ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

2025 Annual Report for Elk Lake Drinking Water System

PREPARED BY

Ontario Clean Water Agency
on behalf of the Township of James

February 27, 2026
Rev: 0

Revision History

Rev. No.	Date	Prepared by:	Approved by:	Description
0	February 27, 2026	H. Dalwadi, PCT	P. Roy, Senior Operations Manger	Revision 0 issued

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Introduction

Municipalities throughout Ontario are required to comply with Ontario Regulation 170/03 made under the Safe Drinking Water Act (SDWA) since June 2003. The Act was passed following recommendations made by Commissioner O'Conner after the Walkerton Inquiry. The Act's purpose is to protect human health through the control and regulation of drinking-water systems. O. Reg. 170/03 regulates drinking water testing, use of licensed laboratories, treatment requirements and reporting requirements.

O. Reg. 170/03 requires the owner to produce an Annual Report, under Section 11. This report must include the following:

1. Description of system and chemical(s) used
2. Summary of any adverse water quality reports and corrective actions
3. Summary of all required testing
4. Description of any major expenses incurred to install, repair or replace equipment

This Annual Report must be completed by February 28 of each year.

The regulation also requires a Summary Report which must be presented and accepted by Council by March 31 of each year for the preceding calendar year reporting period.

The report must list the requirements of the Act, its regulations, the system's Drinking Water Works Permit (DWWP), Municipal Drinking Water Licence (MDWL), Certificate of Approval (if applicable), and any regulatory requirement the system failed to meet during the reporting period. The report must also specify the duration of the failure, and for each failure referred to, describe the measures that were taken to correct the failure.

The Safe Drinking Water Act, 2002 and the drinking water regulations can be viewed at the following website: http://www.e-laws.gov.on.ca.

To enable the Owner to assess the rated capacity of their system to meet existing and future planned water uses, the following information is also required in the report.

1. A summary of the quantities and flow rates of water supplied during the reporting period, including the monthly average and the maximum daily flows.
2. A comparison of the summary to the rated capacity and flow rates approved in the systems approval, drinking water works permit or municipal drinking water licence or a written agreement if the system is receiving all its water from another system under an agreement.

The reports have been prepared by the Ontario Clean Water Agency (OCWA) on behalf of the Owner and presented to council as the 2022 Annual/Summary Report.

Section 11 – Annual Report

1. Introduction

Drinking-Water System Name	**Elk Lake Drinking Water System**
Drinking-Water System Number	220007329
Drinking-Water System Owner	The Corporation of the Township of James
Drinking-Water System Category	Large Municipal, Residential System
Reporting Period	January 1, 2025 to December 31, 2025

Does your Drinking-Water System serve more than 10,000 people? No

Is your annual report available to the public at no charge on a web site on the Internet?

Yes at: **http://www.elklake.ca/**

Location where Report required under O. Reg. 170/03 Schedule 22 will be available for inspection:

Elk Lake Municipal Office
33 Third Street
Elk Lake, Ontario P0J 1G0

Drinking-Water Systems that receive drinking water from the Elk Lake Drinking Water System

The Elk Lake Drinking Water System provides all drinking water to the community of Elk Lake.

The Annual Report was not provided to any other Drinking Water System Owners

The Ontario Clean Water Agency prepared the 2024 Annual/Summary Report for the Elk Lake Drinking Water System and provided a copy to the system owner; the Township of James. The Elk Lake Drinking Water System is a stand-alone system that does not receive water from or send water to another system.

Notification to system users that the Annual Report is available for viewing is accomplished through:

- Notice on the city's Facebook page
- Notice in the local newspaper

2. Elk Lake Drinking Water System (DWS No. 220007329)

The Elk Lake Drinking Water System is owned by the Corporation of the Township of James and consists of a Class 1 water treatment subsystem and a Class 1 water distribution subsystem. The system is a communal ground water well supply that services the Town of Elk Lake. The Ontario Clean Water Agency is the accredited operating authority and is designated as the Overall Responsible Operator for both the water treatment and water distribution facilities.

Raw Water Supply

The water treatment facility is located on Lot 83 First Street in the Township of James and is supplied by one 65 m deep, double steel casing production well. The well is located in water treatment plant and is equipped with a vertical turbine pump, rated at 63 L/s with a 250 mm diameter magnetic flow meter installed on the discharge line. The well includes pump-to-waste capabilities from the pump discharge line.

A second well located in the vicinity of the east end of the bridge across the Montreal River on Lot 5, Concession 5 in the Township of James acts as a monitoring/observation well. It is drilled to a depth of 79 meters and consists of a steel casing. This well is not equipped with a well pump and is not connected to the water treatment plant.

Water Treatment

The production well feeds the water treatment plant that has a maximum rated capacity of 2790 cubic meters per day (m^3/d).

The raw water is directed to an iron and manganese removal system (Filtronics brand) consisting of two reaction vessels fed with sodium hypochlorite, three pressure filters each having a rated capacity of 646 L/min, three flow meters dedicated to each filter and continuous monitoring of chlorine residual and filter operation. The filter backwash recycling system is equipped with a 40 m^3 underground holding tank, a submersible pump rated at 3.8 L/s with a discharge line that re-circulates the supernatant with raw water at the well pump header and a sludge pump for residual disposal to a tanker truck.

The disinfection system consists of a 450 L sodium hypochlorite solution tank equipped with spill containment and duplicate pace-to-flow chemical feed injection pumps (one duty and one standby). Chemical injection is accomplished at the raw water pipe header, prior to entering the reaction vessels.

Water Storage

The treated water discharges into twin cell storage clearwells, connected in series and having a total volume of 540 m^3. Curtain baffling was installed in Cell #2 of the clearwell to provide sufficient chlorine contact time.

Three vertical turbine pumps (one duty, one standby draw from clearwell #1, and one fire pump installed over clearwell #2) with variable frequency drives each rated at 37.5 L/s. A magnetic finished flow meter, chlorine residual analyzer, and a surge anticipator are installed on the discharge main prior to exiting the pump house and entering the distribution system. The water treatment process is controlled by a dedicated Program Logic Controller (PLC) and monitored through the SCADA computer system.

Control System

Control System Supervisory Control and Data Acquisition (SCADA) is the method of control implemented for the Elk Lake Water Treatment System. All analyzing, monitoring and control module equipment information is routed through the SCADA system for operator monitoring and control. Control of equipment can be accomplished locally using the SCADA computer located at the Elk Lake water treatment plant or remotely using operator computers and cell phones. Alarm capability and set point adjustment along with trend monitoring are also available through SCADA system controls.

Emergency Power

A 160 kW emergency stand-by power generator is available at the plant and is capable of supplying power to the entire facility during power failures.

Distribution System

The Elk Lake Drinking Water System is classified as a Large Municipal Residential Drinking Water System and provides water to a population of approximately 460 residents through an estimated 220 service connections. The distribution system was constructed in 1992 and consists of mainly of PVC constructed pipe. Approximately 60 fire hydrants are connected to the system to aid in fire protection. There are no off-site water storage facilities in the distribution system, as storage is incorporated within the treatment plant.

3. List of water treatment chemicals used over the reporting period

The following chemicals were used in the treatment process at the Elk Lake Water Treatment Plant.

- Sodium hypochlorite – Oxidation and Disinfection

This treatment chemical meets AWWA and NSF/ANSI standards.

4. Significant expense incurred to the drinking water system

OCWA is committed to maintaining the assets of the drinking water system and sustains a program of scheduled inspection and maintenance activities using a computerized Work Management System (WMS).

Significant expenses incurred in the drinking water system include:

- Sludge Haul
- Hydrant gate
- Pump Repairs
- In floor heating repair
- Monthly phone charges
- DWQMS third party audit
- Fire extinguisher checks
- Capital works

5. Details on notices of adverse test results and other problems reported to & submitted to the spills action center

Based on information kept on record by OCWA, no adverse water quality incidents were reported to the Ministry's Spills Action Centre in 2022.

Date	AWQI No.	Details
N/A	*N/A*	No AWQIs or Non-Compliances were observed or reported in 2025

6. Microbiological Testing Performed During the Reporting Period

Table 1: Summary of Microbiological Data

Sample Type	# of Samples	*Range of E.coli* Results *(min to max)*	Range of Total Coliform Results *(min to max)*	# of HPC Samples	Range of HPC Results *(min to max)*
Raw (Production Well)	52	0 to 0	0 to 0	0	N/A
Treated	52	0 to 0	0 to 0	52	< 10 to 160
Distribution	106	0 to 0	0 to 0	52	< 10 to 60

Maximum Allowable Concentration (MAC) for *E. coli* = 0 Counts/100 mL
MAC for Total Coliforms = 0 Counts/100 mL

"<" denotes less than the laboratory's method detection limit
">" denotes greater than the laboratory's method detection limit.

Notes:

1. One microbiological sample is collected and tested each week from the raw and treated water supply. A total of two microbiological samples are collected and tested each week from the Elk Lake distribution system. At least 25% of the distribution samples must be tested for HPC bacteria.

7. Operational Testing Performed During The Reporting Period

Table 2: Continuous Monitoring in the Treatment Process

Parameter	# of Samples	Range of Results *(min to max)*	Unit of Measure	Standard
Turbidity (Well)	24	0.36 to 3.90	NTU	≤ 1.0
Free Chlorine Residual	8760	0.55 to 1.63	mg/L	CT

Notes:

1. For continuous monitors 8760 is used as the number of samples.
2. Turbidity samples are required once every month.
3. 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 Elk Lake water plant if the free chlorine residual level drops below 0.330 mg/L to ensure primary disinfection is achieved

Table 3: Summary of Chlorine Residual Data in the Distribution System

Parameter	No. of Samples	Range of Results (min to max)	Unit of Measure	Standard
Combined Chlorine Residual	470	0.56 to 1.53	mg/L	≥ 0.05

Notes:

1. A total of seven operational checks for chlorine residual in the distribution system are collected each week. Four (4) samples are tested one day and three (3) on a second day. The sample sets are collected at least 48-hours apart and samples collected on the same day are from different locations. Three additional residual grabs were collected in January, the 48 hour apart requirement was not met on original secondary 3 grab checks collected for one given week.

Refer to *Appendix B* for a monthly summary of the above operational data.

Table 4: Summary of Nitrate & Nitrite Data (sampled at the plant's point of entry into the distribution every quarter)

Date of Sample	Nitrate Result	Nitrite Result	Unit of Measure	Exceedance
January 13	< 0.10	< 0.01	mg/L	No
April 14	< 0.30	< 0.01	mg/L	No
July 7	< 0.20	< 0.01	mg/L	No
October 14	< 0.20	< 0.01	mg/L	No

Maximum Allowable Concentration (MAC) for Nitrate = 10 mg/L

MAC for Nitrite = 1 mg/L

Table 5: Summary of Total Trihalomethane Data (sampled in the distribution system every quarter)

Date of Sample	THM Result	Unit of Measure	Running Average	Exceedance
January 13	24.4	ug/L	25.5	No
April 14	26.8	ug/L		
July 7	25.7	ug/L		
October 14	24.9	ug/L		

Maximum Allowable Concentration (MAC) for Total Trihalomethanes = 100 ug/L (Four Quarter Running Average)

Table 6: Summary of Total Haloacetic Acid Data (sampled in the distribution system every quarter)

Date of Sample	Result Value	Unit of Measure	Running Average	Exceedance
January 13	16	ug/L	17.0	No
April 14	10	ug/L		
July 7	19	ug/L		
October 14	23	ug/L		

Maximum Allowable Concentration (MAC) for Total Haloacetic Acid = 80 ug/L (Four Quarter Running Average)

Summary of Most Recent Lead Data under Schedule 15.1

(applicable to the following drinking water systems; large municipal residential systems, small, municipal residential systems, and non-municipal year-round residential systems)

The Elk Lake Drinking Water System was eligible to follow the "Exemption from Plumbing Sampling" as described in section 15.1-5(9) and 15.1-5(10) of Schedule 15.1 of Ontario Regulation 170/03. The exemption applies to a drinking water system if, in two consecutive periods at reduced sampling, not more than 10% of all samples from plumbing exceed the maximum allowable concentration (MAC) of 10 ug/L for lead. As such, the system was required to test for total alkalinity and pH in one distribution sample collected during the periods of December 15 to April 15 (winter period) and June 15 to October 15 (summer period). This testing is required in every 12-month period with lead testing in every third 12-month period.

Two rounds of alkalinity and pH testing were carried out on April 7th and October 8th of 2025. Results are summarized in the table below.

Table 7: Summary of Lead Data (sampled in the distribution system)

Date of Sample	# of Samples	Field pH *(min to max)*	Field Temperature (°C) *(min to max)*	Alkalinity (mg/L) *(min to max)*	Lead (ug/L) *(min to max)*
April 7	1	7.2	8.2	226	N/A
October 8	1	6.81	10.2	252	N/A

Note: Next lead sampling scheduled for 2026

Table 8: Most Recent Schedule 23 Inorganic Data Tested at the Water Treatment Plant

Parameter	Result Value	Unit of Measure	MAC	MAC Exceedance	½ MAC Exceedance
Antimony	< 0.5	ug/L	6	NO	NO
Arsenic	1.0	ug/L	10	No	No
Barium	457	ug/L	1000	No	No
Boron	7.0	ug/L	5000	No	No
Cadmium	< 0.1	ug/L	5	No	No
Chromium	< 1.0	ug/L	50	No	No
Mercury	< 0.1	ug/L	1	No	No
Selenium	0.4	ug/L	50	No	No
Uranium	< 1.0	ug/L	20	No	No

Note: Sample required every 36 months (sample date = October 10, 2023). Next sampling scheduled for October 2026

Table 9: Most Recent Schedule 24 Organic Data Tested at the Water Treatment Plant

Parameter	Result Value	Standard	MAC Exceedance	½ MAC Exceedance
Alachlor	< 0.267	5	No	No
Atrazine + N-dealkylated metobolites	< 0.5	5	No	No
Azinphos-methyl	< 0.2	20	No	No
Benzene	< 0.1	1	No	No
Benzo(a)pyrene	< 0.01	0.01	No	No
Bromoxynil	< 0.093	5	No	No
Carbaryl	< 3.0	90	No	No
Carbofuran	< 4.0	90	No	No
Carbon Tetrachloride	< 0.2	2	No	No
Chlorpyrifos	< 0.2	90	No	No
Diazinon	< 0.2	20	No	No
Dicamba	< 0.082	120	No	No
1,2-Dichlorobenzene	< 0.2	200	No	No
1,4-Dichlorobenzene	< 0.3	5	No	No
1,2-Dichloroethane	< 0.2	5	No	No
1,1-Dichloroethylene (vinylidene chloride)	< 0.3	14	No	No
Dichloromethane	< 1.0	50	No	No
2-4 Dichlorophenol	< 0.2	900	No	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	< 0.35	100	No	No
Diclofop-methyl	< 0.117	9	No	No
Dimethoate	< 0.2	20	No	No
Diquat	< 0.2	70	No	No
Diuron	< 10.0	150	No	No
Glyphosate	< 20.0	280	No	No
Malathion	< 0.2	190	No	No

Parameter	Result Value	Standard	MAC Exceedance	½ MAC Exceedance
Metolachlor	< 0.134	50	No	No
Metribuzin	< 0.134	80	No	No
Monochlorobenzene	< 0.5	80	No	No
Paraquat	< 0.2	10	No	No
Polychlorinated Biphenyls (PCBs)	< 0.07	3.0	No	No
Pentachlorophenol	< 0.3	60	No	No
Phorate	< 0.134	2	No	No
Picloram	< 0.082	190	No	No
Prometryne	< 0.067	1	No	No
Simazine	< 0.2	10	No	No
Terbufos	< 0.134	1	No	No
Tetrachloroethylene	< 0.3	10	No	No
2,3,4,6-Tetrachlorophenol	< 0.3	100	No	No
Triallate	< 0.134	230	No	No
Trichloroethylene	< 0.2	5	No	No
2,4,6-Trichlorophenol	< 0.2	5	No	No
2-methyl-4-chlorophenoxyacetic acid (MCPA)	< 5.83	100	No	No
Trifluralin	< 0.134	45	No	No
Vinyl Chloride	< 0.1	1	No	No

Note: Sample required every 36 months (sample date = October 10, 2023). Next sampling scheduled for October 2026

Inorganic or Organic Parameter(s) that Exceeded Half the Standard Prescribed in Schedule 2 of Ontario Drinking Water Quality Standards

No inorganic or organic parameter(s) listed in Schedule 23 and 24 of Ontario Regulation 170/03 exceeded half the standard found in Schedule 2 of the Ontario Drinking Water Standard (O. Reg.169/03) during the reporting period.

Table 10: Most Recent Sodium Data Sampled at the Water Treatment Plant

Date of Sample	# of Samples	Result Value	Unit of Measure	Standard	Exceedance
October 10, 2025	1	10.50	mg/L	20	No

Note: Sample required every 60 months. Next sampling scheduled for October 2030.

The aesthetic objective for sodium in drinking water is 200 mg/L at which it can be detected by a salty taste. It is required that the local Medical Officer of Health be notified when the concentration exceeds 20 mg/L so that persons on sodium restricted diets can be notified by their physicians.

Table 11: Most Recent Fluoride Data Sampled at the Water Treatment Plant

Date of Sample	Number of Samples	Result Value	Unit of Measure	MAC	Exceedance
October 10, 2025	1	0.23	mg/L	1.5	No

Note: Sample required every 60 months. Next sampling scheduled for October 2030.

Additional Testing Performed in Accordance with a Legal Instrument

No additional regulatory sampling and testing was required for the Elk Lake Drinking Water System during the 2025 reporting period.

Schedule 22 – Summary Reports for Municipalities

1. Introduction

Drinking-Water System Name	**Elk Lake Drinking Water System**
Municipal Drinking Water Licence (MDWL)	**274-101-5 (issued February 03, 2026)**
Drinking Water Works Permit (DWWP)	**274-201-4 (issued February 03, 2026)**
Permit to Take Water (PTTW)	P-300-3205063109 (effective May 21, 2024)
Reporting Period	January 1, 2025 to December 31, 2025

2. Requirements the System Failed to Meet

According to information kept on record by OCWA, the Elk Lake Drinking Water System did not fail to meet any requirements during the 2025 reporting period:

Table 12: Requirements the system failed to meet

Drinking Water Legislation	Requirement(s) the System Failed to Meet	Duration	Corrective Action(s)	Status
N/A	N/A	N/A	N/A	N/A

3. Summary of Quantities and Flow Rates

3.1 Flow Monitoring

Municipal Drinking Water Licence (MDWL) #218-102 requires the owner to install a sufficient number of flow measuring devices to permit the continuous measurement and recording of:

- the flow rate and daily volume of water conveyed from the treatment system to the distribution system, and
- the flow rate and daily volume of water conveyed into the treatment system.

The flow monitoring equipment identified in the MDWL is present and operating as required.

These flow meters are calibrated on an annual basis as specified in the manufacturers' instructions.

3.2 Water Usage

The following Water Usage Tables summarize the quantities and flow rates of water taken and produced during the 2025 reporting period, including average monthly volumes, maximum monthly volumes, total monthly volumes and maximum flow rates.

Raw Water

Table 13 : Monthly Summary of water Takings from Well No. 1

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Total Volume (m^3)	3,664	3,316	3,611	3,813	4,895	4,040	4,670	5,078	5,037	4,667	3,289	3,745	49,825
Average Volume (m^3/d)	118	118	116	127	158	34	150	164	168	150	109	121	128
Maximum Volume (m^3/d)	173	150	157	205	561	205	305	313	311	558	150	171	561
PTTW - Maximum Allowable Volume (m^3/day)	2,162	2,162	2,162	2,162	2,162	2,162	2,162	2,162	2,162	2,162	2,162	2,162	2,162
Maximum Flow Rate (L/min)	3,480	3,480	3,240	3,600	3,660	3,660	3,600	3,600	3,540	3,480	3,060	3,120	3,660
PTTW - Maximum Allowable Flow Rate (L/min)	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840

The system's Permit to Take Water #P-300-3205063109, allows the Township to withdraw water at the following rates:

Well No. 1 (Production Well):	2,162 m^3/day	3,840 L/minute
Well No. 2 (Observation Well):	327 m^3/day	227 L/minute
Total Combined Daily Volume:	2,489 m^3/day	

A review of the raw water flow data indicates that the system did not exceed the maximum allowable volume or maximum flow rate during the reporting period.

Well No. 2 is a stand-alone observation well that is not equipped with a well pump. No water was taken from this well in 2025.

Treated Water

Table 14 : Monthly Summary of Treated Water Supplied to the Dustribution System

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Total Volume (m^3)	3,078	2,820	3,035	3,244	4,319	3,537	4,151	4,165	4,622	3,982	2,704	3,150	42,807
Average Volume (m^3/d)	99	100	98	108	139	118	134	139	154	128	90	101	117
Maximum Volume (m^3/d)	133	126	122	145	562	166	183	185	208	578	121	133	578
MDWL/C of A - Rated Capacity (m^3/day)	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790

Schedule C, Section 1.0 (1.1) of MDWL No. 274-101 states that the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed 2790 m^3/day. The Elk Lake DWS complied with this limit having a recorded maximum volume of 578 m^3/day, which represents 20.7% of the rated capacity.

Table 15 and Figure 1 compare the average and maximum flow rates into the distribution system to the rated capacity of the system identified in the MDWL.

Table 15 : Comparision of Treated Water Flows to the Rated Capacity

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Flow (m^3/day)	99	100	98	108	139	118	134	139	154	128	90	101
Maximum Flow (m^3/day)	133	126	122	145	562	166	183	185	208	578	121	133
MDWL - Rated Capacity	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790
% Rated Capacity	4.8	4.5	4.4	5.2	20.1	5.9	6.6	6.6	7.5	20.7	4.3	4.8

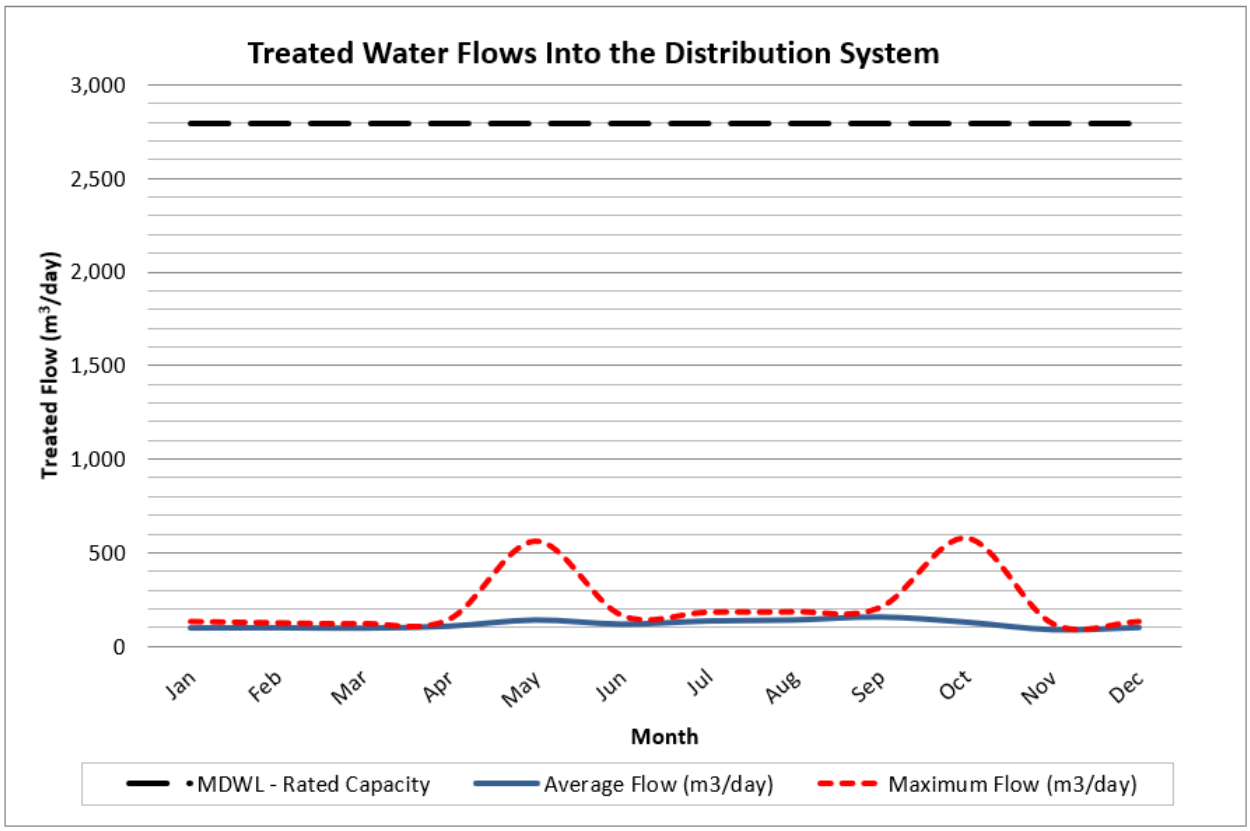

Figure 1: 2025 - Comparison of Treated Water Flows to the Rated Capacity

3.3 Summary of System Performance

The following information is provided to enable the Owner to assess the capability of the system to meet existing and future water usage needs.

Rated Capacity of the Plant (MDWL)	2,790 m^3/day	
Average Daily Flow for 2025	117 m^3/day	4.2 % of the rated capacity
Maximum Daily Flow for 2025	578 m^3/day	20.7 % of the rated capacity
Total Treated Water Produced in 2025	42,807 m^3	

Table 16 and Figure 2 compares the Historical average treated water flows from 2021 to 2025

Table 16: Elk Lake Water Treatment Plant – Flow Comparison

Year	Maximum Treated Flow (m^3/d)	Average Daily Flow (m^3/d)	Average Day % of Rated Capacity (2790 m^3/d)
2025	**578**	**117**	**4.2%**
2024	**520**	**114**	**4.0%**
2023	**591**	**110**	**3.9%**
2022	**298**	**102**	**3.7%**
2021	**656**	**117**	**4.2%**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2021 Average Flow (m^3/day)	86	90	94	99	118	178	143	146	134	114	106	95
2022 Average Flow (m^3/day)	95	99	97	88	100	122	116	127	100	107	89	89
2023 Average Flow (m^3/day)	85	119	96	89	120	135	135	132	113	118	90	85
2024 Average Flow (m^3/day)	92	88	89	91	115	149	144	141	129	136	96	98
2025 Average Flow (m^3/day)	99	100	98	108	139	118	134	139	154	128	90	102
MDWL - Rated Capacity (m^3/day)	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790	2,790

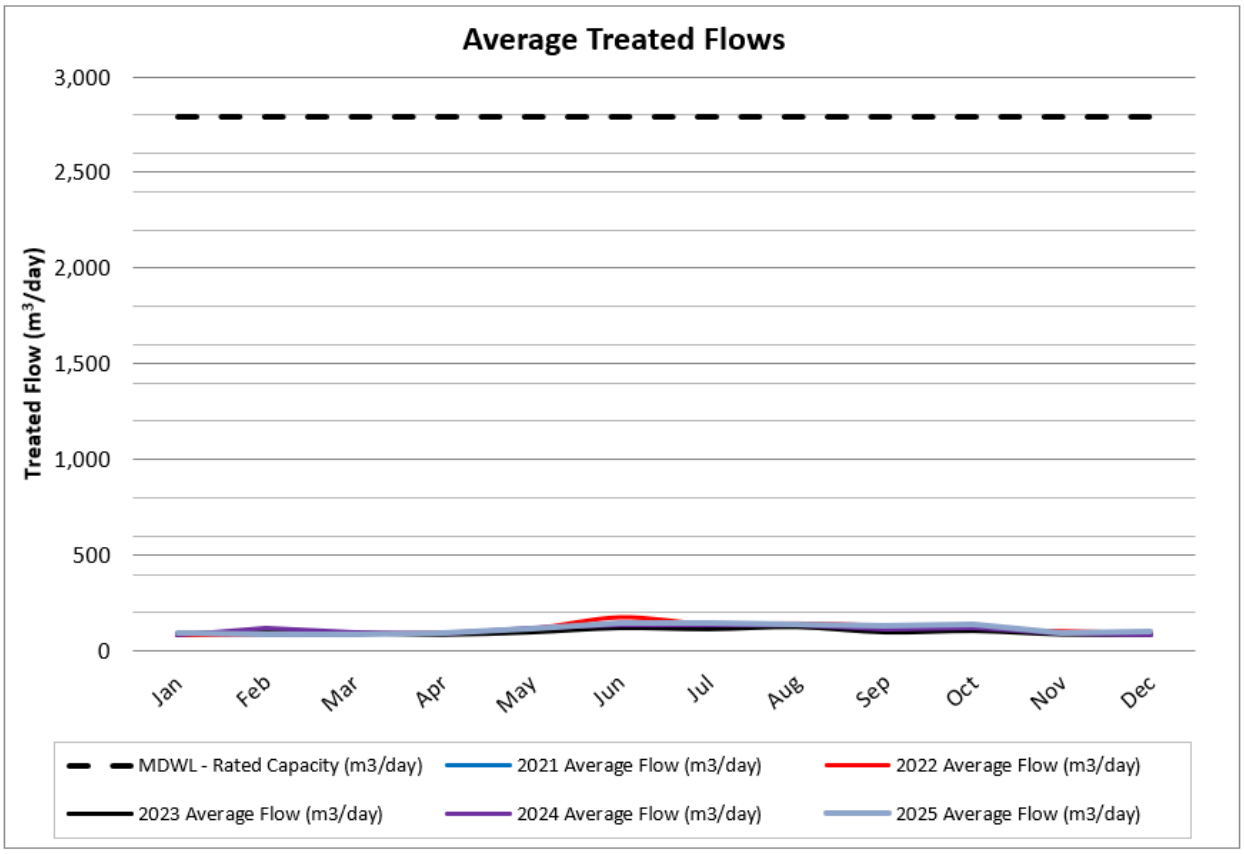

Figure 2: Elk Lake Water Treatment System - Average Treated Water Flows from 2021 to 2025

Conclusion

The water quality data collected in 2025 demonstrates that the Elk Lake drinking water system provided high quality drinking water to its users which met all the Ontario Drinking Water Standards having no incidents of non-compliance or adverse water quality incidents during the reporting period.

The system was able to operate in accordance with the terms and conditions of the Permit to Take Water and for most of the reporting period and in accordance with the rated capacity of the licence while meeting the community's demand for water use.

APPENDIX:

Monthly Summary of Microbiologcal & Operational Test Results

Customized Monthly Report

From 01/01/2025 to 12/31/2025

Facility Name: ELK LAKE DRINKING WATER SYSTEM
Receiver:

Facility Org Number: 5090
Facility Owner: Municipality: Township of James
Service Population: 440

Works: 220007329
Facility Classification: Class 1 Water Treatment
Total Design Capacity: 2790 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

													2025			
EL-3 (Bacti)	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Total	Avg	Max	Min
E. Coli - cfu/100mL																
Count	4.00	4.00	6.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Count	4.00	4.00	6.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
HPC - cfu/mL																
Count	2.00	2.00	3.00	1.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	3.00	26.00			
Lab Count	2.00	2.00	3.00	1.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	3.00	26.00			
Lab Month.Max	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	10.00	60.00	< 10.00	10.00	40.00	10.00	< 10.00			60.00	
Lab Month.Mean	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 35.00	< 10.00	< 10.00	< 25.00	< 10.00	< 10.00		< 13.08		
Lab Month.Min	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00				< 10.00
Total Coliform: TC - cfu/100mL																
Count	4.00	4.00	6.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Count	4.00	4.00	6.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	53.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
													2025			
EL-4 (Bacti)	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Total	Avg	Max	Min
E. Coli - cfu/100mL																
Count	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	51.00			
Lab Count	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	51.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
HPC - cfu/mL																
Count	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	26.00			
Lab Count	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	26.00			
Lab Month.Max	< 10.00	< 10.00	< 10.00	< 10.00	10.00	20.00	60.00	< 10.00	30.00	< 10.00	< 10.00	10.00			60.00	
Lab Month.Mean	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 15.00	< 35.00	< 10.00	< 16.67	< 10.00	< 10.00	< 10.00		< 13.08		
Lab Month.Min	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00				< 10.00
Total Coliform: TC - cfu/100mL																
Count	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	51.00			
Lab Count	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	51.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		

Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
													2025			
Residual No. 1	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Cl Residual: Free - mg/L																
Count	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	10.00	105.00			
IH Edited Count	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	10.00	105.00			
IH Month.Max	0.92	0.78	0.87	0.90	0.92	0.99	1.07	1.45	1.39	1.42	1.20	1.14			1.45	
IH Month.Mean	0.80	0.66	0.83	0.85	0.78	0.89	0.90	1.03	1.13	1.14	1.00	1.04		0.92		
IH Month.Min	0.74	0.57	0.80	0.79	0.58	0.83	0.84	0.73	0.91	0.96	0.87	0.90				0.57
													2025			
Residual No. 2	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Cl Residual: Free - mg/L																
Count	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	10.00	105.00			
IH Edited Count	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	10.00	105.00			
IH Month.Max	0.87	0.84	0.92	0.99	1.04	1.01	1.04	1.53	1.38	1.35	1.17	1.18			1.53	
IH Month.Mean	0.79	0.78	0.86	0.87	0.90	0.94	0.95	1.16	1.15	1.13	1.02	1.09		0.97		
IH Month.Min	0.70	0.68	0.75	0.70	0.72	0.86	0.87	0.95	0.83	0.98	0.90	0.97				0.68
													2025			
Residual No. 3	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Cl Residual: Free - mg/L																
Count	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	10.00	105.00			
IH Edited Count	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	9.00	9.00	8.00	10.00	105.00			
IH Month.Max	0.95	0.86	0.99	0.99	0.93	0.97	1.15	1.46	1.24	1.40	1.21	1.23			1.46	
IH Month.Mean	0.80	0.77	0.87	0.88	0.80	0.88	0.95	1.14	1.08	1.15	1.01	1.09		0.95		
IH Month.Min	0.68	0.64	0.81	0.75	0.56	0.82	0.86	0.69	0.91	0.87	0.75	0.92				0.56
													2025			
Residual No. 4	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Cl Residual: Free - mg/L																
Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
IH Edited Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
IH Month.Max	0.82	0.85	0.90	0.99	0.85	0.97	1.06	1.50	1.38	1.22	1.11	1.16			1.50	
IH Month.Mean	0.76	0.79	0.84	0.92	0.78	0.91	0.93	1.11	1.18	1.03	1.02	1.07		0.95		
IH Month.Min	0.71	0.69	0.70	0.88	0.71	0.86	0.83	0.79	0.96	0.94	0.92	0.98				0.69
													2025			
Well 1 (Production)	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
E. Coli: EC - cfu/100mL																
Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00

Total Coliform: TC - cfu/100mL																
Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Turbidity - NTU																
Count	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	24.00			
IH Edited Count	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	24.00			
IH Month.Max	2.52	1.69	0.65	3.90	3.18	3.56	2.62	1.84	1.82	0.46	0.62	0.50			3.90	
IH Month.Mean	2.43	1.36	0.59	2.17	2.87	2.47	1.93	1.75	1.52	0.41	0.51	0.45		1.54		
IH Month.Min	2.33	1.02	0.53	0.43	2.55	1.38	1.23	1.66	1.21	0.36	0.40	0.39				0.36

													2025			
Treated Water (POE)	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Cl Residual: Free (0.33 mg/L) - mg/L																
Count	22320.00	20160.00	22290.00	21600.00	22320.00	21600.00	22320.00	22320.00	21600.00	22320.00	21571.00	22320.00	262741.00			
OL Month.Max	1.08	1.10	1.10	1.20	1.22	1.08	1.14	1.63	1.45	1.48	1.34	1.47			1.63	
OL Month.Mean	0.94	0.93	0.98	1.02	0.97	0.99	0.99	1.19	1.16	1.06	1.04	1.12		1.03		
OL Month.Min	0.79	0.77	0.85	0.87	0.79	0.89	0.85	0.59	0.55	0.65	0.65	0.69				0.55
E. Coli: EC - cfu/100mL																
Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
HPC - cfu/mL																
Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Month.Max	< 10.00	< 10.00	< 10.00	10.00	< 10.00	< 10.00	10.00	< 10.00	90.00	10.00	160.00	10.00			160.00	
Lab Month.Mean	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	28.00	< 10.00	< 47.50	< 10.00		< 14.62		
Lab Month.Min	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	10.00	< 10.00	< 10.00	< 10.00				< 10.00
Total Coliform: TC - cfu/100mL																
Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Count	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	52.00			
Lab Month.Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	
Lab Month.Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00