

2023 SCHEDULE 22 SUMMARY REPORT

EVERETT
DRINKING WATER
SYSTEM



For the period of
January 1st, 2023 to December 31st, 2023

Prepared for the Corporation of the Township of Adjala-Tosorontio
by the Ontario Clean Water Agency

This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

Drinking-Water System Number:	220004064
Drinking-Water System Name:	Everett Drinking Water System
Drinking-Water System Owner:	The Corporation of the Township of Adjala-Tosorontio
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 – December 31, 2023

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on April 20, 2023 for the period covering June 1, 2022 to April 20, 2023. On June 8, 2023 the Inspection Report was issued and an Inspection Summary Rating Record (IRR) of 100% was received.

The following is a summary of non-compliances noted in the MECP Inspection Report, as well as the duration and the measures that were taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

Table 1. Non-Compliances and Corrective Actions noted in the 2022/2023 MECP Inspection Report

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system's approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP and confirmation of whether the incidents are considered non-compliances are noted in the MECP Inspection Report and included in Table 1.

Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period

Incident	Duration	Corrective Actions
Ballpark Monitoring Well Incident – Vandalism and Monitoring Well On 2023/09/19, at 1255 hrs OCWA staff attended the Ballpark Pumphouse facility to complete facility checks and weekly sampling. Upon arrival staff observed that the monitoring well lid/cap was fully	N/A	<ul style="list-style-type: none"> Operator performed visual check of the monitoring well Operator shutdown the production well which supplies raw water to the Ballpark Pumphouse and placed the Pumphouse offline. Under the guidance of the MECP and local Health Unit and out of an abundance of caution- Raw water

<p>opened and the locked had been removed, assuming it had been cutoff at some point between the last facility check on Friday, September 15, 2023 at 1300 hours and Monday, September 19, 2023 at 1255 hrs.</p> <p>- Since the Monitoring Well and the Production Well which supplies the system with raw water are geographically located in close proximity to one another, and because they shared the same aquifer, OCWA’s corrective actions in consultation with the MECP and local Health Unit were to air on the side of caution and assume that the well may have been tampered with due to vandalism.</p>		<p>sampling was completed for a hydrocarbon suite of tests for petroleum products, bacteriological, nitrate/nitrite and total nitrogen over the course of September to November, 2023 to ensure no contamination in the well.</p> <ul style="list-style-type: none"> • Several raw water, treated water and distribution sampling results received and were within regulatory requirements and shown no sign of bacteriological contamination. • As per AWWA Standards, operations staff shock chlorinated the well and collected two bacteriological samples 24-48 hours apart before directing treated water to users • Operations staff installed a locked concrete crock around the monitoring well. • Under the approval of the MECP and the local Health Unit- the Ballpark Production well was placed back online on 2024/12/01- any samples taken indicate that outside contamination did not occur.
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For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Everett Drinking Water System Annual Report (Section 11).

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 10) summarize the quantities and flowrates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flowrates approved in the system’s approval, DWWP or MDWL.

As required by the MDWL, regulatory flow measuring devices are checked/verified and where necessary calibrated. These checks/verifications/calibrations are performed annually by a third party to ensure the flow measuring devices are within acceptable deviation limits.

2.1 Treated Water

Municipal Drinking Water License (MDWL):	097-102 (Issue Number: 4)
Allowable Rated Capacity for Grohal Pumphouse:	1,958 m ³ /day
Allowable Rated Capacity for Ballpark Pumphouse:	1,958 m ³ /day
Allowable Flowrate into Treatment System:	Not listed in MDWL

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

Table 3. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for Grohal Pumphouse^{3A} in 2023

Treated Water Flow- Grohal Pumphouse ^{3A}					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	365.29	18.66%	598.31	30.56%	11,323.96
February	385.07	19.67%	471.91	24.10%	10,781.92
March	151.80	7.75%	573.45	29.29%	4,705.79
April	203.28	10.38%	701.56	35.83%	6,098.48
May	228.86	11.69%	633.76	32.37%	7,094.70
June	234.27	11.96%	646.71	33.03%	7,028.24
July	193.42	9.88%	648.69	33.13%	5,995.91
August	174.18	8.90%	629.42	32.15%	5,399.60
September	258.69	13.21%	521.31	26.62%	7,760.66
October	388.54	19.84%	1,091.28	55.73%	12,044.67
November	315.43	23.09%	606.67	30.98%	9,462.93
December	210.01	10.73%	471.68	24.09%	6,510.20
2023	259.07	13.23%	1,091.28	55.73%	94,207.06

^{3A}Treated water flow and flowrate data for Grohal Pumphouse is based off the raw water flow and flowrate data for Grohal Production Well (PW# 1-88). There is only one set of pumps responsible for the raw water taking, water that flows into the treatment system and water that flows from the treatment system into the distribution system.

A review of flow information for the reporting period indicates that the Grohal Pumphouse operated within the rated capacity specified in the MDWL (1,958 m³/day), for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

A summary of flowrates of water that flows into the Grohal Pumphouse treatment subsystem can be found in Table 6. The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into the treatment subsystem at Grohal Pumphouse.

Table 4. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for Ballpark Pumphouse^{4A} in 2023

Treated Water Flow- Ballpark Pumphouse ^{4A}					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January ^{4B}	0.00	0.00%	0.00	0.00%	0.00
February	2.37	0.12%	35.67	1.82%	66.27
March	191.95	9.80%	559.81	28.59%	5950.31
April	194.23	9.92%	647.35	33.06%	5826.76
May	184.51	9.42%	620.61	31.70%	5719.96
June	215.19	10.99%	653.39	33.37%	6455.67
July	216.71	11.07%	572.25	29.23%	6718.12
August	196.66	10.04%	541.95	27.68%	6096.58
September	78.59 ^{4C}	4.01%	380.17	19.42%	2357.72
October	3.08 ^{4C}	0.16%	44.04	2.25%	95.34
November	1.72 ^{4C}	0.09%	18.80	0.96%	51.73
December	129.34	6.61%	403.02	20.58%	4009.52
2023	81.87	8.54%	653.39	33.37%	43,347.98

^{4A}Treated water flow and flowrate data for Ballpark Pumphouse is based off the raw water flow and flowrate data for Ballpark Production Well/ PW#1-90. There is only one set of pumps responsible for the raw water taking, water that flows into the treatment system and water that flows from the treatment system into the distribution system.

^{4B}January 1 to February 28, 2023- Ballpark Production Well (PW1-90) was offline for maintenance and inspection activities. No water was supplied to the treatment or distribution system.

^{4C}From September 19 to November 30, 2023- Due to Ballpark Monitoring Well Incident (see table 2- self reported incidents for more information) the Ballpark Production Well (PW1-90) was offline. Any raw water used was flushed to waste and was not sent to the distribution system.

A review of flow information for the reporting period indicates that the Ballpark Pumphouse operated within the rated capacity specified in the MDWL (1,958 m³/day), for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

A summary of flowrates of water that flows into the Ballpark Pumphouse treatment subsystem can be found in Table 10. The applicable MDWL for the reporting period did not list a maximum

allowable limit for the flowrate of water that flows into the treatment subsystem at Ballpark Pumphouse.

2.2 Raw Water

Permit to Take Water Number (PTTW):	4367-93XLP4
Allowable Maximum Raw Water Volume – Grohal Production Well/ PW# 1-88:	1,960.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Grohal Production Well/ PW# 1-88:	1,360 L/min (22.67 L/sec)
Allowable Maximum Volume of Raw Water – Grohal Standby Well/ PW#3-78:	950 m ³ /day
Allowable Maximum Raw Water Flowrate – Grohal Standby Well/ PW#3-78:	660 L/min (1.10 L/sec)
Allowable Maximum Volume of Raw Water – Ballpark Production Well/ PW#1-90:	1,960.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Ballpark Production Well/ PW#1-90:	1,362 L/min (22.70 L/sec)

As per the PTTW, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit.

Table 5. Raw Water (Grohal Production Well/ PW# 1-88) Monthly Average, Maximum Flow and Total Volume for 2023

Raw Water Flow – Grohal Production Well- PW 1-88					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	365.29	18.64%	598.31	30.53%	11,323.96
February	385.07	19.65%	471.91	24.08%	10,781.92
March	151.80	7.74%	573.45	29.26%	4,705.79
April	203.28	10.37%	701.56	35.79%	6,098.48
May	228.86	11.68%	633.76	32.33%	7,094.70
June	380.60	19.42%	646.71	33.00%	7,028.24
July	193.42	9.87%	648.69	33.10%	5,995.91
August	174.18	8.89%	629.42	32.11%	5,399.60
September	258.69	13.20%	521.31	26.60%	7,760.66
October	388.54	19.82%	1,091.28	55.68%	12,044.67
November	315.43	16.09%	606.67	30.95%	13,562.93
December	210.01	10.71%	471.68	24.07%	6,510.20
2023	282.65	14.42%	1,091.28	55.68%	94,207.06

A review of flow information for the reporting period indicates that the Grohal Production well (PW 1-88) operated within the PTTW's maximum allowable daily raw water volume (1,960.00 m³/day).

Table 6. Raw Water (Grohal Production Well/ PW# 1-88) Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water Flowrate – Grohal Production Well- PW 1-88		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	17.93	18.46
February	17.98	21.11
March	11.91	21.26
April	16.49	21.41
May	18.43	21.34
June	19.90	18.53
July	17.545	20.75
August	16.023	21.25
September	20.00	75.00 ^{6A}
October	17.76	21.33
November	17.904	21.30
December	17.788	21.24
2023	17.47	75.00^{6A}

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate (22.67 L/sec) for the Grohal Production Well (PW 1-88) with the exception of:

- ^{6A}September 7, 2023 – Flowrate exceedances due to flowmeter calibration

Table 7. Raw Water (Grohal Standby Well- PW #3-78) Monthly Average, Maximum Flow and Total Volume for 2023

Raw Water Flow – Grohal Standby Well (PW #3-78)					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	1.97	0.21%	2.49	0.26%	9.83
February	0.23	0.02%	1.96	0.21%	6.57
March	0.32	0.03%	3.52	0.37%	9.93
April	0.28	0.03%	2.31	0.24%	8.35
May	0.46	0.05%	3.79	0.40%	14.31
June	0.41	0.04%	3.75	0.39%	12.28
July	0.30	0.03%	2.18	0.23%	9.34
August	0.31	0.03%	2.84	0.30%	9.67

Raw Water Flow – Grohal Standby Well (PW #3-78)					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
September	0.39	0.04%	3.23	0.34%	11.61
October	0.42	0.04%	3.78	0.40%	12.90
November	0.42	0.04%	4.01	0.42%	12.73
December	0.53	0.06%	8.19	0.86%	16.51
2023	0.50	0.05%	8.19	0.86%	134.03

A review of flow information for the reporting period indicates that the system operated within the PTTW’s maximum allowable daily raw water volume (950 m³/day) for Grohal Standby Well (PW #3-78). The flow from this well is directed to waste and not the distribution system.

Table 8. Raw Water Grohal (Standby Well- PW #3-78) Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water Flowrate – Grohal Standby Well (PW #3-78)		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	2.78	10.38 ^{8A}
February	2.17	10.32 ^{8A}
March	1.66	10.33 ^{8A}
April	1.60	10.35 ^{8A}
May	1.87	10.37 ^{8A}
June	1.17	13.94 ^{8A}
July	1.92	10.39 ^{8A}
August	1.44	10.39 ^{8A}
September	1.93	10.41 ^{8A}
October	2.26	10.34 ^{8A}
November	2.68	10.34 ^{8A}
December	1.45	10.34 ^{8A}
2023	1.91	13.94^{8A}

A review of flow information for the reporting period indicates that the system operated outside of the PTTW’s the maximum allowable raw water flowrate for Grohal Standby Well (PW #3-78) throughout the reporting period due to:

- ^{8A}Flowrate exceedances attributed to infrequent well start-ups/runs.

Table 9. Raw Water (Ballpark Production Well- PW #1-90) Monthly Average, Maximum Flow and Total Volume for 2023

Raw Water Flow – Ballpark Production Well (PW #1-90)					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January ^{9A}	0.00 ^{9A}	0.00% ^{9A}	0.00 ^{9A}	0.00% ^{9A}	0.00 ^{9A}
February ^{9A}	2.37 ^{9A}	0.12% ^{9A}	35.67 ^{9A}	1.82% ^{9A}	66.27 ^{9A}
March	191.95	9.80%	559.81	28.59%	5,950.31
April	194.23	9.92%	647.35	33.06%	5,826.76
May	184.51	9.42%	620.61	31.70%	5,719.96
June	215.19	10.99%	653.39	33.37%	6,455.67
July	216.71	11.07%	572.25	29.23%	6,718.12
August	196.66	10.04%	541.95	27.68%	6,096.58
September	78.59 ^{9B}	4.01%	380.17	19.42%	2,357.72
October	3.08 ^{9B}	0.16%	44.04	2.25%	95.34
November	1.72 ^{9B}	0.09%	18.80	0.96%	51.73
December	129.34	6.61%	403.02	20.58%	4,009.52
2023	117.86	9.02%	653.39	33.37%	43,347.98

^{9A}January 1 to February 28, 2023- Ballpark Production Well (PW1-90) was offline for maintenance and inspection activities. No water was supplied to the treatment or distribution system.

^{9B}From September 19 to November 30, 2023- Due to Ballpark Monitoring Well Incident (see table 2- self reported incidents for more information) the Ballpark Production Well (PW1-90) was offline. Any raw water used was flushed to waste and was not sent to the distribution system.

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume (1,960.00 m³/day) for Ballpark Production Well (PW #1-90).

Table 10. Raw Water (Ballpark Production Well- PW #1-90) Annual and Monthly Average and Maximum Flowrates for 2023

Raw Water Flowrate – Ballpark Production Well (PW #1-90)		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January ^{10A}	0.00	0.00
February	1.23	26.36 ^{10C}
March	20.35	24.30 ^{10C}
April	13.51	22.16
May	15.90	21.76
June	17.23	22.33
July	18.49	23.18 ^{10C}
August	16.88	22.06

Raw Water Flowrate – Ballpark Production Well (PW #1-90)		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
September ^{10C}	13.14	21.24
October ^{10C}	5.64	24.06 ^{10B}
November ^{10C}	5.17	22.85 ^{10B}
December ^{10C}	17.62	23.70 ^{10B}
2023	11.72	26.36^{10C}

^{10A}January 1 to February 28, 2023- Ballpark Production Well (PW1-90) was offline for maintenance and inspection activities. No water was supplied to the treatment or distribution system.

A review of flow information for the reporting period indicates that the system operated within the PTTW's the maximum allowable raw water flowrate (22.70 L/sec) for Ballpark Production Well (PW #1-90) with the exception of:

- ^{10B}October, November, December- exceedances were of brief duration and a result of the well being flushed to waste during the Monitoring Well Incident (as described in table 2 of this report)
- ^{10C}February, March and July- exceedances were of short duration and a result of well pump start-ups.