

**SYSTEM OVERVIEW**

**April 1 to June 30, 2023**

**HIGHLIGHTS**

- OCWA was requested to assist in connecting a new service. Work was done alongside municipal employees. A precautionary BWA was issued, resulting in the AWQI detailed area in the incidents section.
- Reclaim pump failed requiring operator to manually empty the reclaim tank on a regular basis. The new reclaim tank was on backorder for months. Some overtime was required to keep the filters in operation.
- Repairs to service lines in the distribution system have helped reduce water production at the water plant which reducing the manganese sludge production and such.

**CAPITAL PLAN PROGRESS**

Status of capital work completed to date in 2023.

CAPITAL ITEM	STATUS
HAA sampling and testing	Billed
Chemical pump parts kits	Billed
Reclaim tank pumping	Billed
Repair to service line at 317 Roche	Billed
Fire hydrant repair - Georgina	Billed

**INCIDENTS**

**JUNE 22**      **Loss of Pressure (AWQI 162272)**  
 During the installation of a new service line at 381 Riverside Street the pressure dropped to zero psi for houses on Riverside Street. A precautionary boil water advisory was issued. The water was off from 11:30 – 11:50. After installation of the service line was complete, flushing was conducted and two sets of bacti samples were taken 24-48 hours apart. Results were good and the BWA was lifted on June 26.

**COMPLAINTS**

There were no complaints documented this quarter.

**CALL-OUT SUMMARY**

<b>Number of Call-outs this Quarter:</b>	6
<b>Total Call-outs to Date (2023):</b>	7
<b>Annual Call-in Allowance:</b>	8
<b>Details of the Call-outs:</b>	Refer to Appendix A for a detailed call back summary.

**REGULATORY**

Inspections

- No regulatory inspections were conducted this quarter.

Quality & Environmental Management System (QEMS)

- No audits were conducted this quarter.

Sampling, Testing and Monitoring

- Refer to Appendix B for a Performance and Quarterly Data Summary.

Reporting

- Regulatory year-end reporting for 2022 complete.

**FLOW SUMMARY**

**Matachewan Water Treatment Plant – Historical Flow Comparison**

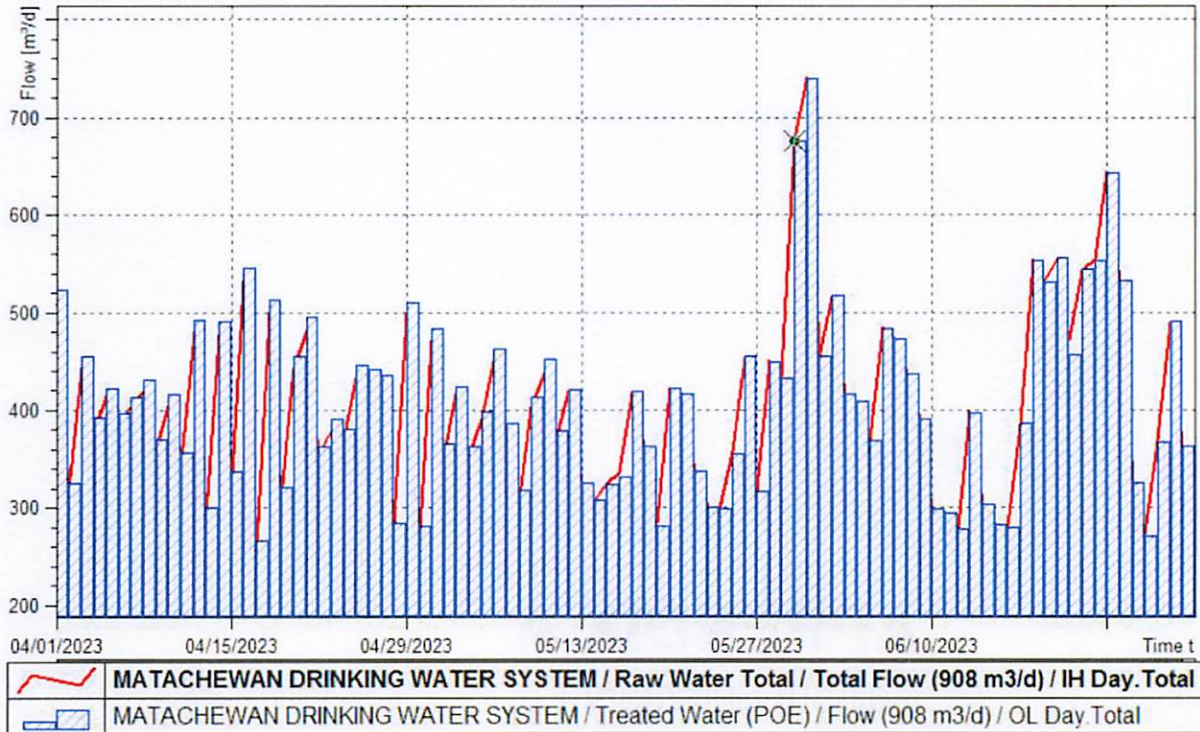
Year	Total Raw Flows (m <sup>3</sup> /d)	Total Treated Flows (m <sup>3</sup> /d)	Average Daily Treated Flow (m <sup>3</sup> /d)	Maximum Treated Flow (m <sup>3</sup> /d)	Maximum % of Rated Capacity (908 m <sup>3</sup> /d)
<b>Jan to June 2023</b>	<b>76,957</b>	<b>78,249</b>	<b>431</b>	<b>740</b>	<b>81.5</b>
2022	144,908	148,335	406	766	84.4%
2021	134,554	137,353	376	642	70.7%
2020*	131,311	133,019	363	827	91.1%
2019	108,798	112,259	308	955	105%

\* 2020 - The plant underwent a major upgrade to install an iron and manganese removal filter system (Filtronics brand), to remove the existing iron and manganese sequestering system. The project was completed in December 2019 and was put into operation in 2020.



Raw Flow versus Treated Flow

April 1 to June 30, 2023



**HEALTH AND SAFETY**

- All safety equipment at each plant was checked monthly to ensure that they are in good working order.
- Health and Safety Training/Sessions completed this quarter include:
  - ✓ Human and Organizational Performance
  - ✓ Plants, Insects and Wildlife
  - ✓ Review of the Facility Emergency Plan



**APPENDIX A**  
Call-out Summary

## Work Order Call Back Details Report

3384612: Matachewan WTP Low Compliance Chlorine Alarm

**Asset:**

**Location:** 7203-WTMA-F 7203, Matachewan WTP, Facility

<b>Page Time:</b>	05/06/2023 12:30 PM
<b>Arrive time:</b>	05/06/2023 01:30 PM
<b>Leave time:</b>	05/06/2023 07:30 PM
<b>Finish Time:</b>	05/06/2023 07:30 PM
<b>Report Date:</b>	5/9/23
<b>Reported By:</b>	Sean McCurdy
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	INPRG
<b>Classification</b>	COMPLIANCE
<b>GL Account:</b>	MATACY7203-210M

### Actual Labor

Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Sean McCurdy	00:00	06:00

### Log

Date	Created By	Description
5/9/23	Sean McCurdy	Matachewan WTP Low Compliance Chlorine Alarm

Matachewan WTP Low Compliance Chlorine Alarm

Disabled alarms, restart plant, and run to waste.

Filter chlorine would not rise above 0.75.

I stopped the plant and performed a cleaning of the discharge end of the hypo pump check vavle.

Once the check valve was reassembled, I restarted the plant, continuing to flush to waste, and monitored chlorine residual levels.

Once contact pipe water was of a compliant cl2 residual, I re-enabled alarms, and stopped flushing and started to send water to the distribution system.

Resumed normal plant operations.

On call operator monitored plant threw Wonderware.



## Work Order Call Back Details Report

3385510: Matachewan WTP Low FCL Plant Lockout

**Asset:**

**Location:** 7203-WTMA-F 7203, Matachewan WTP, Facility

<b>Page Time:</b>	05/10/2023 05:00 PM
<b>Arrive time:</b>	05/10/2023 06:00 PM
<b>Leave time:</b>	05/10/2023 10:00 PM
<b>Finish Time:</b>	05/10/2023 10:00 PM
<b>Report Date:</b>	5/16/23
<b>Reported By:</b>	Julien Bernatchez
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification</b>	COMPLIANCE
<b>GL Account:</b>	MATACY7203-210M

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Julien Bernatchez	00:00	04:00

Log		
Date	Created By	Description
5/16/23	Julien Bernatchez	Matachewan WTP Low FCL Plant Lockout
<p>Low Filter Chlorine at the Matach WTP.</p> <p>Restart plant and flush to waste for an hour after getting the Filter chlorine residual back up.</p> <p>Monitor chlorine residuals.</p> <p>After an hour of flushing, I took multiple samples to ensure the water in the contact pipe had a compliant FCL residual.</p> <p>After flushing, return valves to normal operating positions and started to refill the tower.</p> <p>Continue to monitor plant operations.</p>		

# Work Order Call Back Details Report

3385531: Matach low tower level call

Asset:

Location: 7203-WTMA-F 7203, Matachewan WTP, Facility

<b>Page Time:</b>	05/13/2023 05:30 PM
<b>Arrive time:</b>	05/13/2023 06:30 PM
<b>Leave time:</b>	05/13/2023 09:30 PM
<b>Finish Time:</b>	05/13/2023 09:30 PM
<b>Report Date:</b>	5/16/23
<b>Reported By:</b>	Sean McCurdy
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification:</b>	COMPLIANCE
<b>GL Account:</b>	MATACY7203-21OM

### Actual Labor

Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Sean McCurdy	00:00	04:00

### Log

Date	Created By	Description
5/16/23	Sean McCurdy	Matachewan low tower low pressure call
Received call from Matachewan Water Plant saying 'low tower low pressure'. Went to plant due to not having access to app. Plant was off and had run recently. Tower was nearly full. Observed plant to be operating normally.		

## Work Order Call Back Details Report

3386682: Alarm Low tower/ low pressure 7203

**Asset:**  
**Location:** 7203-WTTW      7203, Matachewan WTP Tower

<b>Page Time:</b>	05/22/2023 12:30 PM
<b>Arrive time:</b>	05/22/2023 01:00 PM
<b>Leave time:</b>	05/22/2023 05:00 PM
<b>Finish Time:</b>	05/22/2023 05:00 PM
<b>Report Date:</b>	5/24/23
<b>Reported By:</b>	Tanner Mazzocato
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification</b>	COMPLIANCE
<b>GL Account:</b>	MATACY7203-210M

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Tanner Mazzocato	00:00	08:00

Log		
Date	Created By	Description
5/24/23	Tanner Mazzocato	Alarm Low tower/ low pressure 7203

Alarm low tower/ low pressure  
 Remote access plant  
 Pressure:548.09kPa  
 Tower level:33.48m



## Work Order Call Back Details Report

3431698: Matachewan WTP Low FCL Plant Lockout

Asset:

Location: 7203-WTMA-F 7203, Matachewan WTP, Facility

<b>Page Time:</b>	06/02/2023 04:30 PM
<b>Arrive time:</b>	06/02/2023 05:00 PM
<b>Leave time:</b>	06/02/2023 09:00 PM
<b>Finish Time:</b>	06/02/2023 09:00 PM
<b>Report Date:</b>	6/7/23
<b>Reported By:</b>	Julien Bernatchez
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification:</b>	COMPLIANCE
<b>GL Account:</b>	MATACY7203-210M

### Actual Labor

Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Julien Bernatchez	00:00	04:00

### Log

Date	Created By	Description
6/7/23	Julien Bernatchez	Matachewan WTP Low FCL Plant Lockout
Plant Locked out due to plugged check valves on hypo pumps.		
Clean check valves and flush plant to waste until contact pipe water was compliant.		
once compliant resume normal operations.		



## Work Order Call Back Details Report

3434738: Alarm High High Reclaim tank 7203

**Asset:**

**Location:** 7203-WTMA-F 7203, Matachewan WTP, Facility

<b>Page Time:</b>	06/19/2023 12:00 AM
<b>Arrive time:</b>	06/19/2023 12:45 AM
<b>Leave time:</b>	06/19/2023 04:45 AM
<b>Finish Time:</b>	06/19/2023 04:45 AM
<b>Report Date:</b>	6/21/23
<b>Reported By:</b>	Tanner Mazzocato
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification:</b>	COMPLIANCE
<b>GL Account:</b>	MATACY7203-210M

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Tanner Mazzocato	00:00	04:00

Log		
Date	Created By	Description
6/21/23	Tanner Mazzocato	Alarm High High Reclaim tank 7203
Alarm reclaim high high check WW to see if plant was running, Plant was not running When I arrived plant was running Calibrated filter chlorine analyzer OL:3.94 HH:1.95 cal to 1.95mg/L Monitored plant		



# APPENDIX B

## Quarterly Data Summary

# MATACHEWAN DRINKING WATER SYSTEM

## Quarterly Data Report



Q2: April 1 to June 30, 2023

Matachewan Drinking Water System		April	May	June	Compliance
<b>Flows</b>					
Raw Flow - Maximum Daily Volume	m <sup>3</sup> /d	532	742	645	Max. = 908
Well 1 Flow - Maximum Daily Volume	m <sup>3</sup> /d	454	454	454	Max. = 454
Well 1 Flow - Maximum Flow Rate	L/min	1,052	1,143	1,032	Max. = 1400
Well 2 Flow - Maximum Daily Volume	m <sup>3</sup> /d	100	398	191	Max. = 454
Well 2 Flow - Maximum Flow Rate	L/min	1,055	1,042	1,089	Max. = 1400
Treated Flow - Maximum Daily Volume	m <sup>3</sup> /d	546	740	644	Max. = 908
Treated Flow - Maximum Flow Rate	L/s	11.8	11.9	11.7	Max. = 14
<b>Raw Water</b>					
Well 1 Turbidity - Maximum	NTU	0.78	0.75	1.18	N/A
Well 2 Turbidity - Maximum	NTU	4.78	0.98	5.89	N/A
Well 1 Total Coliforms - Maximum	c/100mL	0	0	0	N/A
Well 1 <i>E.coli</i> - Maximum	c/100mL	0	0	0	N/A
Well 2 Total Coliforms - Maximum	c/100mL	0	0	2	N/A
Well 2 <i>E.coli</i> - Maximum	c/100mL	0	0	0	N/A
<b>Treated Water</b>					
Free Chlorine Residual	mg/L	1.07	0.53	0.47	Min. = 0.15 (CT) <sup>1</sup>
Total Coliforms - Maximum	c/100mL	0	0	0	Max. = 0
<i>E.coli</i> - Maximum	c/100mL	0	0	0	Max. = 0
Nitrate	mg/L	0.4	-	-	Max. = 10
Nitrite	mg/L	< 0.01	-	-	Max. = 1
<b>Distribution Water</b>					
Free Chlorine Residual	mg/L	0.54	0.98	0.81	Min. = 0.05
Total Coliforms - Maximum	c/100mL	0	0	0	Max. = 0
<i>E.coli</i> - Maximum	c/100mL	0	0	0	Max. = 0
Trihalomethanes (THMs)	µg/L	52.9	-	-	Max. = 100 µg/L (RAA) <sup>2</sup>
Haloacetic Acids (HAAs)	µg/L	76	-	-	Max. = 80 µg/L (RAA) <sup>3</sup>



# MATACHEWAN DRINKING WATER SYSTEM

## Quarterly Data Report



Q2: April 1 to June 30, 2023

Matachewan Drinking Water System		April	May	June	Compliance
<b>Distribution Water</b>					
Lead	µg/L	-	-	-	Max. = 10 µg/L <sup>4</sup>
Alkalinity	mg/L	-	-	-	N/A <sup>5</sup>

### Notes:

- 1** CT is the concentration of chlorine in the water times the time of contact that the chlorine has with the water. It is used to demonstrate the level of disinfection treatment in the water. CT calculations are performed for the Matachewan water plant if the free chlorine residual level drops below 0.15 mg/L to ensure primary disinfection is achieved. Primary disinfection was achieved this quarter.
- 2** Maximum Allowable Concentration (MAC) for Trihalomethanes (THMs) = 100 ug/L (Four Quarter Running Average). The annual running average to the end of the quarter = 56.4 ug/L
- 3** Maximum Allowable Concentration (MAC) for Haloacetic Acids (HAAs) = 80 ug/L (Four Quarter Running Average). The annual running average to the end of the quarter = 65.4 ug/L
- 4** Lead testing required every 3 years.
- 5** Alkalinity testing required twice per year. Sampling is done in March and September of each year.