Date:	Sep 30, 2019 11:59 PM
Location:	1517*
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
1420710	0000328771	UV LIGHT REACTOR #2	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UV Reference Sensor check (UV#1) (1m) 1517	COMP	9/11/19 12:00 AM	10/25/19 11:19 AM	10/25/19 11:19 AM	UV Reference Sensor check (UV#1) (1m) 1517 - Completed monthly UV Reference sensor check, all values within allowable ranges "PASSED".
1420713	0000328765	ANALYZER CHLORINE UNIT #3 PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Portable chlorine Analyzer #3 Calibration (1m) 1517	COMP	9/11/19 12:00 AM	9/30/19 12:00 PM	9/30/19 12:15 PM	Portable chlorine Analyzer #3 Calibration (1m) 1517 - Complete monthly comparison to standards, all results within allowable limits.

Appendix B - Work Order Summary for WWTL

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Aug 1, 2019 12:00 AM
Report End Date:	Sep 30, 2019 11:59 PM
Location:	1541*
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
1380947			1541, Mattawa Wastewater System	CORR	Refurbish/ Replace/Repair	0		451 Bissett- Burglar Alarm- 1541	COMP		8/30/19 01:21 PM	8/30/19 01:32 PM	451 Bissett- Burglar Alarm- 1541 - Called for Burglar Alarm 451 Bissett, @ 1128 Aug 30/19. Arrived at 11:30 to find the gate locked but the ,am door on the station to be open. The door has issues with closing, if you do not pull up on the door when closing it does not stay latched. It was very windy today and the wind may have contributed to the door opening. JD Aug 30/19

Appendix C - Call-out Report for WTP

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Jul 1, 2019 12:00 AM
Report End Date:	Oct 16, 2019 11:59 PM
Location:	1517*
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
1376705			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Service Break on main st 1517	COMP		8/6/19 02:16 PM	8/6/19 02:28 PM	Service break on main st - Called by mattawa recreation staff for water break, checked break was on town, and was washing out the sidewalk. Called Terry Bangs to in form of the break and needed repair. Barricaded area with pylons.
1378625			Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Low reservoir level alarm Mattawa 1517	COMP		8/9/19 12:30 AM	8/9/19 12:45 AM	Low reservoir level alarm Mattawa 1517 - it appears the analogue module for the back up miltronics 3g fried during a lighting storm. cost to replace $135. it also appears the pressure switch/sensor also fried aprox cost $200. Josh had Claude from Stroma verify this. TF Aug 9/19 Low reservoir level alarm Mattawa 1517 JD - Received call from true steel at 0032, for LIT101 out of range runnning on float system. Reviewed the alarm remotely, found the system to be running on the float not the miltronics. Reset the alarms to allow the system to return to the Miltronics. Plant seemed to be running ok, and levels had returned to the miltronics There was a lightning storm which caused a power glitch, causing the system to malfunction. JD Aug 9/19
1379460			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Metering Alarm- Chlorine Pumps Fail 1517 Mattawa	BUSCOMP		8/11/19 08:30 PM	8/11/19 10:00 PM	Metering Alarm- Chlorine Pumps Fail 1517 Mattawa - Called for Metering alarm, remotely reviewed and chlorine pump failure alarm was the issue, pump # 1& 2. Arrived cleared air from both pump # 1 & 2 suction lines, once cleared reset alarms and plant starting in auto. JD Aug 11/19

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Jul 1, 2019 12:00 AM
Report End Date:	Oct 16, 2019 11:59 PM
Location:	1517*
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
1380457			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		PLC fault Mattawa wtp 1517	COMP		8/25/19 12:45 AM	8/25/19 01:15 AM	PLC fault Mattawa wtp 1517 - Called by True steel at 0043 for plc fault alarm. connected remotely to the scada computer reviewed alarms. noted pump 2 running 26l/s uv 56 mj/cm2 poe cl2 1.12 and dw cl2 0.57 resevoir level 1.62 and rising. acknowledged alarms. possibly caused by power bump. TF Aug 25/19
1421858			Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Cl2 pump fault Mattawa 1517	COMP		9/22/19 11:00 AM	9/22/19 01:15 PM	- Called by True Steel @ 1039 for metering pump fault. arrived at 1145 noticed cl2 pump faulted, no well pumps running dw cl2 .66 poe reading .43 resevoir level 2.51. primed both cl2 pumps. reset panel, acknowledge alarm on scada plant started. had to verify poe analyzer as readout spiked. hand held reading 1.24, well pump 1 started.poe analyzer reading 1.25. reviewed trending well pump shutdown with cl2 pump shutdown. TF Sept 22/19
1463121			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Emergency Water off 741 Brydges 1517	COMP		10/4/19 11:54 AM	11/1/19 09:51 AM	Emergency Water off 741 Brydges 1517 - Called @ 0954 to 741 Brydges st for emergency water shut off, arrives @ 1024, customer advised that they had stopped the leak and a shut off was not required. No further action was taken. JD
1463122			1517, Mattawa DWS	CALL	Inspection	0		Generator Running Due to Power Fail 1517	COMP		10/4/19 11:59 AM	11/1/19 09:51 AM	Generator Running Due to Power Fail 1517 - All 4 generators running due to power failure. Check all stations and monitor station levels and generators. Called at 1322 for Multiple alarms at all stations in regards to power failure and generators running. Arrived to check on stations at 1350. JD

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Jul 1, 2019 12:00 AM
Report End Date:	Oct 16, 2019 11:59 PM
Location:	1517*
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
1463123			1517, Mattawa DWS	CALL	Compliance	0		Low Chlorine Alarm at WTP 1517	COMP		10/4/19 12:06 PM	11/1/19 10:06 AM	Low Chlorine Alarm at WTP 1517 - Called at 2043 for Low Chlorine at the WTP, arrived at 2110 to find the plant shut down due to low chlorine. Both pumps had a chlorine air lock, but flows sensors were still being activated when i tried to clear the lines. Review the trending to ensure compliance was met. opened all the taps in the facility to backflush and get chlorinated water back to the analyzer. once the levels had reached operating level, i cleared all alarms and the plant went into auto startup, however the chlorine pumps still were not running. checked the pumps again and found that a wore had come loose and fallen off when i touched it, i plugged the wire back in and the pumps started working again. Restarted the plant and everything was running as it should. Signed out at 2230 JD
1463367			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		pump fault 1517 Mattawa wtp	COMP		10/5/19 02:00 PM	10/5/19 04:15 PM	pump fault 1517 Mattawa wtp - called by true steel at 1341 for pump fault. arrived at 1445 cleared air from cl2 lines reset sure feed system system started.Tf oct 7/19
1463397			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Chlorine Pump Failure WTP 1517	COMP		10/7/19 08:52 AM	10/7/19 09:01 AM	Chlorine Pump Failure WTP 1517 - Called by Tim, to go check on a chlorine pump failure at the water treatment plant. Call from truesteel @ 1639, Tim notified me at 1654. Tim stated the Resevoir level was at 2.19M when he reviewed remotely. Arrival at the WTP at 1815 to find both chlorine pumps were in alarm. Cleared the air from both pump lines, reset the sure feed panel alarms, cleared SCADA alarms and the plant auto started. Signed out at 1840. JD

Appendix D – Call-out Report for WWTL

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Workorder Summary Report

Report Start Date:	Aug 1, 2019 12:00 AM
Report End Date:	Sep 30, 2019 11:59 PM
Location:	1541*
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
1379660			1541, Mattawa Wastewater System	CALL	Refurbish/ Replace/Repair	0		High Priority Trouble Max Starts P1 451 Bissett- 1541	COMP		8/18/19 02:30 PM	8/18/19 04:30 PM	High Priority Trouble Max Starts P1 451 Bissett- 1541 - Called at 1250 aug 18/19 For High Priority trouble alarm at 451 Bissett St Station. Arrived at 1450, found that Pump # 1 was in alarm, reviewed alarms and found Max Starts P1, cleared alarms, allowed the pumps to cycle 2 times. No other issues are seen with the station. Will call Alan Fey with Xylem to see if the alarm can be silenced. Aug 18/19 JD
1379666			1541, Mattawa Wastewater System	CALL	Refurbish/ Replace/Repair	0		High Priority Trouble Max Starts P1 451 Bissett- 1541	COMP		8/14/19 01:00 AM	8/14/19 02:30 AM	High Priority Trouble Max Starts P1 451 Bissett- 1541 - Called out to 451 Bissett St Station for High Prioirty trouble Alarm @ 1256 Aug 14/19. Arrived @ 0120, found that Pump #1 was in alarm for Max Starts. Pump was still operating. Cleared alarms, allowed pumps to cycle, No visible issues with the station. Aug14/19 JD
1380464			1541, Mattawa Wastewater System	CALL	Refurbish/ Replace/Repair	0		High Level Alarm First st ps Mattawa 1541	COMP		8/25/19 05:15 AM	8/25/19 12:00 PM	High Level Alarm First st ps Mattawa 1541 - Called by True steel at 0504 and 1148 for high level alarms that cleared by the time True steel called.TF Aug 25/19

Appendix E - Performance Assessment Report Water

Mattawa Drinking Water System
Performance Assessment Report Water

July 1, 2019 to September 30, 2019

Report extracted 10/31/2019 11:06

Facility: [1517] MATTAWA DRINKING WATER SYSTEM

Works: [210001905]

		07/2019		08/2019		09/2019		<--Total-->		<--Avg.-->		<--Max.-->
Flows:												
Raw Flow: Monthly Total - Well #1 (m³)		42245.79		32602.63		27920.41		102768.83				
Raw Flow: Monthly Total - Well #2 (m³)		2575.78		4458.31		4270.04		11304.13				
Raw Flow: Monthly Avg - Well #1 (m³/d)		1362.77		1051.7		930.68				1115.05		
Raw Flow: Monthly Avg - Well #2 (m³/d)		83.09		143.82		142.33				123.08		
Raw Flow: Monthly Max - Well #1 (m³/d)		1839.91		1436.51		1239.56						1839.91
Raw Flow: Monthly Max - Well #2 (m³/d)		484.06		473.24		451.04						484.06
Raw Flow: Monthly Total - Raw Water - Total (m³)		44821.57		37060.94		32190.45		114072.96				
Raw Flow: Monthly Avg - Raw Water - Total (m³/d)		1445.86		1195.51		1073.02				1238.13		
Raw Flow: Monthly Max - Raw Water - Total (m³/d)		1839.91		1586.07		1314.77						1839.91
Turbidity:												
Raw: Max Turbidity - Well #1 (NTU)		0.26		0.4		0.31						0.4
Raw: Max Turbidity - Well #2 (NTU)		0.27		0.55		0.33						0.55
Chemical Parameters:												
Treated: Max Nitrite - TW (mg/L)	<	0.1									<	0.1
Treated: Max Nitrate - TW (mg/L)		1.99										1.99
Distribution: Max THM - DW (µg/l)	<	2									<	2
Chlorine Residuals:												
Dist: Min Free Cl2 Resid - DW (mg/L)				0.483		0.148*						
Dist: Max Free Cl2 Resid - DW (mg/L)				1.001		1.106						1.106
Bacti Samples Collected:												
Raw Bacti: # of samples - Well #1		5		4		4		13				
Raw Bacti: # of samples - Well #2		5		4		4		13				
Treated Bacti: # of samples - TW		5		4		4		13				
Dist Bacti: # of samples - DW		15		12		12		39				
Treated Bacti: # of TC exceedances - TW		0		0		0		0				
Treated Bacti: # of EC exceedances - TW		0		0		0		0				
Dist Bacti: # of TC exceedances - DW		0		0		0		0				
Dist Bacti: # of EC exceedances - DW		0		0		0		0				
*Low distribution free chlorine residual alarm dialed out and operator responded. UV is used for primary disinfection; therefore, no issue.												

Appendix F - Performance Assessment Report Wastewater

Mattawa Wastewater Treatment Lagoons
Performance Assessment Report Wastewater/Lagoon

From July 1, 2019 to September 30, 2019

Report extracted 10/31/2019 10:11

Facility: [1541] MATTAWA WASTEWATER TREATMENT FACILITY

Works: [110000436]

		07/2019		08/2019		09/2019		<--Total-->		<--Avg.-->		<--Max.-->		<--Criteria-->
Flows:														
Raw Flow: Total - Raw (m^3)		23508.00		20181.00		18929.00		62618.00						
Raw Flow: Avg - Raw (m^3/d)		758.32		651.00		630.97				680.10				
Raw Flow: Max - Raw (m^3/d)		1136.00		824.00		981.00						1136.00		
Eff. Flow: Total - Eff (m^3)		23508.00		20181.00		18929.00		62618.00						
Eff. Flow: Avg - Eff (m^3/d)		758.32		651.00		630.97				680.10				
Eff. Flow: Max - Eff (m^3/d)		1136.00		824.00		981.00						1136.00		
Carbonaceous Biochemical Oxygen Demand: CBOD:														
Eff: Avg cBOD5 - Eff (mg/L)				6.500		4.200				5.350		6.500		25.0
Eff: # of samples of cBOD5 - Eff (mg/L)				1		1		2						
Loading: cBOD5 - Eff (kg/d)						2.650				2.650		2.650		
Biochemical Oxygen Demand: BOD5:														
Raw: Avg BOD5 - Raw (mg/L)		133.500		160.900		93.700				129.367		160.900		
Raw: # of samples of BOD5 - Raw (mg/L)		1		1		1		3						
Eff: Avg BOD5 - Eff (mg/L)		8.900		18.500		8.500				11.967		18.500		30.0
Eff: # of samples of BOD5 - Eff (mg/L)		1		1		1		3						
Loading: BOD5 - Eff (kg/d)		6.749		12.044		5.363				8.052		12.044		
Percent Removal: BOD5 - Raw (mg/L)		0.000		0.000		0.000						0.000		
Total Suspended Solids: TSS:														
Raw: Avg TSS - Raw (mg/L)				245.000		98.800				171.900		245.000		
Raw: # of samples of TSS - Raw (mg/L)				1		1		2						
Eff: Avg TSS - Eff (mg/L)		13.500		25.500		17.300				18.767		25.500		30.0
Eff: # of samples of TSS - Eff (mg/L)		1		1		1		3						
Loading: TSS - Eff (kg/d)		10.237		16.601		10.916				12.585		16.601		
Percent Removal: TSS - Raw (mg/L)				0.000		0.000						0.000		
Total Phosphorus: TP:														
Raw: Avg TP - Raw (mg/L)		3.090		2.980		3.930				3.333		3.930		
Raw: # of samples of TP - Raw (mg/L)		1		1		1		3						
Eff: Avg TP - Eff (mg/L)		0.944		0.608		0.993				0.848		0.993		2.5
Eff: # of samples of TP - Eff (mg/L)		5		4		4		13						
Loading: TP - Eff (kg/d)		0.872		0.397		0.562				0.610		0.872		3.91
Percent Removal: TP - Raw (mg/L)		0.000		0.000		0.000						0.000		
Nitrogen Series:														
Eff: Avg TAN - Eff (mg/L)		13.540		1.320		9.063				7.974		13.540		
Eff: Avg NO3-N - Eff (mg/L)	<	1.000	<	1.000	<	1.000			<	1.000	<	1.000		
Eff: # of samples of NO3-N - Eff (mg/L)		1		1		1		3						
Eff: Avg NO2-N - Eff (mg/L)	<	0.100		2.970		0.100			<	1.057		2.970		
Eff: # of samples of NO2-N - Eff (mg/L)		1		1		1		3						
Disinfection:														