ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

March 28, 2024

Ministry of the Environment, Conservation and Parks
3rd floor, 101 17th Street East
Owen Sound, Ontario
N4K 0A5

RE: 2023 Port Elgin Water Pollution Control Plant Annual Sewage Performance Report (ECA #0556-AKQN3Q) and Municipal Sewage Collection System Performance Report (CLI-ECA 093-W601) – Town of Saugeen Shores

Please see attached for the 2023 Annual Sewage and Collection System Performance Reports prepared by the Ontario Clean Water Agency on behalf of the Town of Saugeen Shores for the:

- Port Elgin Water Pollution Control Plant
- Town of Saugeen Shores Municipal Sewage Collection System

This report was completed in accordance with the requirements set out in ECA #0556-AKQN3Q *Condition 11(4)*, issued May 30, 2017 and Municipal Sewage Collection System CLI-ECA #093-W601 *Schedule E (4.6)*, issued January 10, 2023. Your receipt of this report by or before March 31, satisfies the regulatory requirements:

- ECA #0556-AKQN3Q that "The owner shall prepare performance reports on a calendar year basis and submit to the Water Supervisor by March 31 of the calendar year following the period reported upon" and;
- CLI-ECA #093-W601 that "The Owner shall prepare an annual performance report for the Authorized System that is submitted to the Director on or before March 31st of each year and covers the period from January 1st to December 31st of the preceding calendar year.

In addition, CLI-ECA #093-W601 requires that report shall be made available, on request and without charge, to members of the public who are served by the Authorized System; and made available, by June 1 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. We kindly ask that notification is provided once the report is posted on the Town's Municipal website.

Lastly, the Ministry has indicated that the Municipal Collection System ECA Annual Reports can either be prepared as a separate report or as a subsection of the Annual Sewage Report for the Wastewater Treatment Facility, attached you will find one report that satisfies the reporting requirements of both Environmental Compliance Approvals.

Should you require further clarification on the information found within the Annual Sewage Performance Report, please feel free to contact me.

Sincerely,

Dan MacLeod
Senior Operations Manager
OCWA, Georgian Highlands Region

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

PORT ELGIN
SEWAGE TREATMENT PLANT

ANNUAL PERFORMANCE REPORT

For the period of
JANUARY 1, 2023 TO DECEMBER 31, 2023

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 WWTP 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 m^3 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	~2,896 + ~314 Commercial
Receiving Water	Mill Creek
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-AKQN2Q, *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.

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 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 for Port Elgin Sewage Treatment Plant

Parameter	Average Monthly Concentration (mg/L)
$CBOD_5$	15
Suspended Solids	15
Total Phosphorus	0.8
E-coli	100 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	Average Monthly Concentration (mg/L)	Average Monthly Loading (kg/day)
$CBOD_5$	25	161
Suspended Solids	25	161
Total Phosphorus	1	6.5
E-coli	200 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, CBOD, 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. 2023 Effluent Annual Average Concentrations and Removal Efficiencies

Parameter	Annual Average Concentration (mg/L)	Annual Average Removal Efficiency (%)
Suspended Solids	7.08	94.1%
Total Phosphorus as P	0.50	77.4%

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 (2023)

	$CBOD_5$					**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 (161kg/d)	Average Monthly Concentration (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 (mg/L)	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	2.80	Yes	Yes	11.46	Yes	6.60	Yes	Yes	27.02	Yes	0.50	Yes	Yes	2.03	Yes	3.10	Yes	Yes	7.22	7.60	Yes	Yes
February	2.50	Yes	Yes	10.42	Yes	4.00	Yes	Yes	16.67	Yes	0.56	Yes	Yes	2.32	Yes	2.38	Yes	Yes	7.56	7.84	Yes	Yes
March	2.25	Yes	Yes	9.46	Yes	5.50	Yes	Yes	23.13	Yes	0.38	Yes	Yes	1.61	Yes	3.64	Yes	Yes	7.33	7.83	Yes	Yes
April	2.00	Yes	Yes	9.52	Yes	7.50	Yes	Yes	35.70	Yes	0.49	Yes	Yes	2.33	Yes	4.23	Yes	Yes	7.56	7.73	Yes	Yes
May	3.00	Yes	Yes	13.42	Yes	9.80	Yes	Yes	43.82	Yes	0.59	Yes	Yes	2.62	Yes	3.03	Yes	Yes	7.61	7.90	Yes	Yes
June	3.00	Yes	Yes	12.26	Yes	8.25	Yes	Yes	33.72	Yes	0.54	Yes	Yes	2.23	Yes	4.52	Yes	Yes	7.55	7.79	Yes	Yes
July	2.50	Yes	Yes	10.41	Yes	10.50	Yes	Yes	43.71	Yes	0.66	Yes	Yes	2.74	Yes	2.38	Yes	Yes	7.22	7.68	Yes	Yes
August	2.20	Yes	Yes	9.14	Yes	7.80	Yes	Yes	32.41	Yes	0.61	Yes	Yes	2.53	Yes	2.30	Yes	Yes	7.39	7.87	Yes	Yes
September	2.00	Yes	Yes	7.99	Yes	2.75	Yes	Yes	10.99	Yes	0.44	Yes	Yes	1.75	Yes	2.38	Yes	Yes	7.07	7.21	Yes	Yes
October	2.40	Yes	Yes	9.86	Yes	8.40	Yes	Yes	34.50	Yes	0.54	Yes	Yes	2.22	Yes	<2.00	Yes	Yes	7.27	7.46	Yes	Yes
November	2.25	Yes	Yes	8.92	Yes	6.00	Yes	Yes	23.78	Yes	0.40	Yes	Yes	1.59	Yes	3.56	Yes	Yes	7.18	7.55	Yes	Yes
December	3.00	Yes	Yes	12.28	Yes	6.75	Yes	Yes	27.62	Yes	0.24	Yes	Yes	0.98	Yes	2.38	Yes	Yes	7.21	7.45	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, 2023

Parameters	Average	Minimum	Maximum
BOD_5[8a] (mg/L)	152.25	51.00	383.00
Total Suspended Solids[8a] (mg/L)	160.67	37.00	477.00
Total Phosphorus[8a] (mg/L)	3.02	1.07	6.10
Total Kjeldahl Nitrogen[8a] (mg/L)	13.00	25.68	43.90

[8a]Refer to Appendix A for monthly sample results.

The 2023 average results for BOD_5, TP and TKN are lower while TSS was slightly higher than the previous year. The 2023 minimum results were all lower than the previous year. The 2023 maximum results for Bod_5, TSS, and TP are higher and TKN slightly lower than the previous year.

Table 9. Effluent Monitoring Parameters as required for Port Elgin Sewage Treatment Plant, 2023

Parameters	Average	Minimum	Maximum
Total Kjeldahl Nitrogen (mg/L)	0.80	0.50	2.60
Ammonia Nitrogen[9a] (mg/L)	0.12	0.10	0.90
Nitrite and Nitrate[9a] (mg/L)	24.72	20.20	30.00
Alkalinity (mg/L as $CaCO_3$)	67.44	38.00	107.00
Temperature (°C)	13.37	7.00	20.00

[9a]Refer to Appendix A for monthly sample results.

The 2023 averages for all parameters except temperature are lower than the previous year. The minimum results for TKN and TAN are the same, Nitrite and Nitrate, Alkalinity and pH are higher and temperature is lower than the previous year. The maximum results for all parameters except temperature are lower than the previous year. The average and maximum results for temperature are the same as the previous year.

Table 10. Influent flows and Septage Receiving, 2023

Pump Station	Average Daily Flow (m^3/day)	Total Annual Flow (m^3)	Percentage of Rated Capacity (6,455 m^3/d)
Influent	2,805	1,023,767	43.5%
Septage Receiving Station	0.23	83	n/a

The 2023 influent total annual flow and average daily flow are slightly higher when compared to the previous year. The septage received in 2023 was lower when compared to the previous year.

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 2023, there 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 2023, major maintenance activities that occurred include:

- Sandy Acres Isolation valve replacement (collection system)
- 10th concession air relief valve replacement (3 of them on forcemain)
- 10th concession forcemain couplers replaced (3 of them)
- Chamber hatch/ lid installation
- Sludge tank air isolation valves replaced
- Grit dewatering auger replaced
- Float switches replaced
- New pump ordered for 10th concession

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-AKQN2Q*, 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 are 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 are 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 16, 2023, 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 13 & 14 and October 17, 2023 SPD Sales Ltd. calibrated the gas detection equipment. On April 13, 2023, 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.

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 6,644 m^3 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 2023. The hauling and spreading of sludge from the Port Elgin sewage treatment plant was conducted by Bartel's Environmental Services. 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
23706	1,188	Bartel's Environmental	May 17, 18
25078	352	Bartel's Environmental	May 19
25095	2,288	Bartel's Environmental	June 15, 16, 17, 19, 20, 21
24198	1,672	Bartel's Environmental	September 7, 8
25069	1,144	Bartel's Environmental	October 25, 26

Based on a linear regression with an R^2 value of 66%, the anticipated volume to be generated over the next reporting period is approximately 6,793 m^3.

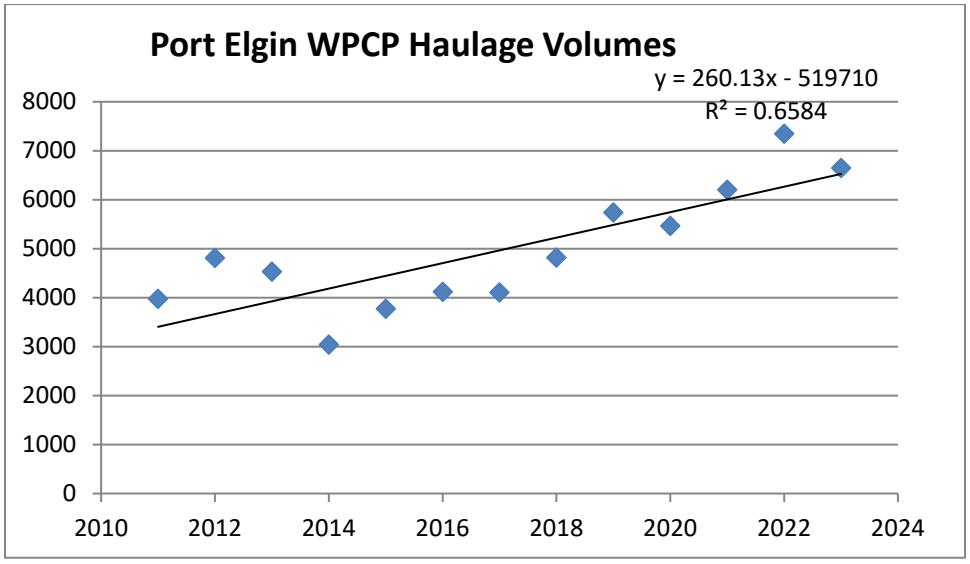

Figure 1. Port Elgin Sewage Treatment Plant Haulage Volumes (2011 to 2024)

In 2023 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 zero (0) community complaints. 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.

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.

The following events occurred in 2023:

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, 2023 to December 31, 2023

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#2022-WaterWastewater-Reports

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

a) 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.
b) If applicable, include a summary of any operating problems encountered and corrective actions taken.
c) 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 2023 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 WWTP 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 WWTP 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 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 16, 2023, 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 13 & 14 and October 17, 2023 SPD Sales Ltd. calibrated the gas detection equipment. On April 13, 2023, 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.

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 is section 4 of this report.

10.5 Community Complaints Received in Relation to the Sewage Works

There were no complaints reported during the reporting period for the collection system.

10.6 Alterations to the Authorized System

For 2023, major maintenance activities that occurred within the Authorized System include:

- Sandy Acres Isolation valve replacement (collection system)
- 10th concession air relief valve replacement (3 of them on forcemain)
- 10th concession forcemain couplers replaced (3 of them)
- Chamber hatch/ lid installation
- Float switches replaced
- New pump ordered for 10th concession

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

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Performance Assessment Report

From 1/1/2023 to 12/31/2023 11:59:59 PM

5069 PORT ELGIN WASTEWATER TREATMENT FACILITY 120001470

	1 / 2023	2/ 2023	3/ 2023	4/ 2023	5/ 2023	6/ 2023	7/ 2023	8/ 2023	9/ 2023	10/ 2023	11/ 2023	12/ 2023	<--Total-->	<--Avg-->	<--Max-->	<-Criteria->
Flows																
Raw Flow: Total - Raw Sewage m³/d	85,738.00	78,460.00	87,043.00	96,985.00	95,790.00	90,290.00	84,270.00	84,044.00	78,132.00	84,022.00	77,770.00	81,223.00	1,023,767.00			0.00
Raw Flow: Avg - Raw Sewage m³/d	2,765.74	2,802.14	2,807.84	3,232.83	3,090.00	3,009.67	2,718.39	2,711.10	2,604.40	2,710.39	2,592.33	2,620.10		2,804.84		6,455.00
Raw Flow: Max - Raw Sewage m³/d	3,087.00	3,335.00	3,889.00	4,374.00	3,470.00	3,995.00	3,008.00	3,072.00	3,119.00	3,257.00	2,773.00	3,106.00			4,374.00	0.00
Raw Flow: Count - Raw Sewage m³/d	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	365.00			0.00
Eff. Flow: Total - Effluent m³/d	126,896.00	116,720.00	130,348.00	142,789.00	138,625.00	122,619.00	129,043.00	128,823.00	119,904.00	127,334.00	118,879.00	126,859.00	1,528,839.00			0.00
Eff. Flow: Avg - Effluent m³/d	4,093.42	4,168.57	4,204.77	4,759.63	4,471.77	4,087.30	4,162.68	4,155.58	3,996.80	4,107.55	3,962.63	4,092.23		4,188.60		6,455.00
Eff. Flow: Max - Effluent m³/d	4,656.00	4,628.00	4,782.00	6,549.00	4,947.00	4,415.00	5,457.00	4,656.00	4,605.00	4,751.00	5,421.00	4,790.00			6,549.00	0.00
Eff Flow: Count - Effluent m³/d	31.00	28.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	365.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Effluent mg/L	< 2.80	< 2.50	< 2.25	< 2.00	< 3.00	3.00	< 2.50	< 2.20	< 2.00	< 2.40	< 2.25	< 3.00		< 2.50		25.00
Eff: # of samples of cBOD5 - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00
Loading: cBOD5 - Effluent kg/d	< 11.462	< 10.421	< 9.461	< 9.519	< 13.415	12.262	< 10.407	< 9.142	< 7.994	< 9.858	< 8.916	< 12.277		< 10.47	< 13.42	161.000
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw Sewage mg/L	67.00	58.00	105.00	76.00	176.00	51.00	123.00	241.00	383.00	204.00	212.00	131.00		152.25	383.00	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	1.00	12.00			0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw Sewage mg/L	68.00	37.00	122.00	99.00	164.00	125.00	102.00	212.00	193.00	205.00	477.00	124.00		160.67	477.00	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	1.00	12.00			0.00
Eff: Avg TSS - Effluent mg/L	6.60	4.00	5.50	7.50	9.80	8.25	10.50	7.80	2.75	8.40	6.00	< 6.75		7.08	10.50	25.00
Eff: # of samples of TSS - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00
Loading: TSS - Effluent kg/d	27.017	16.674	23.126	35.697	43.823	33.720	43.708	32.414	10.991	34.503	23.776	< 27.623		29.64	43.82	161.000
Percent Removal: TSS - Raw Sewage %	90.29	89.19	95.49	92.42	94.02	93.40	89.71	96.32	98.58	95.90	98.74	94.56		94.05	98.74	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw Sewage mg/L	1.32	1.07	2.39	1.59	3.87	1.28	2.68	3.69	4.66	4.80	6.10	2.82		3.02	6.10	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	1.00	12.00			0.00
Eff: Avg TP - Effluent mg/L	0.50	0.56	0.38	0.49	0.59	0.55	0.66	0.61	0.44	0.54	0.40	0.24		0.50	0.66	1.00
Eff: # of samples of TP - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00
Loading: TP - Effluent kg/d	2.030	2.324	1.608	2.332	2.620	2.228	2.737	2.535	1.749	2.218	1.595	0.982		2.10	2.74	6.500
Percent Removal: TP - Raw Sewage %	62.42	47.90	84.00	69.18	84.86	57.42	75.47	83.47	90.61	88.75	93.40	91.49		77.41	93.40	0.00
Nitrogen Series																

Performance Assessment Report

From 1/1/2023 to 12/31/2023 11:59:59 PM

Raw: Avg TKN - Raw Sewage mg/L	13.70	13.10	23.40	14.90	27.10	13.00	26.50	32.70	39.30	34.80	43.90	25.80		25.68	43.90	0.00
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	12.00			0.00
Eff: Avg TAN - Effluent mg/L	< 0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.13	< 0.10	< 0.10	< 0.10	< 0.30	< 0.10		< 0.12	< 0.30	
Eff: # of samples of TAN - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00
Loading: TAN - Effluent kg/d	< 0.491	< 0.417	< 0.420	< 0.476	< 0.447	< 0.409	< 0.520	< 0.416	< 0.400	< 0.411	< 1.189	< 0.409		< 0.50	< 1.19	
Eff: Avg NO3-N - Effluent mg/L	24.60	24.08	23.78	21.43	22.52	23.48	24.60	26.24	27.33	26.48	26.25	25.13		24.66	27.33	0.00
Eff: # of samples of NO3-N - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00
Eff: Avg NO2-N - Effluent mg/L	< 0.04	< 0.04	< 0.04	< 0.04	0.07	0.06	0.07	0.05	< 0.05	< 0.04	< 0.07	< 0.04		< 0.05	<	0.00
Eff: # of samples of NO2-N - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00
Disinfection																
Eff: GMD E. Coli - Effluent cfu/100mL	3.10	2.38	3.64	4.23	3.03	4.52	2.38	2.30	2.38	2.00	3.56	2.38				200.00
Eff: # of samples of E. Coli - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	52.00			0.00

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix B
Calibration Reports

ABB MAGMASTER
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL	
CUSTOMER	OCWA - Georgian Highlands - Bruce Hub
CONTACT	Dan MacLeod
	Senior Operations Manager
	18 Caroline Street West
	Southampton, ON N0H 2L0
	Ph: 519-379-0431
	E: danmacleod@ocwa.com
VER. BY - FM	Paris Machuk / Mike White

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

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 16, 2023
CAL. FREQUENCY	Annual
CAL. DUE DATE	May, 2024

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	5789442	M3
AS LEFT	5789479	M3
DIFFERENCE	37	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	26.68	66.61	133.34	266.12	LPS
MUT [Difference]				0.00	0.05	0.04	0.19	-0.17	LPS
MUT [% Error]				n/a	0.19	0.06	0.15	-0.07	%
mA OUTPUT				**4.000**	**5.065**	**6.663**	**9.326**	**14.652**	mA
MUT [Reading]	min.	4.000	mA	3.995	5.062	6.664	9.307	14.625	mA
MUT [Difference]	max.	20.000	mA	-0.005	-0.003	0.001	-0.019	-0.027	mA
MUT [% Error]				-0.12	-0.06	0.02	-0.20	-0.18	%
TOTALIZER - REF. FLOW RATE				**Enter in Totalizer Test Velocity if Different (m/s)**			2.0	**266.293**	LPS
TOTALIZER [MUT]								20	M3
TEST TIME								75.02	SECONDS
CALC. TOTALIZER								19.977	M3
ERROR								0.11	%

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	0.08	PASS
mA OUTPUT	-0.11	PASS
TOTALIZER	0.11	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.

Rectangular Weir
W/End Contractions
Verification/Calibration Report

FLOWMETRIX

AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

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

VER. BY - FM Paris Machuk / Mike White

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

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 16, 2023
CAL. FREQUENCY	Annual
CAL. DUE DATE	May, 2024

PROGRAMMING PARAMETERS

THROAT WIDTH, (exp 1.5)	m	1.500
EMPTY DISTANCE, TX to notch	m	1.263
TRANSDUCER (TX), to sump flo	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

Ultrasonic sensor installed to ensure full scale flow condition

TOTALIZER

AS FOUND	8610451.66	M3
AS LEFT	8610522.19	M3
DIFFERENCE	70.53	M3

TEST CRITERIA

AS FOUND CERTIFICATION TEST	Yes
ALLOWABLE [%] ERROR	5

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.

AS FOUND TEST RESULTS

				0.0	14.1	39.7	72.5	94.8	% F.S. Range
				0.000	0.050	0.100	0.150	0.180	m
REF. FLOW RATE				**0.0**	**2645.5**	**7432.3**	**13561.7**	**17754.5**	M3/D
MUT [Reading]				0.0	2578.8	7661.0	13876.4	18122.5	M3/D
MUT [Difference]				0.0	-66.7	228.7	314.7	368.0	M3/D
MUT [% Error]				0.0	-0.4	1.2	1.7	2.0	%
mA OUTPUT				**4.000**	**6.261**	**10.353**	**15.592**	**19.176**	mA
MUT [Reading]	min.	4.000	mA	4.016	6.186	10.540	15.758	19.568	mA
MUT [Difference]	max.	20.000	mA	0.016	-0.075	0.187	0.166	0.392	mA
MUT [% Error]				0.08	-0.38	0.94	0.83	1.96	%
TOTALIZER - REF. FLOW RATE								**17754.526**	M3/D
TOTALIZER [MUT]								19.69	M3
TEST TIME								93.39	SECONDS
CALC. TOTALIZER								19.191	M3
ERROR								2.53	%

COMMENTS

Unit is working as expected - recommend look at doing setup again for empty distance values

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	1.13	PASS
mA OUTPUT	0.69	PASS
TOTALIZER	2.53	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.

Parshall Flume
Verification/Calibration Report

SCG FLOWMETRIX

AS FOUND CERTIFICATION

PASS

CLIENT DETAIL

CUSTOMER	OCWA - Georgian Highlands - Bruce Hub
CONTACT	Dan MacLeod
	Senior Operations Manager
	18 Caroline Street West
	Southampton, ON N0H 2L0
	Ph: 519-379-0431
	E: danmacleod@ocwa.com
VER. BY - FM	Paris Machuk / Mike White

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

EQUIPMENT DETAIL

[MUT] MANUFACTURER	Endress + Hauser
MODEL	FMU90
CONVERTER SERIAL NUMBER	N80035150E6
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 16, 2023
CAL. FREQUENCY	Annual
CAL. DUE DATE	May, 2024

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	4954626	M3
AS LEFT	4954876	M3
DIFFERENCE	250	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

Ultrasonic sensor installed to ensure full scale flow condition

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

AS FOUND TEST RESULTS

				0.0	13.5	39.1	73.0	92.6	% F.S. Range
				0.000	0.100	0.200	0.300	0.350	m
REF. FLOW RATE				**0**	**110**	**320**	**597**	**756**	M3/H
MUT [Reading]				0.00	115.69	325.34	608.59	763.01	M3/H
MUT [Difference]				0.00	5.54	5.49	11.86	6.62	M3/H
MUT [% Error]				n/a	0.68	0.67	1.45	0.81	%
mA OUTPUT				**4.000**	**6.157**	**10.264**	**15.686**	**18.812**	mA
MUT [Reading]	min.	4.000	mA	4.002	6.176	10.030	15.280	18.140	mA
MUT [Difference]	max.	20.000	mA	0.002	0.019	-0.234	-0.406	-0.672	mA
MUT [% Error]				0.01	0.10	-1.17	-2.03	-3.36	%
TOTALIZER - REF. FLOW RATE								**756.385**	M3/H
TOTALIZER [MUT]								15	M3
TEST TIME								71.80	SECONDS
CALC. TOTALIZER								15.086	M3
ERROR								-0.57	%

COMMENTS

- Configuration Parameters checked and remeasured. Readings are accurate. Output is off slightly due to an unknown programming parameter. Since the daily total is taken off the local display this was not adjusted. Could be adjusted on the PLC end if necessary.

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	0.90	PASS
mA OUTPUT	-1.29	PASS
TOTALIZER	-0.57	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.

ABB MAGMASTER
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL	
CUSTOMER	OCWA - Georgian Highlands - Bruce Hub
CONTACT	Dan MacLeod
	Senior Operations Manager
	18 Caroline Street West
	Southampton, ON N0H 2L0
	Ph: 519-379-0431
	E: danmacleod@ocwa.com
VER. BY - FM	Paris Machuk / Mike White

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

EQUIPMENT DETAIL	
[MUT] MANUFACTURER	ABB
MODEL	MagMaster
CONVERTER SERIAL NUMBER	V/88589/2/1
FUSE	Lighting Panel - Breaker #7
PLANT ID	Port Elgin WWTP
METER ID	RAS Pump Discharge Flow
FIT ID	N/A
CLIENT TAG	OCWA# 71258
OTHER	ORG# 5069
GPS COORDINATES	N44 26.324 W081 22.358
VERIFICATION DATE	May 16, 2023
CAL. FREQUENCY	Annual
CAL. DUE DATE	May, 2024

PROGRAMMING PARAMETERS		
DIAMETER (DN)	mm	300
F.S. FLOW - MAG	LPS	706.9
F.S. RANGE - O/P	LPS	149.00
TUBE CAL. FACTOR	1	1.0000

FORWARD TOTALIZER INFORMATION		
AS FOUND	20047021	M3
AS LEFT	20047054	M3
DIFFERENCE	33	M3

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

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	9.5	23.7	47.4	94.9	% F.S. Range
REF. FLOW RATE				**0.00**	**14.14**	**35.34**	**70.69**	**141.37**	LPS
MUT [Reading]				0.00	14.16	36.39	71.32	139.67	LPS
MUT [Difference]				0.00	0.02	1.05	0.63	-1.70	LPS
MUT [% Error]				n/a	0.16	2.96	0.90	-1.20	%
mA OUTPUT				**4.000**	**5.518**	**7.795**	**11.590**	**19.181**	mA
MUT [Reading]	min.	4.000	mA	4.000	5.511	7.735	11.598	19.119	mA
MUT [Difference]	max.	20.000	mA	0.000	-0.007	-0.060	0.008	-0.062	mA
MUT [% Error]				0.00	-0.13	-0.77	0.07	-0.32	%
TOTALIZER - REF. FLOW RATE				**Enter in Totalizer Test Velocity if Different (m/s)**			2.0	**141.372**	LPS
TOTALIZER [MUT]								10	M3
TEST TIME								70.83	SECONDS
CALC. TOTALIZER								10.013	M3
ERROR								-0.13	%

COMMENTS

NOTE: during power up for verification unit was resetting every so often like a power up - signs of failure in future - recommend `budgeting for replacement.

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	0.70	PASS
mA OUTPUT	-0.23	PASS
TOTALIZER	-0.13	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.

ABB MAGMASTER
Verification Report

AS FOUND CERTIFICATION

FORWARD FLOW DIRECTION

PASS

CLIENT DETAIL	
CUSTOMER	OCWA - Georgian Highlands - Bruce Hub
CONTACT	Dan MacLeod
	Senior Operations Manager
	18 Caroline Street West
	Southampton, ON N0H 2L0
	Ph: 519-379-0431
	E: danmacleod@ocwa.com
VER. BY - FM	Paris Machuk / Mike White

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

EQUIPMENT DETAIL	
[MUT] MANUFACTURER	ABB
MODEL	MagMaster
CONVERTER SERIAL NUMBER	08W021272
FUSE	Lighting Panel - Breaker #9
PLANT ID	Port Elgin WWTP
METER ID	Was/Scum Flow Meter
FIT ID	N/A
CLIENT TAG	OCWA #61152
OTHER	ORG# ?
GPS COORDINATES	N44 26.324 W081 22.358
VERIFICATION DATE	May 16, 2023
CAL. FREQUENCY	Annual
CAL. DUE DATE	May, 2024

PROGRAMMING PARAMETERS		
DIAMETER (DN)	mm	150
F.S. FLOW - MAG	LPS	295.3
F.S. RANGE - O/P	LPS	20.00
TUBE CAL. FACTOR	1	1.67109

FORWARD TOTALIZER INFORMATION		
AS FOUND	203316	M3
AS LEFT	203320	M3
DIFFERENCE	4	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		**0.1**	**0.2**	**0.5**	**m/s**
				0		**1**	**2**	**5**	**% F.S. Flow**
				0.0		**14.8**	**29.5**	**73.8**	**% F.S. Range**
REF. FLOW RATE				**0.00**		**2.95**	**5.91**	**14.77**	LPS
MUT [Reading]				0.00		2.99	5.96	14.78	LPS
MUT [Difference]				0.00		0.04	0.05	0.01	LPS
MUT [% Error]				n/a		1.25	0.91	0.10	%
mA OUTPUT				**4.000**		**6.362**	**8.725**	**15.812**	mA
MUT [Reading]	min.	4.000	mA	3.993		6.392	8.733	15.857	mA
MUT [Difference]	max.	20.000	mA	-0.007		0.030	0.008	0.045	mA
MUT [% Error]				-0.18		0.46	0.09	0.28	%
TOTALIZER - REF. FLOW RATE				**Enter in Totalizer Test Velocity if Different (m/s)**			0.5	**14.765**	LPS
TOTALIZER [MUT]								1	M3
TEST TIME								67.07	SECONDS
CALC. TOTALIZER								0.990	M3
ERROR								0.97	%

COMMENTS

NOTE: display has random characters showing through display - possible signs of failure in near future.

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	0.75	PASS
mA OUTPUT	0.17	PASS
TOTALIZER	0.97	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.

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						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230295-0001**	**Asset#:**	NA
Due Date:	13-Apr-24	**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 Descrpition:**	Operator Room				

Instrument Information:	
Range:	14
Slope:	-57 mV/PH
Offset:	-53.7 mV

Input	**Input %**	**Temp. °C**	**As Found**	**Deviation**	**As Left**	**Deviation**
4.01	**28.64%**	**20.80**	4.09	2.00%	4.05	1.00%
7.00	**50.00%**	**20.80**	7.25	3.57%	7.05	0.71%
10.00	**71.43%**	**20.80**	10.48	4.80%	10.09	0.90%

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 #A2059	Mar-24
	pH 10.00 Cat2283649	Lot #A2341	Dec-23
	Technician Name	**Witness Name**	
	Vaibhav Patel	kone Kennedy	
Calibration Result: **Pass**	**Date:** 13-Apr-23	**Date:**	13-Apr-23

CALIBRATION / VERIFICATION

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Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230295-0001**	**Asset#:**	NA
Due Date:	13-Apr-24	**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 Descrpition:**	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	+-.10
Calibration Standard Solution 3:	1.47	+-.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**	1.48	0.68%	1.48	0.68%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Verified Successfully	DPD Chlrine LR Standard Kit	Lot #A2027	Feb-24
As the instrument being obsolete, Calibration can not be performed.			
	Technician Name	**Witness Name**	
	Vaibhav Patel	Kole Kennedy	
Verification Result: **Pass**	**Date:** 13-Apr-23	**Date:** 13-Apr-23	

CALIBRATION / VERIFICATION

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Customer Name:	OCWA - Southampton						
Plant Name and address:	Port Elgin WWTP - 815 Lehnen St, Port Elgin, ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230295-0001**	**Asset#:**	NA
Due Date:	13-Apr-24	**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 Descrpition:**	Operator Room				

Instrument Information:	
Range	Auto
Temperature:	18 Degree C
Offset	0
Slope	99.50%

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		8.65	-4.21%	8.57	-5.09%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.			
As left reading was 8.57 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	Justin Porter	
Calibration Result: **Pass**	**Date:** 13-Apr-23	**Date:** 13-Apr-23	

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:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230295-0001**	**Asset#:**	NA
Due Date:	13-Apr-24	**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 Descrpition:**	outside				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.95

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		12.20	35.11%	9.48	4.98%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.			
As left reading was 9.48 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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-23	**Date:**	13-Apr-23

CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
Ontario L4V 1B3. **Tel:** (905) 678-2882
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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:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230295-0001**	**Asset#:**	NA
Due Date:	13-Apr-24	**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 Descrpition:**	outside				

Instrument Information:	
Range at 4 mA:	Auto Range
Range at 20 mA:	Auto Range
Temperature:	21 Degree C
Slope correction	0.87

Input		**mg/L**		**As Found**	**Deviation**	**As Left**	**Deviation**
Dissolved oxygen from Air	**Should be between 8 to10 mg/l**	**9.03**		11.28	24.92%	9.85	9.08%

Comments	**Test Equipment Used**		
	Name / Type	**Serial No.**	**Due Date**
Air calibration was performed.			
As left reading was 9.85 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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-23	**Date:**	13-Apr-23

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 - Southhampton						
Plant Name and address:	632 Harbour St ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-23	**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 Descrpition:**	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**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-23	**Date:**	13-Apr-23

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 - Southhampton						
Plant Name and address:	632 Harbour St ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-23	**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**	37	7.50%	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-2023

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-23	**Date:**	13-Apr-23

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 - Southhampton						
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-23	**Manufacturer:**	MSA				
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 Descrpition:**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-23	**Date:**	13-Apr-23

CALIBRATION / VERIFICATION

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

Customer Name:	OCWA - Southhampton						
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-23	**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 Descrpition:**	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	304-402190658-1, Aug-2025
		CalGas H2S 40 PPM	304-402184551-1, Aug-2023
Other Outputs Tested:	**Not tested**	**Technician Name**	**Witness Name**
Loop Check Performed:	**Not Tested**	Vaibhav Patel	Kone Kennedy
Within Specification:	**Yes**	**Date:** 13-Apr-23	**Date:** 13-Apr-23

CALIBRATION / VERIFICATION

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Ontario L4V 1B3. **Tel:** (905) 678-2882
Email: service@spdsales.com
Web Site: www.spdsales.com

Customer Name:	OCWA - Southhampton						
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON						
Service Date:	13-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-23	**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**	20.8	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-23	**Date:**	13-Apr-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

CALIBRATION / VERIFICATION

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Ontario L4V 1B3. **Tel:** (905) 678-2882
Email: service@spdsales.com
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Customer Name:	OCWA - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**Manufacturer:**	MSA				
Follow-Up Required:	**Yes**	**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 Descrpition:**	815 Lehenen 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**	6.90	-82.75%	NA	#VALUE!

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Sensor Failed calibration. Sensor cannot able to read past 7 PPM.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025
Area has higher concentragtion of H2S gas accumulated.	CalGas H2S 40 PPM	304-402184551-1, Aug-2023
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		Kone Kennedy	
Within Specification:	**No**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	815 Lehenen 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**	20.8	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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**	25	-37.50%	NA	#VALUE!

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025
Area has higher concentragtion of H2S gas accumulated.	CalGas H2S 40 PPM	304-402184551-1, Aug-2023
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		Kone Kennedy	
Within Specification:	**No**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
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Email: service@spdsales.com
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Customer Name:	OCWA - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
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Customer Name:	OCWA - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

CALIBRATION / VERIFICATION

3230B American Dr, Mississauga,
Ontario L4V 1B3. **Tel:** (905) 678-2882
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Customer Name:	OCWA - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	14-Apr-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	14-Oct-23	**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 Descrpition:**	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	14-Apr-23	**Date:**	14-Apr-23

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 - Southhampton						
Plant Name and address:	815 Lehnen st, Port Elgin						
Service Date:	13-Apr-22	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-22	**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 Descrpition:**	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**	87	74.00%	50	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**100**	98	-2.00%	100	0.00%
Sensor 3	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**25**	27	8.00%	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	Kone Kennedy
Within Specification:	**Yes**	**Date:** 13-Apr-22	**Date:** 13-Apr-22

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 - Southhampton						
Plant Name and address:	815 Lehnen st, Port Elgin						
Service Date:	13-Apr-22	**Instrument Type:**	**AIT**	**W.O. Number:**	**220902-0002**	**Asset#:**	NA
Due Date:	13-Oct-22	**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 Descrpition:**	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**	92	84.00%	50	0.00%
Sensor 2	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**100**	100	0.00%	100	0.00%
Sensor 3	**Zero**	**0**	0	0.00%	0	0.00%
	Span	**25**	24	-4.00%	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		Kone Kennedy	
Within Specification:	**Yes**	**Date:**	13-Apr-22	**Date:**	13-Apr-22

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 - Southhampton						
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-24	**Manufacturer:**	MSA				
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 Descrpition:**	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**	54	8.00%	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-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-24	**Manufacturer:**	MSA				
Follow-Up Required:	**Yes**	**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 Descrpition:**	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**	NA	0.00%	NA	0.00%
Span	**40**	NA	#VALUE!	NA	#VALUE!

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Sensor Failed.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025
Need to replace sensor.	CalGas H2S 40 PPM	304-402184551-1, Aug-2024

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Steve	
Within Specification:	**No**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	345 10th Concession Rd 10, Port Elgin, ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-24	**Manufacturer:**	MSA				
Follow-Up Required:	**Yes**	**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**	NA	0.00%	NA	0.00%
Span	**20.8**	NA	#VALUE!	NA	#VALUE!

Comments	**Test Equipment Used**	
	Name / Type	**Serial and Due Date**
Need to replace sensor.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025
Calibrated the sensor but The Value kept falling		

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Steve	
Within Specification:	**No**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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**	52	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:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	815 Lehenen 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**	13.00	-67.50%	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 concentragtion of H2S gas accumulated.	CalGas H2S 40 PPM	304-402184551-1, Aug-2024
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:	**No**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	815 Lehenen 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

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Steve	
Within Specification:	**Yes**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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**	54	8.00%	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-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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**	17	-57.50%	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 concentragtion of H2S gas accumulated.	CalGas H2S 40 PPM	304-402184551-1, Aug-2024
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:	**No**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-24	**Manufacturer:**	MSA				
Follow-Up Required:	**Yes**	**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 Descrpition:**	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**
Sensor failed.	CalGas Oxygen 20.8% Vol	304-402190658-1, Aug-2025
Value was not stable and was falling into Alarm.		

Other Outputs Tested:	**Not tested**	**Technician Name**		**Witness Name**	
Loop Check Performed:	**Not Tested**	Vaibhav Patel		Steve	
Within Specification:	**No**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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**	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:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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**	63	26.00%	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-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen St.ON						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen st, Port Elgin						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-24	**Manufacturer:**	MSA				
Follow-Up Required:	**Yes**	**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 Descrpition:**	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**	-	0.00%	-	0.00%
	Span	**50**	-	#VALUE!	-	#VALUE!
Sensor 2	**Zero**	**0**	-	0.00%	-	0.00%
	Span	**100**	-	#VALUE!	-	#VALUE!
Sensor 3	**Zero**	**0**	-	0.00%	-	0.00%
	Span	**25**	-	#VALUE!	-	0.00%
Sensor 4	**Zero**	**0**	-	0.00%	-	0.00%
	Span	**18.0**	-	#VALUE!	-	#VALUE!

Comments		Test Equipment Used			
		Name / Type		**Serial and Due Date**	
Oxygen Sensor Falied.		MSA Quadgas		304-402541925-1 ; Sept-2026	
Need to replace Oxygen sensor.		(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:	**No**	**Date:**	17-Oct-23	**Date:**	17-Oct-23

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 - Southhampton						
Plant Name and address:	815 Lehnen st, Port Elgin						
Service Date:	17-Oct-23	**Instrument Type:**	**AIT**	**W.O. Number:**	**230882-0001**	**Asset#:**	NA
Due Date:	17-Apr-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 Descrpition:**	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**	69	38.00%	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**	18.4	2.22%	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-Oct-23	**Date:**	17-Oct-23

ONTARIO CLEAN WATER AGENCY
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Appendix C

Sludge Quality Sample Analysis

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (Hauled Sludge)

Waterworks/Project # **120001470**	C of C LIMS No: MA7-12949 RR
Facility Name **PORT ELGIN WPCP**	Laboratory Section
Org. # **5069**	Date Rec'd: MAY 19 2023 AR
Quote #	Sample condition upon receipt ______
Attached Parameter List [ ] No [✓] Yes	Time Rec'd: ____ Initials ______
	Temperature Upon Receipt 12X3 °C

Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment

Requested Turnaround Time: App. Req'd 24-48 h [ ] [X] 5-7d [ ] 7-10d [ ] Other Specify:______

	Report to: Process & Compliance Technician (PCT)	Data Transfer Contact: PCT	Invoice 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	705-652-2000 / 519-672-4500
Fax:	(519) 797-3080	(519) 797-3080	(519) 797-3080	705-652-6365 / 519-672-0361
Email:	kyoung@ocwa.com	kyoung@ocwa.com	apwesthighlands@ocwa.com	carrie.greenlaw@sgs.com / angela.stott@sgs.com

Station Acronym	Station Number (Short Name)		Sample Location Name	Date & Time Collected 1330	# of Bottles	TS	TS ASH	TS LOI	TKN	E.Coli	NH3 +NH4	Nitrite	Nitrate	Nitrite + Nitrate	TP	pH	Metals**						Comments Site ID #23706	Upload to MOE	Upload to OCWA
BSLQ	BSLQ	-	Sludge Quality Hauled Sludge	May 18, 2023	2	X	X	X	X		X	X	X	X	X	X	X							Yes [X] No [ ]	Yes [X] No [ ]
BSLQ	BSLQ	-	Sludge Quality Hauled Sludge	May 18/2023	1					X	— as per bottle received MA													Yes [X] No [ ]	Yes [X] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]
																								Yes [ ] No [ ]	Yes [ ] No [ ]

Sampler Name: Steve Elliott | Sampler Signature: S Elliott

* Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary digestion, Bsd - Biosolids sec. digestion, Bps - Biosolids pri super, Bss - Biosolids sec super, Bslq - Biosolids sludge quality, Bsoq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effluent, RAS - Return Activated Sludge, SBR - Secondary Treatment/SBRs, ScEf - Secondary Effluent, TWAS - Thickened Waste Activated Sludge, WAS - Waste Activated Sludge, IndW - Industrial Wastewater, PStn - Pump Stn, Sept - Septage, Lcht - Leachate, PrTr - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Aflo - Actiflo, TeBy - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow

608448659938 HC RHN

CM 10:00

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120001470
Project : PO#017018

01-June-2023

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. : 19 May 2023
LR Report: **CA12949-MAY23**

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
Sample Date & Time					18-May-23 13:30
Temperature Upon Receipt [°C]	---	---	---	---	12.0
Total Solids [mg/L]	23-May-23	21:36	25-May-23	09:47	25000
Total Solids (ASH) [mg/L]	23-May-23	21:36	25-May-23	09:47	6080
Total Solids (LOI) [mg/L]	23-May-23	21:36	25-May-23	09:47	19000
pH [pH Units]	24-May-23	08:34	24-May-23	15:24	6.81
Total Kjeldahl Nitrogen [as N mg/L]	23-May-23	16:03	26-May-23	11:51	1700
Ammonia+Ammonium (N) [as N mg/L]	23-May-23	17:06	25-May-23	10:28	128
Nitrite (as N) [mg/L]	23-May-23	19:47	29-May-23	16:01	0.3
Nitrate (as N) [mg/L]	23-May-23	19:47	29-May-23	16:01	< 0.3
Nitrate + Nitrite (as N) [mg/L]	23-May-23	19:47	29-May-23	16:01	0.3
Arsenic [mg/L]	30-May-23	13:59	01-Jun-23	14:23	< 0.1
Cadmium [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.015
Cobalt [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.04
Chromium [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.34
Copper [mg/L]	30-May-23	13:59	01-Jun-23	14:23	16
Mercury [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.012
Potassium [mg/L]	30-May-23	13:59	01-Jun-23	14:23	99
Molybdenum [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.16
Nickel [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.26
Phosphorus (Total) [mg/L]	30-May-23	13:59	01-Jun-23	14:23	849
Lead [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.2
Selenium [mg/L]	30-May-23	13:59	01-Jun-23	14:23	0.1
Zinc [mg/L]	30-May-23	13:59	01-Jun-23	14:23	10
E. Coli [cfu/1g dried wgt]	19-May-23	12:27	23-May-23	09:02	60000
E. Coli [cfu/100mL]	19-May-23	12:27	23-May-23	09:02	150000

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.

OnLine LIMS

0003352287

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SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120001470

Project : PO#017018
LR Report : **CA12949-MAY23**

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

OnLine LIMS

0003352287

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Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (Hauled Sludge)

Waterworks/Project #	120001470	C of C LIMS No:	JUN 12696
Facility Name	PORT ELGIN WPCP	Laboratory Section	Sample condition upon receipt
Org. #	5069	Date Rec'd: JUN 16 2023 KC	Time Rec'd: ____ Initials ____
Quote # / Attached Parameter List	No [ ] Yes [✓]	Temperature Upon Receipt 7 x 3 °C	

Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment

Requested Turnaround Time: App. Req'd 24-48 h [ ] | [X] 5-7d | [ ] 7-10d | [ ] Other Specify:______

	Report to: Process & Compliance Technician (PCT)	Data Transfer Contact: PCT	Invoice 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	705-652-2000 / 519-672-4500
Fax:	(519) 797-3080	(519) 797-3080	(519) 797-3080	705-652-6365 / 519-672-0361
Email:	kyoung@ocwa.com	kyoung@ocwa.com	apwesthighlands@ocwa.com	carrie.greenlaw@sgs.com / angela.stott@sgs.com

Station Acronym	Station Number (Short Name)		Sample Location Name	Date & Time Collected	# of Bottles	TS	TS ASH	TS LOI	TKN	E.Coli	NH3 +NH4	Nitrite	Nitrate	Nitrite + Nitrate	TP	pH	Metals**					Comments	Upload to MOE	Upload to OCWA
				June 15-2023																		Hauled Slude Samples		
BSLQ	BSLQ	-	Sludge Quality Hauled Sludge	11:35	2	X	X	X	X		X	X	X	X	X	X	X					for Kevin Farrow	Yes [X] No [ ]	Yes [X] No [ ]
BSLQ	BSLQ	-	Sludge Quality Hauled Sludge	11:40	1					X												Site #	Yes [X] No [ ]	Yes [X] No [ ]
											1EC		TS	Cut	Frombach		KC					25095	Yes [ ] No [ ]	Yes [ ] No [ ]
																							Yes [ ] No [ ]	Yes [ ] No [ ]
			Rec'd Bacti																				Yes [ ] No [ ]	Yes [ ] No [ ]
			bottle "11:40"																				Yes [ ] No [ ]	Yes [ ] No [ ]
			KMM																				Yes [ ] No [ ]	Yes [ ] No [ ]
																							Yes [ ] No [ ]	Yes [ ] No [ ]

Analysis requested was not checked off. Processed for all pre-printed analysis for which bottles were received. CA

Sampler Name:	Darren MacArthur	Sampler Signature:	D MacArthur

* Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary digestion, Bsd - Biosolids sec. digestion, Bps - Biosolids pri super, Bss - Biosolids sec super, Bslq - Biosolids sludge quality, Bsoq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effluent, RAS - Return Activated Sludge, SBR - Secondary Treatment/SBRs, ScEf - Secondary Effluent, TWAS - Thickened Waste Activated Sludge, WAS - Waste Activated Sludge, IndW - Industrial Wastewater, PStn - Pump Stn, Sept - Septage, Lcht - Leachate, PrTr - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Aflo - Actiflo, TeBy - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow

6084876257491
KM 11:00
KC8 [illegible]

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120001470
Project : PO#017018

23-June-2023

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. : 16 June 2023
LR Report: **CA12696-JUN23**

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					15-Jun-23 11:35	15-Jun-23 11:40
Temperature Upon Receipt [°C]	---	---	---	---	7.0	7.0
Total Solids [mg/L]	19-Jun-23	20:33	21-Jun-23	11:15	26800	27300
Total Solids (ASH) [mg/L]	19-Jun-23	20:33	21-Jun-23	11:15	6580	---
Total Solids (LOI) [mg/L]	19-Jun-23	20:33	21-Jun-23	11:15	20300	---
pH [pH Units]	19-Jun-23	07:42	19-Jun-23	10:00	7.30	---
Total Kjeldahl Nitrogen [as N mg/L]	19-Jun-23	16:43	21-Jun-23	10:59	1840	---
Ammonia+Ammonium (N) [as N mg/L]	19-Jun-23	17:14	20-Jun-23	11:50	257	---
Nitrite (as N) [mg/L]	21-Jun-23	15:07	23-Jun-23	08:52	< 3	---
Nitrate (as N) [mg/L]	21-Jun-23	15:07	23-Jun-23	08:52	< 3	---
Nitrate + Nitrite (as N) [mg/L]	21-Jun-23	15:07	23-Jun-23	08:52	< 3	---
Arsenic [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	< 0.1	---
Cadmium [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.011	---
Cobalt [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.03	---
Chromium [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.23	---
Copper [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	9.3	---
Mercury [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.007	---
Potassium [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	102	---
Molybdenum [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.11	---
Nickel [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.16	---
Phosphorus (Total) [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	506	---
Lead [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	0.1	---
Selenium [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	< 0.1	---
Zinc [mg/L]	21-Jun-23	15:41	22-Jun-23	17:43	7	---
E. Coli [cfu/1g dried wgt]	16-Jun-23	16:08	19-Jun-23	12:43	---	69597
E. Coli [cfu/100mL]	16-Jun-23	16:08	19-Jun-23	12:43	---	190000

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.

OnLine LIMS

0003376971

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SGS Canada Inc.
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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120001470

Project : PO#017018
LR Report : **CA12696-JUN23**

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

OnLine LIMS

0003376971

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SGS Canada Inc. Environment-Health & Safety statement of conformity decision rule does not consider uncertainty when analytical results are compared to a specified standard or regulation.

Ontario Clean Water Agency - Request for Laboratory Services and CHAIN OF CUSTODY - SEWAGE (Hauled Sludge)

Waterworks/Project #	**120001470**	C of C LIMS No:	OCT 15945
Facility Name	**PORT ELGIN WPCP**	Laboratory Section Date Rec'd:	OCT 26 2023 pe
Org. #	**5069**	Sample condition upon receipt / Time Rec'd: / Initials	
Quote # / Attached Parameter List	☐ No ☑ Yes	Temperature Upon Receipt	11, 11, 13 °C

Identification of Regulation under which the sample(s) fall: No Requirement to Report Sample Results Under Any Regulation for Wastewater Treatment

Requested Turnaround Time: App. Req'd — 24-48 h ☐ — X 5-7d — 7-10d ☐ — Other ☐ Specify:

	Report to: Process & Compliance Technician (PCT)	Data Transfer Contact: PCT	Invoice 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	705-652-2000 / 519-672-4500
Fax:	(519) 797-3080	(519) 797-3080	(519) 797-3080	705-652-6365 / 519-672-0361
Email:	kyoung@ocwa.com	kyoung@ocwa.com	apwesthighlands@ocwa.com	carrie.greenlaw@sgs.com / angela.stott@sgs.com

Sample						Parameters																Comments	Upload to MOE	Upload to OCWA
Station Acronym	Station Number (Short Name)		Sample Location Name	Date & Time Collected	# of Bottles	TS	TS ASH	TS LOI	TKN	E.Coli	NH3 +NH4	Nitrite	Nitrate	Nitrite + Nitrate	TP	pH	Metals**							
BSLQ	BSLQ	-	Sludge Quality Hauled Sludge	Oct 25, 2023 10:20	2	X	X	X	X		X	X	X	X	X	X	X					Hauled Sludge to Saugeen Trails Site #25069	Yes ☒ No ☐	Yes ☒ No ☐
BSLQ	BSLQ	-	Sludge Quality Hauled Sludge	10:25	1					(X)													Yes ☒ No ☐	Yes ☒ No ☐
			made out for TS from bacti lab		~~bottle says 10:35~~ KL																		Yes ☐ No ☐	Yes ☐ No ☐
					~~Bacti bottle says 10:30~~																		Yes ☐ No ☐	Yes ☐ No ☐
																							Yes ☐ No ☐	Yes ☐ No ☐
									* Checked Ecoli as per bottle received. HA														Yes ☐ No ☐	Yes ☐ No ☐
																							Yes ☐ No ☐	Yes ☐ No ☐
																							Yes ☐ No ☐	Yes ☐ No ☐

Sampler Name:	Darren MacArthur	Sampler Signature:	D MacArthur

* Station Acronym: Cell - Cell Contents, Dis - Disinfection, Down - Downstream, Eff - Final Effluent, PrBy - Primary Bypass, Raw - Raw Sewage, ScBy - Secondary Bypass, Up - Upstream, Well - Monitoring Well, Aer - Aeration, Brs - Biosolids-raw sludge, Bth - Biosolids thickening, Bpd - Biosolids primary digestion, Bsd - Biosolids sec. digestion, Bps - Biosolids pri super, Bss - Biosolids sec super, Bslq - Biosolids sludge quality, Bsoq - Biosolids soil quality, DAF - Dissolved Air Floatation, Grit - Primary Treatment/Grit, PrEf - Primary Effluent, RAS - Return Activated Sludge, SBR - Secondary Treatment/SBRs, ScEf - Secondary Effluent, TWAS - Thickened Waste Activated Sludge, WAS - Waste Activated Sludge, IndW - Industrial Wastewater, PStn - Pump Stn, Sept - Septage, Lcht - Leachate, PrTr - Primary Treatment, ReAr - Re-aeration, Tert - Tertiary Treatment, Aflo - Actiflo, TeBy - Tertiary Bypass, Hold - Holding Tank, CSO - Combined Sewer Overflow, SSO - Sanitary Sewer Overflow

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Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120001470
Project : PO#017018

03-November-2023

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. : 26 October 2023
LR Report: **CA15945-OCT23**

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-Sudge Quality Hauled Sludge-Bacti
Sample Date & Time					25-Oct-23 10:20	25-Oct-23 10:25
Temperature Upon Receipt [°C]	---	---	---	---	11.0	11.0
Total Solids [mg/L]	26-Oct-23	21:28	01-Nov-23	11:17	22300	23800
Total Solids (ASH) [mg/L]	27-Oct-23	19:17	01-Nov-23	11:17	5590	---
Total Solids (LOI) [mg/L]	27-Oct-23	19:17	01-Nov-23	11:17	16700	---
pH [pH Units]	31-Oct-23	12:58	01-Nov-23	10:00	6.74	---
Total Kjeldahl Nitrogen [as N mg/L]	01-Nov-23	13:21	03-Nov-23	10:16	708	---
Ammonia+Ammonium (N) [as N mg/L]	27-Oct-23	15:28	30-Oct-23	11:57	18.1	---
Nitrite (as N) [mg/L]	27-Oct-23	10:31	30-Oct-23	14:25	< 3	---
Nitrate (as N) [mg/L]	27-Oct-23	10:31	30-Oct-23	14:25	< 3	---
Nitrate + Nitrite (as N) [mg/L]	27-Oct-23	10:31	30-Oct-23	14:25	< 3	---
Arsenic [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	< 0.1	---
Cadmium [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.012	---
Cobalt [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.03	---
Chromium [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.29	---
Copper [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	11	---
Mercury [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.009	---
Potassium [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	74	---
Molybdenum [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.11	---
Nickel [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.20	---
Phosphorus (Total) [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	677	---
Lead [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	0.2	---
Selenium [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	< 0.1	---
Zinc [mg/L]	31-Oct-23	12:52	02-Nov-23	10:37	9	---
E. Coli [cfu/1g dried wgt]	26-Oct-23	14:21	30-Oct-23	11:08	---	205882
E. Coli [cfu/100mL]	26-Oct-23	14:21	30-Oct-23	11:08	---	490000

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.

OnLine LIMS

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0003522375

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120001470

Project : PO#017018
LR Report : **CA15945-OCT23**

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

OnLine LIMS

0003522375

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ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix D

Sludge Haulage Records

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin # 5069	Saugeen Shores	May 17, 2023

Carrier/ Hauler	Site #
Bartels Enviro	23706

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	12:20	12:40	44	127	T-20	BB
2	12:50	1:25	44	415	T-17	DH
3	1:20	1:40	44	127	T20	BB
4	1:55	2:20	44	415	T-17	DH
5	2:30	3:00	44	127	T20	BB
6	3:20	3:35	44	415	T-17	DH
7	4:00	4:30	44	127	T20	BB
8	4:35	5:00	44	415	T-17	DH
9	5:15	5:45	44	127	T20	BB
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 396 m^3

REMARKS

Date May 17, 2023

OCWA Rep. Signature

X Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin # 5069	Saugeen Shores	May 18-23

Carrier/ Hauler	Site #
Bartels Environmental	23706 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:45	7:10	44	415	T-17	DH
2	7:20	7:45	44	127	T20	BB
3	8:00	8:20	44	415	T-17	DH
4	8:30	8:50	44	127	T20	BB
5	9:05	9:25	44	415	T-17	DH
6	9:40	10:00	44	127	T20	BB
7	10:30	10:50	44	415	T-17	DH
8	11:00	11:25	44	127	T20	BB
9	12:00	12:20	44	415	T-17	DH
10	12:20	12:45	44	127	T20	BB
11	12:50	1:20	44	415	T-17	DH
12	1:20	1:45	44	127	T20	BB
13	1:50	2:15	44	415	T-17	DH
14	2:20	2:45	44	127	T20	BB
15	3:10	3:25	44	415	T-17	DH
16	3:30	3:50	44	127	T20	BB
17	4:10	4:25	44	415	T-17	DH
18	5:00	5:30	44	127	T20	BB
19						
20						

Daily Total 792 m^3

REMARKS

Date May 18, 2023

OCWA Rep. Signature D. Elliott

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin # 5069	Saugeen Shores	May 19-23

Carrier/ Hauler	Site #
Bartels Enviromental	25078 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:50	7:10	44	415	T-17	DH
2	7:20	7:45	44	127	T20	BB
3	9:00	9:20	44	127	T20	BB
4	10:00	10:20	44	127	T20	BB
5	11:00	11:20	44	127	T20	BB
6	12:00	12:20	44	127	T20	BB
7	12:55	1:20	44	415	T-17	DH
8	1:20	1:45	44	127	T20	BB
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 352 m^3

REMARKS

Date May 19, 2023

OCWA Rep. Signature

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin 5069	Bruce	June 15-23

Carrier/ Hauler	Site #
Bartels Enviro—	25095 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:10	7:25	44	415	T-26	DH
2	7:30	7:45	44	343	T-19	MG
3	8:10	8:55	44	415	T-26	DH
4	9:20	9:45	44	343	T-19	MG
5	10:10	10:25	44	415	T-26	DH
6	11:00	11:15	44	343	T-19	MG
7	11:20	11:40	44	415	T-26	DH
8	12:25	12:40	44	343	T-19	MG
9	12:40	1:00	44	415	T-26	DH
10	2:20	2:40	44	415	T-26	DH
11	2:45	3:00	44	343	T-19	MG
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 484 m^3

REMARKS

Date June 15, 2023

OCWA Rep. Signature Steve Elliott

Carrier/ Hauler Signature X

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin 5069	Bruce	June 16-23

Carrier/ Hauler	Site #
Bartels Enviro	25095 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time In	Time Out	Load Volume (m^3)	Carrier Information: Vehicle License #	Carrier Information: Trailer #	Driver Initials
1	6:30	6:50	44	415	T-26	DH
2	7:10	7:25	44	343	T-19	MG
3	7:50	8:05	44	4209	T-17	WN
4	8:15	8:35	44	415	T-26	DH
5	9:50	10:10	44	343	T-19	MG
6	10:20	10:40	44	415	T-26	DH
7	10:50	11:10	44	4209	T-17	WN
8	11:50	12:10	44	343	T-19	MG
9	12:20	12:40	44	415	T-26	DH
10	12:50	1:10	44	4209	T-17	WN
11	2:40	3:00	44	415	T-26	DH
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 484 m^3

REMARKS

Date June 16, 2023

OCWA Rep. Signature Steve Elliott

X Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
PORT ELGIN 5069	Bruce	June 17, 2023

Carrier/ Hauler	Site #
BARTELS ENVIRO.	25095

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	8:20	44	415	T-26	DH
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 44 m^3

REMARKS

Date June 17, 2023

OCWA Rep. Signature Stu Elliott

X Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin WWTP	Saugeen Shores	June 19 23

Carrier/ Hauler	Site #
Bartels	25095

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	8:45	9:05	44	415	T-26	DN
2	9:10	9:30	44	343	T-19	MG
3	10:10	10:30	44	415	T-26	DN
4	10:35	11:00	44	343	T-19	MG
5	11:35	11:55	44	415	T-26	DN
6	12:10	12:35	44	343	T-19	MG
7	1:00	1:20	44	415	T-26	DN
8	1:50	2:15	44	343	T-19	MG
9	2:20	2:40	44	415	T-26	DN
10	3:25	3:50	44	343	T-19	MG
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 440 m^3

REMARKS

Date June 19, 2023

OCWA Rep. Signature Steve Elliott

X Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	June 2023

Carrier/ Hauler	Site #
Bartels Env.	25095 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:25	6:45	44	415	T-26	DH
2	6:50	7:10	44	343	T-19	MG
3	7:40	8:00	44	415	T-26	DH
4	8:20	8:45	44	343	T-19	MG
5	9:00	9:20	44	415	T-26	DH
6	10:00	10:25	44	343	T-19	MG
7	10:30	10:50	44	415	T-26	DH
8	12:00	12:20	44	415	T-26	DH
9	12:20	12:45	44	343	T-19	MG
10	1:15	1:35	44	415	T-26	DH
11	1:55	2:13	44	343	T-19	MG
12	2:40	3:00	44	415	T-26	DH
13	3:25	3:50	44	343	T-19	MG
14	4:10	4:30	44	415	T-26	DH
15						
16						
17						
18						
19						
20						

Daily Total 616

REMARKS

Date June 20-2023

OCWA Rep. Signature Darren MacArthur

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	June 21-23

Carrier/ Hauler	Site #
Bartels Env.	25095 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:15	6:35	44	415	T-26	DH
2	6:40	7:00	44	343	T-19	MG
3	7:45	8:10	44	415	T-26	DH
4	8:15	8:40	44	343	T-19	MG
5	9:10	9:30	44	415	T-26	DH
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Daily Total 220

REMARKS

Date June 21 2023

OCWA Rep. Signature

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page | of

Plant/ Facility Name	Area	Date
Port Elgin SOG 9	Bruce	Sept 7-23

Carrier/ Hauler	Site #
Bactels	241 98 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	7:15	7:30	44	415	T-26	DH
2	7:45	8:00	~~4382~~ 44	4382	T 14	JH
3	8:00	8:20	44	127	T20	BS
4	8:45	9:10	44	415	T-26	DH
5	9:10	9:25	44	4382	T 14	JH
6	9:30	9:50	44	127	T20	BS
7	10:00	10:20	44	415	T-26	DH
8	10:35	10:50	44	4382	T 14	JH
9	11:00	11:25	44	127	T20	BS
10	11:35	11:50	44	415	T-26	DH
11	12:00	12:30	44	4382	T 14	JH
12	12:30	1:00	44	127	T20	BS
13	1:10	1:30	44	415	T-26	DH
14	1:30	1:45	44	4382	T 14	JH
15	2:00	2:30	44	127	T20	BS
16	2:40	3:10	44	415	T-26	DH
17	3:30	3:45	44	4382	T 14	JH
18	4:00	4:30	44	127	T20	BS
19	4:30	4:50	44	415	T-26	DH
20	4:50	5:10	44	4382	T-14	JH

Daily Total 880 m^3

REMARKS

Date Sept 7/23

OCWA Rep. Signature Ste Elliott

Carrier/ Hauler Signature BBactels

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Plant/ Facility Name	Area	Date
PORT ELGIN 5069	Bruce	Sept. 8/23

Carrier/ Hauler	Site #
BARTELS	24198 NOTE: ONLY ONE SHEET PER SITE

Load No.	Time		Load Volume (m^3)	Carrier Information		Driver Initials
	In	Out		Vehicle License #	Trailer #	
1	6:10	6:30	44	127	T20	BB
2	6:35	7:00	44	415	T26	DH
3	7:00	7:20	44	4382	T14	
4	8:00	8:20	44	427	T-20	BB
5	8:20	8:40	44	415	T-26	DH
6	8:40	9:00	44	4382	T14	
7	9:00	9:20	44	127	T20	BB
8	9:20	9:30	44	415	T-26	DH
9	9:30	10:00	44	4382	T14	
10	10:45	11:10	44	127	T20	BB
11	11:10	11:30	44	415	T-26	DH
12	11:30	11:50	44	4382	T14	
13	12:00	12:20	44	127	T20	BB
14	1:40	1:10	44	415	T-26	DH
15	1:10	1:30	44	4382	T14	
16	1:40	2:10	44	127	T20	BB
17	2:10	2:25	44	415	T-26	DH
18	2:30	2:50	44	4382	T14	
19						
20						

Daily Total 792

REMARKS

Date Sept. 08/23

OCWA Rep. Signature Steve Elliott

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

Daily Record of Sludge Haulage

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Page of

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	Oct 25-23

Carrier/ Hauler	Site #
Bartels	25069

NOTE: ONLY ONE SHEET PER SITE

Load No.	Time In	Time Out	Load Volume (m^3)	Carrier Information: Vehicle License #	Carrier Information: Trailer #	Driver Initials
1	6:00	6:20	44	4115	T-26	DH
2	6:30	6:50	44	4282	T-27	JH
3	7:30	7:50	44	4115	T-26	DH
4	8:45	9:05	44	4282	T-27	JH
5	9:25	9:50	44	4115	T-26	DH
6	9:55	10:20	44	4282	T-27	JH
7	10:30	10:55	44	4115	T-26	DH
8	10:55	11:20	44	4282	T-27	JH
9	11:30	11:50	44	4115	T-26	DH
10	11:50	12:10	44	4282	T-27	JH
11	12:20	12:40	44	4115	T-26	DH
12	12:45	1:05	44	4282	T-27	JH
13	1:20	1:40	44	4115	T-26	DH
14	1:45	2:10	44	4282	T-27	JH
15	2:15	2:35	44	4115	T-26	DH
16	2:40	3:05	44	4282	T-27	JH
17	3:10	3:30	44	4115	T-26	DH
18	3:50	4:10	44	4282	T-27	JH
19	4:15	4:35	44	4115	T-26	DH
20	4:50	5:10	44	4282	T-27	JH
		Daily Total	880			

REMARKS

Date Oct 25, 2023

OCWA Rep. Signature Darren McArthur

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Daily Record of Sludge Haulage

Page of

Plant/ Facility Name	Area	Date
Port Elgin	Saugeen Shores	Oct 26-23

Carrier/ Hauler	Site #
Bartels Env.	25069

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	415	T-26	DH
2	8:00	8:20	44	4282	T-27	JH
3	8:40	9:00	44	415	T-26	DH
4	9:00	9:20	44	4282	T-27	JH
5	9:25	9:45	44	415	T-26	DH
6	9:50	10:10	44	4282	T-27	JH
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
		Daily Total	264			

REMARKS

Date Oct 26, 2023

OCWA Rep. Signature Dawn McCall

Carrier/ Hauler Signature

White Copy = OCWA Yellow Copy = Carrier Pink Copy = Facility

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix E

Community Complaints

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix F

Septage Receiving

QEMS Ontario Clean Water Agency	5069 Port Elgin WWTP Sludge Receiving Station Month: ~~JANUARY~~ May Year: 2023	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	Residential	Industrial	Commercial	Volume (m^3)
May 2?	10:25	JP	OCWA	Mill St Pump Station	✓			1
June 1	11:45	JP	OCWA	Gobles Scout	–			8
June ?	09:20	JP	OCWA	Gobles Scout	✓			4
June 2?	0930	JP	OCWA	Gobles Scout Washroom	–			4
June 30	12:25	JP	OCWA	Gobles Scout Washroom	–			3
July 7	0820	JP	OCWA	Gobles Scout Washroom	–			5
July 12	14:15	JP	OCWA	Gobles Scout Washroom	–			5
July 21	0925	JP	OCWA	Gobles Scout Washroom	–			5
July 28	0950	JP	OCWA	Gobles Scout Washroom	–			8
Aug 3	0855	JP	OCWA	Gobles Scout Washroom	–			6
Aug 11	10:05	JP	OCWA	Gobles Scout Washroom	–			8
Aug 18	0900	JP	OCWA	Gobles Scout Washroom	–			4
Aug 24	0910	JP	OCWA	Gobles Scout Washroom	–			4
Sept 1	0840	JP	OCWA	Gobles Scout Washroom	–			3
Sept 8	0840	JP	OCWA	Gobles Scout Washroom	–			6
Sept 14	11:25	JP	OCWA	Gobles Scout Washroom	–			2
Sept 21	09:15	JP	OCWA	Gobles Scout Washroom	–			3
Oct 13	0950	JP	OCWA	Gobles Scout Washroom	–			4
				Month of Year **Total**				~~78~~ 83

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Appendix G

Spills & Bypass Reports

From: Karla Young
To: "Graham, Robert G. (MECP)"; "Smith, Mark (MECP)"; "Shannon, Rhonda (MECP)"
Cc: Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2023 Q1 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: May-11-23 10:52:00 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	Time		Duration	Volume	Treatment Process Bypassed	Samples Collected	Reason for Bypass	Impact of Bypass	Mitigation
	Start	End	HH:MM	(M^3)					
n/a	n/a	n/a	n/a	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	Time		Duration	Volume	Level of Treatment	Disinfection Status of Overflow	Reason for Overflow	Receiver	Samples Collected	Impact on Receiver
	Start	End	HH:MM	(M^3)						
n/a	n/a	n/a	n/a	n/a	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: "Graham, Robert G. (MECP)"; "Smith, Mark (MECP)"; "Shannon, Rhonda (MECP)"
Cc: Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2023 Q2 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: August-10-23 12:12:00 PM

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	Time		Duration	Volume	Treatment Process Bypassed	Samples Collected	Reason for Bypass	Impact of Bypass	Mitigation
	Start	End	HH:MM	(M^3)					
n/a	n/a	n/a	n/a	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;

	Time	Duration	Volume		Disinfection	Reason		Samples	Impact on

Date					Level of Treatment	Status of Overflow	for Overflow	Receiver	Collected	Receiver
	Start	End	HH:MM	(M^3)						
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

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From: Karla Young
To: Graham, Robert G. (MECP); "Smith, Mark (MECP)"; "Shannon, Rhonda (MECP)"
Cc: Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2023 Q3 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: October-23-23 11:03:00 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	Time		Duration	Volume	Treatment Process Bypassed	Samples Collected	Reason for Bypass	Impact of Bypass	Mitigation
	Start	End	HH:MM	(M^3)					
n/a	n/a	n/a	n/a	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;

	Time	Duration	Volume		Disinfection	Reason		Samples	Impact on

Date					Level of Treatment	Status of Overflow	for Overflow	Receiver	Collected	Receiver
	Start	End	HH:MM	(M^3)						
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

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From: Karla Young
To: "Graham, Robert G. (MECP)"; "Smith, Mark (MECP)"; "Shannon, Rhonda (MECP)"
Cc: Daniel Macleod; -GHRH-SPCM@ocwa.com (Mailing List); Caralynn McRae
Subject: 2023 Q4 - Bypass/Overflow Event Summary - Port Elgin WPCP (120001470) - Town of Saugeen Shores
Date: January-30-24 4:51:00 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	Time		Duration	Volume	Treatment Process Bypassed	Samples Collected	Reason for Bypass	Impact of Bypass	Mitigation
	Start	End	HH:MM	(M^3)					
n/a	n/a	n/a	n/a	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;

	Time	Duration	Volume		Disinfection	Reason		Samples	Impact on

Date					Level of Treatment	Status of Overflow	for Overflow	Receiver	Collected	Receiver
	Start	End	HH:MM	(M^3)						
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Thanks
Karla

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