

SYSTEM OVERVIEW

July 1st to September 30th , 2020

OPERATIONAL HIGHLIGHTS

Drinking Water System

- The water treatment system operated well during the third quarter.
- Storm knocked out communications at the reservoir. Loop isolators were replaced to get the system back online.
- Fire hydrant replaced at 220 7th St. This was a category 1 water main repair, with 10 houses and 1 apartment complex affected. Flow maintained until air gap created, air gap maintained throughout repair and pipe and repair parts were disinfected. Replaced fire hydrant, MOH, MECP notified as courtesy. ORO and Owner notified. Hydrant was flushed through and achieved a free chlorine residual of 0.60 mg/L. Service was restored at 1325 on July 20, 2020.
- New hydrant installed at 411 8th St.
- New hydrant installed on the corner of 8th St. and McKenzie St.
- Service repair completed at 388 Poplar St.
- Emergency watermain repair completed at the corner of Main and Bangs St.

Wastewater Treatment

- The wastewater treatment system performed well during the third quarter.

CAPITAL PLAN PROGRESS

Drinking Water System

- Second storm in as many days caused damage to communications at the reservoir again requiring repairs. The reservoir level transmitter was also destroyed and replacements were ordered.
- New sodium hypochlorite day tank installed to make room for Well #2 variable frequency drive (VFD).
- New Well #2 VFD installed and functional.

Wastewater Treatment

- New flow meter installed due to failure of the old flow meter.

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
There were no Call-outs for the WWTL

REGULATORY

- All drinking water samples required under O. Regulation 170/03 were collected and tested in the third quarter of 2020 and all results fell within regulatory limits.
- There was no Ministry of the Environment, Conservation and Parks (MECP) or Ministry of Labour (MOL) inspections conducted this quarter.
- UV transmittance analyzer failure during plant operation on July 13, 2020 from 1145 to 1343. This is a violation of section 1.6.2 of MDWL #195-101, Issue Number 2. Plant ran for about two hours without UVT being continuously monitored (every five minutes) as per MDWL. Handheld UVT taken at end of plant operation with a result of 99.8%. UV intensity and plant ran normally while UVT analyzer was out of service. Operator shut down plant and called Trojan to troubleshoot UVT analyzer. Operator was able to repair the UVT analyzer at 1400 on July 13, 2020. Forwarded trends to MECP. Notified Lori Duquette via phone call at 1407 on July 13, 2020. Emailed non-compliance form to Vesna and Lori at 1450 on July 13, 2020.
- August 13, 2020 upon reviewing trends after previous non-compliance. PCT noticed UV transmittance analyzer failure during plant operation on March 11, 2020 from 1239 to 1259. This is a violation of section 1.6.2 of MDWL #195-101, Issue Number 2. Plant ran for about twenty minutes without UVT being continuously monitored (every five minutes) as per MDWL. UVT prior to and after analyzer was out of service. UV intensity and plant ran normally while UVT analyzer was out of service. Optiview (UVT Analyzer) began functioning shortly after failure. Investigating possibility of installing plant lockout upon instrument/analyzer failure/malfunction. Forwarded trends to MECP. Emailed non-compliance form to Vesna Alimpic @ 1430 on August 13, 2020.
- Quarterly trihalomethanes (THM), haloacetic acids (HAA), Nitrate and Nitrite sampling completed July 21, 2020.
- Internal audit completed on DWQMS 2.0 on August 26, 2020. Seven Opportunities for Improvement (OFI) were identified and have been addressed.
- Summer term lead, pH and alkalinity sampling completed October 14, 2020.
- All required sewage samples required under the system's C of A were collected and tested in the third quarter of 2020.
- Raw sewage flow meter malfunctioned and ceased normal operations, discovered on July 9, 2020. Instrumentation Technician/Maintenance Electrician onsite to trouble shoot. Further trouble shooting is required to determine issue with flow meter. While, flow meter out of service, alternate method of

calculating daily raw flows will be used. Daily pump hours and average pump rate will be used to calculate approximate flows. Incident of non-compliance emailed to MECP inspector on July 9, 2020. New flow meter installed and functional on August 21, 2020.

INCIDENTS AND COMPLAINTS

Mattawa Drinking Water System

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

Mattawa Wastewater System

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

HEALTH AND SAFETY

- Staff training completed on Fire Extinguishers
- Staff training completed on SDS/MSDS.
- Staff training completed on lockout/tagout.
- New eyewash station installed at lagoon building.

MATTAWA DRINKING WATER SYSTEM PERFORMANCE

See Appendix D – Performance Assessment Report Water

MATTAWA WASTEWATER TREATMENT LAGOON – WASTEWATER FLOW SUMMARY

See Appendix E – Performance Assessment Report Wastewater



Ontario Clean Water Agency
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MATTAWA WATER & WASTEWATER SYSTEMS QUARTERLY OPERATIONS REPORT

Appendix A - Work Order Summary for WTP

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM

Report End Date: Sep 30, 2020 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
1833679			1517, Mattawa DWS	CAP	Refurbish/ Replace/Repair	0		isolator cards level sensor Mattawa reservoir 1517	COMP		7/10/20 03:05 PM	10/22/20 09:08 AM	
1834363			1517, Mattawa DWS	CAP	Compliance	0		Mattawa Well 2 VFD Purchase	CLOSE		7/23/20 03:46 PM	7/23/20 03:46 PM	Mattawa Well 2 VFD Purchase - Purchase VFD for Well 2. To be used for smooth start ups, reduced electrical consumption and to rev down the well pump motor to avoid flow exceedance non-compliance issues. 40HP ABB VARIABLE FREQUENCY DRIVE: ACQ580-01-041A-6
1834452			Mattawa DWS	CAP	Refurbish/ Replace/Repair	0		Mattawa, Purchase Spare Echopod, Reservoir Level	CLOSE		8/4/20 12:21 PM	8/4/20 12:21 PM	
1836016			1517, Mattawa DWS	CAP	Compliance	0		Mattawa Well 2 VFD Installation	COMP		9/25/20 11:57 AM	9/25/20 11:57 AM	Mattawa Well 2 VFD Installation -Start installation of Mattawa VFD for pump 2

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1833683	0000328792	TANK STORAGE RESERVOIR	1517, Mattawa DWS	CORR	Refurbish/ Replace/Repair	0		Reservoir Level sensor emergency repairs	CLOSE		7/20/20 02:30 PM	7/20/20 02:30 PM	Reservoir Level sensor emergency repairs -Stroma called to site after electrical storm caused damage to equipment. Isolators were replaced. Reservoir Level sensor emergency repairs -Called Claudel from stroma, to diagnose level sensor issues. After checking systems over the phone with Claudel, he came to the conclusion that one of the isolator cards was blown. After speaking with Claudel and Tim F, it was decided best to have Claudel come down immediately to replace and repair the level sensor isolator cards. All now in working order. JD
1835957	0000328787	ANALYZER UV TRANSMITTANCE	1517, Mattawa DWS	CORR	Compliance	0		Opti-view Repairs - 1517	CLOSE		7/23/20 11:49 AM	7/23/20 11:49 AM	Opti-view Repairs - 1517 -Called by truesteel on Saturday july 11/20, for low UVT. Both tim fraser and josh dewaal reviewed the scada and trending remotely. to determine that the optiview was not working correctly once again. Uv reactors are running in auto mode, so they will react to the changing UVT, Will asses and deal with the issue on Monday. On Monday July 13/20, tim and myself took the optiview offline to clean and install a new sensor. Once changed there was an issue with finding home on the sensor. Spoke with H2Flow they said to check the wiring and position of the home sensor. I changed the placement of the wire and reinstalled the unit. All seems ok now. Calibration was ran on the unit. Compared On line analyzer with handheld unit and they are the same. JD

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1917010	0000328760	GENERATOR ELECTRIC DIESEL	1517, Mattawa DWS	CORR	Refurbish/ Replace/Repair	0		Mattawa WTP Generator Engine Repairs	COMP		10/28/20 09:52 AM	10/28/20 09:52 AM	Mattawa WTP Generator Engine Repairs - To drain cooling system, flush engine and radiator. Replace dried out and cracked cooling hoses. Then refill cooling system with new Diesel anti-freeze. Install new 8D batteries, install new crankcase hose and Amp meter. Mattawa WTP Generator Engine Repairs -Vals Equipment was onsite and completed all necessary repairs to the generator
1917021	0000328760	GENERATOR ELECTRIC DIESEL	1517, Mattawa DWS	CORR	Refurbish/ Replace/Repair	0		Mattawa WTP Generator Fuel Line Upgrades	COMP		10/29/20 10:12 AM	10/29/20 10:12 AM	Mattawa WTP Generator Fuel Line Upgrades - To remove and install new fuel lines, fire valve, stainless steel flex lines 60' - 1/2" double wall fuel line, fire valve, stainless steel flex lines, misc. fittings, and floor covering. Mattawa WTP Generator Fuel Line Upgrades -Fuel lines are new, signed off OK by TSSA on March 31/20. JD
1873213	0000328800	TANK STORAGE SODIUM HYPO	1517, Mattawa DWS	OPER	Refurbish/ Replace/Repair	0		Sodium Hypo Tank Replacement	COMP		10/8/20 08:14 AM	10/8/20 08:14 AM	Sodium Hypo Tank Replacement -Sourced a new sodium hypo tank for WTP from RTS plastics. A new 200L day tank with containment \$ 305.00. Has been ordered on 08/13/2020. JD Sodium Hypo Tank Replacement -Old tank removed, area cleaned and cleared to make way for VFD installation. New tank installed and commissioned.

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1873829			1517, Mattawa DWS	OPER	Refurbish/ Replace/Repair	0		Water and Sewer install @ corner of 8th and Bissett 1517/1541	COMP		8/20/20 01:29 PM	8/20/20 01:29 PM	Water and Sewer install @ corner of 8th and Bissett 1517/1541 -Over-see the installation of New 5" sewer service, from property line to the 8" main. As well as installation of New 3/4" plastic service from property line the 4" cast iron main. JD Water and Sewer install @ corner of 8th and Bissett 1517/1541 - assisted with install of water and sewer services using awwa standards and opsd specs. TF Aug 12/20
1918660	0000328765	ANALYZER CHLORINE UNIT #3 PORTABLE	1517, Mattawa DWS	OPER	Calibration	0		Cholorimeter Supplies/ Calibration Standards	COMP		9/25/20 03:09 PM	10/29/20 10:12 AM	

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1918661			1517, Mattawa DWS	OPER	Compliance	0		SCADA Upgrades	COMP		9/25/20 03:11 PM	11/5/20 10:27 AM	SCADA Upgrades -Requested upgrading of the following systems: 1. Low Distribution Pressure alarming output 2. UVT low shutdown 3. Trending on Flow trending screens for #2 Flow meter 4. Increase Delay on Pump Pressure transmitter All work quoted @ \$960.00 for onsite work. true steel expansion module - expansion module required to alarm out changes to scada. TF Oct 2/20

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													scada upgrades complete - Well pump 2 is now trended. UVT at or below 95% will shut the well pumps off as well as loss of power to the instrument. A low distribution pressure alarm has been added and is set to call out at 70 psi or less. Claudel changed the time on the well pump pressure switches to 40 secs to allow the vfd to ramp up slower/ longer. He also changed the polling time from .5 sec to 2 secs on the flow meter to help smooth out well 1 exceedance spikes.
1821826	0000328763	ANALYZER TURBIDITY PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Turbidity Analyzer Calibration (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:17 PM	8/13/20 12:17 PM	
1821831	0000328760	GENERATOR ELECTRIC DIESEL	1517, Mattawa DWS	PM	Refurbish/ Replace/Repair	1	MONTHS	Generator Monthly Test (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:17 PM	8/13/20 12:17 PM	
1821834	0000328770	UV LIGHT REACTOR #1	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UVR Reference Sensor check (UV#1) (1m / 1y) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:18 PM	8/13/20 12:18 PM	
1821839	0000328771	UV LIGHT REACTOR #2	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UVR Reference Sensor check (UV#2) (1m / 1y) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:18 PM	8/13/20 12:18 PM	
1821844	0000328765	ANALYZER CHLORINE UNIT #3 PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Portable chlorine Analyzer #3 Calibration (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:19 PM	8/13/20 12:19 PM	
1821889	0000328804	ANALYZER CHLORINE / PH AIT 102	1517, Mattawa DWS	PM	Calibration	1	YEARS	PH Analyzer change Probe & Calibration (1y) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:19 PM	8/13/20 12:19 PM	

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1821895			1517, Mattawa DWS	PM	Calibration	1	YEARS	PH Analyzer change Probe & Calibration (POE) (1y) 1517	COMP	7/1/20 12:00 AM	10/29/20 10:16 AM	10/29/20 10:16 AM	PH Analyzer change Probe & Calibration (POE) (1y) 1517 -Calibration only, did not change probe. JD
1821901			1517, Mattawa DWS	PM	Inspection	3	MONTHS	Replace UV Air Filters 1517	COMP	7/1/20 12:00 AM	10/28/20 09:42 AM	10/28/20 09:42 AM	
1821909	0000328767	ANALYZER UV PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	UVT Analyzer calibration to yellow box (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:20 PM	8/13/20 12:20 PM	
1821930			1517, Mattawa DWS	PM	Inspection	1	MONTHS	Alarm Dialer Route (1m) - 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:20 PM	8/13/20 12:20 PM	
1821939			1517, Mattawa DWS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:20 PM	8/13/20 12:20 PM	
1821952	0000328758	VALVE REGULATING	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Valve Regulating Inspection (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:20 PM	8/13/20 12:20 PM	
1822111			1517, Mattawa DWS	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 1517	CLOSE	7/1/20 12:00 AM	8/13/20 12:21 PM	8/13/20 12:21 PM	
1862282			1517, Mattawa DWS	PM	Inspection	6	MONTHS	CL2 sensor change Electrolyte and membrane cap (6m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:42 AM	10/28/20 09:42 AM	
1862289	0000328787	ANALYZER UV TRANSMITTANCE	1517, Mattawa DWS	PM	Refurbish/ Replace/Repair	3	MONTHS	UV Transmitter Optiview calibration (3m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:43 AM	10/28/20 09:43 AM	
1862300	0000328763	ANALYZER TURBIDITY PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Turbidity Analyzer Calibration (1m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:46 AM	10/28/20 09:46 AM	
1862305	0000328760	GENERATOR ELECTRIC DIESEL	1517, Mattawa DWS	PM	Refurbish/ Replace/Repair	1	MONTHS	Generator Monthly Test (1m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:42 AM	10/28/20 09:42 AM	
1862308	0000328770	UV LIGHT REACTOR #1	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UVR Reference Sensor check (UV#1) (1m / 1y) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:40 AM	10/28/20 09:40 AM	
1862311	0000328771	UV LIGHT REACTOR #2	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UVR Reference Sensor check (UV#2) (1m / 1y) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:40 AM	10/28/20 09:40 AM	
1862314	0000328765	ANALYZER CHLORINE UNIT #3 PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Portable chlorine Analyzer #3 Calibration (1m) 1517	COMP	8/1/20 12:00 AM	10/29/20 10:17 AM	10/29/20 10:17 AM	
1862362			1517, Mattawa DWS	PM	Inspection	6	MONTHS	CL2 sensor change Electrolyte and membrane cap (POE) (6m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:41 AM	10/28/20 09:41 AM	
1862369	0000328767	ANALYZER UV PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	UVT Analyzer calibration to yellow box (1m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:41 AM	10/28/20 09:41 AM	

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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
1862390			1517, Mattawa DWS	PM	Inspection	1	MONTHS	Alarm Dialer Route (1m) - 1517	COMP	8/1/20 12:00 AM	10/28/20 09:41 AM	10/28/20 09:41 AM	
1862399			1517, Mattawa DWS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1517	COMP	8/1/20 12:00 AM	10/19/20 01:39 PM	10/19/20 01:39 PM	
1862412	0000328758	VALVE REGULATING	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Valve Regulating Inspection (1m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:41 AM	10/28/20 09:41 AM	
1862510			1517, Mattawa DWS	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 1517	COMP	8/1/20 12:00 AM	10/28/20 09:44 AM	10/28/20 09:44 AM	
1903686	0000328763	ANALYZER TURBIDITY PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Turbidity Analyzer Calibration (1m) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:44 AM	10/28/20 09:44 AM	
1903691	0000328760	GENERATOR ELECTRIC DIESEL	1517, Mattawa DWS	PM	Refurbish/ Replace/Repair	1	MONTHS	Generator Monthly Test (1m) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:43 AM	10/28/20 09:43 AM	
1903694	0000328770	UV LIGHT REACTOR #1	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UVR Reference Sensor check (UV#1) (1m / 1y) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:46 AM	10/28/20 09:46 AM	
1903697	0000328771	UV LIGHT REACTOR #2	1517, Mattawa DWS	PM	Calibration	1	MONTHS	UVR Reference Sensor check (UV#2) (1m / 1y) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:47 AM	10/28/20 09:47 AM	
1903700	0000328765	ANALYZER CHLORINE UNIT #3 PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Portable chlorine Analyzer #3 Calibration (1m) 1517	COMP	9/1/20 12:00 AM	10/29/20 10:18 AM	10/29/20 10:18 AM	
1903743			1517, Mattawa DWS	PM	Refurbish/ Replace/Repair	1	MONTHS	UVR Service (Spring & Fall) 1517	COMP	9/1/20 12:00 AM	10/30/20 02:09 PM	10/30/20 02:09 PM	
1903750	0000328767	ANALYZER UV PORTABLE	1517, Mattawa DWS	PM	Inspection	1	MONTHS	UVT Analyzer calibration to yellow box (1m) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:47 AM	10/28/20 09:47 AM	
1903774			1517, Mattawa DWS	PM	Inspection	1	MONTHS	Alarm Dialer Route (1m) - 1517	COMP	9/1/20 12:00 AM	10/28/20 09:47 AM	10/28/20 09:47 AM	
1903787			1517, Mattawa DWS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1517	COMP	9/1/20 12:00 AM	10/19/20 01:41 PM	10/19/20 01:41 PM	
1903800	0000328758	VALVE REGULATING	1517, Mattawa DWS	PM	Inspection	1	MONTHS	Valve Regulating Inspection (1m) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:48 AM	10/28/20 09:48 AM	
1903935			1517, Mattawa DWS	PM	Calibration	1	MONTHS	Analyzer Chlorine Inspection/ Service (1m) 1517	COMP	9/1/20 12:00 AM	10/28/20 09:48 AM	10/28/20 09:48 AM	



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Appendix B - Work Order Summary for WWTL

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1833681			1541, Mattawa Wastewater System	CAP	Compliance	0		Flow meter Mattawa lagoon 1541	COMP		7/10/20 03:17 PM	9/10/20 03:14 PM	
1836626			1541, Mattawa Wastewater System	CAP	Compliance	0		1541 Flow meter Display	COMP		9/10/20 03:12 PM	9/10/20 03:12 PM	1541 Flow meter Display -Check flow meter, display not functioning , suspect lighting damage , parts on order (new Transmitter) Repair Complete -
1875381			1541, Mattawa Wastewater System	CAP	Refurbish/ Replace/Repair	0		1541 repair for mackenzie St station	COMP		10/5/20 09:48 AM	10/5/20 09:48 AM	1541 repair for mackenzie St station -Pump 1 fail to start and tripping main breaker , replace start capacitor and start relay and test , spare components on order
1873383			1541, Mattawa Wastewater System	CORR	Health and Safety	0		STP Eye wash station purchase 1541	COMP		9/10/20 02:45 PM	9/10/20 02:45 PM	STP Eye wash station purchase 1541 -Eye wash station purchased and installed.
1875132			1541, Mattawa Wastewater System	CORR	Refurbish/ Replace/Repair	0		Relays for Mackenzie ST Station 1541	COMP		9/28/20 03:19 PM	9/28/20 03:19 PM	

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1917025	0000328901	GENERATOR ELECTRIC DIESEL	1541, Mattawa Wastewater System	CORR	Refurbish/ Replace/Repair	0		Mattawan SPS Generator Engine Repairs	COMP		10/28/20 10:01 AM	10/28/20 10:01 AM	Mattawan SPS Generator Engine Repairs - To drain cooling system, flush cracked cooling hoses. Then refill cool Mattawan SPS Generator Engine Repairs -Vals was onsite and completed the following repairs: To drain cooling system, flush cracked cooling hoses. Then refill cool

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				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
1917044	0000328874	GENERATOR ELECTRIC DIESEL BACKUP POWER	1541, Mattawa Wastewater System	CORR	Refurbish/ Replace/Repair	0		Mattawa Lagoon Generator Engine Repairs	COMP		10/28/20 10:02 AM	10/28/20 10:02 AM	Mattawa Lagoon Generator Engine Repairs - To drain cooling system, flush cracked cooling hoses. Then refill cool new 8D batteries, install new crank Mattawa Lagoon Generator Engine Repairs -Vals equipment was onsite and completed the following repairs: To drain cooling system, flush cracked cooling hoses. Then refill cool new 8D batteries, install new crank

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM
Report End Date: Sep 30, 2020 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
1917047	0000328842	GENERATOR ELECTRIC DIESEL 601 MCKENZIE ST.	1541, Mattawa Wastewater System	CORR	Refurbish/ Replace/Repair	0		Mattawa McKenzie SPS Generator Engine Repairs	COMP		10/28/20 10:04 AM	10/28/20 10:04 AM	Mattawa McKenzie SPS Generator Engine Repairs - To replace one 8D battery and install new air louver motor. Mattawa McKenzie SPS Generator Engine Repairs -Vals equipment was onsite and installed a new battery and repaired the louver to working order. -
1918023			1541, Mattawa Wastewater System	CORR	Refurbish/ Replace/Repair	0		Mackenzie Street capacitor and relay purchase	COMP		9/25/20 12:00 PM	9/25/20 12:00 PM	
1837293			1541, Mattawa Wastewater System	OPER	Compliance	0		Alum Order for Lagoons	CLOSE		7/31/20 01:19 PM	8/13/20 12:26 PM	Alum Order for Lagoons -Alum order was received on August 10/2020 JD
1821975			1541, Mattawa Wastewater System	PM	Inspection	1	MONTHS	Alarm Dialer Route (1m) - 1541	CLOSE	7/1/20 12:00 AM	8/13/20 12:19 PM	8/13/20 12:19 PM	
1821991			1541, Mattawa Wastewater System	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1541	CLOSE	7/1/20 12:00 AM	8/13/20 12:21 PM	8/13/20 12:21 PM	
1834352	0000328888	TANK STORAGE ALUM	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	1	MONTHS	Tank Alum Inspection (1m) - 1541	CLOSE	7/16/20 12:00 AM	8/13/20 12:21 PM	8/13/20 12:21 PM	
1862432			1541, Mattawa Wastewater System	PM	Inspection	1	MONTHS	Alarm Dialer Route (1m) - 1541	COMP	8/1/20 12:00 AM	10/28/20 09:45 AM	10/28/20 09:45 AM	
1862457			1541, Mattawa Wastewater System	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1541	COMP	8/1/20 12:00 AM	10/28/20 09:45 AM	10/28/20 09:45 AM	
1873473	0000328888	TANK STORAGE ALUM	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	1	MONTHS	Tank Alum Inspection (1m) - 1541	COMP	8/16/20 12:00 AM	10/28/20 09:44 AM	10/28/20 09:44 AM	
1873824	0000328891	PUMP PERISTALTIC 01	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	0		Alum Pump Heads	COMP		10/20/20 11:20 AM	10/20/20 11:20 AM	Alum Pump Heads -Alum Pump heads ordered from SCG as per quote # 8011414 on 08/18/2020. Revised to show 2 pumps ordered not 3. Price of \$268.30 each.

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM

Report End Date: Sep 30, 2020 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
1903679	0000328854	UV LIGHT REACTOR SYSTEM	1541, Mattawa Wastewater System	PM	Inspection	6	MONTHS	UV Reactor service Fall (2m) 1541	COMP	9/1/20 12:00 AM	10/30/20 02:21 PM	10/30/20 02:21 PM	
1903828			1541, Mattawa Wastewater System	PM	Inspection	1	MONTHS	Alarm Dialer Route (1m) - 1541	COMP	9/1/20 12:00 AM	10/28/20 09:48 AM	10/28/20 09:48 AM	
1903866			1541, Mattawa Wastewater System	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 1541	COMP	9/1/20 12:00 AM	10/28/20 09:48 AM	10/28/20 09:48 AM	
1916853	0000328874	GENERATOR ELECTRIC DIESEL BACKUP POWER	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	1	MONTHS	Generator Monthly Test (1m) 1541	COMP	9/13/20 12:00 AM	10/28/20 09:49 AM	10/28/20 09:49 AM	
1916856	0000328842	GENERATOR ELECTRIC DIESEL 601 MCKENZIE ST.	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	1	MONTHS	Generator Monthly Test (1m) 1541	COMP	9/13/20 12:00 AM	10/28/20 09:50 AM	10/28/20 09:50 AM	
1916859	0000328901	GENERATOR ELECTRIC DIESEL	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	1	MONTHS	Generator Monthly Test (1m) 1541	COMP	9/13/20 12:00 AM	10/28/20 09:50 AM	10/28/20 09:50 AM	
1917383	0000328888	TANK STORAGE ALUM	1541, Mattawa Wastewater System	PM	Refurbish/ Replace/Repair	1	MONTHS	Tank Alum Inspection (1m) - 1541	COMP	9/16/20 12:00 AM	10/28/20 10:05 AM	10/28/20 10:05 AM	



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MATTAWA WATER & WASTEWATER SYSTEMS

QUARTERLY OPERATIONS REPORT

Appendix C - Call-out Report for WTP

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM

Report End Date: Sep 30, 2020 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
1833682			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Low pressure Mattawa reservoir 1517	CLOSE		7/8/20 12:15 AM	7/8/20 04:00 AM	Low pressure alarm -Called by Josh Dewaal for low pressure complaints. Josh said he started a well pump remotely and was going to meet me at Wtp. Asked Josh to check reservoir level physically as he said the level appeared to be frozen. Upon arrival at well house Josh said there was water in reservoir. Reviewed low pressure sop. Trending showed pressure down to 23 psi above the 20 reportable. Reviews cl2 residuals as per sop. The lowest was 0.79f. The low pressure was not for a prolonged period. A second visit to the reservoir revealed the level transmitter was likely hit by lightning. Disconnect level sensor so reservoir would run off float back up. To have electrician check in am. TF. Low pressure alarm -I was contacted by Mattawa councillor Dexture Sarrazin at 1200 for low pressure throughout town, I remotely checked the level and found the reservoir level sensor had flat lined early in the evening during an electrical storm. I immediately started the plant in hand, and called tim F as he was on call to go check it out. He asked for me to attend as well being a large issue, once onsite, reviewed the trending once again. once tim was onsite we reviewed the trending and went up to the reservoir to check the issue. The level sensor seemed to be blown as well as an isolator card. I disconnected the level sensor to allow the water plant to run on float system as we could not fix the issue right away. JD

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM

Report End Date: Sep 30, 2020 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
1833929			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		uvt fault	CLOSE		7/13/20 09:02 AM	7/14/20 08:25 AM	
1834076			Mattawa DWS	CALL	Compliance	0		UVT optiview fault Mattawa 1517	CLOSE		7/11/20 03:15 PM	7/11/20 03:30 PM	UVT optiview fault Mattawa 1517 - Recieved call from Josh D regarding UVT fault. switched from manual operation to auto to allow optiview to ramp up depending on flow. sensor required. monitored pump cycles to make sure plant runs. TF July 11/20
1835959			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Reservoir Alarms - 1517	COMP		7/23/20 11:51 AM	7/23/20 12:02 PM	Reservoir Alarms - 1517 -Called by truesteel at 0101 for multiple alarms regarding the reservoir - LIT101 out of range/ running on float system, LIT101 Low level alarm, PLC fail. Remotely reviewed the scada and attempted to clear all alarms, the alarms would not clear. Arrived at the plant at 0139, once again attempted to clear alarms to no success. Went to the reservoir, found the level sensor is working properly, but the HMI is not sending the level back to the water plant. Called Rick at 0208 - no answer. Called Tim F, explained the situation and he agreed with me that it may be a isolator card issue. Will call Claudel from stroma in the AM. Plant OK running on float system for the night

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM

Report End Date: Sep 30, 2020 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
1835963			1517, Mattawa DWS	CALL	Inspection	0		Power Failure, Generators Running 1517/1541	COMP		7/23/20 12:26 PM	7/23/20 12:32 PM	Power Failure, Generators Running 1517/1541 -Called by truesteel at 0730 on sunday july 19/20, for power failure alarms at all stations, and generators running at WTP,STP,300 Mattawan, and 601 Mckenzie. Arrived in town at 0755, inspected all stations, no station was near the over flow limits. All generators running ok. Monitor stations with no backup power. All ok. Power restored at 1110. Checked all stations, power switched from generators to shore power OK, all other stations pumped down and did not reach over flow pipes. JD
1836151			1517, Mattawa DWS	CALL	Compliance	0		PLC fault wtp uv fail Mattawa 1517	COMP		7/21/20 08:30 PM	7/21/20 11:30 PM	PLC fault wtp uv fail Mattawa 1517 - Called by true steel at 2022 for plc fault/reservoir level. than a second call for mattawan, brooke st and 451 bisette st ps. called Fraser to find out if there was a power outage, Fraser to go check mattawan as i recieved a third call for high level. fraser called back mattawan station warm generator had been running levels normal pumps running. cleared alarms. Arrived at wtp 2125 reset alarms cleared on scada uv1 still in fault. unable to clear alarm for uv1. plant reading reservoir level, uv2 ok waited for plant to start will check with josh D and trojan in morning to clear uv1 alarm. TF July 21/20

Workorder Summary Report

Report Start Date: Jul 1, 2020 12:00 AM

Report End Date: Sep 30, 2020 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
1872810			1517, Mattawa DWS	CALL	Refurbish/ Replace/Repair	0		Water off 359 Mattawan st Mattawa 1517	COMP		8/8/20 03:10 PM	8/8/20 06:20 PM	Water off 359 mattawan st -Called by Francine for a water off at 359 Mattawan st. at 1510. Advised I didn't have my vehicle with necessary tools to locate and turn water off. She said she could have someone bring tools if needed. Tried calling Fraser to see if we was available. No answer. Picked up service key from vehicle at gm. Arrived at 1620 could hear water leaking in crawl space. Couldn't locate service box. Found sewer clean out. Called Kim from public works to bring metal detector. Eventually found service box in driveway and was able to turn off. TF aug8/20
1836620			1517, Mattawa DWS	EMER	Refurbish/ Replace/Repair	0		1517 Reservoir lighting Damage	COMP		10/5/20 09:33 AM	10/5/20 09:33 AM	1517 Reservoir lighting Damage -damage to level transmitter and circuit isolators from storm activity , system running in hand , replace level transmitter and one spare isolator , more isolators are on order , as well as a spare transmitter , system back in Auto as of July 8 2020



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MATTAWA WATER & WASTEWATER SYSTEMS

QUARTERLY OPERATIONS REPORT

Appendix D - Performance Assessment Report Water

**Mattawa Water Treatment Plant
Performance Assessment Report Water**

From July 1, 2020 to September 30, 2020

Report extracted 11/13/2020 13:42

Facility: [1517] MATTAWA DRINKING WATER SYSTEM

Works: [210001905]

	07/2020	08/2020	09/2020	<--Total-->	<--Avg.-->	<--Max.-->	<--Min.-->
Flows:							
Raw Flow: Monthly Total - Well #1 (m³)	47416.11	35760.3	36317.01	119493.42			
Raw Flow: Monthly Total - Well #2 (m³)	6579.92	5124.74	4994.56	16699.22			
Raw Flow: Monthly Avg - Well #1 (m³/d)	1529.55	1153.56	1210.57		1297.89		
Raw Flow: Monthly Avg - Well #2 (m³/d)	212.26	165.31	166.49		181.35		
Raw Flow: Monthly Max - Well #1 (m³/d)	2331.82	1547.41	1525.21			2331.82	
Raw Flow: Monthly Max - Well #2 (m³/d)	571.44	558.17	623.44			623.44	
Raw Flow: Monthly Total - Raw Water - Total (m³)	53996.03	40885.04	41311.57	136192.64			
Raw Flow: Monthly Avg - Raw Water - Total (m³/d)	1741.81	1318.87	1377.05		1479.24		
Raw Flow: Monthly Max - Raw Water - Total (m³/d)	2658.54	1547.41	1712.32			2658.54	
Turbidity:							
Raw: Max Turbidity - Well #1 (NTU)	0.28	0.31	0.29			0.31	
Raw: Max Turbidity - Well #2 (NTU)	0.27	0.28	0.30			0.30	
Chemical Parameters:							
Treated: Max Nitrate - TW (mg/L)	1.62					1.62	
Chlorine Residuals:							
Treated: Min Free Cl2 Resid - TW (mg/L)	0.005	0.022	0.156				0.005
Treated: Max Free Cl2 Resid - TW (mg/L)	4.119	4.119	4.119			4.119	
Dist: Min Free Cl2 Resid - DW (mg/L)	0.334	0.543	0.521				0.334
Dist: Max Free Cl2 Resid - DW (mg/L)	1.363	1.356	1.377			1.377	
Bacti Samples Collected:							
Raw Bacti: # of samples - Well #1	4	4	5	13			
Raw Bacti: # of samples - Well #2	4	4	5	13			
Treated Bacti: # of samples - TW	4	4	5	13			
Dist Bacti: # of samples - DW	12	12	15	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			



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MATTAWA WATER & WASTEWATER SYSTEMS

QUARTERLY OPERATIONS REPORT

Appendix E - Performance Assessment Report Wastewater

**Mattawa Wastewater Treatment Lagoon
Performance Assessment Report Wastewater/Lagoon**

Report extracted 11/13/2020 13:45

July 1, 2020 to September 30, 2020

Facility: [1541] MATTAWA WASTEWATER TREATMENT FACILITY

Works: [110000436]

	07/2020	08/2020	09/2020	<--Total-->	<--Avg.-->	<--Max.-->	<--Criteria-->
Flows:							
Raw Flow: Total - Raw (m³)	24347.00	21053.00	18782.50	64182.50			
Raw Flow: Avg - Raw (m³/d)	785.39	679.13	626.08		696.87		
Raw Flow: Max - Raw (m³/d)	985.00	908.00	984.50			985.00	
Eff. Flow: Total - Eff (m³)	24347.00	21053.00	18782.50	64182.50			
Eff. Flow: Avg - Eff (m³/d)	785.39	679.13	626.08		696.87		
Eff. Flow: Max - Eff (m³/d)	985.00	908.00	984.50			985.00	
Carbonaceous Biochemical Oxygen Demand: CBOD:							
Eff: Avg cBOD5 - Eff (mg/L)	5.700	10.200	2.600		6.167	10.200	25.0
Eff: # of samples of cBOD5 - Eff (mg/L)	1	1	1	3			
Loading: cBOD5 - Eff (kg/d)	4.477	6.927	1.628		4.344	6.927	
Biochemical Oxygen Demand: BOD5:							
Raw: Avg BOD5 - Raw (mg/L)	137.300	146.800	201.000		161.700	201.000	
Raw: # of samples of BOD5 - Raw (mg/L)	1	1	1	3			
Eff: Avg BOD5 - Eff (mg/L)	8.100	11.600	3.400		7.700	11.600	30.0
Eff: # of samples of BOD5 - Eff (mg/L)	1	1	1	3			
Loading: BOD5 - Eff (kg/d)	6.362	7.878	2.129		5.456	7.878	
Percent Removal: BOD5 - Raw (mg/L)	0.000	0.000	0.000			0.000	
Total Suspended Solids: TSS:							
Raw: Avg TSS - Raw (mg/L)	221.000	233.000	136.000		196.667	233.000	
Raw: # of samples of TSS - Raw (mg/L)	1	1	1	3			
Eff: Avg TSS - Eff (mg/L)	19.200	11.300	13.800		14.767	19.200	30.0
Eff: # of samples of TSS - Eff (mg/L)	1	1	1	3			
Loading: TSS - Eff (kg/d)	15.079	7.674	8.640		10.465	15.079	
Percent Removal: TSS - Raw (mg/L)	0.000	0.000	0.000			0.000	
Total Phosphorus: TP:							
Raw: Avg TP - Raw (mg/L)	2.750	1.870	2.600		2.407	2.750	
Raw: # of samples of TP - Raw (mg/L)	1	1	1	3			
Eff: Avg TP - Eff (mg/L)	1.170	1.040	1.092		1.101	1.170	2.5
Eff: # of samples of TP - Eff (mg/L)	4	4	5	13			
Loading: TP - Eff (kg/d)	0.887	0.625	0.664		0.725	0.887	3.91
Percent Removal: TP - Raw (mg/L)	0.000	0.000	0.000			0.000	
Nitrogen Series:							
Eff: Avg TAN - Eff (mg/L)	9.260	1.132	7.986		6.126	9.260	
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	0.860	< 0.100		< 0.353	0.860	
Eff: # of samples of NO2-N - Eff (mg/L)	1	1	1	3			
Disinfection:							