



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

**PORT ELGIN
SEWAGE TREATMENT PLANT**

ANNUAL PERFORMANCE REPORT

For the period of
JANUARY 1, 2024 TO DECEMBER 31, 2024

Prepared by the Ontario Clean Water Agency
For The Town of Saugeen Shores

1. System Description

The Port Elgin Sewage Treatment Plant is designed for the treatment of municipal sanitary sewage and disposal of final effluent. The works is owned by the Corporation of the Town of Saugeen Shores and operated on behalf of the Owner by the Ontario Clean Water Agency (OCWA). Port Elgin WPCP began operating in its current configuration August 17, 2017. The plant is an extended aeration, activated sludge operation, with two secondary clarifiers, two aeration tanks and phosphorus removal (by continuous alum addition). Final effluent from the plant is disinfected by ultraviolet irradiation and flows through the constructed outfall (commissioned August 17, 2017) to Mill Creek.

Sludge is digested aerobically in a primary and secondary digester and stored in two aerated holding tanks. Digested sludge is land applied as farm fertilizer in accordance with the Guidelines. The plant has a six month storage that is used when conditions are not favorable for land application.

The Inlet Works includes continuously cleaned mechanical filter screen, grit removal system and odour control system, while the Septage Receiving Station includes screening, septage pumping station and two (2) 24 m³ below grade septage holding tanks.

An overview of Port Elgin Sewage Treatment Plant can be found in Table 1.

Table 1. Port Elgin Sewage Treatment Plant Overview

Facility Name	Port Elgin Sewage Treatment Plant
Facility Type	Modified Extended Aeration
Plant Classification	II WWT
Works Number	120001470
Design Capacity	6,455 m ³ /day
Number of Households	3,933 Residential + 411 Commercial
Receiving Water	Mill Creek
Environmental Compliance Approval / Certificate of Approval	0556-AKQN3Q (Sewage Treatment Plant) 0704-56VS78 (Air)

2. Monitoring Data

As per Section 11, 4(a), (b) and (g) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary and interpretation of all Influent and Imported Sewage monitoring data, including sewage characteristics, flow rates and a comparison to the values used in the design of the Works; a summary and interpretation of all Final Effluent monitoring data and a comparison to the compliance limits condition, including an overview of the success and adequacy of the Works; and a description of efforts made and results achieved in meeting the design objectives condition*; is required.

2.1 Sampling Frequency

Both raw sewage and effluent are sampled on a regular basis. The sampling types and frequencies are summarized in Table 2 and Table 3. The sampling frequencies either meet or exceed the requirements set out in ECA 0556-AKQN3Q.

Annual Performance Report: January 1, 2024 to December 31, 2024

Town of Saugeen Shores: Port Elgin Water Pollution Control Plant

ECA # 0556-AKQN3Q (Issued May 30, 2017)

Municipal Sewage Collection System ECA #093-W601, Issue 1 (Issue Date: January 10, 2023)

Table 2. Raw Sewage Monitoring - Sampling Frequencies as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameters	Sample Type	Minimum Frequency
BOD ₅ ^{2a}	Grab	Monthly
Total Suspended Solids ^{2a}	Grab	Monthly
Total Phosphorus ^{2a}	Grab	Monthly
Total Kjeldahl Nitrogen ^{2a}	Grab	Monthly

^{2a}Refer to Appendix A for monthly sample results.

Table 3. Effluent Monitoring - Sampling Frequencies as required as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameters	Sample Type	Minimum Frequency
CBOD ₅ ^{3a}	Composite	Weekly
Total Suspended Solids ^{3a}	Composite	Weekly
Total Phosphorus ^{3a}	Composite	Weekly
Total Ammonia Nitrogen ^{3a}	Composite	Weekly
Nitrite and Nitrate ^{3a}	Composite	Weekly
Alkalinity	Composite	Weekly
pH	Composite/Grab	Weekly (Grab)
E. Coli ^{3a}	Grab	Weekly
Temperature	Grab	Weekly

^{3a}Refer to Appendix A for monthly sample results.

2.2 Effluent Objectives and Effluent Limits

The effluent objectives for the Port Elgin Sewage Treatment Plant are:

Table 4. Effluent Objectives as required as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameter	Monthly Average Concentration (mg/L)
CBOD ₅	15
Suspended Solids	15
Total Phosphorus	0.8
E. Coli	100 organisms per 100 mL geometric mean density
pH	Between 6.5 – 8.5 inclusive, at all times

The effluent limits that are to be met for the Port Elgin Sewage Treatment Plant are found in Table 5. Any exceedance with the limits found in Table 5 constitutes a non-compliance.

Table 5. Effluent Limits as required by ECA 0556-AKQN3Q for Port Elgin Sewage Treatment Plant

Parameter	Monthly Average Concentration (mg/L)	Monthly Average Loading (kg/day)
CBOD ₅	25	161
Suspended Solids	25	161
Total Phosphorus	1.0	6.5
E. Coli	200 organisms per 100 mL geometric mean density	
pH	Between 6.0 and 9.5, inclusive, at all times	

2.3 Comparison of Data to Effluent Objectives and Effluent Limits

Analytical and monitoring data for the Port Elgin sewage treatment is stored in OCWAs data management system (PDM). Annual and monthly averages for flows, CBOD₅, Suspended Solids, Total Phosphorus as P, Nitrogen-series and E.coli can be found in Appendix A. A comparison of analytical data from effluent samples to the effluent objectives and effluent limits show the following removal efficiencies:

Table 6. 2024 Effluent Annual Average Concentrations and Removal Efficiencies

Parameter	Annual Average Concentration (mg/L)	Annual Average Removal Efficiency (%)
Suspended Solids	6.66	94.9%
Total Phosphorus as P	0.49	84.1%

The Port Elgin Sewage Treatment Plant effectively provided effluent that was well within the effluent limits and effluent objectives set out in the ECA. Refer to Table 7 for a monthly summary of analytical samples with the effluent limits and objectives.

Table 7. Comparison of Effluent Limits and Objectives to Sampled Effluent for Port Elgin Sewage Treatment Plant (2024)

	CBOD ₅				Total Suspended Solids				Total Phosphorus				E.Coli		pH							
	Average Monthly Concentration (mg/L)	Within Objectives (15 mg/L)	Within Limits (25 mg/L)	Average Monthly Loading (kg/d)	Within Limit (161 kg/d)	Monthly Average Concentration (mg/L)	Within Objectives (15 mg/L)	Within Limits (25 mg/L)	Average Monthly Loading (kg/d)	Within Limit (161 kg/d)	Average Monthly Concentration (0.8 mg/L)	Within Objectives (0.8 mg/L)	Within Limits (1 mg/L)	Average Monthly Loading (kg/d)	Within Limit (6.5 kg/d)	Monthly Geometric Mean Density (CFU/100 mL)	Within Objectives (100 cfu/100 mL)	Within Limits (200 cfu/100 mL)	Monthly Minimum	Monthly Maximum	Within Objectives (6.5 – 8.5 inclusive)	Within Limits (6.0 – 9.5 inclusive)
January	3.40	Yes	Yes	14.66	Yes	8.00	Yes	Yes	34.49	Yes	0.35	Yes	Yes	1.53	Yes	2.30	Yes	Yes	7.19	7.78	Yes	Yes
February	3.25	Yes	Yes	14.70	Yes	6.00	Yes	Yes	27.14	Yes	0.27	Yes	Yes	1.21	Yes	<2.00	Yes	Yes	7.25	7.41	Yes	Yes
March	2.50	Yes	Yes	11.64	Yes	9.00	Yes	Yes	41.91	Yes	0.33	Yes	Yes	1.54	Yes	3.56	Yes	Yes	7.65	7.72	Yes	Yes
April	2.80	Yes	Yes	13.43	Yes	7.00	Yes	Yes	33.58	Yes	0.29	Yes	Yes	1.41	Yes	<2.00	Yes	Yes	7.40	7.78	Yes	Yes
May	2.25	Yes	Yes	10.58	Yes	8.25	Yes	Yes	38.80	Yes	0.44	Yes	Yes	2.05	Yes	3.25	Yes	Yes	7.09	7.78	Yes	Yes
June	2.00	Yes	Yes	8.97	Yes	5.25	Yes	Yes	23.54	Yes	0.56	Yes	Yes	2.49	Yes	2.38	Yes	Yes	7.27	7.82	Yes	Yes
July	2.60	Yes	Yes	11.82	Yes	7.20	Yes	Yes	32.73	Yes	0.82	No	Yes	3.74	Yes	2.70	Yes	Yes	7.42	7.64	Yes	Yes
August	2.00	Yes	Yes	8.32	Yes	4.50	Yes	Yes	18.71	Yes	0.62	Yes	Yes	2.58	Yes	<2.00	Yes	Yes	6.93	7.84	Yes	Yes
September	2.00	Yes	Yes	5.92	Yes	3.75	Yes	Yes	11.10	Yes	0.62	Yes	Yes	1.84	Yes	<2.00	Yes	Yes	6.92	7.60	Yes	Yes
October	2.20	Yes	Yes	6.22	Yes	7.40	Yes	Yes	20.92	Yes	0.55	Yes	Yes	1.54	Yes	1.74	Yes	Yes	6.57	7.35	Yes	Yes
November	3.25	Yes	Yes	8.94	Yes	7.00	Yes	Yes	19.25	Yes	0.61	Yes	Yes	1.67	Yes	2.38	Yes	Yes	6.74	7.80	Yes	Yes
December	2.40	Yes	Yes	7.07	Yes	6.00	Yes	Yes	17.67	Yes	0.44	Yes	Yes	1.31	Yes	<2.00	Yes	Yes	6.62	7.69	Yes	Yes

2.4 Additional Monitoring Parameters

The following parameters do not have effluent limits or objectives but are monitored on a regular basis (see Section 3.1 for sampling frequency) as required by ECA 0556-AKQN3Q. Table 8, 9, and 10 summarizes the monitoring data for the reporting period.

Table 8. Raw Sewage Monitoring Parameters as required for Port Elgin Sewage Treatment Plant, 2024

Parameters	Average	Minimum	Maximum
BOD ₅ ^{8a} (mg/L)	166.75	88.00	257.00
Total Suspended Solids ^{8a} (mg/L)	143.08	65.00	202.00
Total Phosphorus ^{8a} (mg/L)	3.23	2.21	4.37
Total Kjeldahl Nitrogen ^{8a} (mg/L)	29.07	22.20	34.10

^{8a}Refer to Appendix A for monthly sample results.

The 2024 average results for BOD₅, TP and TKN are higher while TSS was slightly lower than the previous year. The 2024 minimum results for BOD₅, TP and TKN are higher while TSS was slightly lower than the previous year. The 2024 maximum results were all lower than the previous year.

Table 9. Effluent Monitoring Parameters as required for Port Elgin Sewage Treatment Plant, 2024

Parameters	Average	Minimum	Maximum
Total Kjeldahl Nitrogen (mg/L)	1.09	0.50	5.20
Ammonia Nitrogen ^{9a} (mg/L)	0.22	0.10	4.50
Nitrite and Nitrate ^{9a} (mg/L)	23.31	1.30	30.30
Alkalinity (mg/L as CaCO ₃)	58.98	20.00	101.00
Temperature (°C)	13.23	8.00	18.00

^{9a}Refer to Appendix A for monthly sample results.

The 2024 averages for TKN and TAN were higher while Nitrite + Nitrate, alkalinity and temperature were slightly lower than the previous year. The minimum results for TKN and TAN are the same, Nitrite + Nitrate and temperature are higher and alkalinity is lower than the previous year. The maximum results for all parameters except temperature are higher than the previous year with the exception of temperature, which is slightly lower.

Table 10. Influent flows and Septage Receiving, 2024

Pump Station	Average Daily Flow (m ³ /day)	Total Annual Flow (m ³)	Percentage of Rated Capacity (6,455 m ³ /d)
Influent	2,875	1,052,264	44.5%
Septage Receiving Station	0.27	99	n/a

The 2024 influent total annual flow and average daily flow are slightly higher when compared to the previous year. The septage received in 2024 was also slightly higher when compared to the previous year. A summary of septage received can be found in Appendix F.

3. Operating Challenges

As per Section 11,(4)(c) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a description of any operating problems encountered and corrective actions taken* is required.

In 2024, the following operating problems were encountered:

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
n/a	n/a	n/a

4. Major Maintenance Activities

As per Section 11, (4)(d) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary of all maintenance carried out on any major structure, equipment, apparatus or mechanism forming part of the Works*; is required.

For 2024, major maintenance activities that occurred include:

- Replaced flow meters for RAS, WAS, Harbour St PS, influent and effluent
- Replaced dialers and phone lines at Tomlinson PS and Millcreek PS
- New Flygt pump at 10th Concession PS
- 10th Concession PS pump rebuild
- Upgraded pump control panel #1 and #2 at 10th Concession PS
- New outlet covers on digester

As per Section 11, (4)(k) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a copy of all Notice of Modifications, submitted to the Water Supervisor as a result of Schedule B, Section 1, with a status report on the implementation of each modification*, is required.

There were no Notice of Modifications submitted during the reporting period.

As per Section 11, (4)(l) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a report summarizing all modification completed as a result of Schedule B, Section 3*, is required.

See above for summary of modifications completed.

5. Effluent Quality Assurance and Control

As per Section 11,(4)(e) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary of effluent quality assurance or control measures taken during the reporting period* is required.

All laboratory analyzed raw sewage and effluent samples were analyzed by SGS Canada Inc., which is an ISO 17025 accredited laboratory. In-house tests are conducted for monitoring purposes by licensed operators using standardized methods. The results from in-house tests are used to determine treatment efficiency and how effectively process control is maintained. Calibrations and preventative maintenance was performed on facility equipment and monitoring equipment, see Section 6 for more details. In addition to sample analysis, preventative maintenance is scheduled for equipment at the sewage treatment plant and pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Preventative maintenance activities were scheduled within the work management system (WMS).

6. Calibration and Maintenance Procedures

As per Section 11, (4)(f) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *an evaluation of the calibration and maintenance procedures conducted on all Influent, Imported Sewage and Final Effluent monitoring equipment*; is required.

All in-house monitoring equipment is calibrated/verified as per manufacturer's recommendations. Monitoring and metering equipment is also calibrated by a third party on an annual basis. Preventative maintenance is scheduled for all equipment at the sewage treatment plant and pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Maintenance activities are scheduled within the work management system (WMS), upon completion, Operators set the work order to complete. On a monthly basis, preventative work orders are reviewed for completion.

On May 15 and 16, 2024, SCG Flowmetrix performed an annual third party instrument verification of the final effluent, influent, return activated sludge discharge, waste activated sludge and pumping station flow meters. All flow meters passed the annual verification. On April 17 and 18 and October 30 and 31, 2024 SPD Sales Ltd. calibrated the gas detection equipment. On April 29, 2024, SPD Sales Ltd. calibrated spectrophotometers, portable meters, colourimeters, and DO probes, used in the Port Elgin Sewage Treatment Plant. The meter/probes were cleaned, parts were replaced and the devices were calibrated and verified that the devices were performing to factory specifications.

During 2024, the following flow meters were replaced: WAS, RAS, Harbour St PS, influent and effluent. All records for the above mentioned calibrations/ verifications can be found in Appendix B.

7. Sludge Generation & Disposal

As per Section 11, (4)(h) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *the volume of sludge generated during the reporting period and an outline of anticipated volumes to be generated over the next reporting period and a summary of the locations where the sludge was disposed* is required.

According to the sludge haulage check sheets, a total volume of 5,500 m³ of sludge was generated from the Port Elgin Sewage Treatment Plant and applied to agricultural land during the reporting period. Table 11 summarizes the sludge haulage volumes for 2024. The hauling and spreading of sludge from the Port Elgin sewage treatment plant was conducted by Bartels Environmental Services Inc. A chemical analysis of the sludge/biosolids quality can be found in Appendix C.

Table 11. Volume of Sludge Generated from Port Elgin Sewage Treatment Plant

Site	Volume of Sludge Generated (m ³)	Hauler	Haulage Dates
25069	1,452	Bartels Environmental	May 3, 6, 2024
25078	88	Bartels Environmental	May 21, 2024
25075	2,068	Bartels Environmental	May 22, 23, 24, 2024
61280	1,892	Bartels Environmental	September 26, 27 & October 7, 9, 10, 2024

Based on a linear regression with an R^2 value of 60%, the anticipated volume to be generated over the next reporting period is approximately 6,683 m³.

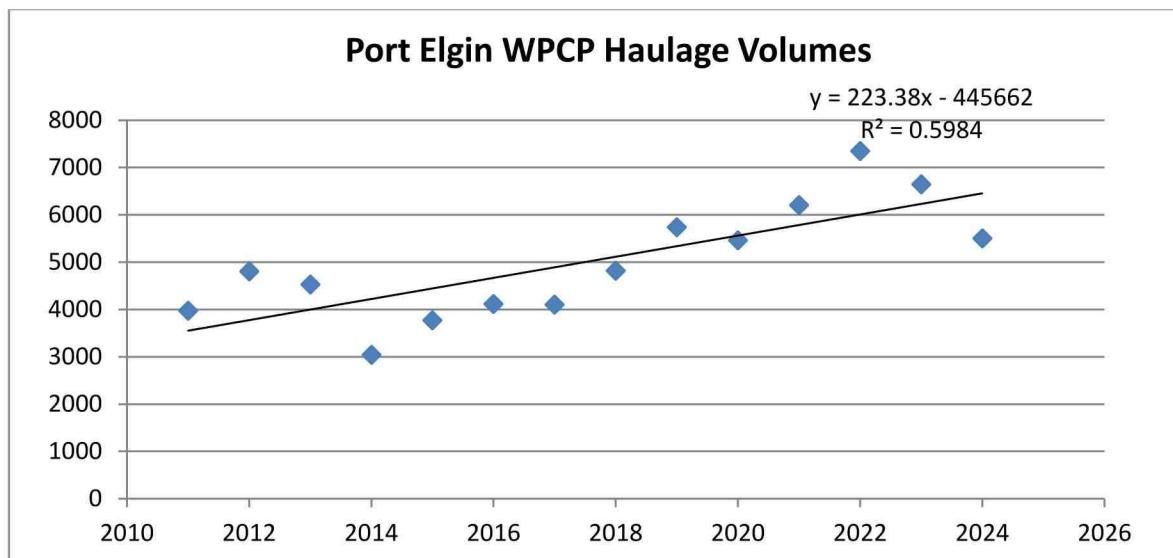


Figure 1. Port Elgin Sewage Treatment Plant Haulage Volumes (2011 to 2025)

In 2024 sludge was handled and hauled by Bartels Environmental Inc. and applied to Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) approved Non-Agricultural Source Material Plans (NASM Plans) and C of As based on Ontario Regulation 338/09 made under the Nutrient Management Act, 2002. NASM Plans under the Nutrient Management Act are issued to the owner (farmer) who is responsible for managing this plan with assistance from the NASM Plan Developer. See Appendix D for Sludge Haulage Records for Port Elgin Sewage Treatment Plant.

Grab samples of digested (aerobic) sludge were collected as the sludge was being transferred from the digester to the hauling truck (see Appendix C for laboratory results). With the exception of total solids and volatile suspended solids, all other samples were analyzed by SGS Canada Inc. Sludge analyses showed that the sludge met the quality criteria specified in the Ontario Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land (Guidelines). A summary of sludge haulage and sample and quality report results is attached in Appendix C.

8. Community Complaints

As per Section 11, (4)(i) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary of complaints received during the reporting period and any steps taken to address the complaints* is required.

During the reporting period, OCWA staff received one (1) community complaint for odour. Typically, the Town will address complaints by verifying if there are odours in the surrounding area physically by attending the location of the complaint and creating an odour log. The sewers are flushed routinely and the operators of the plant ensure that an odour control atomizer is maintained and functional during any facility process adjustments. See Appendix E for a record of community complaints received by OCWA during the reporting period.

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Town of Saugeen Shores: Port Elgin Water Pollution Control Plant

ECA # 0556-AKQN3Q (Issued May 30, 2017)

Municipal Sewage Collection System ECA #093-W601, Issue 1 (Issue Date: January 10, 2023)

9. By-passes, Spills & Discharge Events

As per Section 11, (4)(j) of Environmental Compliance Approval (ECA) 0556-AKQN3Q, *a summary of all Bypasses, Overflows, reportable spills or abnormal discharge event*; is required.

Quarterly summary reports of Bypass and Overflow Event(s) were prepared and submitted to the MECP in accordance with the facility's most current ECA, Section 4.5 and 5.5. See Appendix G for quarterly summary reports submitted to the Ministry.

The following events occurred in 2024:

Date (yyyy/mm/dd)	Event	Details
N/A	N/A	N/A

10. Municipal Sewage Collection System – Annual Performance Report

This report was prepared in accordance with the requirements of the Environmental Compliance Approval for a Municipal Sewage Collection Systems, Schedule E, Section 4.6.1.

Municipal Sewage Collection System ECA #	093-W601, Issue 1
Sewage Works	Saugeen Shores Municipal Sewage Collection System
Collection System Owner	The Corporation of the Town of Saugeen Shores
Reporting Period	January 1, 2024 to December 31, 2024

Is the Annual Report available to the public at no charge on a website on the Internet?

Yes

Note: As per Schedule E, Section 4.7.1 of CLI-ECA #093-W601, the annual performance report must be made available, on request and without charge, to members of the public who are served by the Authorized System; and 4.7.2 must be made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

Location where Annual Performance Report required under CLI-ECA #093-W601 Schedule E will be available for inspection. (CLI-ECA #093-W601, Schedule E, Section 4.7.1 & 4.7.2):

- Town of Saugeen Shores Municipal Office, 600 Tomlinson Dr., Port Elgin, ON N0H 2C0
- <https://www.saugeenshores.ca/en/town-hall/water-reports.aspx>

Pursuant to Schedule E, sections 4.6.3 to 4.6.9, this Annual Performance Report shall:

- If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations.
- If applicable, include a summary of any operating problems encountered and corrective actions taken.
- Includes a summary of all calibration, maintenance, and repairs carried out on any major structure, Equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System.

- d) Include a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.
- e) Include a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat.
- f) Include a summary of all Collection System Overflow(s) and Spill(s) of Sewage.
- g) Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses.

10.1 Description of the Works

The Town of Saugeen Shores Municipal Sewage Collection System consists of two separate subsystems; the Port Elgin Wastewater Collection Subsystem and the Southampton Wastewater Collection Subsystem. For the purposes of this annual report, only the Port Elgin Wastewater Collection Subsystem will be included. For further information on the Southampton Wastewater Collection System, please refer to the Southampton WWTP 2024 Annual Performance Report.

The Port Elgin Wastewater Collection Subsystem consists of sewage works for the collection and transmission of sewage, consisting of trunk sewers, separate sewers, sewage pumping stations, and forcemains, with discharge into the Port Elgin Water Pollution Control Plant.

The sewage pumping station in the Authorized system include:

- Westlink Pumping Station – located at 2089 Bruce County Rd 17. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer at the top of the hill on Green St.
- Harbour St. Pumping Station – located at 632 Harbour St. Consists of a drywell, a control building, three pumps, a stand-by diesel generator, and discharges to the WPCP headworks building.
- Tomlinson Dr. Pumping Station – located at 500 Tomlinson Dr. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer that flows to the 10th Concession Pumping Station.
- Mill Creek Pumping Station – located at 525 Mill Creek Rd. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer that flows to Harbour St. Pumping Station.
- Shipley Pumping Station – located at 65 Shipley Ave. Consists of a wetwell, a control building, two pumps, a stand-by diesel generator and discharges into a gravity sewer that flows into Harbour St. Pumping Station.
- 10th Concession Pumping Station – located at 345 10th Concession. Consists of a drywell, a control building, two pumps, a stand-by diesel generator and discharges to the WPCP headworks building.

The Town of Saugeen Shores Municipal Sewage Collection Systems contains no combined sewage pumping stations, no combined sewage storage structures or combined storage tanks. The authorized

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Town of Saugeen Shores: Port Elgin Water Pollution Control Plant

ECA # 0556-AKQN3Q (Issued May 30, 2017)

Municipal Sewage Collection System ECA #093-W601, Issue 1 (Issue Date: January 10, 2023)

collection system also contains no authorized combined sewer collection system overflow points and no authorized sanitary sewer overflow points.

Prior to January 10, 2023, Shipley Ave. Pumping Station was captured under CofA 9916-5YPTLB. On January 10, 2023, Municipal Sewage Collection System ECA Number 093-W601, Issue 1, was issued to the Town of Saugeen Shores Municipal Sewage Collection Systems incorporating all Pumping Stations, sewers, separate sewers and forcemains into one Consolidated Linear Infrastructure ECA. As such, all prior ECAs, issued by the Director for Sewage Works are considered revoked and replaced by ECA Number 093-W601.

10.2 Summary of Monitoring Data and Interpretation

No monitoring data was required within the municipal sewage collection system for the reporting period.

10.3 Summary of Operating Problems Encountered and Corrective Actions Taken

There were no operating problems encountered within the municipal sewage collection system for the reporting period.

10.4 Summary of Calibration, Maintenance and Repairs

All in-house monitoring equipment is calibrated/verified as per manufacturer's recommendations. Monitoring and metering equipment is also calibrated by a third party on an annual basis. Preventative maintenance is scheduled for all equipment at the sewage treatment plant and pumping stations at regular frequency (frequency depends on the equipment and type of maintenance). Maintenance activities are scheduled within the work management system Maximo, upon completion, operators set the work order to complete. On a monthly basis, preventative work orders are reviewed for completion.

On May 15 and 16, 2024, SCG Flowmetrix performed an annual third party instrument verification of the final effluent, influent, return activated sludge discharge, waste activated sludge and pumping station flow meters. All flow meters passed the annual verification. On April 17 and 18 and October 30 and 31, 2024 SPD Sales Ltd. calibrated the gas detection equipment. On April 29, 2024, SPD Sales Ltd. calibrated spectrophotometers, portable meters, colourimeters, and DO probes, used in the Port Elgin Sewage Treatment Plant. The meter/probes were cleaned, parts were replaced and the devices were calibrated and verified that the devices were performing to factory specifications.

During 2024, the following flow meters were replaced: WAS, RAS, Harbour St PS, influent and effluent. All records for the above mentioned calibrations/ verifications can be found in Appendix B.

Major maintenance activities for the sewage pump stations can be found in section 4 of this report.

10.5 Community Complaints Received in Relation to the Sewage Works

During the reporting period, OCWA staff received one (1) community complaint for odour. See Appendix E for a record of community complaints received by OCWA during the reporting period.

10.6 Alterations to the Authorized System

For 2024, major maintenance activities that occurred within the Authorized System include:

- Replaced flow meter for Harbour St PS
- Replaced dialers and phone lines at Tomlinson PS and Millcreek PS
- New Flygt pump at 10th Concession PS
- 10th Concession PS pump rebuild
- Upgraded pump control panel #1 and #2 at 10th Concession PS

There were no alterations performed within the Authorized System that pose a Significant Drinking Water Threat.

10.7 Summary of Collection System Overflow(s) and Spill(s) of Sewage

There were no collection system overflow or spill events that occurred during the reporting period.

10.8 Efforts Made to Reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses.

The sewage pump stations are equipped with alarm monitoring for high flow events. Preventative maintenance procedures are in place to ensure the sewage pump stations are operating as designed and include:

- Wet well cleanouts
- Daily inspections of pump stations
- Annual cleanouts
- Pump inspections
- Alarm testing
- Generator inspection and maintenance



ONTARIO CLEAN WATER AGENCY
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Appendix A

Performance Assessment Report

Performance Assessment Report

02/11/2025

From 1/1/2024 to 12/31/2024 11:59:59 PM

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	1 / 2024	2 / 2024	3 / 2024	4 / 2024	5 / 2024	6 / 2024	7 / 2024	8 / 2024	9 / 2024	10 / 2024	11 / 2024	12 / 2024	<--Total-->	<--Avg-->	<--Max-->	<-Criteria->															
Flows																															
Raw Flow: Total - Raw Sewage m ³ /d		86,612.00	83,255.00	95,101.00	96,780.00	101,908.00	89,115.00	92,354.00	88,401.00	77,728.00	77,637.00	74,773.00	88,600.00	1,052,264.00			0.00														
Raw Flow: Avg - Raw Sewage m ³ /d		2,793.94	2,870.86	3,067.77	3,226.00	3,287.35	2,970.50	2,979.16	2,851.65	2,590.93	2,504.42	2,492.43	2,858.06		2,875.04		6,455.00														
Raw Flow: Max - Raw Sewage m ³ /d		3,193.00	3,086.00	3,386.00	3,803.00	4,538.00	3,422.00	3,487.00	3,324.00	2,987.00	2,878.00	2,723.00	3,904.00			4,538.00	0.00														
Raw Flow: Count - Raw Sewage m ³ /d		31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	366.00			0.00														
Eff. Flow: Total - Effluent m ³ /d		133,643.00	131,198.00	144,358.00	143,915.00	145,815.00	134,514.00	140,912.00	128,883.00	88,798.00	87,619.00	82,503.00	91,277.00	1,453,435.00			0.00														
Eff. Flow: Avg - Effluent m ³ /d		4,311.06	4,524.07	4,656.71	4,797.17	4,703.71	4,483.80	4,545.55	4,157.52	2,959.93	2,826.42	2,750.10	2,944.42		3,971.13		6,455.00														
Eff. Flow: Max - Effluent m ³ /d		4,866.00	4,850.00	5,527.00	5,760.00	5,100.00	5,031.00	5,507.00	5,190.00	3,288.00	3,239.00	3,959.00	4,129.00			5,760.00	0.00														
Eff Flow: Count - Effluent m ³ /d		31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	366.00			0.00														
Carbonaceous Biochemical Oxygen Demand: CBOD																															
Eff: Avg cBOD5 - Effluent mg/L	<	3.40	<	3.25	<	2.50	<	2.80	<	2.25	<	2.00	<	2.60	<	2.00	<	2.20	<	3.25	<	2.40	<	2.57	<	3.40	<	25.00			
Eff: # of samples of cBOD5 - Effluent		5.00		4.00		4.00		5.00		4.00		4.00		5.00		4.00		5.00		4.00		5.00		53.00						0.00	
Loading: cBOD5 - Effluent kg/d	<	14.658	<	14.703	<	11.642	<	13.432	<	10.583	<	8.968	<	11.818	<	8.315	<	5.920	<	6.218	<	8.938	<	7.067	<	10.19	<	14.70	<	161.000	
Biochemical Oxygen Demand: BOD5																															
Raw: Avg BOD5 - Raw Sewage mg/L		121.00		193.00		146.00		257.00		137.00		109.00		179.00		175.00		231.00		88.00		112.00		253.00		166.75		257.00		0.00	
Raw: # of samples of BOD5 - Raw Sewage		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		12.00						0.00	
Total Suspended Solids: TSS																															
Raw: Avg TSS - Raw Sewage mg/L		128.00		172.00		176.00		178.00		144.00		111.00		159.00		65.00		192.00		107.00		83.00		202.00		143.08		202.00		0.00	
Raw: # of samples of TSS - Raw Sewage		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		12.00						0.00	
Eff: Avg TSS - Effluent mg/L		8.00		6.00		9.00		7.00		8.25		5.25		7.20		4.50		3.75		7.40		7.00		6.00		6.66		9.00		25.00	
Eff: # of samples of TSS - Effluent		5.00		4.00		4.00		5.00		4.00		4.00		5.00		4.00		4.00		5.00		4.00		5.00		53.00					0.00
Loading: TSS - Effluent kg/d		34.489		27.144		41.910		33.580		38.806		23.540		32.728		18.709		11.100		20.916		19.251		17.667		26.45		41.91		161.000	
Percent Removal: TSS - Raw Sewage %		93.75		96.51		94.89		96.07		94.27		95.27		95.47		93.08		98.05		93.08		91.57		97.03		94.92		98.05		0.00	
Total Phosphorus: TP																															
Raw: Avg TP - Raw Sewage mg/L		2.96		3.78		3.21		3.19		3.23		3.48		2.92		3.06		3.32		3.05		2.21		4.37		3.23		4.37		0.00	
Raw: # of samples of TP - Raw Sewage		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		12.00						0.00	
Eff: Avg TP - Effluent mg/L		0.35		0.27		0.33		0.29		0.44		0.56		0.82		0.62		0.62		0.55		0.61		0.44		0.49		0.82		1.00	
Eff: # of samples of TP - Effluent		5.00		4.00		4.00		5.00		4.00		4.00		5.00		4.00		4.00		5.00		4.00		5.00		53.00					0.00
Loading: TP - Effluent kg/d		1.526		1.210		1.537		1.410		2.046		2.489		3.736		2.578		1.843		1.543		1.671		1.307		1.95		3.74		6.500	
Percent Removal: TP - Raw Sewage %		88.04		92.92		89.72		90.78		86.53		84.05		71.85		79.74		81.25		82.10		72.51		89.84		84.11		92.92		0.00	
Nitrogen Series																															
Raw: Avg TKN - Raw Sewage mg/L		30.80		32.80		26.00		34.10		25.30		30.10		24.90		33.80		31.00		25.00		22.20		32.80		29.07		34.10		0.00	

Performance Assessment Report

02/11/2025

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Raw: # of samples of TKN - Raw Sewage	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TAN - Effluent mg/L	< 0.10	0.10 <	0.10 <	0.10 <	0.18 <	0.23 <	0.10 <	0.20 <	0.10 <	0.10 <	0.10 <	0.10 <	0.10 <	0.10 <	1.20 <	0.26 <	0.22 <	1.20			
Eff: # of samples of TAN - Effluent	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	53.00			0.00	
Loading: TAN - Effluent kg/d	< 0.431	< 0.452	< 0.466	< 0.863	< 1.058	< 0.448	< 0.909	< 0.416	< 0.296	< 0.283	< 3.300	< 0.766	< 0.89	< 3.30							
Eff: Avg NO3-N - Effluent mg/L	23.06	22.43	20.45	20.74	22.78	17.97	25.18	23.23	26.88	27.62	23.05	24.66	23.17	27.62							0.00
Eff: # of samples of NO3-N - Effluent	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	53.00			0.00	
Eff: Avg NO2-N - Effluent mg/L	< 0.04	0.04 <	0.04	0.06 <	0.06	0.05	0.07 <	0.05 <	0.03 <	0.04 <	0.12	0.06 <	0.05 <	0.12	0.06 <	0.05 <	0.12	0.00			
Eff: # of samples of NO2-N - Effluent	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	53.00			0.00	
Disinfection																					
Eff: GMD E. Coli - Effluent cfu/100mL	2.30	2.00	3.56	2.00	3.25	2.38	2.70	2.00	2.00	1.74	2.38	2.00									200.00
Eff: # of samples of E. Coli - Effluent	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	53.00			0.00	



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix B

Calibration Reports



CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Southampton
 CONTACT Dan MacLeod
 Senior Operations Manager
 18 Caroline Street West
 Southampton, ON N0H 2L0
 Ph: 519-379-0431
 E: DMacleod@ocwa.com

VER. BY - FM Paris Machuk

Quality Management Standards Information -
 Reference equipment and instrumentation used to
 conduct this verification test is found in our AC-
 QMS document at the time this test was
 conducted.

EQUIPMENT DETAIL

[MUT] MANUFACTURER ABB
 MODEL MagMaster
 CONVERTER SERIAL NUMBER 3K620000015307
 FUSE Control Panel CP-01 Fuse Holder ULF7

PLANT ID Port Elgin - Concession # 10 P.S.
 METER ID Pumped Flow
 FIT ID FIT-01
 CLIENT TAG OCWA #227081
 OTHER ORG# 5069
 GPS COORDINATES N44 27.588 W081 23.464

VERIFICATION DATE May 16th 2024
 CAL. FREQUENCY Annual
 CAL. DUE DATE May 2025

PROGRAMMING PARAMETERS

DIAMETER (DN)	mm	350
F.S. FLOW - MAG	LPS	1331.5
F.S. RANGE - O/P	LPS	400.00
TUBE CAL. FACTOR	1	1.3839

FORWARD TOTALIZER INFORMATION

AS FOUND	6240977	M3
AS LEFT	6241038	M3
DIFFERENCE	61	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
FORWARD FLOW DIRECTION	Yes
ALLOWABLE [%] ERROR	5

COMPONENTS TESTED

CONVERTER DISPLAY	yes
mA OUTPUT	yes
TOTALIZER	yes
ACCURACY BASED ON [% o.r.]	yes
ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.	

FLOW TUBE SIMULATION

		0.0	0.2	0.5	1.0	2.0	m/s
		0	2	5	10	20	% F.S. Flow
		0.0	6.7	16.6	33.3	66.6	% F.S. Range
REF. FLOW RATE		0.00	26.63	66.57	133.15	266.29	LPS
MUT [Reading]		0.00	26.75	66.81	133.65	267.56	LPS
MUT [Difference]		0.00	0.12	0.24	0.50	1.27	LPS
MUT [% Error]		n/a	0.45	0.36	0.38	0.48	%
mA OUTPUT		4.000	5.065	6.663	9.326	14.652	mA
MUT [Reading]	min.	4.000	mA	3.995	5.063	6.673	mA
MUT [Difference]	max.	20.000	mA	-0.005	-0.002	0.010	mA
MUT [% Error]				-0.12	-0.04	0.15	%
TOTALIZER - REF. FLOW RATE	Enter in Totalizer Test Velocity if Different (m/s)					2.0	
TOTALIZER [MUT]						266.293	LPS
TEST TIME						40	M3
CALC. TOTALIZER						149.10	SECONDS
ERROR						39.704	M3
						0.74	%

COMMENTS

QUALITY MANAGEMENT STANDARDS INFO.		
[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	ABBMM	1
PROCESS METER	DMM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	Yes

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	0.42	PASS
mA OUTPUT	0.05	PASS
TOTALIZER	0.74	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.



CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Southampton
CONTACT Dan MacLeod
Senior Operations Manager
18 Caroline Street West
Southampton, ON N0H 2L0
Ph: 519-379-0431
E: DMacleod@ocwa.com

VER. BY - FM Paris Machuk / Travis Krayetski

Quality Management Standards Information -
Reference equipment and instrumentation used to conduct this verification test is found in our AC-QMS document at the time this test was conducted.

[MUT] MANUFACTURER
MODEL
CONVERTER S/N:
FUSE

ENDRESS & HAUSER
Prosimic 91W
TC084B16000
On board Pull Plug

PLANT ID
METER ID
FIT ID
CLIENT TAG
OTHER
GPS COORDINATES

Port Elgin STP - Harbour St P/S
Station Flow
n/a
n/a
n/a

VERIFICATION DATE
CAL. FREQUENCY
CAL. DUE DATE

May 16th 2024
Annual
May 2025

PROGRAMMING PARAMETERS

DIAMETER (DN)	mm	300
F.S. FLOW - MAG	LPS	706.838
F.S. RANGE - O/P	LPS	350.00
TUBE k-FACTOR		1.0000
TUBE zero		0

FORWARD TOTALIZER INFORMATION

AS FOUND	0.65	M3
AS LEFT	177.38	M3
DIFFERENCE	176.73	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
FORWARD FLOW DIRECTION	Yes
ALLOWABLE [%] ERROR	5

COMPONENTS TESTED

CONVERTER DISPLAY	Yes
mA OUTPUT	Yes
TOTALIZER	Yes
ACCURACY BASED ON [% o.r.]	Yes

ERROR DOCUMENTED IN THIS REPORT; BASED ON % o.r.

FLOW TUBE SIMULATION

			0.0	87.5	175.0	262.5	350.0	LPS	% F.S. Flow
			0.0	12.4	24.8	37.1	49.5		% F.S. Range
			0.0	25.0	50.0	75.0	100.0		
REF. FLOW RATE			0.000	87.500	175.000	262.500	350.000	LPS	
MUT [Reading]			0.000	87.520	175.200	262.840	350.480	LPS	
MUT [Difference]			0.000	0.020	0.200	0.340	0.480	LPS	
MUT [% Error]			n/a	0.02	0.11	0.00	0.14	%	
mA OUTPUT			4.000	8.000	12.000	16.000	20.000	mA	
MUT [Reading]	min.	4	3.990	7.983	11.983	15.981	19.980	mA	
MUT [Difference]	max.	20	-0.010	-0.017	-0.017	-0.019	-0.020	mA	
MUT [% Error]			-0.25	-0.21	-0.14	-0.12	-0.10	%	
TOTALIZER					REF. FLOW RATE	350.000	LPS		
					TOTALIZER [MUT]	22.81	M3		
					TEST TIME	65.06	SECONDS		
					TOTALIZER [REF]	22.771	M3		
					ERROR	0.17	%		

COMMENTS

Note: new unit was installed

QUALITY MANAGEMENT STANDARDS INFO.		
[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] FTS	E&H-FC	3
PROCESS METER	DMM	20
ANALOG METER	AM	N/A
STOP WATCH	SW	Yes

RESULTS

TEST	AVG % o.r.	PASS FAIL
DISPLAY	0.07	PASS
mA OUTPUT	-0.16	PASS
TOTALIZER	0.17	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.



AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Southampton
CONTACT Dan MacLeod
Senior Operations Manager
18 Caroline Street West
Southampton, ON N0H 2L0
Ph: 519-379-0431
E: DMacleod@ocwa.com

VER. BY - FM Travis Krayetski

Quality Management Standards Information -
Reference equipment and instrumentation used to
conduct this verification test is found in our AC-
QMS document at the time this test was
conducted.

EQUIPMENT DETAIL
[MUT] MANUFACTURER Siemens
MODEL LUT440
CONVERTER SERIAL NUMBER PBD/J1270233

PLANT ID Port Elgin WWTP
METER ID Final Effluent
FIT ID 1001
CLIENT TAG OCWA# Not Assigned
OTHER ORG# 5069
GPS COORDINATES N44 26.324 W081 22.358

VERIFICATION DATE May 15th 2024
CAL. FREQUENCY Annual
CAL. DUE DATE May 2025

PROGRAMMING PARAMETERS

THROAT WIDTH, (exp 1.5)	m	1.500
EMPTY DISTANCE, TX to notch	m	1.263
TRANSDUCER (TX), to sump flc	m	n/a
SUMP LEVEL, zero flow	m	n/a
OFFSET FOR ZERO	m	0.033
MAX. HEAD	m	0.187
BLANKING DISTANCE	m	0.305
DEAD ZONE	m	1.076
MAX. FLOW	M3/D	18718.6
F.S. RANGE - O/P	M3/D	18718.6

TOTALIZER
AS FOUND N/A M3
AS LEFT N/A M3
DIFFERENCE n/a M3
TEST CRITERIA
AS FOUND CERTIFICATION TEST Yes
ALLOWABLE [%] ERROR 5

COMPONENTS TESTED
CONVERTER DISPLAY yes
mA OUTPUT yes
TOTALIZER no
ACCURACY BASED ON [% o.r.] no

ERROR DOCUMENTED IN THIS REPORT; BASED ON % F.S.

Ultrasonic sensor installed to ensure full scale flow condition

AS FOUND TEST RESULTS

		0.0	14.1	39.7	72.5	100.3	% F.S. Range
		0.000	0.050	0.100	0.150	0.187	m
REF. FLOW RATE		0.0	2645.5	7432.3	13561.7	18782.2	M3/D
MUT [Reading]		0.0	3017.8	7994.6	14325.6	19470.1	M3/D
MUT [Difference]		0.0	372.3	562.3	763.9	687.9	M3/D
MUT [% Error]		0.0	2.0	3.0	4.1	3.7	%
mA OUTPUT		4.000	6.261	10.353	15.592	20.054	mA
MUT [Reading]	min. 4.000 mA	4.000	6.614	10.353	15.592	20.000	mA
MUT [Difference]	max. 20.000 mA	0.000	0.353	0.000	0.000	-0.054	mA
MUT [% Error]		0.00	1.76	0.00	0.00	-0.27	%
TOTALIZER - REF. FLOW RATE							
TOTALIZER [MUT]							
TEST TIME							
CALC. TOTALIZER							
ERROR							

COMMENTS

Very slow response - 21 seconds on average to get to a stable head reading

QUALITY MANAGEMENT STANDARDS INFO.
[QMS] INFORMATION IDENT. ID #
[REFERENCE] LEVEL Sim. BOARD Yes
PROCESS METER DMM 20
STOP WATCH SW Yes

RESULTS

TEST	AVG %FS	PASS FAIL
DISPLAY	3.19	PASS
mA OUTPUT	0.30	PASS
TOTALIZER	N/A	N/A

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.



AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Southampton
CONTACT Dan MacLeod
Senior Operations Manager
18 Caroline Street West
Southampton, ON N0H 2L0
Ph: 519-379-0431
E: DMacleod@ocwa.com

[MUT] MANUFACTURER Endress + Hauser
MODEL FMU90
CONVERTER SERIAL NUMBER N80035150E6

VER. BY - FM Paris Machuk / Travis Krayetski

Quality Management Standards Information -
Reference equipment and instrumentation used to
conduct this verification test is found in our AC-
QMS document at the time this test was
conducted.

PLANT ID Port Elgin WWTP
METER ID Influent Raw Flow
FIT ID N/A
CLIENT TAG N/A
OTHER N/A
GPS COORDINATES N44 26.324 W081 22.358
ADDRESS
VERIFICATION DATE May 16th 2024
CAL. FREQUENCY Annual
CAL. DUE DATE May 2025

PROGRAMMING PARAMETERS

THROAT DIMENSION (DN)	inches	18
EMPTY DISTANCE	m	1.327
MAX. HEAD	m	0.368
DEAD ZONE	m	0.959
BLANKING DISTANCE	m	0.070
MAX. FLOW	M3/H	817.0
F.S. RANGE - O/P	M3/H	2595.0

	TOTALIZER
AS FOUND	6104379 M3
AS LEFT	6104519 M3
DIFFERENCE	140 M3
	TEST CRITERIA
AS FOUND CERTIFICATION TEST	Yes
ALLOWABLE [%] ERROR	15

COMPONENTS TESTED

CONVERTER DISPLAY	yes
mA OUTPUT	yes
TOTALIZER	yes
ACCURACY BASED ON [% o.r.]	no

ERROR DOCUMENTED IN THIS REPORT; BASED ON % F.S.

Ultrasonic sensor installed to ensure full scale flow condition

AS FOUND TEST RESULTS

		13.5	13.5	39.1	73.0	92.6	% F.S. Range
		0.100	0.100	0.200	0.300	0.350	m
REF. FLOW RATE		110	110	320	597	756	M3/H
MUT [Reading]		103.99	103.99	309.76	582.53	742.65	M3/H
MUT [Difference]		-6.16	-6.16	-10.09	-14.20	-13.74	M3/H
MUT [% Error]		-0.75	-0.75	-1.24	-1.74	-1.68	%
mA OUTPUT		6.157	6.157	10.264	15.686	18.812	mA
MUT [Reading]	min. 4.000 mA	5.930	5.930	9.741	14.815	17.767	mA
MUT [Difference]	max. 20.000 mA	-0.227	-0.227	-0.523	-0.871	-1.045	mA
MUT [% Error]		-1.13	-1.13	-2.61	-4.35	-5.23	%
TOTALIZER - REF. FLOW RATE						756.385	M3/H
TOTALIZER [MUT]						13	M3
TEST TIME						65.31	SECONDS
CALC. TOTALIZER						13.722	M3
ERROR						-5.55	%

COMMENTS

NOTE: changed level response from Calm Surface to Fast Response. Making this change there was a noticeable difference in how the controller responded to level change. This will make a noticeable change in the flow calculations when flow is initially coming in.

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION	IDENT.	ID #
[REFERENCE] LEVEL	Sim. BOARD	Yes
PROCESS METER	DMM	20
STOP WATCH	SW	Yes

RESULTS

TEST	AVG %FS	PASS FAIL
DISPLAY	-1.35	PASS
mA OUTPUT	-2.89	PASS
TOTALIZER	-5.55	PASS

This report reflects the test results of the overall accuracy for the above flow converter using the specified manufacturers flow tube simulator to within the specified tolerance as identified within this report.

VeriMaster - Flow Meter Verification Report

Customer Information		Meter Information	
Customer	OCWA-Port Elgin	Meter Owner	RAS Flow
Verification Download	Thu, May 16, 2024	Meter Type	WaterMaster
		Sensor Size	DN300
		Pipe Status	Fluid Present
		Sensor Type	Fullbore
		Sensor Serial No	3K672023120806
		Transmitter Serial No	3K672023120806
		Tag	RAS Flow
		Location	Port Elgin STP

Overall Status: Pass

The flowmeter has passed its internal continuous verification and automatic self calibration. It is working within +/-1% of its original factory calibration

Summary of Results		Verification History	
Coil Group	Passed	OIML Accuracy Alarms	0
Electrode Group	Passed	Totaliser Information	
Sensor Group	Passed	Forward	412332.74 m3
Transmitter Signal	Passed	Reverse	0.77 m3
Transmitter Driver	Passed	Net	412332.02 m3
Output Group	Passed	Sensor Data	
Configuration	Passed	Coil Current	179.9 mA
Sensor Information		Coil Inductance	302.8 mH
Q3	694.44 l/s	Coil Inductance Shift	0.2%
Calibration Accuracy	OIML Class 2	Coil / Loop Resistance	0.0 cuft/s
Sensor Calibration Factors	150.1%; -2.92 mm/s; 11	Transmitter Data	
Date of Manufacture	01 Feb 2023	Tx Gain - Adjustment	0.0cuft/s
Run Hours	49days 19hrs 6284mins	VeriMaster Information	
Transmitter Information		Version	01.00.01
Application Version	V01.07.00 03/02/17	Limit Version	01.00.01
MSP Version	00.00.04	Pulse Output	
Date of Manufacture	01 Feb 2023	Output 1: 100.0Hz	Not tested
Run Hours	99days 16hrs 2048mins	Output 1: 50.0Hz	Not tested
Current Output		Output 2: 250Hz	Not available for testing
4mA Value	Pass : 3.999 mA ; 0.02%	Output 2: 125Hz	Not available for testing
12mA Value	Pass : 11.982 mA ; 0.15%		
20mA Value	Pass : 19.992 mA ; 0.04%		

Installation Comments / Equipment used:		Configuration Settings	
DMM-20 used for mA Output Checks		Mains Frequency	26 Hz
		Qmax	149.00 l/s
		Pulses/Unit	1.000000
		Pulses Limit Frequency	100.0 Hz
		Sensor User Span/Zero	100.0%; 0.00 mm/s
		User Flow Cutoff/Hysteresis	0.00%; 20%
		Meter Mode	Normal operation

Date Thu, May 16, 2024

Operator Signature

Print Name

ABB Instrumentation World Flow Technology

ABB Limited
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37079 Gottingen, GERMANY
Tel: +49 (0) 551 905212
Fax: +1 (215) 674 6394



Flow Rate Comparison

Verification Report

CERTIFICATION RESULTS

AS FOUND	PASS
AS LEFT	PASS

CLIENT DETAIL

CUSTOMER OCWA - Georgian Highlands - Southampton
 CONTACT Dan MacLeod
 Senior Operations Manager
 18 Caroline Street West
 Southampton, ON N0H 2L0
 Ph: 519-379-0431
 E: DMacleod@ocwa.com

[MUT] MANUFACTURER ABB
 MODEL WaterMaster
 CONVERTER SERIAL NUMBER 3K672023120806

VER. BY - FM Paris Machuk

PLANT ID Port Elgin WWTP
 METER ID RAS Flow Meter
 FIT ID n/a
 CLIENT TAG n/a
 OTHER n/a
 GPS COORDINATES N44 26.324 W081 22.358

Quality Management Standards Information -
 Reference equipment and instrumentation used to
 conduct this verification test is found in our AC-
 QMS document at the time this test was
 conducted.

VERIFICATION DATE May 16th 2024
 CAL. FREQUENCY Annual
 CAL. DUE DATE May 2025

[MUT] PROGRAMMING PARAMETERS

DIAMETER (DN-mm) 300
 FLOW RATE UNITS LPS
 TUBE CAL. FACTOR [AF] n/a
 TUBE CAL. FACTOR [AL] n/a

MANUFACTURER Endress + Hauser
 MODEL Prosonic 91W
 SERIAL NUMBER N8031D16000

REFERENCE METER

PIPE TYPE Ductile Iron
 PIPE CIRCUMFERENC mm 1053
 PIPE OD mm 335.30
 PIPE ID mm 318
 WALL THICKNESS mm 7.1
 # TRAVERSES 2
 SEP. DISTANCE mm K 48 or 399.07
 WIRE LENGTH mm N/A
 SIGNAL STRENGTH dB 53.6

INSTALLATION DETAIL

FLOW RATE COMPARISON

TEST #	BEFORE			
	REF VALUE	MUT VALUE	DIFF VALUE	ERROR % o.r.
	LPS	LPS	LPS	% o.r.
1	45.52	48.79	3.274	7.19
2	45.13	49.12	3.992	8.85
3	44.62	48.88	4.263	9.55
4	44.83	49.06	4.234	9.45
5	44.63	48.4	3.772	8.45
6	44.94	49.28	4.344	9.67
7	45.09	48.71	3.62	8.03
8	45.06	48.71	3.655	8.11
9	45.01	48.77	3.757	8.35
10	44.89	48.89	3.996	8.90
AVG	45.0	48.9	3.9	8.65
STD (+/-)	0.083	0.079	0.107	0.25

TEST #	AFTER			
	REF VALUE	MUT VALUE	DIFF VALUE	ERROR % o.r.
	LPS	LPS	LPS	% o.r.
1	45.52	48.79	3.274	7.19
2	45.13	49.12	3.992	8.85
3	44.62	48.88	4.263	9.55
4	44.83	49.06	4.234	9.45
5	44.63	48.4	3.772	8.45
6	44.94	49.28	4.344	9.67
7	45.09	48.71	3.62	8.03
8	45.06	48.71	3.655	8.11
9	45.01	48.77	3.757	8.35
10	44.89	48.89	3.996	8.90
AVG	45.0	48.9	3.9	8.65
STD (+/-)	0.083	0.079	0.107	0.25

FORWARD TOTALIZER INFORMATION

AS FOUND N/A L
 AS LEFT N/A L
 DIFFERENCE n/a L

TEST CRITERIA

AS FOUND CERTIFICATION TEST Yes
 FORWARD FLOW DIRECTION Yes
 ALLOWABLE [%] ERROR 15

COMPONENTS TESTED

CONVERTER DISPLAY Yes

COMMENTS

NOTE: given limited installation location and with best installation practices applied reference meter could only achieve 53.6 dB signal strength yielding lower flows than with a good signal strength.

QUALITY MANAGEMENT STANDARDS INFO.

[QMS] INFORMATION IDENT. ID #
 [REFERENCE] METER TRANSIT TIME 1
 PROCESS METER PM n/a

This report reflects the comparison test results at a constant test flow rate. This report reflects the "AS FOUND" and AS LEFT" results based on the test results observed.



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	29-Apr-24	Instrument Type:	AIT	W.O. Number:	240422-0001	Asset#:	NA
Due Date:	29-Apr-25	Manufacturer:	Hach				
Follow-Up Required:	No	Model:	Transmitter: HQ11d	Sensor:	PHC101		
As Left Status:	Initial Condt	Serial #:	Transmitter: 080200017705	Sensor:	NA		
Instrument Visual Inspection:		Range:	0-14 PH	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Portable PH Probe				
As found Display information:	OK	Process/Location Description:	Operator Room				

Instrument Information:	
Range:	14
Slope:	-55.52 mV/PH
Offset:	-16.8 mV

Input	Input %	Temp. °C	As Found	Deviation	As Left	Deviation
4.01	28.64%	20.80	4.07	1.50%	4.00	-0.25%
7.00	50.00%	20.80	7.14	2.00%	7.01	0.14%
10.00	71.43%	20.80	-	#VALUE!	-	#VALUE!

Comments	Test Equipment Used			
	Name / Type	Serial No.	Due Date	
Calibrated Successfully	pH 4.00 Cat 2283449	Lot#A2045	Feb-26	
	pH 7.00 Cat2283549	Lot #A3270	Sep-25	
	Technician Name		Witness Name	
	Vaibhav Patel		Steve	
Calibration Result:	Pass	Date:	29-Apr-24	Date: 29-Apr-24



CALIBRATION / VERIFICATION

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Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnens St, Port Elgin, ON						
Service Date:	29-Apr-24	Instrument Type:	AIT	W.O. Number:	240422-0001	Asset#:	NA
Due Date:	29-Apr-25	Manufacturer:	Hach				
Follow-Up Required:	No	Model:	Pocket Colorimeter				
As Left Status:	Initial Condt	Serial #:	030500035442				
Instrument Visual Inspection:		Range:	NA	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Portable Chlorine Meter				
As found Display information:	OK	Process/Location Description:	Operator Room				

Instrument Information:		
Unit of measurement:	mg/l	
Range of the meter:	NA	
Calibration Standard Solution 1:	0.19	+0.09
Calibration Standard Solution 2:	0.84	+0.10
Calibration Standard Solution 3:	1.47	+0.14

Chlorine Standard	Output Value	As Found	Deviation	As Left	Deviation
0.19	0.19	0.18	-5.26%	0.18	-5.26%
0.84	0.84	0.82	-2.38%	0.82	-2.38%
1.47	1.47	1.47	0.00%	1.47	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial No.	Due Date
Verified Successfully	DPD Chlrine LR Standard Kit	Lot #A2027	Jun-24
As the instrument being obsolete, Calibration can not be performed.			
Technician Name		Witness Name	
Vaibhav Patel		Steve	
Verification Result:	Pass	Date:	29-Apr-24
		Date:	29-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
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Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	29-Apr-24	Instrument Type:	AIT	W.O. Number:	240422-0001	Asset#:	NA
Due Date:	29-Apr-25	Manufacturer:	Hach				
Follow-Up Required:	No	Model:	Transmitter:	HQ1130D	Sensor:	LDO	
As Left Status:	Initial Condt	Serial #:	Transmitter:	230191130055	Sensor:	222302599464	
Instrument Visual Inspection:		Range:	NA		Output:	NA	
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Portable DO Probe				
As found Display information:	OK	Process/Location Description:	Operator Room				

Instrument Information:	
Range	Auto
Temperature:	18 Degree C
Offset	0
Slope	101.00%

Input		mg/L		As Found	Deviation	As Left	Deviation
Dissolved oxygen from Air	Should be between 8 to10 mg/l	9.00		8.70	-3.33%	8.60	-4.44%

Comments	Test Equipment Used		
	Name / Type	Serial No.	Due Date
Air calibration was performed.			
As left reading was 8.60 mg/l in air.			
Disolved oxygen in Air depends on the various parameter such as temperature, pressure and weather conditins.			
		Technician Name	Witness Name
		Vaibhav Patel	Steve
Calibration Result:	Pass	Date:	29-Apr-24
		Date:	29-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, Ontario
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Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	29-Apr-24	Instrument Type:	AIT	W.O. Number:	240422-0001	Asset#:	NA
Due Date:	29-Apr-25	Manufacturer:	Hach				
Follow-Up Required:	No	Model:	Transmitter:	SC200	Sensor:	LDO	
As Left Status:	Initial Condt	Serial #:	Transmitter:	1806C0162137	Sensor:	001101410029	
Instrument Visual Inspection:		Range:	NA		Output:	4-20 mA	
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	East Tank DO Probe				
As found Display information:	OK	Process/Location Description:	outside				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.86

Input	mg/L	As Found	Deviation	As Left	Deviation
Dissolved oxygen from Air	Should be between 8 to10 mg/l	9.03	10.00	10.74%	9.35

Comments	Test Equipment Used			
	Name / Type	Serial No.	Due Date	
Air calibration was performed.				
As left reading was 9.35 mg/l in air.				
Disolved oxygen in Air depends on the various parameter such as temperature, pressure and weather conditins.				
Other Outputs Tested:	Not tested	Technician Name	Witness Name	
Loop Check Performed:	Not tested	Vaibhav Patel	Steve	
Within Specification:	Yes	Date:	29-Apr-24	Date: 29-Apr-24



CALIBRATION / VERIFICATION

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Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	29-Apr-24	Instrument Type:	AIT	W.O. Number:	240422-0001	Asset#:	NA
Due Date:	29-Apr-25	Manufacturer:	Hach				
Follow-Up Required:	No	Model:	Transmitter:	SC200	Sensor:	LDO	
As Left Status:	Initial Condt	Serial #:	Transmitter:	1806C0162137	Sensor:	181990000028	
Instrument Visual Inspection:		Range:	NA		Output:	4-20 mA	
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	West Tank DO Probe				
As found Display information:	OK	Process/Location Description:	outside				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.94

Input	mg/L	As Found	Deviation	As Left	Deviation
Dissolved oxygen from Air	Should be between 8 to10 mg/l	9.03	10.80	19.60%	9.60

Comments	Test Equipment Used				
	Name / Type	Serial No.	Due Date		
Air calibration was performed.					
As left reading was 9.60 mg/l in air.					
Disolved oxygen in Air depends on the various parameter such as temperature, pressure and weather conditins.					
Other Outputs Tested:	Not tested	Technician Name	Witness Name		
Loop Check Performed:	Not tested	Vaibhav Patel	Steve		
Within Specification:	Yes	Date:	29-Apr-24	Date:	29-Apr-24



CALIBRATION / VERIFICATION

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L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	29-Apr-24	Instrument Type:	AIT	W.O. Number:	240422-0001	Asset#:	NA
Due Date:	29-Apr-25	Manufacturer:	Hach				
Follow-Up Required:	No	Model:	Pocket Colorimeter				
As Left Status:	Initial Condt	Serial #:	xxxx455				
Instrument Visual Inspection:		Range:	NA	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Portable Chlorine Meter				
As found Display information:	OK	Process/Location Description:	Operator Room				

Instrument Information:		
Unit of measurement:	mg/l	
Range of the meter:	NA	
Calibration Standard Solution 1:	0.19	+0.09
Calibration Standard Solution 2:	0.84	+0.10
Calibration Standard Solution 3:	1.47	+0.14

Chlorine Standard	Output Value	As Found	Deviation	As Left	Deviation
0.19	0.19	0.20	5.26%	0.20	5.26%
0.84	0.84	0.84	0.00%	0.84	0.00%
1.47	1.47	1.50	2.04%	1.50	2.04%

Comments	Test Equipment Used		
	Name / Type	Serial No.	Due Date
Verified Successfully	DPD Chlrine LR Standard Kit	Lot #A2027	Jun-24
As the instrument being obsolete, Calibration can not be performed.			
Technician Name		Witness Name	
Vaibhav Patel		Steve	
Verification Result:	Pass	Date:	29-Apr-24
		Date:	29-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton										
Plant Name and address:	632 Harbour St ON										
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA				
Due Date:	17-Oct-24	Manufacturer:	MSA								
Follow-Up Required:	No	Model:	ULTIMA - X 5000								
As Left Status:	Initial Condt	Serial #:	0001002001150000D								
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA						
Mechanical Inspection:	OK	Tag Infomration:	NA								
Electrical Inspection:	OK	Description:	Monitoring Methane Gas								
As found Display information:	OK	Process/Location Description:	632 Harbour St Pumping station								

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	44	-12.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	17-Apr-24	Date:	17-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	632 Harbour St ON						
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA
Due Date:	17-Oct-24	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	ULTIMA - X 5000				
As Left Status:	Initial Condt	Serial #:	0001002001170019				
Instrument Visual Inspection:		Range:	0-25 O2%, 0-50 PPM H2S	Output:	4-20 mA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas & H2S Gas				
As found Display information:	OK	Process/Location Descrpition:	632 Harbour St Pumping station				

Instrument Information:								
Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	O2	%	0	20.80	0-25	NA	19.50	18.00
2	H2S	PPM	0	25	0-50	NA	5.00	15.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	Zero	0	0	0.00%	0	0.00%
	Span	20.8	20.80	0.00%	20.80	0.00%
Sensor 2	Zero	0	0	0.00%	0	0.00%
	Span	25	22	12.00%	25	0.00%

Comments			Test Equipment Used		
			Name / Type	Serial and Due Date	
Calibrated Successfully.			CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
			CalGas H2S 25 PPM	BC617705, Oct-2025	
Other Outputs Tested:	Not tested		Technician Name	Witness Name	
Loop Check Performed:	Not Tested		Vaibhav Patel	Steve	
Within Specification:	Yes		Date:	17-Apr-24	Date: 17-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton							
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON							
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:		
Due Date:	17-Oct-24	Manufacturer:	MSA			NA		
Follow-Up Required:	No	Model:	MSA UltimaX					
As Left Status:	Initial Condt	Serial #:	H09-3188968-10-001					
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA					
Electrical Inspection:	OK	Description:	Monitoring LEL Gas					
As found Display information:	OK	Process/Location Description:	345 10th Concess pumping station					

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	45	-10.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	17-Apr-24	Date:	17-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON									
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	17-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	H09-3188968-20-001							
Instrument Visual Inspection:		Range:	0-50PPM	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring H2S Gas							
As found Display information:	OK	Process/Location Description:	345 10th concess pumping station							

Instrument Information:	
Sensor Type and unit:	H2S , PPM
Zero Gas Value:	0
Span Gas Value:	25
Gas Range Value:	0-50
Caution Level:	NA
Warning Level:	5
Alarm Level:	15

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	NA	0.00%	NA	0.00%
Span	25	NA	#VALUE!	NA	#VALUE!

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
	CalGas H2S 25 PPM	BC617705, Oct-2025	
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 17-Apr-24	Date: 17-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON									
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	17-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	H09-3188968-20-001							
Instrument Visual Inspection:		Range:	0-25% O2	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas							
As found Display information:	OK	Process/Location Descripition:	345 10th concess pumping station							

Instrument Information:	
Sensor Type and unit:	Oxygen, %
Zero Gas Value:	0
Span Gas Value:	20.80
Gas Range Value:	0-25
Caution Level:	NA
Warning Level:	19.5
Alarm Level:	18

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	20.8	20.7	0.48%	20.8	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 17-Apr-24	Date: 17-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	18-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-10-001							
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Methane gas							
As found Display information:	OK	Process/Location Description:	815 Lehnen street upper level							

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	50	0.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	18-Apr-24	Date:	18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	18-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-20-001							
Instrument Visual Inspection:		Range:	0-50PPM	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring H2S Gas							
As found Display information:	OK	Process/Location Descripition:	815 Lehnen St. Upper level							

Instrument Information:	
Sensor Type and unit:	H2S , PPM
Zero Gas Value:	0
Span Gas Value:	25
Gas Range Value:	0-50
Caution Level:	NA
Warning Level:	5
Alarm Level:	15

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	25	13.00	-48.00%	25	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Sensor was reading too low. Need to keep an eye on it.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Area has higher concentratrgion of H2S gas accumulated.	CalGas H2S 25 PPM	BC617705, Oct-2025	
Recommended to use hendheld gas detectors while working in premise.			
Other Outputs Tested:	Not tested	Technician Name	
Loop Check Performed:	Not Tested	Vaibhav Patel	
Within Specification:	Yes	Date:	18-Apr-24
		Date:	18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	18-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-30-001							
Instrument Visual Inspection:		Range:	0-25% O2	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas							
As found Display information:	OK	Process/Location Descripition:	815 Lehnen St. Upper level							

Instrument Information:	
Sensor Type and unit:	Oxygen, %
Zero Gas Value:	0
Span Gas Value:	20.80
Gas Range Value:	0-25
Caution Level:	NA
Warning Level:	19.5
Alarm Level:	18

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	20.8	20.6	-0.96%	20.8	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025
Replaced Sensor			
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 18-Apr-24	Date: 18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	18-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-10-002							
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Methane gas							
As found Display information:	OK	Process/Location Description:	815 Lehnen street ground level							

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	45	-10.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	18-Apr-24	Date:	18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V
 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA
Due Date:	18-Oct-24	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	MSA UltimaX				
As Left Status:	Initial Condt	Serial #:	C10-3361242-20-002				
Instrument Visual Inspection:		Range:	0-50PPM	Output:	4-20 mA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Monitoring H2S Gas				
As found Display information:	OK	Process/Location Description:	815 Lehnen St. Ground level				

Instrument Information:	
Sensor Type and unit:	H2S , PPM
Zero Gas Value:	0
Span Gas Value:	25
Gas Range Value:	0-50
Caution Level:	NA
Warning Level:	5
Alarm Level:	15

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	5.00%	0	0.00%
Span	25	19	-24.00%	25	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Sensor was reading too low. Need to keep an eye on it.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Area has higher concentratrgtion of H2S gas accumulated.	CalGas H2S 25 PPM	BC617705, Oct-2025	
Recommended to use hendheld gas detectors while working in premise.			
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 18-Apr-24	Date: 18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA			
Due Date:	18-Oct-24	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-30-001							
Instrument Visual Inspection:		Range:	0-25% O2	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas							
As found Display information:	OK	Process/Location Descripition:	815 Lehnen St. Ground level							

Instrument Information:	
Sensor Type and unit:	Oxygen, %
Zero Gas Value:	0
Span Gas Value:	20.8
Gas Range Value:	0-25
Caution Level:	NA
Warning Level:	18.5
Alarm Level:	18

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	20.8	20.8	0.00%	20.8	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 18-Apr-24	Date: 18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton								
Plant Name and address:	815 Lehnen St.ON								
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA		
Due Date:	18-Oct-24	Manufacturer:	MSA -Amstrong Methane Gas						
Follow-Up Required:	No	Model:	1011						
As Left Status:	Initial Condt	Serial #:	1195021						
Instrument Visual Inspection:		Range:	0-100% LEL		Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA						
Electrical Inspection:	OK	Description:	Monitoring Methane gas						
As found Display information:	OK	Process/Location Description:	815 Lehnen street Main Enterance Admin Building						

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	55	10.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	18-Apr-24	Date:	18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton								
Plant Name and address:	815 Lehnen St.ON								
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA		
Due Date:	18-Oct-24	Manufacturer:	MSA -Amstrong Methane Gas						
Follow-Up Required:	No	Model:	1011						
As Left Status:	Initial Condt	Serial #:	1195020						
Instrument Visual Inspection:		Range:	0-100% LEL		Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA						
Electrical Inspection:	OK	Description:	Monitoring Methane gas						
As found Display information:	OK	Process/Location Description:	815 Lehnen street Digester Building						

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	60	20.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	18-Apr-24	Date:	18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton								
Plant Name and address:	815 Lehnen St.ON								
Service Date:	18-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA		
Due Date:	18-Oct-24	Manufacturer:	MSA -Amstrong Methane Gas						
Follow-Up Required:	No	Model:	1011						
As Left Status:	Initial Condt	Serial #:	1195022						
Instrument Visual Inspection:		Range:	0-100% LEL		Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA						
Electrical Inspection:	OK	Description:	Monitoring Methane gas						
As found Display information:	OK	Process/Location Description:	815 Lehnen street RAS Building						

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	10	0.00%	0	0.00%
Span	50	50	0.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	18-Apr-24	Date:	18-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V
 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton 815 Lehnen st, Port Elgin						
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA
Due Date:	17-Oct-24	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	ALTAIR 4X				
As Left Status:	Initial Condt	Serial #:	167875				
Instrument Visual Inspection:		Range:	0-100%,0-100PPM,0-50PPM,0-25%	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	MSA ALTAIR 4X Handheld gas				
As found Display information:	OK	Process/Location Description:	Operator room				

Instrument Information:								
Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	NA	10.00	10.00
2	CO	PPM	0	100	100	NA	10.00	20.00
3	H2S	PPM	0	25	50	NA	5.00	15.00
4	O2	%	0	18.0	25	NA	19.50	18.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	Zero	0	0	0.00%	0	0.00%
	Span	50	45	-10.00%	50	0.00%
Sensor 2	Zero	0	0	0.00%	0	0.00%
	Span	100	95	-5.00%	100	0.00%
Sensor 3	Zero	0	0	0.00%	0	0.00%
	Span	25	25	0.00%	25	0.00%
Sensor 4	Zero	0	0	0.00%	0	0.00%
	Span	18.0	18	0.00%	18	0.00%

Comments			Test Equipment Used		
			Name / Type	Serial and Due Date	
Calibrated Successfully			MSA Quadgas	304-402541925-1 ; Sept-2026	
			(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)		
Other Outputs Tested:		Not tested	Technician Name	Witness Name	
Loop Check Performed:		Not tested	Vaibhav Patel	Steve	
Within Specification:		Yes	Date:	17-Apr-24	Date: 17-Apr-24



CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
Ontario L4V 1B3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton 815 Lehnens st, Port Elgin						
Service Date:	17-Apr-24	Instrument Type:	AIT	W.O. Number:	240369-0001	Asset#:	NA
Due Date:	17-Oct-24	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	ALTAIR 4X				
As Left Status:	Initial Condt	Serial #:	356331				
Instrument Visual Inspection:		Range:	0-100%,0-100PPM,0-50PPM,0-25%	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	MSA ALTAIR 4X Handheld gas				
As found Display information:	OK	Process/Location Description:	Operator room				

Instrument Information:								
Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	10.00	10.00	
2	CO	PPM	0	100	100	10.00	20.00	
3	H2S	PPM	0	25	50	5.00	15.00	
4	O2	%	0	18.0	25	19.50	18.00	

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	Zero	0	0	0.00%	0	0.00%
	Span	50	50	0.00%	50	0.00%
Sensor 2	Zero	0	0	0.00%	0	0.00%
	Span	100	101	1.00%	100	0.00%
Sensor 3	Zero	0	0	0.00%	0	0.00%
	Span	25	25	0.00%	25	0.00%
Sensor 4	Zero	0	0	0.00%	0	0.00%
	Span	18.0	18	0.00%	18	0.00%

Comments			Test Equipment Used		
			Name / Type	Serial and Due Date	
Calibrated Successfully			MSA Quadgas	304-402541925-1 ; Sept-2026	
			(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)		
Other Outputs Tested:		Not tested	Technician Name		Witness Name
Loop Check Performed:		Not tested	Vaibhav Patel		Steve
Within Specification:		Yes	Date:	17-Apr-24	Date: 17-Apr-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton										
Plant Name and address:	632 Harbour St ON										
Service Date:	31-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA				
Due Date:	30-Apr-25	Manufacturer:	MSA								
Follow-Up Required:	No	Model:	ULTIMA - X 5000								
As Left Status:	Initial Condt	Serial #:	0001002001150000D								
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA						
Mechanical Inspection:	OK	Tag Infomration:	NA								
Electrical Inspection:	OK	Description:	Monitoring Methane Gas								
As found Display information:	OK	Process/Location Description:	632 Harbour St Pumping station								

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	49	-2.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	31-Oct-24	Date:	31-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	632 Harbour St ON						
Service Date:	31-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA
Due Date:	30-Apr-25	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	ULTIMA - X 5000				
As Left Status:	Initial Condt	Serial #:	0001002001170019				
Instrument Visual Inspection:		Range:	0-25 O2%, 0-50 PPM H2S	Output:	4-20 mA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas & H2S Gas				
As found Display information:	OK	Process/Location Descrpition:	632 Harbour St Pumping station				

Instrument Information:								
Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	O2	%	0	20.80	0-25	NA	19.50	18.00
2	H2S	PPM	0	40	0-50	NA	5.00	15.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	Zero	0	0	0.00%	0	0.00%
	Span	20.8	20.80	0.00%	20.80	0.00%
Sensor 2	Zero	0	0	0.00%	0	0.00%
	Span	40	39	2.50%	40	0.00%

Comments			Test Equipment Used		
			Name / Type	Serial and Due Date	
Calibrated Successfully.			CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
			CalGas H2S 40 PPM	304-402184551-1, Aug-2025	
Other Outputs Tested:	Not tested		Technician Name	Witness Name	
Loop Check Performed:	Not Tested		Vaibhav Patel	Steve	
Within Specification:	Yes		Date:	31-Oct-24	Date: 31-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton							
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON							
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:		
Due Date:	30-Apr-25	Manufacturer:	MSA			NA		
Follow-Up Required:	No	Model:	MSA UltimaX					
As Left Status:	Initial Condt	Serial #:	H09-3188968-10-001					
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA					
Electrical Inspection:	OK	Description:	Monitoring LEL Gas					
As found Display information:	OK	Process/Location Description:	345 10th Concess pumping station					

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	48	-4.00%	50	0.00%

Comments	Test Equipment Used			
	Name / Type		Serial and Due Date	
Calibrated successfully	CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
	CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name	Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve	
Within Specification:	Yes	Date:	30-Oct-24	Date: 30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON									
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA			
Due Date:	30-Apr-25	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	H09-3188968-20-001							
Instrument Visual Inspection:		Range:	0-50PPM	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring H2S Gas							
As found Display information:	OK	Process/Location Description:	345 10th concess pumping station							

Instrument Information:	
Sensor Type and unit:	H2S , PPM
Zero Gas Value:	0
Span Gas Value:	40
Gas Range Value:	0-50
Caution Level:	NA
Warning Level:	5
Alarm Level:	15

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	40	38.00	-5.00%	40	0.00%

Comments		Test Equipment Used				
		Name / Type	Serial and Due Date			
Calibrated successfully		CalGas Oxygen 20.8% Vol				
		CalGas H2S 40 PPM				
Other Outputs Tested:	Not tested	Technician Name	Witness Name			
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve			
Within Specification:	Yes	Date:	30-Oct-24	Date: 30-Oct-24		



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON									
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA			
Due Date:	30-Apr-25	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	H09-3188968-20-001							
Instrument Visual Inspection:		Range:	0-25% O2	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas							
As found Display information:	OK	Process/Location Descrpition:	345 10th concess pumping station							

Instrument Information:	
Sensor Type and unit:	Oxygen, %
Zero Gas Value:	0
Span Gas Value:	20.80
Gas Range Value:	0-25
Caution Level:	NA
Warning Level:	19.5
Alarm Level:	18

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	20.8	20.7	0.48%	20.8	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 30-Oct-24	Date: 30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton										
Plant Name and address:	815 Lehnen St.ON										
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA				
Due Date:	30-Apr-25	Manufacturer:	MSA								
Follow-Up Required:	No	Model:	MSA UltimaX								
As Left Status:	Initial Condt	Serial #:	C10-3361242-10-001								
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA						
Mechanical Inspection:	OK	Tag Infomration:	NA								
Electrical Inspection:	OK	Description:	Monitoring Methane gas								
As found Display information:	OK	Process/Location Description:	815 Lehnen street upper level								

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	49	-2.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	30-Oct-24	Date:	30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA			
Due Date:	30-Apr-25	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-20-001							
Instrument Visual Inspection:		Range:	0-50PPM	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring H2S Gas							
As found Display information:	OK	Process/Location Descripition:	815 Lehnen St. Upper level							

Instrument Information:	
Sensor Type and unit:	H2S , PPM
Zero Gas Value:	0
Span Gas Value:	40
Gas Range Value:	0-50
Caution Level:	NA
Warning Level:	5
Alarm Level:	15

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	40	39.00	-2.50%	40	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Sensor was reading too low. Need to keep an eye on it.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Area has higher concentratrgion of H2S gas accumulated.	CalGas H2S 40 PPM	304-402184551-1, Aug-2025	
Recommended to use hendheld gas detectors while working in premise.			
Other Outputs Tested:	Not tested	Technician Name	
Loop Check Performed:	Not Tested	Vaibhav Patel	
Within Specification:	Yes	Date:	30-Oct-24
		Date:	30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA			
Due Date:	30-Apr-25	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-30-001							
Instrument Visual Inspection:		Range:	0-25% O2	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas							
As found Display information:	OK	Process/Location Desrpition:	815 Lehnen St. Upper level							

Instrument Information:	
Sensor Type and unit:	Oxygen, %
Zero Gas Value:	0
Span Gas Value:	20.80
Gas Range Value:	0-25
Caution Level:	NA
Warning Level:	19.5
Alarm Level:	18

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	20.8	20.7	-0.48%	20.8	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025
Replaced Sensor			
Other Outputs Tested:	Not tested	Technician Name	
Loop Check Performed:	Not Tested	Vaibhav Patel	
Within Specification:	Yes	Date:	30-Oct-24
		Date:	30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton										
Plant Name and address:	815 Lehnen St.ON										
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA				
Due Date:	30-Apr-25	Manufacturer:	MSA								
Follow-Up Required:	No	Model:	MSA UltimaX								
As Left Status:	Initial Condt	Serial #:	C10-3361242-10-002								
Instrument Visual Inspection:		Range:	0-100% LEL	Output:	4-20 mA						
Mechanical Inspection:	OK	Tag Infomration:	NA								
Electrical Inspection:	OK	Description:	Monitoring Methane gas								
As found Display information:	OK	Process/Location Description:	815 Lehnen street ground level								

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	51	2.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	30-Oct-24	Date:	30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V
1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA
Due Date:	30-Apr-25	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	MSA UltimaX				
As Left Status:	Initial Condt	Serial #:	C10-3361242-20-002				
Instrument Visual Inspection:		Range:	0-50PPM	Output:	4-20 mA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	Monitoring H2S Gas				
As found Display information:	OK	Process/Location Description:	815 Lehnen St. Ground level				

Instrument Information:	
Sensor Type and unit:	H2S , PPM
Zero Gas Value:	0
Span Gas Value:	40
Gas Range Value:	0-50
Caution Level:	NA
Warning Level:	5
Alarm Level:	15

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	5.00%	0	0.00%
Span	40	37	-7.50%	40	0.00%

Comments	Test Equipment Used			
	Name / Type	Serial and Due Date		
Sensor was reading too low. Need to keep an eye on it.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025		
Area has higher concentratrgtion of H2S gas accumulated.	CalGas H2S 40 PPM	304-402184551-1, Aug-2025		
Recommended to use hendheld gas detectors while working in premise.				
Other Outputs Tested:	Not tested	Technician Name	Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve	
Within Specification:	Yes	Date:	30-Oct-24	Date: 30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton									
Plant Name and address:	815 Lehnen St.ON									
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA			
Due Date:	30-Apr-25	Manufacturer:	MSA							
Follow-Up Required:	No	Model:	MSA UltimaX							
As Left Status:	Initial Condt	Serial #:	C10-3361242-30-001							
Instrument Visual Inspection:		Range:	0-25% O2	Output:	4-20 mA					
Mechanical Inspection:	OK	Tag Infomration:	NA							
Electrical Inspection:	OK	Description:	Monitoring Oxygen Gas							
As found Display information:	OK	Process/Location Descripition:	815 Lehnen St. Ground level							

Instrument Information:	
Sensor Type and unit:	Oxygen, %
Zero Gas Value:	0
Span Gas Value:	20.8
Gas Range Value:	0-25
Caution Level:	NA
Warning Level:	18.5
Alarm Level:	18

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	20.8	20.8	0.00%	20.8	0.00%

Comments	Test Equipment Used		
	Name / Type	Serial and Due Date	
Calibrated successfully	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name	Witness Name
Loop Check Performed:	Not Tested	Vaibhav Patel	Steve
Within Specification:	Yes	Date: 30-Oct-24	Date: 30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton								
Plant Name and address:	815 Lehnen St.ON								
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA		
Due Date:	30-Apr-25	Manufacturer:	MSA -Amstrong Methane Gas						
Follow-Up Required:	No	Model:	1011						
As Left Status:	Initial Condt	Serial #:	1195021						
Instrument Visual Inspection:		Range:	0-100% LEL		Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA						
Electrical Inspection:	OK	Description:	Monitoring Methane gas						
As found Display information:	OK	Process/Location Description:	815 Lehnen street Main Enterance Admin Building						

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	49	-2.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	30-Oct-24	Date:	30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton								
Plant Name and address:	815 Lehnen St.ON								
Service Date:	31-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA		
Due Date:	30-Apr-25	Manufacturer:	MSA - Armstrong Methane Gas						
Follow-Up Required:	No	Model:	1011						
As Left Status:	Initial Condt	Serial #:	1195020						
Instrument Visual Inspection:		Range:	0-100% LEL		Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA						
Electrical Inspection:	OK	Description:	Monitoring Methane gas						
As found Display information:	OK	Process/Location Description:	815 Lehnen street Digester Building						

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	0	0.00%	0	0.00%
Span	50	50	0.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	31-Oct-24	Date:	31-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V 1H3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton								
Plant Name and address:	815 Lehnen St.ON								
Service Date:	31-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA		
Due Date:	30-Apr-25	Manufacturer:	MSA -Amstrong Methane Gas						
Follow-Up Required:	No	Model:	1011						
As Left Status:	Initial Condt	Serial #:	1195022						
Instrument Visual Inspection:		Range:	0-100% LEL		Output:	4-20 mA			
Mechanical Inspection:	OK	Tag Infomration:	NA						
Electrical Inspection:	OK	Description:	Monitoring Methane gas						
As found Display information:	OK	Process/Location Description:	815 Lehnen street RAS Building						

Instrument Information:	
Sensor Type and unit:	LEL, %
Zero Gas Value:	0
Span Gas Value:	50
Gas Range Value:	0-100
Caution Level:	NA
Warning Level:	10
Alarm Level:	20

Gas	Gas Value	As Found	Deviation	As Left	Deviation
Zero	0	10	0.00%	0	0.00%
Span	50	50	0.00%	50	0.00%

Comments		Test Equipment Used			
		Name / Type		Serial and Due Date	
Calibrated successfully		CalGas Methane 2.5% Vol (50%)		304-402205618-1, Aug-2025	
		CalGas Oxygen 20.8% Vol		304-402190658-1, Aug-2025	
Other Outputs Tested:	Not tested	Technician Name		Witness Name	
Loop Check Performed:	Not Tested	Vaibhav Patel		Steve	
Within Specification:	Yes	Date:	31-Oct-24	Date:	31-Oct-24



CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
Ontario L4V 1B3. Tel: (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton 815 Lehnens st, Port Elgin						
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA
Due Date:	30-Apr-25	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	ALTAIR 4X				
As Left Status:	Initial Condt	Serial #:	356341				
Instrument Visual Inspection:		Range:	0-100%,0-100PPM,0-50PPM,0-25%	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	MSA ALTAIR 4X Handheld gas				
As found Display information:	OK	Process/Location Description:	Operator room				

Instrument Information:								
Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	10.00	10.00	
2	CO	PPM	0	100	100	10.00	20.00	
3	H2S	PPM	0	25	50	5.00	15.00	
4	O2	%	0	18.0	25	19.50	18.00	

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	Zero	0	0	0.00%	0	0.00%
	Span	50	65	30.00%	50	0.00%
Sensor 2	Zero	0	0	0.00%	0	0.00%
	Span	100	101	1.00%	100	0.00%
Sensor 3	Zero	0	0	0.00%	0	0.00%
	Span	25	25	0.00%	25	0.00%
Sensor 4	Zero	0	0	0.00%	0	0.00%
	Span	18.0	18	0.00%	18	0.00%

Comments			Test Equipment Used		
			Name / Type	Serial and Due Date	
Calibrated Successfully			MSA Quadgas	304-402541925-1 ; Sept-2026	
			(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)		
Other Outputs Tested:		Not tested	Technician Name	Witness Name	
Loop Check Performed:		Not tested	Vaibhav Patel	Steve	
Within Specification:		Yes	Date:	30-Oct-24	Date: 30-Oct-24



CALIBRATION / VERIFICATION

6470 Viscount Rd, Mississauga, ON L4V
 1H3. Tel: (905) 678-2882
 Email: service@spdsales.com
 Web Site: www.spdsales.com

Customer Name:	OCWA - Southampton 815 Lehnen st, Port Elgin						
Service Date:	30-Oct-24	Instrument Type:	AIT	W.O. Number:	240988-0001	Asset#:	NA
Due Date:	30-Apr-25	Manufacturer:	MSA				
Follow-Up Required:	No	Model:	ALTAIR 4X				
As Left Status:	Initial Condt	Serial #:	167875				
Instrument Visual Inspection:		Range:	0-100%,0-100PPM,0-50PPM,0-25%	Output:	NA		
Mechanical Inspection:	OK	Tag Infomration:	NA				
Electrical Inspection:	OK	Description:	MSA ALTAIR 4X Handheld gas				
As found Display information:	OK	Process/Location Description:	Operator room				

Instrument Information:								
Sensor No.:	Sensor Type	Unit	Zero Gas Value	Span Gas Value	Range Gas Value	Caution Setpoint	Warning Setpoint	Alarm Setpoint
1	LEL	%	0	50	100	NA	10.00	10.00
2	CO	PPM	0	100	100	NA	10.00	20.00
3	H2S	PPM	0	25	50	NA	5.00	15.00
4	O2	%	0	18.0	25	NA	19.50	18.00

Sensor No.:	Gas	Gas Value	As Found	Deviation	As Left	Deviation
Sensor 1	Zero	0	0	0.00%	0	0.00%
	Span	50	51	2.00%	50	0.00%
Sensor 2	Zero	0	0	0.00%	0	0.00%
	Span	100	105	5.00%	100	0.00%
Sensor 3	Zero	0	0	0.00%	0	0.00%
	Span	25	25	0.00%	25	0.00%
Sensor 4	Zero	0	0	0.00%	0	0.00%
	Span	18.0	18	0.00%	18	0.00%

Comments			Test Equipment Used		
			Name / Type	Serial and Due Date	
Calibrated Successfully			MSA Quadgas	304-402541925-1 ; Sept-2026	
			(100 PPM CO, 25 PPM H2S, 50 %LEL, 18% O2)		
Other Outputs Tested:		Not tested	Technician Name	Witness Name	
Loop Check Performed:		Not tested	Vaibhav Patel	Steve	
Within Specification:		Yes	Date:	30-Oct-24	Date: 30-Oct-24



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix C

Sludge Quality Sample Analysis

Sampler Name:

Sampler Signature

105

111

* Station Acronym: Cell - Cell Content, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PBu - Primary Bypass, Raw - Raw Sewage, SB - Biosolids Bypass, Secondary Bypass, Up - Upstream, Wall - Monitoring Wall, Aer - Aeration, Brs - Biosolids Thickening, Bpd - Biosolids primary digestion, Bsd - Biosolids sec. digestion, Bps - Biosolids pri super, Bss - Biosolids sec super, Basq - Biosolids sludge quality, Basq - Biosolids soil quality, DAF - Dissolved Air Flotation, Grf - Primary Treatment/Grit, Pef - Primary Effluent, RAS - Return Activated Sludge, SBR - Secondary Treatment/SBRs, SceI - Secondary Effluent, TWS - Thickened Waste Activated Sludge, WAS - Waste Activated Sludge, IndW - Industrial Wastewater, PStn - Pump Station, Sept - Septage, Lcht - Leachate, PTrt - Primary Treatment, R&R - Re-aeration, Tert - Tertiary Treatment, Aflo - Afcllo, Teby - Tertiary Treatment, Hold - Holding Tank, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow

Review 115

Revised: 2020.07.27

18:00:24

SAT- 608793660309-B67

09-May-2024

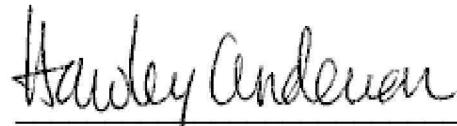
OCWA-Bruce (Port Elgin WPCP)

Attn : Karla Young

P.O. Box 760
Southampton, ON
N0H 2L0, CanadaPhone: 519-797-2561
Fax:pdf**Date Rec. :** 04 May 2024
LR Report: CA13220-MAY24**Copy:** #1**CERTIFICATE OF ANALYSIS**
Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: BSLQ BSLQ-Sludge Quality Hauled Sludge	6: BSLQ BSLQ-Sludge Quality Hauled Sludge Bacti
Sample Date & Time					03-May-24 11:30	03-May-24 11:45
Temperature Upon Receipt [°C]	---	---	---	---	13.0	13.0
Total Solids [mg/L]	06-May-24	20:17	08-May-24	09:50	28000	25600
Total Solids (ASH) [mg/L]	06-May-24	20:17	08-May-24	09:50	5580	---
Total Solids (LOI) [mg/L]	06-May-24	20:17	08-May-24	09:50	22400	---
pH [pH Units]	06-May-24	09:55	07-May-24	10:40	7.19	---
Total Kjeldahl Nitrogen [as N mg/L]	07-May-24	14:55	09-May-24	09:59	1550	---
Ammonia+Ammonium (N) [as N mg/L]	07-May-24	19:23	08-May-24	13:05	96.1	---
Nitrite (as N) [mg/L]	06-May-24	10:23	07-May-24	16:38	< 3	---
Nitrate (as N) [mg/L]	06-May-24	10:23	07-May-24	16:38	< 3	---
Nitrate + Nitrite (as N) [mg/L]	06-May-24	10:23	07-May-24	16:38	< 3	---
Arsenic [mg/L]	08-May-24	17:02	09-May-24	10:49	< 0.1	---
Cadmium [mg/L]	08-May-24	17:02	09-May-24	10:49	0.015	---
Cobalt [mg/L]	08-May-24	17:02	09-May-24	10:49	0.04	---
Chromium [mg/L]	08-May-24	17:02	09-May-24	10:49	0.35	---
Copper [mg/L]	08-May-24	17:02	09-May-24	10:49	16	---
Mercury [mg/L]	08-May-24	17:02	09-May-24	10:49	0.010	---
Potassium [mg/L]	08-May-24	17:02	09-May-24	10:49	130	---
Molybdenum [mg/L]	08-May-24	17:02	09-May-24	10:49	0.15	---
Nickel [mg/L]	08-May-24	17:02	09-May-24	10:49	0.25	---
Phosphorus (Total) [mg/L]	08-May-24	17:02	09-May-24	10:49	820	---
Lead [mg/L]	08-May-24	17:02	09-May-24	10:49	0.2	---
Selenium [mg/L]	08-May-24	17:02	09-May-24	10:49	0.1	---
Zinc [mg/L]	08-May-24	17:02	09-May-24	10:49	10	---
E. Coli [cfu/1g dried wgt]	04-May-24	13:37	06-May-24	10:02	---	66406
E. Coli [cfu/100mL]	04-May-24	13:37	06-May-24	10:02	---	170000

Not e: Metals and mercury were analyzed on the as-received sample.
The E. coli value reported in CFU/1g dried weight was calculated using Total Solids and CFU/100mL.



*Hawley Anderson, Hon.B.Sc
Project Specialist,
Environment, Health & Safety*

Facility Name	PORT ELGIN WPCP		Sample condition upon receipt	
Org. #	5069		Date Rec'd.	MAY 23 2024
Quote #			Time Rec'd.	_____
Attached Parameter List	<input type="checkbox"/>	No	Initials	_____
Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment				
Requested Turnaround Time:	<input type="checkbox"/> App. Rqd	24-48 h	<input checked="" type="checkbox"/> 5-7 d	<input type="checkbox"/> 7-10 d
			<input type="checkbox"/> Other	Specify: _____

Report to: Process & Compliance Technician (PCT)	Data Transfer Contact: PCT	Invoiced To: Ontario Clean Water Agency	Laboratory: SGS Lakefield / London Research Ltd
Address: 18 Caroline Street Southampton, ON N0H 2L0	18 Caroline Street Southampton, ON N0H 2L0	18 Caroline Street Southampton, ON N0H 2L0	185 Concession St., Lakefield ON, K0L 2H0 657 Consortium Ct., London ON, N6E 2S8
Telephone: 519-374-5782	519-374-5782	(519) 797-2561	705-692-2000 / 519-672-4500
Fax: (519) 797-3080	(519) 797-3080	(519) 797-3080	705-692-6365 / 519-672-0361
Email: kyoung@ocwa.com	kyoung@ocwa.com	apowers@highlands@ocwa.com	cautie.greenslaw@ocwa.com / angelia.slater@ocwa.com

Sampler Name:

Darren MacArthur

Sampler Sign

Demosthenes

* Station Acronym: Ccll - Cell Contents, Dis - Disinfection, Down - Downstream, El - Final Effluent, Pby - Primary Bypass, Raw - Raw Sewage, SbY - Suction Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids:raw sludge, Blh - Biosolids thickening, Bsd - Biosolids primary digestion, Bsd - Biosolids:sludge quality, Bsc - Biosolids soil quality, DAF - Dissolved Air Flotation, Grit - Primary Treatment/Grit, Pte - Primary Effluent, RAS - Return Activated Sludge, SBR - Secondary Treatment/SBRs, SeEf - Secondary Effluent, TWAS - Thickened Waste Activated Sludge, WAS - Waste Activated Sludge, IndW - Industrial Wastewater, PStn - Pump Station, Sept - Septage, Lech - Leachate, PTI - Primary Treatment, ReA - Re-aeration, Tert - Tertiary Treatment, Atto - Attenuation, ToBy - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow

Revision #5

Revised: 2020.07.27

068793666918
K 10:30

P22

31-May-2024

OCWA-Bruce (Port Elgin WPCP)

Attn : Karla Young

P.O. Box 760
 Southampton, ON
 N0H 2L0, Canada

Phone: 519-797-2561
 Fax:pdf

Date Rec. : 23 May 2024
 LR Report: CA12899-MAY24

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: BSLQ BSLQ-Sludge Quality Hauled Sludge	6: BSLQ BSLQ-Sludge Quality Hauled Sludge (bact)
Sample Date & Time					22-May-24 09:55	22-May-24 09:50
Temperature Upon Receipt [°C]	---	---	---	---	18.0	18.0
Total Solids [mg/L]	23-May-24	20:38	29-May-24	13:21	22500	30500
Total Solids (ASH) [mg/L]	23-May-24	20:38	27-May-24	09:27	4300	---
Total Solids (LOI) [mg/L]	23-May-24	20:38	27-May-24	09:27	18200	---
pH [pH Units]	28-May-24	15:57	29-May-24	11:07	6.76	---
Total Kjeldahl Nitrogen [as N mg/L]	24-May-24	15:16	28-May-24	13:35	1380	---
Ammonia+Ammonium (N) [as N mg/L]	24-May-24	19:14	27-May-24	14:20	84.5	---
Nitrite (as N) [mg/L]	27-May-24	09:19	29-May-24	16:01	< 3	---
Nitrate (as N) [mg/L]	27-May-24	09:19	29-May-24	16:01	< 3	---
Nitrate + Nitrite (as N) [mg/L]	27-May-24	09:19	29-May-24	16:01	< 3	---
Arsenic [mg/L]	30-May-24	15:03	31-May-24	09:09	< 0.1	---
Cadmium [mg/L]	30-May-24	15:03	31-May-24	09:09	0.011	---
Cobalt [mg/L]	30-May-24	15:03	31-May-24	09:09	0.02	---
Chromium [mg/L]	30-May-24	15:03	31-May-24	09:09	0.22	---
Copper [mg/L]	30-May-24	15:03	31-May-24	09:09	10	---
Mercury [mg/L]	30-May-24	15:03	31-May-24	09:09	0.008	---
Potassium [mg/L]	30-May-24	15:03	31-May-24	09:09	95	---
Molybdenum [mg/L]	30-May-24	15:03	31-May-24	09:09	0.11	---
Nickel [mg/L]	30-May-24	15:03	31-May-24	09:09	0.16	---
Phosphorus (Total) [mg/L]	30-May-24	15:03	31-May-24	09:09	500	---
Lead [mg/L]	30-May-24	15:03	31-May-24	09:09	0.1	---
Selenium [mg/L]	30-May-24	15:03	31-May-24	09:09	< 0.1	---
Zinc [mg/L]	30-May-24	15:03	31-May-24	09:09	7	---
E. Coli [cfu/1g dried wgt]	23-May-24	16:24	27-May-24	09:35	---	68852
E. Coli [cfu/100mL]	23-May-24	16:24	27-May-24	09:35	---	210000

Note: Metals and mercury were analyzed on the as-received sample. The E. coli value reported in CFU/1g dried weight was calculated using Total Solids and CFU/100mL.



Carrie Greenlaw
Carrie Greenlaw
Project Specialist,
Environment, Health & Safety

03-October-2024

OCWA-Bruce (Port Elgin WPCP)

Attn : Karla Young

P.O. Box 760
 Southampton, ON
 N0H 2L0, Canada

Phone: 519-797-2561
 Fax:pdf

Date Rec. : 27 September 2024
LR Report: CA13867-SEP24

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: BSLQ BSLQ-Sludge Quality Hauled Sludge	6: BSLQ BSLQ-Sludge Quality Hauled Sludge (Bacti)
Sample Date & Time					26-Sep-24 11:20	26-Sep-24 11:25
Temperature Upon Receipt [°C]	---	---	---	---	16.0	16.0
Total Solids [mg/L]	27-Sep-24	21:11	01-Oct-24	09:31	29600	28000
Total Solids (ASH) [mg/L]	27-Sep-24	21:11	01-Oct-24	09:31	8650	---
Total Solids (LOI) [mg/L]	27-Sep-24	21:11	01-Oct-24	09:31	20900	---
pH [pH Units]	01-Oct-24	14:41	02-Oct-24	10:39	6.54	---
Total Kjeldahl Nitrogen [as N mg/L]	30-Sep-24	07:40	01-Oct-24	11:48	1360	---
Ammonia+Ammonium (N) [as N mg/L]	30-Sep-24	11:42	01-Oct-24	11:02	89.8	---
Nitrite (as N) [mg/L]	02-Oct-24	07:52	03-Oct-24	11:34	< 3	---
Nitrate (as N) [mg/L]	02-Oct-24	07:52	03-Oct-24	11:34	< 3	---
Nitrate + Nitrite (as N) [mg/L]	02-Oct-24	07:52	03-Oct-24	11:34	< 3	---
Arsenic [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.1	---
Cadmium [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.025	---
Cobalt [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.05	---
Chromium [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.55	---
Copper [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	20	---
Mercury [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.019	---
Potassium [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	130	---
Molybdenum [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.21	---
Nickel [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.31	---
Phosphorus (Total) [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	1200	---
Lead [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.3	---
Selenium [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	0.2	---
Zinc [mg/L]	01-Oct-24	16:44	03-Oct-24	10:29	16	---
E. Coli [cfu/1g dried wgt]	27-Sep-24	14:52	30-Sep-24	10:54	---	117857
E. Coli [cfu/100mL]	27-Sep-24	14:52	30-Sep-24	10:54	---	330000

Notes: Metals and mercury were analyzed on the as-received sample. The E. coli value reported in CFU/1g dried weight was calculated using Total Solids and CFU/100mL.



Carrie Greenlaw
Carrie Greenlaw
Project Specialist,
Environment, Health & Safety



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix D

Sludge Haulage Records

Daily Record of Sludge Haulage

Plant/ Facility Name <i>Port Elgin</i>	Area <i>Saugeen Shores</i>	Date <i>May 3/24</i>
Carrier/ Hauler <i>Barbels Environmental</i>	Site # <i>25069</i>	<small>NOTE: ONLY ONE SHEET PER SITE</small>

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:00	7:30	44	127	T20	BB
2	7:40	8:05	44	415	T-26	DH
3	8:15	8:40	44	127	T20	BB
4	9:10	9:30	44	415	T-26	DH
5	9:30	9:50	44	127	T20	BB
6	9:55	10:15	44	415	T-26	DH
7	10:20	10:40	44	127	T20	BB
8	10:50	11:10	44	415	T-26	DH
9	11:20	11:40	44	127	T20	BB
10	12:05	12:20	44	415	T-26	DH
11	1:00	1:20	44	127	T20	BB
12	1:30	1:50	44	415	T-26	DH
13	2:00	2:25	44	127	T20	BB
14	2:30	2:50	44	415	T-26	DH
15	3:10	3:30	44	127	T20	BB
16						
17						
18						
19						
20						

Daily Total

660 m³

REMARKS

Date

May 3/24

OCWA Rep.
Signature

Steve Ellsworth

Carrier/ Hauler
Signature

BB and DH

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	May 6-24
Carrier/ Hauler	Site #	
Bartels	25069	

NOTE: ONLY ONE SHEET PER SITE

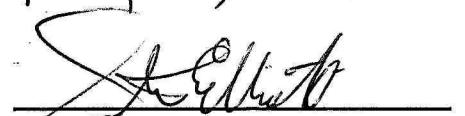
Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	9:00	9:20	441	4115	T-26	DH
2	9:30	9:50	44	127	T20	BB
3	10:10	10:30	44	4115	T-26	DH
4	10:30	10:50	44	127	T20	BB
5	11:05	11:25	441	4115	T-26	DH
6	11:30	11:50	44	127	T20	BB
7	12:10	12:30	441	4115	T-26	DH
8	12:30	12:50	44	127	T20	BB
9	1:00	1:20	441	4115	T-26	DH
10	1:30	1:50	44	127	T20	BB
11	2:00	2:20	441	4115	T-26	DH
12	2:30	2:50	44	127	T20	BB
13	2:55	3:15	441	4115	T-26	DH
14	3:30	3:50	44	127	T20	BB
15	4:00	4:20	441	4115	T-26	DH
16	4:30	4:50	44	127	T20	BB
17	5:00	5:20	44	4115	T-26	DH
18	5:30	5:50	44	127	T20	BB
19						
20						
Daily Total			792			

REMARKS

Date

May 6, 2024

OCWA Rep.
Signature



Carrier/ Hauler
Signature



Daily Record of Sludge Haulage

Plant/ Facility Name <i>Port Elgin</i>	Area <i>Saugeen Shores</i>	Date <i>May 21/24</i>
Carrier/ Hauler <i>Bartels Environmental</i>	Site # <i>25078</i>	NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	9:30	10:00	44	115	T-26	PL
2	10:00	10:30	44	127	T20	BB
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total			88			

REMARKS

Date

May 21/24

OCWA Rep.
Signature

Steve Elliott

Carrier/ Hauler
Signature

B. Baum

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin WPCP	Bruce	May 22-2024

Carrier/ Hauler	Site #
Bartel's Environmental	25075

NOTE: ONLY ONE SHEET PER SITE

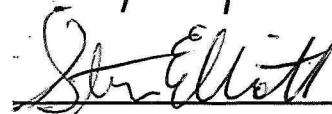
Load No.	Time		Load Volume (m³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:00	7:30	44	127	T20	BB
2	7:40	8:10	44	415	T-26	DB
3	8:15	8:40	44	127	T20	BB
4	8:40	9:05	44	125	T-15	M6
5	9:05	9:30	44	415	T-26	DB
6	9:30	9:50	44	127	T20	BB
7	9:55	10:15	44	123	T-15	M6
8	10:15	10:35	44	415	T-26	DB
9	10:40	11:00	44	127	T20	BB
10	11:10	11:30	44	123	T27	M6
11	11:35	11:55	44	415	T-26	DB
12	12:05	12:30	44	127	T20	DB
13	12:35	12:30	44	123	T-26	M6
14	12:56	NS	44	415	T-26	DB
15	1:25	1:45	44	127	T20	BB
16	2:00	2:20	44	123	T-15	M6
17	2:25	2:45	44	415	T-26	DB
18	2:50	3:10	44	127	T20	BB
19	3:20	3:40	44	123	T-15	M6
20	3:50	4:10	44	415	T-26	DB
Daily Total		880				

REMARKS

Date

May 22/24

OCWA Rep.
Signature



Carrier/ Hauler
Signature





Daily Record of Sludge Haulage

Plant/ Facility Name Port Elgin	Area Saugeen Shores	Date May 22/24 Con't
Carrier/ Hauler Bartels Environmental	Site # 25075	NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
21	4:15	4:40	44	127	T20	BB
22	4:40	5:50	44	125	T-15	MG
23	5:10	5:30	44	415	T-16	DL
24	5:30	6:00	44	127	T20	BB
25						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total			176			

REMARKS

Date

May 22/24

OCWA Rep.
SignatureCarrier/ Hauler
Signature

Daily Record of Sludge Haulage

Page | of |

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	May 23/24
Carrier/ Hauler	Site #	
Bartels	25075	
NOTE: ONLY ONE SHEET PER SITE		

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:30	6:50	44	12-125	T-15	MG
2	7:10	7:30	44	4115	T-26	DH
3	7:30	7:50	44	127	T20	BB
4	7:55	8:15	44	125	T-15	MG
5	8:20	8:40	44	4115	T-26	DH
6	8:45	9:05	44	127	T20	BB
7	9:15	9:35	44	125	T-15	MG
8	9:45	10:05	44	4115	T-26	DA
9	10:10	10:30	44	127	T20	BB
10	10:40	11:00	44	125	T-15	MG
11	11:05	11:25	44	4115	T-26	DH
12	11:30	11:50	44	127	T20	BB
13	12:00	12:20	44	125	T-15	MG
14	12:30	12:50	44	4115	T-26	DH
15	1:05	1:25	44	127	T20	BB
16	1:25	1:45	44	125	T-15	MG
17	2:00	2:20	44	4115	T-26	DH
18	2:25	2:50	44	127	T20	BB
19	2:50	3:10	44	123	T-15	MG
20	3:30	3:50	44	4115	T-26	DH
Daily Total			880 m ³			

REMARKS

Date

May 23/24

OCWA Rep.
Signature



Carrier/ Hauler
Signature





Daily Record of Sludge Haulage

Plant/ Facility Name <i>Port Elgin</i>	Area <i>Saugeen Shores</i>	Date <i>May 24/24</i>
Carrier/ Hauler <i>Bartels</i>	Site # <i>25075</i>	<i>NOTE: ONLY ONE SHEET PER SITE</i>

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:00	6:20	44	127	T-20	BB
2	6:30	7:00	44	123	T-15	M6
3	7:00	7:30	44	127	T20	BB
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total			132			

REMARKS

Date

*May 24/24*OCWA Rep.
Signature*RD*Carrier/ Hauler
Signature*BB*

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin # 5069	# Saugers Shores	Sept 26/24

Carrier/ Hauler	Site #
Bartels Environmental	61280

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	8:30	8:50	44	127	T-20	BB
2	8:50	9:40	416	415	T-26	BB
3	11:10	11:30	44	127	T-20	BB
4	11:35	11:55	416	415	T-26	BB
5	12:15	12:45	416	127	T-20	BB
6	2:50	3:10	416	415	T-26	BB
7	3:20	3:45	44	127	T-20	BB
8	3:50	4:10	416	415	T-26	BB
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total		352				

REMARKS

Date Sept 26/24

OCWA Rep.
Signature

Steve Elliott

Carrier/ Hauler
Signature

BB

Daily Record of Sludge Haulage

Plant/ Facility Name Port Elgin 5209	Area Saugeen Shores	Date Sept 27-24
Carrier/ Hauler Bartels Environmental	Site # 61380	NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:40	7:00	411	127	T-20	BB
2	7:00	7:20	414	4115	T-26	DH
3	7:45	8:05	411	127	T-20	BB
4	8:10	8:30	411	4115	T-26	DH
5	9:00	9:20	411	127	T-20	BB
6	9:25	9:45	411	4115	T-26	DH
7	10:15	10:40	411	127	T-20	BB
8	10:45	11:05	411	4115	T-26	DH
9	11:20	11:45	411	127	T-20	BB
	11:50	12:10	411	4115	T-26	DH
11	12:25	12:50	411	127	T-20	BB
12	12:50	1:10	411	4115	T-26	DH
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total		528				

REMARKS

Date

Sept 27-24

OCWA Rep.
Signature

St Elliott

Carrier/ Hauler
Signature

B. Bush



Daily Record of Sludge Haulage

Plant/ Facility Name Port Elgin WPCP # 5069	Area Sauble Shores	Date Oct 7/24
--	-----------------------	------------------

Carrier/ Hauler Bartels Environmental	Site # 61280	NOTE: ONLY ONE SHEET PER SITE
--	-----------------	-------------------------------

Load No.	Time		Load Volume (m³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	9:35	9:50	44	344	T-27	MG
2	10:00	10:20	44	127	7201	DB
3	11:00	11:20	44	127	120	DB
4	11:25	11:45	44	344	T-27	MG
5	12:10	12:30	44	127	720	DB
6	12:40	1:00	44	344	T-27	MG
7	1:15	1:35	44	127	720	DB
8	2:00	2:20	44	344	T-27	MG
9	2:30	2:50	44	127	720	DB
10	3:20	3:40	44	344	T-27	MG
11	3:45	4:10	44	127	720	DB
12	4:25	4:45	44	344	T-27	MG
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total			525 m³			

REMARKS

Date

Oct 7/24

OCWA Rep.
Signature

Steve Elliott

Carrier/ Hauler
Signature

Bartels



Daily Record of Sludge Haulage

Plant/ Facility Name Port Elgin WTR	Area Scugog Shores	Date Oct 9/24
--	-----------------------	------------------

Carrier/ Hauler Bartels Environmental	Site # 61280	NOTE: ONLY ONE SHEET PER SITE
--	-----------------	-------------------------------

Load No.	Time		Load Volume (m³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:00	7:25	44	127	720	BB
2	7:30	7:50	94	344	727	MC
3	8:15	8:40	94	127	720	BB
4						
5						
6						
7						
8						
9						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total		132				

REMARKS

Date

Oct 9/24

OCWA Rep.
Signature

Dawn McArthur

Carrier/ Hauler
Signature

B. Bartels

Daily Record of Sludge Haulage

Page 1 of

Plant/ Facility Name PEWWT P	Area Saugan Shores	Date OCT 10/24
---------------------------------	-----------------------	-------------------

Carrier/ Hauler BANBES	Site # 61280	NOTE: ONLY ONE SHEET PER SITE
---------------------------	-----------------	-------------------------------

Load No.	Time		Load Volume (m ³)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:30	7:50	44	344	T-27	MG
2	8:10	8:30	44	127	T30	BB
3	8:35	9:55	44	344	T-27	MG
4	9:15	9:40	44	127	T30	BB
5	9:45	10:05	44	344	T-27	MG
6	10:15	10:10	44	127	T30	BB
7	11:25	11:50	44	344	T-27	MG
8	11:55	12:20	44	127	T30	BB
9						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Daily Total		352				

REMARKS

Date

Oct 10/24

OCWA Rep.
Signature

Deborah

Carrier/ Hauler
Signature

Elberta



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix E

Community Complaints

PORT ELGIN WWTF Logbook

Entry Time	Label	Entry Text	Operator	Created Time
2024-06-24 00:00:00		07:00-15:30 OIC: Darren MacArthur (dmacarthur) 00:00-23:59 ORO: Steven Elliott (sellioott) 07:00-15:30 OIC: Joshua Marx (jmarx) 07:00-15:30 Duty OIC: Steven Elliott (sellioott) 07:00-15:30 OIT: James McCormack (jmccormack)	Joshua Marx	2024-06-24 21:19:01
2024-06-24 07:00:00	Port Elgin WPCP	Daily checks and oper of plant lab work check compaint from TSS at 498 Izzard st, Trade safe on site fro lift inspectionsps stp uv work/ quote	Steven Elliott	2024-06-24 14:06:16
2024-06-24 15:20:00		Flushed hydrants at Davey, Drummond, Bricker, Ashwell, Wellington	James McCormack	2024-06-24 15:24:08
2024-06-24 15:30:00	Port Elgin WPCP, PS harbour st, PS millcreek, PS shipley, PS tomlinson, PS westlinks	Checks at PS's. Rake barscreen at PS's. Clean up banks w/DM.	Joshua Marx	2024-06-24 21:20:49
2024-06-24 16:00:00	Community Complaint, Port Elgin WPCP	Daily plant operations, lab work. Headworks checks, rake Bar Screen. Check on community complaint with SE on Izzard st. for sewage smell. Checked manholes, clean and install covers under manhole lid. Spoke with homeowner. No noticeable odour there this morning. Waste sludge from clarifier and clean UV lights and channel with JM in afternoon. Start up sampler.	Darren MacArthur	2024-06-24 16:11:06



ONTARIO CLEAN WATER AGENCY
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Appendix F

Septage Receiving



5069 Port Elgin WWTP
Sludge Receiving Station

Month: May Year: 2024

Issued: 2020-02-13
Rev.#: 1
Pages: 1 of 2

Reviewed by: Process & Compliance Technician

Approved by: Senior Operations Manager

Date	Time	Oper ID	Hauler	Source Location	Volume (m³)		
					Residential	Industrial	Commercial
17	0805	✓	OCWA	Tobles Scov	1		8
21	0900	✓	OCWA	Tobles Scov	1		3
June							
7	0930	✓	OCWA	Tobles Scov	1		4
21	0925	✓	OCWA	Tobles Scov	1		4
28	0930	✓	OCWA	Tobles Scov	1		4
July							
12	1035	✓	OCWA	Tobles Scov	1		8
19	1005	✓	OCWA	Tobles Scov	1		7
25	0755	✓	OCWA	Tobles Scov	1		7
Aug							
2	0855	✓	OCWA	Tobles Scov	1		8
10	1045	✓	OCWA	Tobles Scov	1		8
9	0955	✓	OCWA	Tobles Scov	1		4
14	0805	✓	OCWA	Tobles Scov	1		4
23	0820	✓	OCWA	Tobles Scov	1		4
31	0830	✓	OCWA	Tobles Scov	1		8
Sept.							
6	0810	✓	OCWA	Tobles Scov	1		4
13	1040	✓	OCWA	Tobles Scov	1		3
20	1050	✓	OCWA	Tobles Scov	1		3
Oct.							
1	1040	✓	OCWA	Tobles Scov	1		4
18	0945	✓	OCWA	Tobles Scov	1		4
Month of _____					Total		



ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix G

Spills & Bypass Reports

From: Karla Young
To: MEOP-WATER-OSSAR@ontario.ca
Cc: [Graham, Robert G. \(MECP\)@ontario.ca](mailto:Graham, Robert G. (MECP)@ontario.ca); [Shannon, Rhonda \(MECP\)@ontario.ca](mailto:Shannon, Rhonda (MECP)@ontario.ca); Daniel Macleod; -GRRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2024 Q1 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: May-06-24 4:02:00 PM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

[Bypass Events](#)

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration	Volume	Process Bypassed and Reason	Impact of Event	Mitigation
	HH:MM	(m³)			
n/a	n/a	n/a	n/a	n/a	n/a

[Overflow Events](#)

The ECA requires the submission of a summary report of the Overflow Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
		HH:MM			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks

Karla

Karla Young
 Process & Compliance Technician
 Grey-Bruce/Bruce Hubs
 Georgian Highlands Region
Ontario Clean Water Agency
kyoung@ocwa.com
 (519) 374 - 5782

From: Karla Young
To: MEOP-WATER-OSSAR@ontario.ca
Cc: [Graham, Robert G. \(MECP\)@ontario.ca](mailto:Graham, Robert G. (MECP)@ontario.ca); [Shannon, Rhonda \(MECP\)@ontario.ca](mailto:Shannon, Rhonda (MECP)@ontario.ca); Daniel Macleod; -GRRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2024 Q2 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: August-12-24 10:54:00 AM

Good Morning,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

[Bypass Events](#)

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration	Volume	Process Bypassed and Reason	Impact of Event	Mitigation
	HH:MM	(m³)			
n/a	n/a	n/a	n/a	n/a	n/a

[Overflow Events](#)

The ECA requires the submission of a summary report of the Overflow Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
		HH:MM			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks

Karla

Karla Young
 Process & Compliance Technician
 Grey-Bruce/Bruce Hubs
 Georgian Highlands Region
Ontario Clean Water Agency
kyoung@ocwa.com
 (519) 374 - 5782

From: Karla Young
To: ["MEOP-WATER-OSSAR@ontario.ca"](mailto:MEOP-WATER-OSSAR@ontario.ca)
Cc: ["Graham, Robert G. \(MECP\)@ontario.ca"](mailto:Graham, Robert G. (MECP)@ontario.ca); ["Shannon, Rhonda \(MECP\)@ontario.ca"](mailto:Shannon, Rhonda (MECP)@ontario.ca); Daniel Macleod; -GRRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2024 Q3 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: November-06-24 3:40:00 PM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

[Bypass Events](#)

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration	Volume	Process Bypassed and Reason	Impact of Event	Mitigation
	HH:MM	(m³)			
n/a	n/a	n/a	n/a	n/a	n/a

[Overflow Events](#)

The ECA requires the submission of a summary report of the Overflow Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
		HH:MM			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks

Karla

Karla Young
 Process & Compliance Technician
 Grey-Bruce/Bruce Hubs
 Georgian Highlands Region
Ontario Clean Water Agency
kyoung@ocwa.com
 (519) 374 - 5782

From: Karla Young
To: MEOP-WATER-OSSAR@ontario.ca
Cc: [Graham, Robert G. \(MECP\)@ontario.ca](mailto:Graham, Robert G. (MECP)@ontario.ca); [Shannon, Rhonda \(MECP\)@ontario.ca](mailto:Shannon, Rhonda (MECP)@ontario.ca); Daniel Macleod; -GRRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2024 Q4 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: February-05-25 2:05:00 PM

Good Afternoon,

Under ECA 0556-AKQN3Q, a quarterly summary report shall be submitted for Bypass Event(s) and Overflows that occur at the Port Elgin Water Pollution Control Plant.

[Bypass Events](#)

The ECA requires the submission of a summary report of the Bypass Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Bypass;
- the location of the Bypass and the treatment process(es) bypassed;
- the reason(s) for the Bypass;
- the disinfection status of the Bypass;
- the duration of the Bypass Event;
- the measured or estimated volume of Bypass;
- the impact of the Bypass on the quality of the Final Effluent;
- Samples collected.

Date	Duration	Volume	Process Bypassed and Reason	Impact of Event	Mitigation
	HH:MM	(m³)			
n/a	n/a	n/a	n/a	n/a	n/a

[Overflow Events](#)

The ECA requires the submission of a summary report of the Overflow Event(s) to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 15, May 15, August 15, and November 15.

The summary reports shall contain, at a minimum:

- the date and time of the Overflow;
- the location of the Overflow and the receiver;
- the reason(s) for the Overflow;
- the level of treatment the Overflow has received and disinfection status of same;
- the duration of the Overflow Event;
- the measured or estimated volume of the Overflow;
- the impact of Overflow on the receiver;
- Samples collected;

Date	Duration	Volume and Receiver	Disinfection Status and Reason	Impact of Event	Mitigation: Taken and Planned
		HH:MM			
n/a	n/a	n/a	n/a	n/a	n/a

Thanks

Karla

Karla Young
 Process & Compliance Technician
 Grey-Bruce/Bruce Hubs
 Georgian Highlands Region
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 (519) 374 - 5782