



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Bayfield Sewage Treatment Plant 2022 Annual Performance Report

Municipality of Bluewater
WW#120002754

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Section 1: Overview of the System

The Bayfield Sewage Treatment Plant is operated per Amended Environmental Compliance Approval (ECA) # 6250-AB4JCT issued August 26, 2016. The Bayfield Sewage Treatment Plant is a Class 1 Wastewater Treatment facility.

The sewage treatment facility is located on a site approximately 750 m North of Huron County Rd #3 and approximately 2.5 km east of the east boundary of the Village of Bayfield and consists of the following:

Inlet Works

- Inlet raw sewage force main in an easement from Huron County Road #3 to the Control Building and Inlet Chamber including in-ground air relief valve chambers;
- A Control Building housing an inlet raw sewage flow meter with by-pass valves and piping;
- An Inlet Chamber with separate inlet piping to either sewage lagoon Cell 1 and/or lagoon Cell 2;

Waste Stabilization Lagoon

- Two Sewage Cells 1 and 2, each having top dimensions of 424.4 m x 154.4 m, a design liquid depth of 1.8 m and each having an effective storage volume of approximately 110,554 m³ with the cells operating in series;
- To facilitate the Bayfield WWTF expansion, a new berm was constructed in the fall of 2022 to partition off a section of the existing Lagoon Cell #2. Construction of the new facilities is scheduled to begin in Spring/Summer of 2023 in the area where Lagoon Cell #2 is sectioned off.
- A Transfer Chamber to interconnect sewage lagoon Cell 1 and lagoon Cell 2;
- Gravity discharge pipe from each cell to the Filter Pumping Station Inlet Chamber;

Intermittent Sand Filters

- A Filter Pumping Station Inlet Chamber including valves and piping to allow discharge by gravity to the Filter Pumping Station or the Discharge Chamber;
- An in-ground Filter Pumping Station consisting of two submersible sewage pumps, having a total rated capacity with parallel operation of 215.0 L/s at a TDH of 9.8 m, valves and piping, liquid level indicators and alarm, etc. with force main discharge piping to a filter Distribution Chamber;
- A Filter Distribution Chamber with valves to permit the Filter Pumping Station to discharge to either or both of the Intermittent Sand Filters;
- Two Intermittent Sand Filters each with a top surface area of approximately 71 m x 37 m and a minimum effective filtering area of 2,312 m², together with a distribution piping and under drain collection piping, designed for an average hydraulic loading rate of 1,708 m³/d, discharging by gravity to a Discharge Chamber;

Phosphorus Removal System

- A liquid alum feed system for phosphorous removal located in the Control Building, consisting of one 27,000 L chemical storage tank and three metering pumps (two duty, one standby) all within a containment enclosure, with dual point injection into the inlet raw sewage force main and Cell 1 – Cell 2 Transfer Chamber;

Effluent Discharge and Outfall

- A Discharge Chamber and Sampling Building housing flow measurement devices including weir level transducer baffle and effluent sample piping;
- Outfall structure and piping to Bayfield River;

Imported Sewage

- Leachate is to be received at the influent chamber for co-treatment at the works, leachate is imported from the Stanley Landfill site located at 38594 Mill Road in the Municipality of Bluewater, at a rate not exceeding 200 m³/ d or an annual total of 2,000 m³/year;

Miscellaneous

All other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the Works.

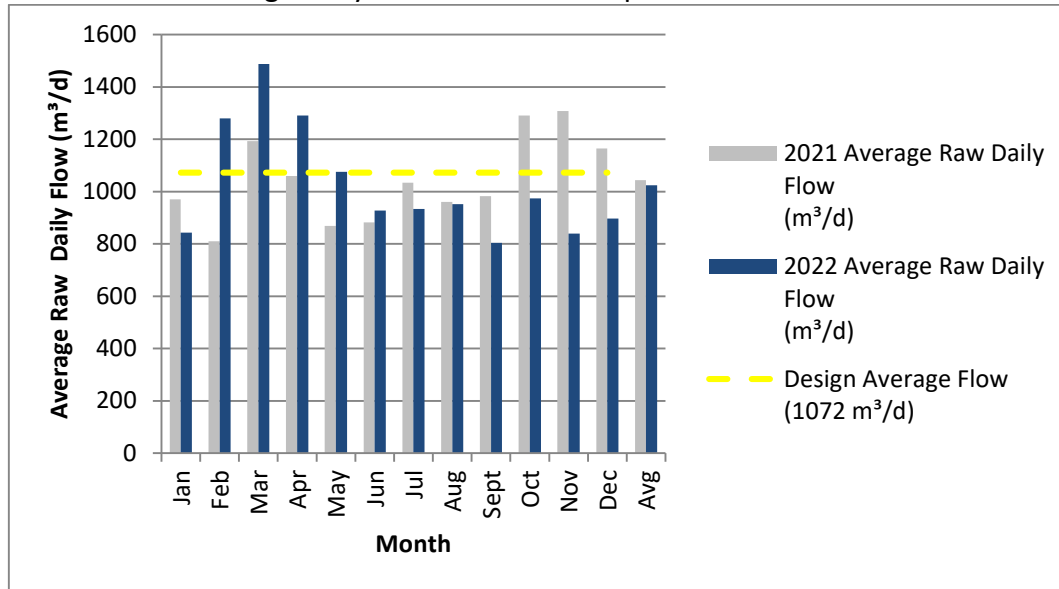
The following provides a summary of the reporting requirements of the current Environmental Compliance Approval:

Section 2: Monitoring Data

Raw Sewage Monitoring

The 2022 average daily flow of raw sewage was 1,023.56 m³/day; this is 95.48% of the rated capacity of 1,072 m³/day. The maximum daily raw sewage flow for 2022 was 3,266.39 m³/day; this is 304.70 % of the rated capacity. The maximum daily raw sewage flow occurred in February of 2022; see charts 1a and 1b.

Chart 1. Raw Average Daily flows for 2022 compared to 2021 flows.



Raw sewage is sampled on a monthly basis and tested for BOD₅, Total Suspended Solids, Total Phosphorus and Total Kjeldahl Nitrogen.

Effluent Monitoring

The effluent is monitored during discharge on a weekly basis and sampled for parameters identified in the ECA.

There were challenges this year meeting the compliance limits due to a necessary discharge at the end of the season to empty the contents of Cell 2 for the berm construction. The exceedances are summarized in Table 1 and 2 and further described throughout this section.

The lagoon discharged into the Bayfield River during the months of March, April, May, June, July, August, September, October and November of 2022. The total amount discharged into the Bayfield River for the 2022 reporting period was 269,875.89 m³. The average daily discharge flow was 1,458.79 m³/day with a maximum daily discharge flow of 7,941.82 m³/day recorded in November 2022. Refer to Chart 2 for summary of monthly effluent discharged.

Chart 2: Bayfield Lagoons Discharge Final Effluent Flows in 2022 compared to 2021 flows.

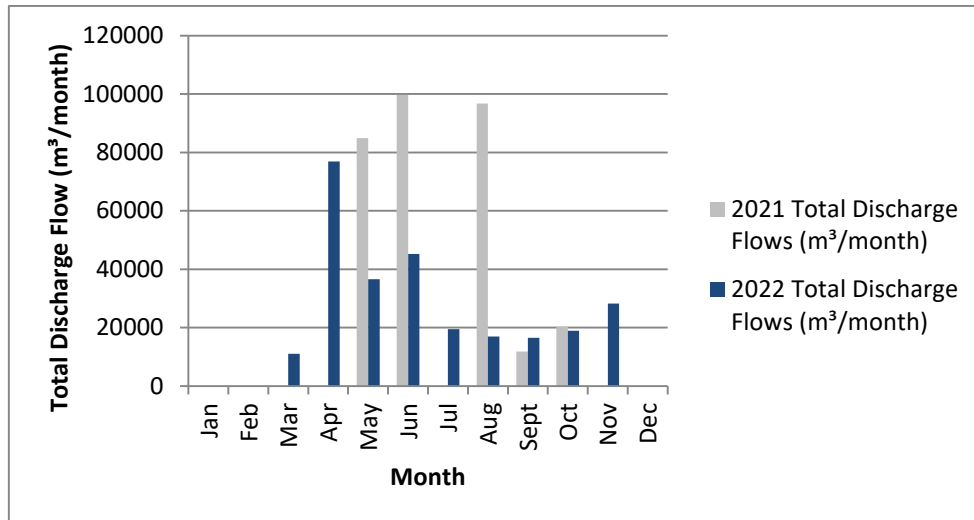


Table 1. Effluent Concentrations Limits compared against the average monthly concentrations.

Effluent Parameter	Monthly Average Concentration	2022 Average Monthly Concentration Ranges	Number of Exceedances
CBOD5	10.0 mg/L	2.0 - 23.5 mg/L	3
Total Suspended Solids	10.0 mg/L	2.0 – 420.0 mg/L	4
Total Phosphorus	0.5 mg/L	0.2 - 2.1 mg/L	3
Total Ammonia Nitrogen	4.0 mg/L	0.1 - 4.7 mg/L	1
E. Coli	200 cfu/ 100 mL	1.0 - 166 cfu/ 100mL	0
pH of the effluent	maintained between 6.0 to 9.5	6.3 - 7.8	0

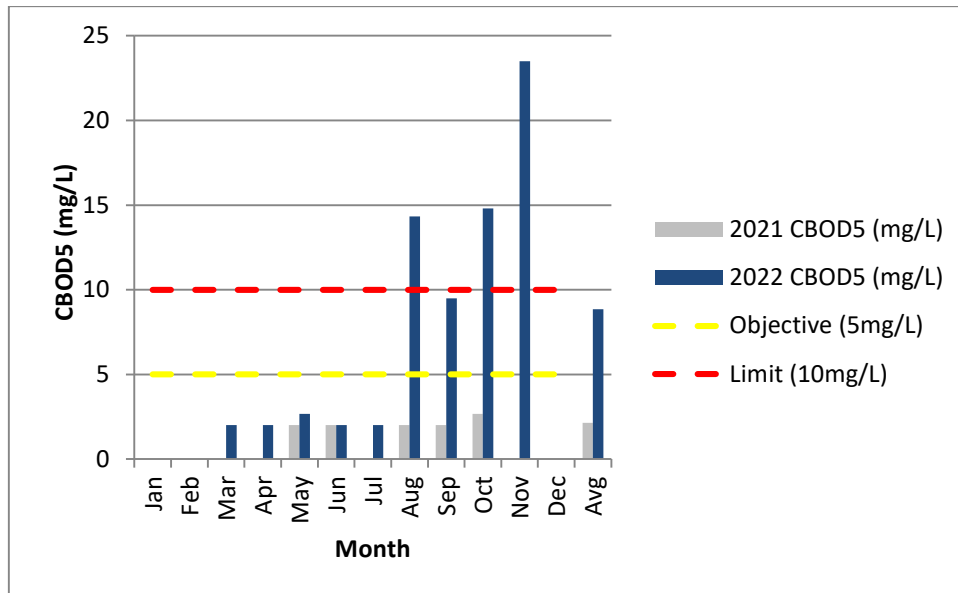
Table 2. Effluent Loadings compared to the limits for loading in the ECA.

Effluent Parameter	Annual Total Loading	2022 Seasonal Average Loading
CBOD5	15.1 kg/d	9.2 kg/d
Total Suspended Solids	15.1 kg/d	66.9 kg/d
Total Phosphorus	0.76 kg/d	0.61 kg/d

The 2022 final effluent annual average Carbonaceous Biochemical Oxygen Demand (CBOD5) concentration was 8.84 mg/L with a maximum monthly concentration of 23.5 mg/L recorded for November 2022; compliance limit is 10.0 mg/L (refer to Chart 3). The 2022 seasonal average loading for CBOD5 was 9.2 kg/d; compliance limit is 15.1 kg/d. Final effluent CBOD5 discharge concentrations were not consistently compliant with Environmental Compliance Approval # 6250-AB4JCT Effluent Limits and Objectives throughout 2022. The CBOD5 compliance limit of 10.0 mg/L was not met in the months of August (14.3 mg/L), October (14.8 mg/L) and November (23.5 mg/L) of 2022. The CBOD5 objective value of 5.0 mg/L was not met in the months of August (14.3 mg/L), September (9.5 mg/L), October (14.8 mg/L) and November (23.5 mg/L). Exceedances were the result of limited facility storage space,

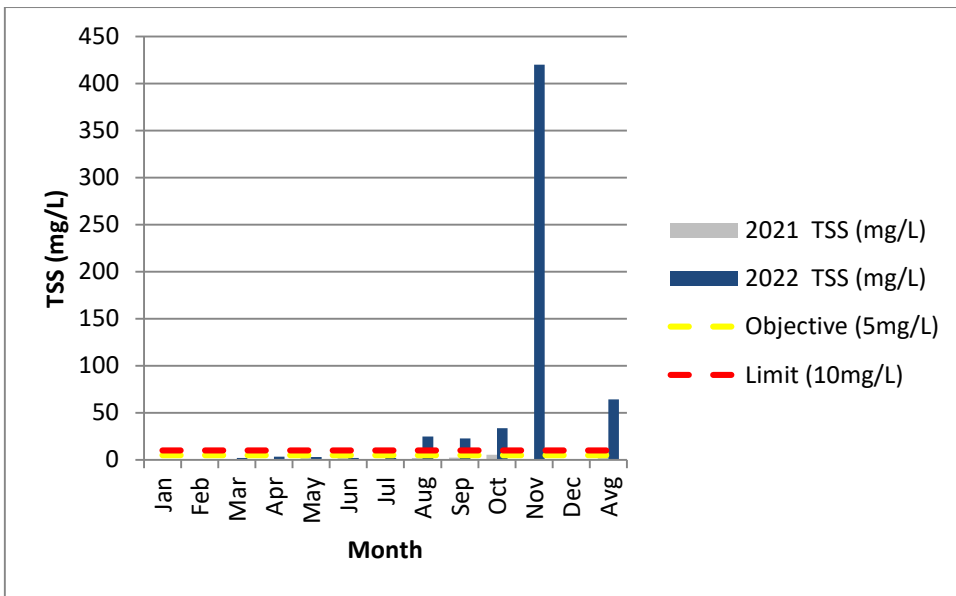
continual use of sand filters and discharging Cell 2 to the empty level to accommodate the construction of a new berm as part of facility upgrades in process.

Chart 3: Bayfield Lagoons Average Monthly Effluent Carbonaceous Biochemical Oxygen Demand (CBOD5) results for 2022 compared to 2021.



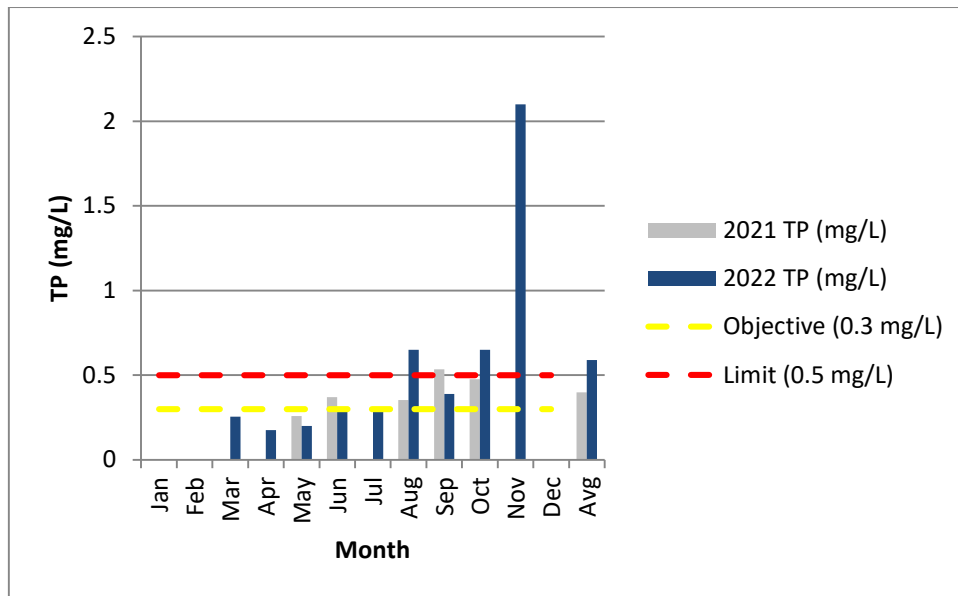
The 2022 final effluent annual average Total Suspended Solids (TSS) was 64.22 mg/L with a maximum monthly concentration of 420 mg/L recorded for November 2022; compliance limit is 10.0 mg/L (refer to Chart 4). The 2022 seasonal average loading for TSS was 66.9 kg/d; compliance limit is 15.1 kg/d. Final effluent TSS discharge concentrations were not consistently compliant with Environmental Compliance Approval # 6250-AB4JCT Effluent Limits throughout 2022. The TSS compliance limit of 10.0 mg/L and objective value of 5.0 mg/L were not met in the months of August (24.7 mg/L), September (22.8 mg/L), October (33.8 mg/L) and November (420 mg/L) of 2022. Exceedances were the result of limited facility storage space, continual use of sand filters and discharging Cell 2 to the empty level to accommodate the construction of a new berm as part of facility upgrades in process.

Chart 4: Bayfield Lagoons Average Monthly Effluent Total Suspended Solids (TSS) results for 2022 compared to 2021.



The 2022 final effluent annual average Total Phosphorus (TP) concentration was 0.59 mg/L with a maximum monthly concentration of 2.10 mg/L, recorded for November 2022; compliance limit is 0.5 mg/L (refer to Chart 5). The 2022 seasonal average loading for Total Phosphorus was 0.61 kg/d; compliance limit is 0.76 kg/d. Final effluent TP discharge concentrations were not consistently compliant with Environmental Compliance Approval # 6250-AB4JCT Effluent Limit throughout 2022. The TP compliance limit of 0.5 mg/L was not met in the months of August (0.65 mg/L), October (0.65 mg/L) and November (2.10 mg/L) of 2022. The TP objective value of 0.3 mg/L was not met in the months of August (0.65 mg/L), September (0.39 mg/L), October (0.65 mg/L) and November (2.10 mg/L). Exceedances were the result of limited facility storage space, continual use of sand filters and discharging Cell 2 to the empty level to accommodate the construction of a new berm as part of facility upgrades in process.

Chart 5: Bayfield Lagoons Average Monthly Effluent Total Phosphorus (TP) results for 2022 compared to 2021.



The 2022 final effluent annual average Total Ammonia Nitrogen (TAN) concentration was 0.98 mg/L with a maximum monthly concentration of 4.73 mg/L recorded for March 2022 (refer to Chart 6). Final effluent TAN discharge concentrations were not consistently compliant with Environmental Compliance Approval # 6250-AB4JCT Effluent Limit throughout 2022; compliance limit is 4.0 mg/L. The TAN compliance limit of 4.0 mg/L was not met in the month of March (4.73 mg/L) of 2022. The TAN objective value of 1.0 mg/L was not met in the months of March (4.73 mg/L) and November (1.43 mg/L). Exceedances were the result of limited facility storage space and discharging Cell 2 to the empty level to accommodate the construction of a new berm as part of facility upgrades in process.

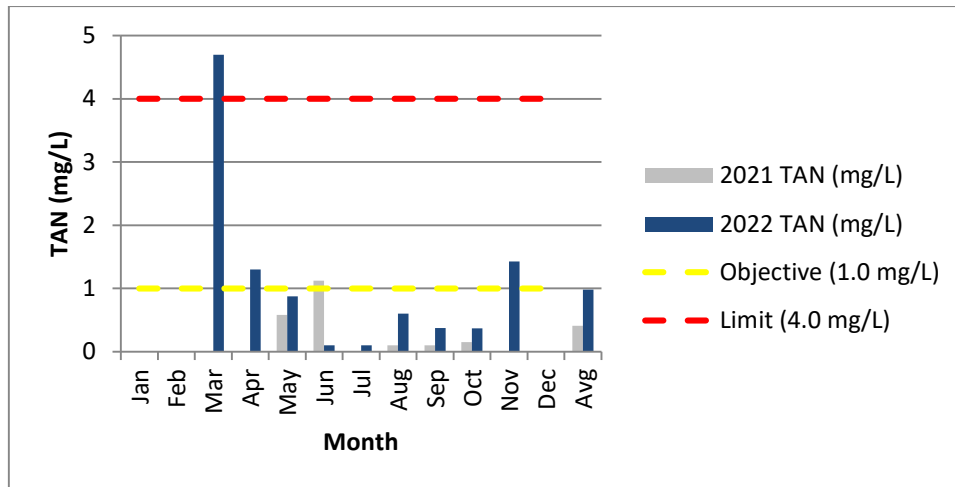
Final effluent pH and temperature (Temp.) were analyzed for each Total Ammonia Nitrogen (TAN) sample collection and unionized ammonia calculated; refer to Table 3.

Table 3: Effluent Unionized ammonia concentrations.

Date	Temp. °C	TAN mg/L	pH	Unionized Ammonia mg/L	Meets Ontario Provincial Water Quality Objective 0.02 mg/L
2022-03-26	7.3	3.4	7.22	0.008	Yes
2022-03-28	4.7	5.3	7.13	0.009	Yes
2022-03-29	4.1	5.5	7.16	0.009	Yes
2022-04-04	6.1	2.4	7.02	0.003	Yes
2022-04-11	5.7	1.4	7.21	0.003	Yes
2022-04-19	7.5	0.5	7.18	0.001	Yes
2022-04-26	10.2	0.9	7.13	0.002	Yes
2022-05-02	11.2	0.8	7.41	0.004	Yes

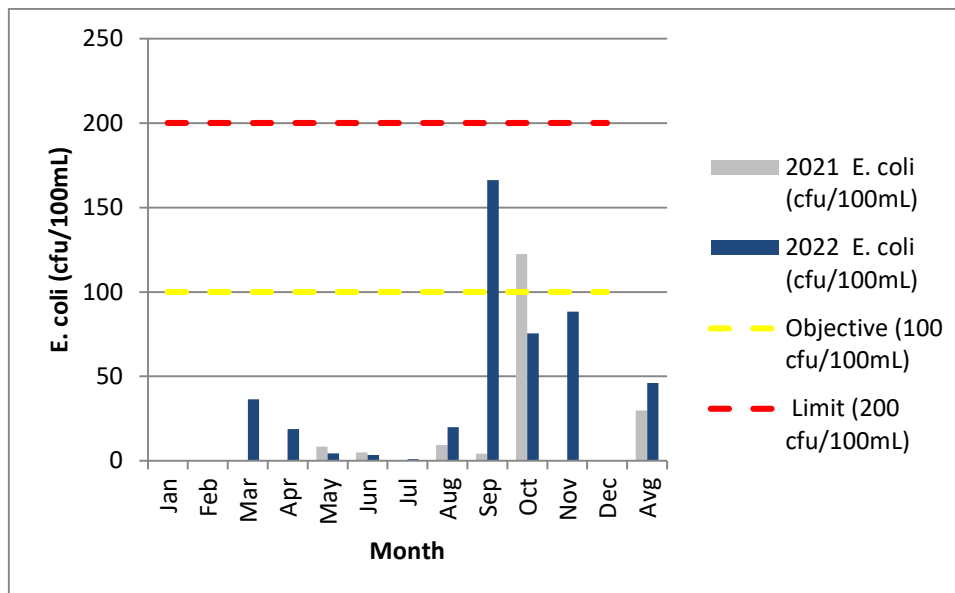
Date	Temp. °C	TAN mg/L	pH	Unionized Ammonia mg/L	Meets Ontario Provincial Water Quality Objective 0.02 mg/L
2022-05-09	13.4	0.4	7.54	0.003	Yes
2022-05-16	21.7	1.3	7.50	0.018	Yes
2022-06-01	25.8	< 0.1	7.52	< 0.001	Yes
2022-06-06	9.4	< 0.1	7.66	< 0.001	Yes
2022-06-13	8.4	< 0.1	7.79	< 0.001	Yes
2022-06-21	20.3	< 0.1	7.58	< 0.001	Yes
2022-06-27	9.4	< 0.1	6.95	< 0.001	Yes
2022-07-04	9.5	0.1	7.75	0.001	Yes
2022-07-11	23.5	< 0.1	7.25	< 0.001	Yes
2022-08-17	21	< 0.1	6.97	< 0.001	Yes
2022-08-22	24	< 0.1	7.23	< 0.001	Yes
2022-08-31	6.8	2.0	7.6	0.012	Yes
2022-09-22	20.9	< 0.1	7.05	< 0.001	Yes
2022-09-26	15.9	0.5	7.19	0.002	Yes
2022-09-27	14.7	0.5	7.12	0.002	Yes
2022-09-28	14.1	0.4	7.20	0.001	Yes
2022-10-04	16.8	0.2	7.05	< 0.001	Yes
2022-10-11	14.3	0.4	6.27	< 0.001	Yes
2022-10-17	11.1	0.4	7.34	0.002	Yes
2022-10-24	14.3	0.6	7.22	0.003	Yes
2022-10-31	12.9	0.3	7.18	0.001	Yes
2022-11-07	13.7	0.4	7.12	0.001	Yes
2022-11-14	11.8	0.9	7.08	0.002	Yes
2022-11-28	6.5	2.1	7.49	0.009	Yes
2022-11-29	5.9	2.3	7.52	0.01	Yes

Chart 6: Bayfield Lagoons Average Monthly Effluent Total Ammonia Nitrogen (TAN) results for 2022 compared to 2021.



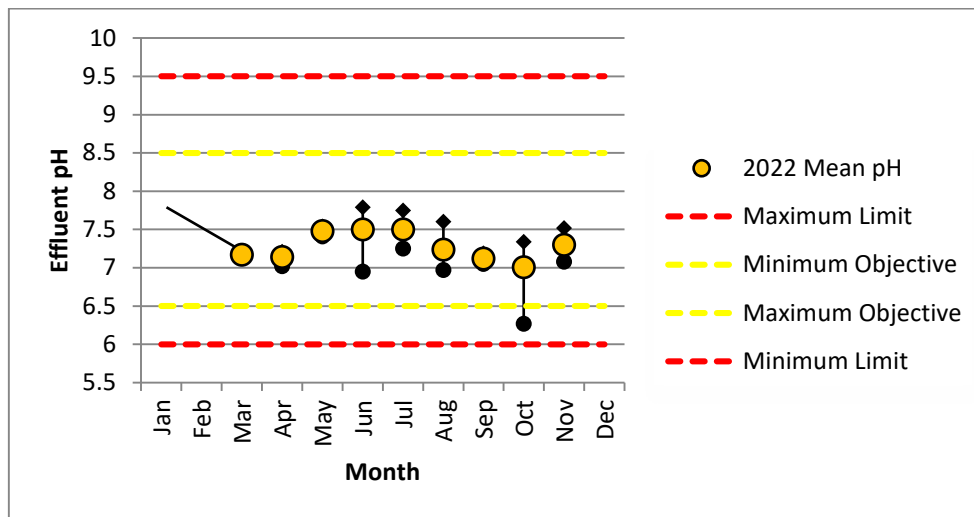
The 2022 final effluent annual E. coli Geometric Mean Density (GMD) was 46.04 cfu/100mL with a maximum monthly GMD concentration of 166.3 cfu/100mL recorded for September 2022 (refer to Chart 7). Final effluent E. coli GMD averages were compliant with Environmental Compliance Approval # 6250-AB4JCT Effluent Limits throughout 2022; compliance limit is 200.00 cfu/100mL. The final effluent E. coli GMD objective was not met in the month of September (166.3 cfu/ 100mL); GMD objective value is 100.00 cfu/100mL.

Chart 7: Bayfield Lagoons Final Effluent E. coli Geometric Mean Density (GMD) results for 2022 compared to 2021.



In 2022, final effluent pH values ranged from 6.27 to 7.79; the 2022 final effluent maximum pH value of 7.79 (7.8) was recorded in June and minimum pH value of 6.27 (6.3) was recorded in October (refer to Chart 8). Final effluent discharge pH values were compliant with Environmental Compliance Approval # 6250-AB4JCT Effluent Limits in 2022; compliance limits are 6.0 – 9.5 Final effluent pH objective values of 6.5-8.5 were consistently in every month of 2022 except for October; October 11, 2022 pH was 6.27. This lower limit objective exceedance is likely due to biological activity in the lagoon.

Chart 8: Bayfield Lagoons Final Effluent pH results for 2022.



Overall the effluent discharged was adequately treated to meet the requirements of the limits identified in the Environmental Compliance Approval. Limit exceedances did occur for Carbonaceous Biochemical Oxygen Demand (CBOD5), Total Suspended Solids (TSS), Total Phosphorus (TP) and Total Ammonia Nitrogen (TAN); exceedances were the result of limited facility storage space, continual use of sand filters and discharging Cell 2 to the empty level to accommodate the construction of a new berm as part of facility upgrades in process.

Section 3: Summary of the Quality and Quantity of Leachate

No leachate was hauled into the Bayfield Lagoon during the 2022 calendar year. At this time leachate is being processed at the landfill and is not required to be brought to the lagoon for co-treatment. As per Environmental Compliance Approval (ECA) # 6250-AB4JCT issued August 26, 2016 additional effluent parameters are sampled and analyzed quarterly; sample collections are identified on the facility sample schedule. Quarterly effluent samples were collected on March 28, May 04, August 22 and October 18 of 2022; see Appendix A

Section 4: Operating Problems Encountered and Corrective Actions

The rated capacity of the works is 1,072 m³/day. The facility rated capacity was exceeded in the months of February (13 days), March (30 days), April (30 days), May (12 days), June (3 days), July (2 days), August (6 days), September (2 days), October (6 days), November (1day) and December (1 day) of 2022. Compliance is an annual average; daily exceedances are not a reportable event.

The 2022 maximum raw sewage flow rate of 3,266.39 m³/day was recorded in February; this is 304.7 % of the facility rated capacity.

Pump stations required additional maintenance activities including pulling pumps to clear pump blockages and removing grease build up. Grease build up in the collection system wet wells is monitored and removed as required.

Section 5: Summary of Maintenance

Regular-scheduled monthly preventative maintenance has been assigned and monitored using OCWA's Work Management System program (Maximo). Pierce Services is contracted to complete annual calibration services of all instrumentation for the Bayfield Sewage Lagoon System; see Appendix B.

Equipment preventive maintenance requirements are built into the regular work schedule and corrective maintenance work requests are added according to their priority and staff and contractor availability; see Appendix C Work Order Summary. Additional maintenance completed during 2022 included:

- Periodic wet well cleaning;
- Repaired Bayfield Lagoon water pump float;
- Pulled pumps, cleaned or sent for repair as needed;
- Final Effluent flow meter was repaired and calibrated;
- Repaired actuator on lagoon valve # 1;
- Installed new alum injection point and alum lines;
- Replaced Bayfield Lagoon UPS unit;
- Addressed communication issues;
- Repaired filter bed piping as needed;
- Completed filter bed maintenance as needed;
- Added charcoal to sewage vents/ drums to prevent odours from wet well;

Section 6: Summary of Effluent Quality Assurance

The effluent parameters specified in the Environmental Compliance Approval were analyzed by SGS Lakefield; SGS Lakefield is an accredited laboratory in Ontario.

The systems are monitored on an on-going basis to ensure proper operations. System checks include well level checks, pump hour meter readings, testing of alarms and running generators to ensure all systems are operating effectively.

Annually a facility sampling schedule calendar is prepared and reviewed with operational staff; the sampling schedule calendar identifies sample collection dates to meet regulatory requirements of the Environmental Compliance Approval.

Operators are on-site a minimum of once a week monitoring the facility and discharge.

The lab results are reviewed by the operators and the cluster Process and Compliance Technician as they are received to ensure compliance. The Process and Compliance Technician reviews uploaded data and facility worksheets monthly.

Section 7: Summary of Calibrations

In 2022 flow meter calibrations were completed by Pierce Services and Solutions Inc. See Appendix B for calibration records. In house monitoring equipment is calibrated by operators following manufacturer instructions.

Section 8: Objectives

Objectives were met consistently for DO; objectives were not met consistently throughout the 2022 reporting period for CBOD5, TSS, TP, TAN, E. coli and pH (refer to Table 4). Regular scheduled filter maintenance, alum dosage adjustments, discharge flow rate adjustments and effluent monitoring are completed by operational staff to strive and meet Environmental Compliance Approval design objectives.

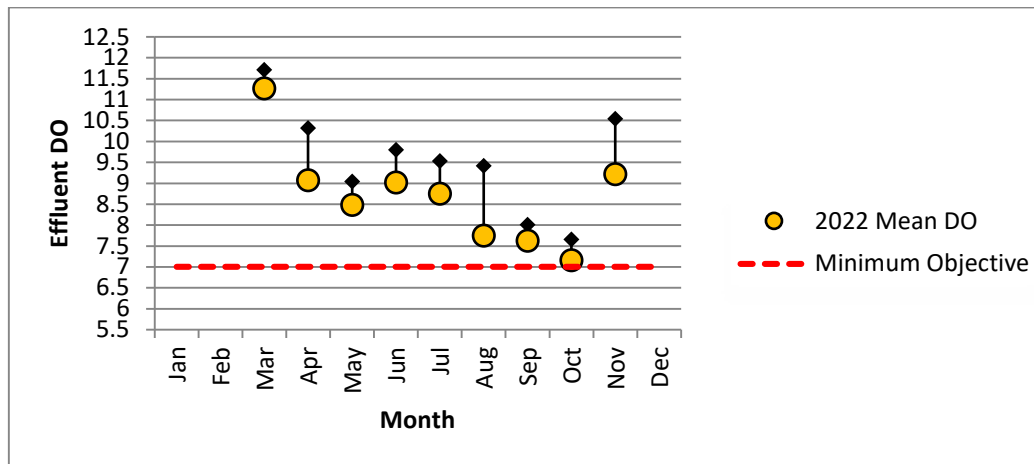
See Appendix A for the Annual Summary of results

Table 4. Effluent Objectives compared to average monthly concentrations.

Effluent Parameter	Monthly Average Concentration	2022 Average Monthly Concentration Ranges	Number of Exceedances
CBOD5	5.0 mg/L	2.0 - 23.5 mg/L	4
Suspended Solids (TSS)	5.0 mg/L	2.0 – 420.0 mg/L	4
Total Phosphorus (TP)	0.3 mg/L	0.2 - 2.1 mg/L	4
Total Ammonia Nitrogen (TAN)	1.0 mg/L	0.1 - 4.7 mg/L	3
Dissolved Oxygen (DO)	7.0 mg/L	7.2 - 11.3	0
E. Coli	100 cfu/ 100 mL	1.0 – 166 cfu/ 100mL	1
pH	maintained between 6.5 – 8.5	6.3 – 7.8	1

Dissolved oxygen (DO) is monitored on the effluent discharged, the objective is to achieve at least 7mg/L of DO in the effluent. Monthly DO results consistently met ECA identified objective average value of 7.0 mg/L in 2022.

Chart 9: Bayfield Lagoons Final Effluent Dissolved Oxygen (DO) results for 2022.



Section 9: Sludge Generated

There was no sludge hauled from the Bayfield Lagoon System in 2022. It was calculated that approximately 40 m³ of sludge was generated in during the 2022 reporting period. It is anticipated that approximately 40 m³ of sludge will be generated during the next reporting period.

Section 10: Summary of Complaints

No complaints were received applicable to this reporting period.

Section 11: Summary of Bypass, Overflow, Spill or abnormal discharge events

There were no bypass, overflow or spill events in 2022.

Approval was granted on March 24, 2022 for an early discharge of the Bayfield Lagoon to avoid an uncontrolled bypassing event; the requested follow up written report was submitted. The pre approved Bayfield Lagoon early discharge started on March 25, 2022; sample collections were complete. The ECA Condition 7, Total Ammonia Nitrogen (TAN) effluent limit of 4.0 mg/L was exceeded; March TAN monthly average was 4.7 mg/L. Filter start up and decreased ambient temperatures led to the March TAN non compliance issue; non compliance issue was reported to the MECF as required.

Section 12: Notice of Modifications

No Notice of Modifications was submitted to the Water Supervisor during this report period. No modifications were made per Schedule B, Section 3 of the ECA, during this report period.

Section 13: Other information the Water Supervisor Requires

The Environmental Compliance Approval (ECA) # 6250-AB4JCT issued August 26, 2016 requires that Bypass & Overflow Reports be submitted to the Ministry's local office quarterly; reports were submitted as required.

On June 2, 2021 the Water Supervisor requested that future annual reports provide an update regarding the status of the Municipality's efforts to:

- a) expand the facility's capacity
- b) reduce infiltration, and
- c) control development in area served by the lagoon until the Municipality's capacity needs have been addressed

Please see report, "CLASS ENVIRONMENTAL ASSESSMENT FOR EXPANSION AND UPGRADING OF THE BAYFIELD SEWAGE TREATMENT FACILITY", prepared by BM Ross for the Municipality of Bluewater; report is available through the [municipal website](#)

The Municipality is actively progressing with upgrades to the Bayfield Sewage Treatment Facility; a berm was constructed inside the Bayfield north lagoon cell to facilitate construction of a Sequential Batch Reactor.

A Consent Letter issued by the Water Supervisor on November 15, 2022 acknowledged the Ministry's receipt of an application to expand the capacity of the current Bayfield sewage works by constructing a Sequential Batch Reactor inside the existing footprint of the north Bayfield lagoon cell. To facilitate the construction of a berm in the north cell and to accommodate the temporary loss of capacity consent was granted to:

- extend the fall 2022 discharge period if necessary following additional sampling and reporting requirements;
- prerequisites needed for permission to be granted for an early 2023 discharge through the sand filters;
- prerequisites needed for permission to be granted for an early 2023 lagoon discharge bypassing the sand filters;
- additional sampling and reporting requirements.

A late November discharge occurred to accommodate the construction of the berm; a 30 hour discharge occurred from November 28 to 29, 2022, with a total of 14,572 m³ effluent discharged. Additional upstream and downstream samples were collected prior to and during this discharge period as requested. A follow up report was submitted to the MECP as requested; results of upstream and downstream sampling indicated no adverse effects occurred to the receiving stream.

Appendix A: Flow and Monitoring Results

6655 BAYFIELD WASTEWATER TREATMENT LAGOON 120002754

	1/ 2022	2/ 2022	3/ 2022	4/ 2022	5/ 2022	6/ 2022	7/ 2022	8/ 2022	9/ 2022	10/ 2022	11/ 2022	12/ 2022	<--Total-->	<--Avg-->	<--Max-->	<-Criteria-->
Flows																
Raw Flow: Total - Raw Sewage m³/d	26,121.13	35,834.06	46,100.09	38,701.94	33,334.12	27,825.09	28,928.06	29,510.59	24,118.42	30,171.43	25,158.17	27,795.15	373,598.25			0.00
Raw Flow: Avg - Raw Sewage m³/d	842.62	1,279.79	1,487.10	1,290.06	1,075.29	927.50	933.16	951.95	803.95	973.27	838.61	896.62		1,023.56		
Raw Flow: Max - Raw Sewage m³/d	1,024.62	3,266.39	2,275.44	1,454.89	1,346.26	1,302.57	1,241.12	1,343.93	1,215.82	2,260.61	1,060.05	2,153.53			3,266.39	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 - Final Effluent m³/d	0.00	0.00	11,005.95	76,903.28	36,554.03	45,264.71	19,417.36	16,976.97	16,504.20	18,963.41	28,285.98	0.00	269,875.89			0.00
Eff. Flow: Avg - Final Effluent m³/d	0.00	0.00	1,572.28	2,563.44	1,179.16	1,508.82	1,386.95	998.65	1,500.38	632.11	1,767.87	0.00		1,458.79		
Eff. Flow: Max - Final Effluent m³/d	0.00	0.00	3,093.16	4,082.33	3,063.74	1,709.03	1,574.22	1,661.61	3,320.41	1,213.24	7,941.82	0.00			7,941.82	0.00
Eff Flow: Count - Final Effluent m³/d	0.00	0.00	7.00	30.00	31.00	30.00	14.00	17.00	11.00	30.00	15.00	0.00	185.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Final Effluent mg/L	0.00	0.00	< 2.00	< 2.00	< 2.67	< 2.00	< 2.00	14.33	9.50	14.80	23.50	0.00		< 8.84	< 23.50	
Loading: cBOD5 - Final Effluent kg/d	0.000	0.000	< 3.145	< 5.127	< 3.144	< 3.018	< 2.774	14.314	14.254	9.355	44.315	0.000		< 11.05	< 44.31	0.000
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw Sewage mg/L	44.00	96.00	31.00	57.00	88.00	84.00	114.00	253.00	270.00	118.00	220.00	110.00		123.75	270.00	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
Eff: Avg BOD5 - Final Effluent mg/L	0.00	0.00	3.00	0.00	3.00	0.00	0.00	20.00	0.00	8.00	0.00	0.00		8.50	20.00	
Loading: BOD5 - Final Effluent kg/d	0.000	0.000	4.717	0.000	3.537	0.000	0.000	19.973	0.000	5.057	0.000	0.000		8.32	19.97	0.000
Percent Removal: BOD5 - Raw Sewage %	0.00	0.00	90.32	0.00	96.59	0.00	0.00	92.09	0.00	93.22	0.00	0.00			96.59	0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw Sewage mg/L	58.00	97.00	85.00	90.00	84.00	134.00	78.00	255.00	261.00	164.00	193.00	49.00		129.00	261.00	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 - Final Effluent mg/L	0.00	0.00	2.00	3.50	3.00	< 2.00	2.00	24.67	22.75	33.80	420.00	0.00		64.22	420.00	10.00
Eff: # of samples of TSS - Final Effluent	0.00	0.00	2.00	4.00	3.00	5.00	2.00	3.00	4.00	5.00	4.00	0.00	32.00			0.00
Loading: TSS - Final Effluent kg/d	0.000	0.000	3.145	8.972	3.537	< 3.018	2.774	24.633	34.134	21.365	792.007	0.000		99.29	792.01	0.000
Percent Removal: TSS - Raw Sewage %	0.00	0.00	97.65	96.11	96.43	98.51	97.44	90.33	91.28	79.39	-117.62	0.00			98.51	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw Sewage mg/L	0.47	2.40	0.95	1.29	3.49	3.50	4.65	4.50	4.12	2.66	3.11	2.43		2.80	4.65	0.00

From 1/1/2022 to 12/31/2022

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	1.00	12.00			0.00
Eff: Avg TP - Final Effluent mg/L	0.00	0.00	0.26	0.18	0.20	0.29	0.29	0.65	0.39	0.65	2.10	0.00		0.59	2.10		
Eff: # of samples of TP - Final Effluent	0.00	0.00	2.00	4.00	3.00	5.00	2.00	3.00	4.00	5.00	4.00	0.00	32.00			0.00	
Loading: TP - Final Effluent kg/d	0.000	0.000	0.401	0.449	0.236	0.438	0.402	0.649	0.589	0.412	3.965	0.000		0.84	3.96	0.000	
Percent Removal: TP - Raw Sewage %	0.00	0.00	73.16	86.43	94.27	91.71	93.76	85.56	90.47	75.49	32.40	0.00			94.27	0.00	

Nitrogen Series

Raw: Avg TKN - Raw Sewage mg/L	11.80	23.50	7.00	14.70	26.50	44.60	31.20	39.20	35.50	31.20	27.10	27.70		26.67	44.60	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 - Final Effluent mg/L	0.00	0.00	4.73	1.30	0.88	< 0.10	< 0.10	< 0.60	< 0.38	0.37	1.43	0.00		0.98	4.73	
Eff: # of samples of TAN - Final Effluent	0.00	0.00	3.00	4.00	4.00	5.00	2.00	4.00	4.00	6.00	4.00	0.00	36.00			0.00
Loading: TAN - Final Effluent kg/d	0.000	0.000	7.442	3.332	1.032	< 0.151	< 0.139	< 0.599	< 0.563	0.232	2.687	0.000		1.80	7.44	0.000

Disinfection

Eff: GMD E. Coli - Final Effluent cfu/100mL	0.00	0.00	36.50	18.90	4.38	3.53	1.00	20.00	166.32	75.39	88.35	0.00				
Eff: # of samples of E. Coli - Final Effluent	0.00	0.00	2.00	4.00	3.00	5.00	2.00	3.00	4.00	5.00	4.00	0.00	32.00			0.00

Ontario Clean Water Agency
Time Series Info Report

Report extracted 01/20/2023 10:26

From: 01/01/2022 to 31/12/2022

Facility Org Number: 6655
 Facility Works Number: 120002754
 Facility Name: BAYFIELD WASTEWATER TREATMENT LAGOON
 Facility Owner: Municipality: The Municipality of Bluewater
 Facility Classification: Class 1 Wastewater Treatment
 Receiver: Bayfield River
 Service Population: 1550.0
 Total Design Capacity: 1072.0 m3/day

	01/2022	02/2022	03/2022	04/2022	05/2022	06/2022	07/2022	08/2022	09/2022	10/2022	11/2022	12/2022	Total	Avg	Max	Min
Final Effluent / Dissolved Oxygen: DO - mg/L																
Count IH	0	0	3	3	3	5	2	4	2	5	4	0	31			
Max IH			11.71	10.32	9.04	9.8	9.53	9.42	8.01	7.66	10.84				11.71	
Mean IH			11.273	9.07	8.487	9.024	8.745	7.745	7.63	7.164	9.223			8.647		
Min IH			10.65	8.41	7.77	7.72	7.96	5.98	7.25	6.86	7.37					5.98
Final Effluent / pH - ---																
Count IH	0	0	3	3	3	5	2	4	2	5	4	0	31			
Max IH			7.22	7.21	7.54	7.79	7.75	7.6	7.19	7.34	7.52				7.79	
Mean IH			7.17	7.137	7.483	7.5	7.5	7.24	7.12	7.012	7.302			7.269		
Min IH			7.13	7.02	7.41	6.95	7.25	6.97	7.05	6.27	7.08					6.27



SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120002754

Project : PO#017018

11-April-2022

OCWA-Lucan (Bayfield STP)

**6242 Fallon Drive
Lucan, ON
N0M 2J0, Canada**

Date Rec. : 29 March 2022
LR Report: CA30533-MAR22

Copy: #1

Phone: 519-227-1409

Fax:


CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Sample Date & Time					28-Mar-22 13:50
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	3.6
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	7.0
Field pH [no unit]	---	---	---	---	7.13
Field Temperature [celcius]	---	---	---	---	4.7
Field Dissolved O2 [mg/L]	---	---	---	---	11.71
Biochemical Oxygen Demand (BOD5) [mg/L]	31-Mar-22	17:31	05-Apr-22	11:54	3
Total Dissolved Solids [mg/L]	31-Mar-22	09:08	01-Apr-22	14:43	389
Conductivity [uS/cm]	05-Apr-22	10:04	05-Apr-22	11:08	708
Hydrogen Sulphide [mg/L]	01-Apr-22	12:02	04-Apr-22	13:38	< 0.02
Sulphide [mg/L]	01-Apr-22	12:02	04-Apr-22	13:38	< 0.02
Hardness [mg/L as CaCO3]	01-Apr-22	12:36	04-Apr-22	16:04	239
Ammonia+Ammonium (N) [as N mg/L]	01-Apr-22	09:15	04-Apr-22	10:26	5.3
4AAP-Phenolics [mg/L]	01-Apr-22	13:49	04-Apr-22	12:50	< 0.002
Dissolved Organic Carbon [mg/L]	01-Apr-22	11:26	04-Apr-22	12:47	6
Chemical Oxygen Demand [mg/L]	31-Mar-22	10:56	05-Apr-22	12:00	17
Sulphate [mg/L]	07-Apr-22	22:18	11-Apr-22	09:12	57
Chloride [mg/L]	07-Apr-22	17:12	07-Apr-22	19:35	77
Silver (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	< 0.00005
Aluminum (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.015
Arsenic (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.0011
Beryllium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	< 0.000007
Boron (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.070
Calcium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	71.2
Cadmium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.000022
Chromium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	< 0.00008
Copper (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.0014
Iron (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.016
Magnesium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	14.9
Manganese (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.00473
Sodium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	49.1
Potassium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	7.78

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Lead (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	< 0.00009
Selenium (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	0.00010
Zinc (total) [mg/L]	01-Apr-22	12:36	04-Apr-22	16:00	< 0.002
Oil & Grease (total) [mg/L]	01-Apr-22	08:29	04-Apr-22	10:50	< 4

Note: Hydrogen Sul phi de (H2S) cal cul ated from fi el d pH, fi el d temperature and lab conducti vi ty.



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



SGS Canada Inc.

P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120002754

Project : PO#017018

13-May-2022

OCWA-Lucan (Bayfield STP)

**6242 Fallon Drive
Lucan, ON
N0M 2J0, Canada**

Date Rec. : 04 May 2022

LR Report: CA30123-MAY22

Copy: #1

Phone: 519-227-1409

Fax:

CERTIFICATE OF ANALYSIS

Final Report

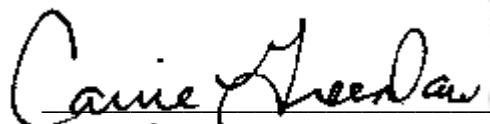
Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Sample Date & Time					04-May-22 12:20
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	11.3
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	9.0
Field pH [no unit]	---	---	---	---	7.38
Field Temperature [celcius]	---	---	---	---	13.6
Field Dissolved O2 [mg/L]	---	---	---	---	8.66
Biochemical Oxygen Demand (BOD5) [mg/L]	06-May-22	16:15	11-May-22	13:57	3
Total Dissolved Solids [mg/L]	06-May-22	14:23	10-May-22	10:13	323
Conductivity [uS/cm]	09-May-22	08:10	10-May-22	10:02	696
Hydrogen Sulphide [mg/L]	09-May-22	15:21	11-May-22	15:18	< 0.02
Sulphide [mg/L]	09-May-22	15:21	11-May-22	15:18	< 0.02
Hardness [mg/L as CaCO3]	10-May-22	14:52	12-May-22	11:22	252
Ammonia+Ammonium (N) [as N mg/L]	06-May-22	22:35	09-May-22	10:23	1.0
4AAP-Phenolics [mg/L]	09-May-22	11:24	10-May-22	09:39	< 0.002
Dissolved Organic Carbon [mg/L]	09-May-22	22:20	10-May-22	09:55	5
Chemical Oxygen Demand [mg/L]	06-May-22	13:01	11-May-22	13:36	16
Sulphate [mg/L]	13-May-22	13:34	13-May-22	15:20	52
Chloride [mg/L]	13-May-22	12:56	13-May-22	15:20	68
Silver (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	< 0.00005
Aluminum (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.003
Arsenic (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.0007
Beryllium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	< 0.000007
Boron (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.092
Calcium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	75.7
Cadmium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.000017
Chromium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.00017
Copper (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.0013
Iron (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	< 0.007
Magnesium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	15.4
Manganese (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.0124

Online LIMS

0002900758

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Sodium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	51.7
Potassium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	7.47
Lead (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	< 0.00009
Selenium (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	0.00017
Zinc (total) [mg/L]	10-May-22	14:52	12-May-22	11:21	< 0.002
Oil & Grease (total) [mg/L]	06-May-22	16:34	09-May-22	10:32	< 2

Note: Hydrogen Sulphide (H₂S) calculated from field pH, field temperature and lab conductivity.



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



SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
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Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120002754

Project : PO#017018

01-September-2022

OCWA-Lucan (Bayfield STP)

**6242 Fallon Drive
Lucan, ON
N0M 2J0, Canada**

Date Rec. : 22 August 2022
LR Report: CA30432-AUG22

Copy: #1

Phone: 519-227-1409

Fax:

CERTIFICATE OF ANALYSIS

Final Report


Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Sample Date & Time					22-Aug-22 11:05
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	14.5
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	16.0
Field pH [no unit]	---	---	---	---	7.23
Field Temperature [celcius]	---	---	---	---	24
Field Dissolved O2 [mg/L]	---	---	---	---	6.87
Biochemical Oxygen Demand (BOD5) [mg/L]	24-Aug-22	16:51	29-Aug-22	14:20	20
Total Dissolved Solids [mg/L]	24-Aug-22	15:15	25-Aug-22	14:31	494
Conductivity [uS/cm]	24-Aug-22	15:43	25-Aug-22	10:55	868
Hydrogen Sulphide [mg/L]	24-Aug-22	15:42	25-Aug-22	09:01	< 0.02
Sulphide [mg/L]	24-Aug-22	15:42	25-Aug-22	09:01	< 0.02
Hardness [mg/L as CaCO3]	25-Aug-22	17:04	26-Aug-22	14:54	234
Ammonia+Ammonium (N) [as N mg/L]	24-Aug-22	17:48	26-Aug-22	11:07	0.2
4AAP-Phenolics [mg/L]	24-Aug-22	12:03	25-Aug-22	08:41	< 0.002
Dissolved Organic Carbon [mg/L]	25-Aug-22	09:30	26-Aug-22	11:27	14
Chemical Oxygen Demand [mg/L]	25-Aug-22	09:25	29-Aug-22	13:49	94
Sulphate [mg/L]	25-Aug-22	09:50	29-Aug-22	16:35	66
Chloride [mg/L]	25-Aug-22	08:48	29-Aug-22	16:35	150
Silver (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	< 0.00005
Aluminum (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.017
Arsenic (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.0027
Beryllium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	< 0.000007
Boron (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.154
Calcium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	64.8
Cadmium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.000032
Chromium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.00015
Copper (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.0042
Iron (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.079
Magnesium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	17.5
Manganese (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.0679
Sodium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	77.5
Potassium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	17.4

Online LIMS

0003033583

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Lead (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.00023
Selenium (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.00018
Zinc (total) [mg/L]	25-Aug-22	17:04	26-Aug-22	14:55	0.002
Oil & Grease (total) [mg/L]	31-Aug-22	12:14	01-Sep-22	13:32	< 2

ote: Hydrogen Sul phi de (H2S) cal cul ated from fi el d pH, fi el d temperature and lab conducti vi ty.



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



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Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Works #: 120002754

Project : PO#017018

01-November-2022

OCWA-Lucan (Bayfield STP)

**6242 Fallon Drive
Lucan, ON
N0M 2J0, Canada**

Date Rec. : 18 October 2022
LR Report: CA30349-OCT22

Copy: #1

Phone: 519-227-1409

Fax:

CERTIFICATE OF ANALYSIS

Final Report

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Sample Date & Time					18-Oct-22 15:05
Temperature Upon Receipt [at London Lab °C]	---	---	---	---	4.9
Temperature Upon Receipt [at Lakefield Lab °C]	---	---	---	---	13.0
Field pH [no unit]	---	---	---	---	7.61
Field Temperature [celcius]	---	---	---	---	11.4
Field Dissolved O2 [mg/L]	---	---	---	---	9.30
Biochemical Oxygen Demand (BOD5) [mg/L]	20-Oct-22	17:08	25-Oct-22	15:47	8
Total Dissolved Solids [mg/L]	20-Oct-22	16:41	21-Oct-22	16:18	403
Conductivity [uS/cm]	21-Oct-22	08:05	21-Oct-22	17:11	718
Hydrogen Sulphide [mg/L]	21-Oct-22	13:40	24-Oct-22	16:02	< 0.02
Sulphide [mg/L]	21-Oct-22	13:40	24-Oct-22	16:02	< 0.02
Hardness [mg/L as CaCO3]	28-Oct-22	18:00	31-Oct-22	16:39	209
Ammonia+Ammonium (N) [as N mg/L]	24-Oct-22	21:13	25-Oct-22	13:13	0.3
4AAP-Phenolics [mg/L]	20-Oct-22	08:08	24-Oct-22	09:45	0.004
Dissolved Organic Carbon [mg/L]	25-Oct-22	20:25	26-Oct-22	11:15	12
Chemical Oxygen Demand [mg/L]	25-Oct-22	07:19	25-Oct-22	15:47	88
Sulphate [mg/L]	20-Oct-22	15:25	22-Oct-22	20:53	66
Chloride [mg/L]	20-Oct-22	15:02	22-Oct-22	20:53	130
Silver (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.00005
Aluminum (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.041
Arsenic (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.0029
Beryllium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.000010
Boron (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.157
Calcium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	55.3
Cadmium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.000036
Chromium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	< 0.00008
Copper (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.0032
Iron (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.144
Magnesium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	17.1
Manganese (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.260
Sodium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	81.2
Potassium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	13.5

Online LIMS

0003104328

Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date	4: Analysis Completed Time	5: Eff Eff-Final Effluent
Lead (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.00052
Selenium (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.00020
Zinc (total) [mg/L]	28-Oct-22	18:00	31-Oct-22	16:39	0.325
Oil & Grease (total) [mg/L]	20-Oct-22	16:02	24-Oct-22	09:51	4

Note: Hydrogen Sul phi de (H2S) cal cul ated from fi el d pH, fi el d temperature and lab conducti vi ty.



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

Appendix B: Calibration



Pierce Services
& Solutions Inc.

519.820.4853 Fax 519.824.9402

Instrument Verification Sheet

Client Name: Ontario Clean Water Agency

Date: April 4, 2022

Equipment Description: Level Sensor

Assigned Number: Wet Well Level

Area Located: Bayfield Main Lift Station

Inventory Number: 156233

Instrument Data

Manufacturer: Milltronics

Model Number: MultiRanger Plus

Type: Ultrasonic

Serial Number: N/A

Range: 0 - 3.300 m

Accuracy: +/- 5%

Method Of Calibration: Standard Measurement

Application: Waste Water

Calibration Data

Input %	Input	As Found	As Left	Pass/Fail
	12.32 mA	1.559 m	1.559 m	Pass

Confirmed Run Mode:

Placed back in service:

Comments:



Checked By: Greg Pierce CCST

Signature: 



#	Parameter	Value	#	Parameter	Value
P-0	Security	1954	P-50	OCM mA output	1
P-1	Units	1	P-51	OCM simulation	--
P-2	Mode of Measurement	1	P-52	Totalizer display factor	0
P-3	Empty Distance	3.300	P-53	Totalizer decimal point	2
P-4	Span	3.000	P-54	Low total	00.00
P-5	Blanking	0.300	P-55	High total	0000
P-6	Analog Output	2	P-56	Remote totalizer contact	0
P-7	Decimal Point	2	P-57	Flow sampler control	0
P-8	Relay 1, Function	dE:8	P-58	Flow sampler control	1.000
P-9	Relay 1, Setpoint On	0.800	P-59	Time sampler control	--
P-10	Relay 1, Setpoint Off	0.900	P-60	Full Calibration	--
P-11	Relay 2, Function	dE:9	P-61	Empty Calibration	--
P-12	Relay 2, Setpoint On	2.050	P-62	Measurement Offset	0.000
P-13	Relay 2, Setpoint Off	1.100	P-63	Sound Velocity at 20° C	344.1
P-14	Relay 3, Function	dE:9	P-64	Velocity at P-65	336.5
P-15	Relay 3, Setpoint On	2.150	P-65	Air temperature	7 C
P-16	Relay 3, Setpoint Off	1.200	P-66	Maximum air temperature	21 C
P-17	Relay 4, Function	dE:9	P-67	Minimum air temperature	0 C
P-18	Relay 4, Setpoint On	2.200	P-68	Fill damping	10.00
P-19	Relay 4, Setpoint Off	1.300	P-69	Empty damping	10.00
P-20	Relay 5, Function	7	P-70	Process rate display	0.144
P-21	Relay 5, Setpoint On	0.000	P-71	Process rate filter	1
P-22	Relay 5, Setpoint Off	0.000	P-72	Fuzz filter	1
P-23	Transducer, Submersible	0	P-73	Agitator discrimination	1
P-24	Pump 1, hours	70.44	P-74	Fail-safe mode	3
P-25	Pump 2, hours	8636	P-75	Fail-safe timer	1.00
P-26	Pump 3, hours	153.8	P-76	Reading	1.56
P-27	Pump 4, hours	10.58	P-77	Material level	1.559
P-28	Pump 5, hours	0.000	P-78	Space or distance	1.741
P-29	Pump, run on, interval	0.000	P-79	Scope displays	---
P-30	Pump, run off, duration	0	P-80	Echo confidence	0:20
P-31	Transducer	0	P-81	Confidence threshold long	10
P-32	DLD milliamp output	1	P-82	Confidence threshold long	5
P-33	Inflow/discharge totaling	1	P-83	Echo strength	76
P-34	Tank Shape	0	P-84	Noise	11:22
P-35	Tank dimension A	0.000	P-85	Algorithms	1
P-36	Tank dimension L	0.000	P-86	TVT curve	1
P-37	Convert display	1.000	P-87	Range extension	20
P-38	Display offset	0.000	P-88	Number of transmit pulses	4
P-39	Display reading options	0	P-89	Software version	1.21
P-40	Primary measuring device	1	P-90	Memory test	PASS
P-41	Flow rate time units	4	P-91	LCD,LED and relay test	PASS
P-42	OCM exponent	1.550	P-92	mA output test	12.32
P-43	Flume Dimensions	1.000	P-93	Temperature sensor test	189.0
P-45	Maximum head	3.000	P-94	Transmitter test	PASS
P-46	Maximum flow rate	1000	P-95	Programmer test	PASS
P-47	Auto zero	--	P-96	Watchdog reset test	PASS
P-48	OCM low head cutoff	5.000	P-97	Trim for 4 mA	221
P-49	OCM decimal point	2	P-98	Trim for 20 mA	3494
			P-99	Master reset	



Pierce Services
& Solutions Inc.

519.820.4853 Fax 519.824.9402

Instrument Verification Sheet

Client Name: Ontario Clean Water Agency

Date: April 04, 2022

Equipment Description: Level Sensor

Assigned Number: LIT 101

Area Located: North Lift Bayfield

Inventory Number: 1556177

Instrument Data

Manufacturer: Milltronics

Model Number: MultiRanger Plus

Type: Ultrasonic

Serial Number: N/A

Range: 0 - 3.750 m

Accuracy: +/- 5%

Method Of Calibration: Standard Measurement

Application: Waste Water

Calibration Data

Input %	Input	As Found	As Left	Pass/Fail
	8.378 mA	0.944 m	0.944 m	Pass

Confirmed Run Mode:

Placed back in service:

Comments:



Checked By: Greg Pierce CCST

Signature: 



Tag # Wet Well Level North Lift
Date: April 4, 2022

#	Parameter	Value	#	Parameter	Value
P-0	Security	1954	P-50	OCM mA output	1
P-1	Units	1	P-51	OCM simulation	--
P-2	Mode of Measurement	1	P-52	Totalizer display factor	0
P-3	Empty Distance	3.75	P-53	Totalizer decimal point	2
P-4	Span	3.45	P-54	Low total	00.00
P-5	Blanking	0.300	P-55	High total	0000
P-6	Analog Output	2	P-56	Remote totalizer contact	0
P-7	Decimal Point	2	P-57	Flow sampler control	0
P-8	Relay 1, Function	dE:8	P-58	Flow sampler control	1.000
P-9	Relay 1, Setpoint On	0.600	P-59	Time sampler control	--
P-10	Relay 1, Setpoint Off	0.650	P-60	Full Calibration	--
P-11	Relay 2, Function	dE:9	P-61	Empty Calibration	--
P-12	Relay 2, Setpoint On	1.55	P-62	Measurement Offset	0.000
P-13	Relay 2, Setpoint Off	0.85	P-63	Sound Velocity at 20° C	344.1
P-14	Relay 3, Function	dE:9	P-64	Velocity at P-65	336.8
P-15	Relay 3, Setpoint On	1.65	P-65	Air temperature	8 C
P-16	Relay 3, Setpoint Off	0.95	P-66	Maximum air temperature	24 C
P-17	Relay 4, Function	7	P-67	Minimum air temperature	2 C
P-18	Relay 4, Setpoint On	--	P-68	Fill damping	10.00
P-19	Relay 4, Setpoint Off	--	P-69	Empty damping	10.00
P-20	Relay 5, Function	1	P-70	Process rate display	0.006
P-21	Relay 5, Setpoint On	1.720	P-71	Process rate filter	1
P-22	Relay 5, Setpoint Off	1.69	P-72	Fuzz filter	1
P-23	Transducer, Submersible	1	P-73	Agitator discrimination	1
P-24	Pump 1, hours	6.794	P-74	Fail-safe mode	3
P-25	Pump 2, hours	8829	P-75	Fail-safe timer	0.5
P-26	Pump 3, hours	280.9	P-76	Reading	0.94
P-27	Pump 4, hours	0.000	P-77	Material level	0.944
P-28	Pump 5, hours	0.000	P-78	Space or distance	28.06
P-29	Pump, run on, interval	0.000	P-79	Scope displays	--
P-30	Pump, run off, duration	0	P-80	Echo confidence	0:25
P-31	Transducer	102	P-81	Confidence threshold long	10
P-32	DLD milliamp output	1	P-82	Confidence threshold long	5
P-33	Inflow/discharge totaling	1	P-83	Echo strength	66
P-34	Tank Shape	0	P-84	Noise	17:24
P-35	Tank dimension A	0.000	P-85	Algorithms	1
P-36	Tank dimension L	0.000	P-86	TVT curve	1
P-37	Convert display	1.000	P-87	Range extension	20
P-38	Display offset	0.000	P-88	Number of transmit pulses	4
P-39	Display reading options	5	P-89	Software version	1.22
P-40	Primary measuring device	1	P-90	Memory test	PASS
P-41	Flow rate time units	4	P-91	LCD,LED and relay test	PASS
P-42	OCM exponent	1.550	P-92	mA output test	8.378
P-43	Flume Dimensions	1.000	P-93	Temperature sensor test	188.0
P-45	Maximum head	3.45	P-94	Transmitter test	PASS
P-46	Maximum flow rate	1000	P-95	Programmer test	PASS
P-47	Auto zero	--	P-96	Watchdog reset test	PASS
P-48	OCM low head cutoff	5.000	P-97	Trim for 4 mA	216
P-49	OCM decimal point	2	P-98	Trim for 20 mA	3489
			P-99	Master reset	



Pierce Services
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Instrument Verification Sheet

Client Name: Ontario Clean Water Agency

Date: April 4, 2022

Equipment Description: Level Sensor

Assigned Number: Wet Well Level

Area Located: Bayfield South Lift Station

Inventory Number: 156154

Instrument Data

Manufacturer: Milltronics

Model Number: MultiRanger 100

Type: Ultrasonic

Serial Number: N/A

Range: 0 - 5.000 m

Accuracy: +/- 5%

Method Of Calibration: Standard Measurement

Application: Waste Water

Calibration Data

Input %	Input	As Found	As Left	Pass/Fail
	9.30 mA	1.56 m	1.56 m	Pass

Confirmed Run Mode:

Placed back in service:

Comments:



Checked By: Greg Pierce CCST

Signature: 



Tag # Wet Well Level South Lift Bayfield

Date: April 4, 2022

Parameter #	Parameter Description	Parameter Value	Value Description	Relay #
P001	Operation	1	Level measurement	
P002	Material	1	Liquid surface	
P003	Process Speed	3	Medium (1m/min)	
P004	Transducer	112	XPS 10	
P005	Units	1	Meters	
P006	Empty	5.000	Transducer to base	
P007	Span	4.700	Maximum reading	
P065	Reading Override Value	5.00	Relay Value Inserted	
P111	Pump Fixed Duty Setting	1	Pump Fixed Duty Setting	1
P112	Relay on Level	0.850	Meters	1
P113	Relay off Level	0.900	Meters	1
P309	Run Time	2.6	Hours	1
P111	Pump Fixed Duty Setting	52	Pump Fixed Duty Setting	2
P112	Relay on Level	2.000	Meters	2
P113	Relay off Level	1.000	Meters	2
P309	Run Time	22.9	Hours	2
P111	Pump Fixed Duty Setting	52	Pump Fixed Duty Setting	3
P112	Relay on Level	2.160	Meters	3
P113	Relay off Level	1.500	Meters	3
P309	Run Time	18.2	Hours	3
P111	Loss of Echo	52		4
P112	Relay on Level	2.150	Meters	4
P113	Relay off Level	1.800	Meters	4
P309	Run Time	24.4	Hours	4
P111	Loss of Echo	50		5
P112	Relay on Level	0.850		5
P113	Relay off Level	0.900		5
P309	Run Time	2.6		5
P340	Date of Manufacture			
P341	Run Time	1230		
P342	Start Ups	7		
P650	Offset Calibration			
P651	Sound Calibration			
P652	Offset Correction			
P653	Velocity	344.6		
P654	Velocity at 20 C	344.1		
P660	Temperature Source Fixed	1		
P791	Bus Error Count	8		
P802	Transducer Submergence	0		
	%	32.93%		
	Echo	100		
	Temp	6 C		
	mA	9.30 mA		
	Level	1.56 l/s		

Site Location:



Pierce Services
& Solutions Inc.

PO Box 26027
Guelph, ON N1E 6W1

Phone: 519.820.4853
Fax: 519.824.9402

Flowmeter Report

Verification: X

Calibration:

Client: OCWA Bluewater
Description: Mag Flow Meter
Manufacturer: Krohne
Model: Aquaflex
Inventory No.: 249218

Location: Bayfield Lagoons
Date: 04-Apr-22
Checked By: Greg Pierce
Serial No.: 1047692

Velocity	Input	As Found	As Left	Pass/Fail
0 m/s	0.00 l/s	0.00 l/s	0.00 l/s	Pass
1.23 m/s	59.94 l/s	59.94 l/s	59.94 l/s	Pass
2.54 m/s	125.00 l/s	125.00 l/s	125.00 l/s	Pass
3.842 m/s	58.2 l/s	58.2 l/s		

Confirmed Run Mode: X

Returned to service: X

Service Comments:

Flowmeter Information

Flow Unit: l/s
Meter Size: 250 mm
Pipe Material: Cast Steel
Liner Material: PU
Range: 0-125 l/s
Tag Number: FIT 100



Comments:

Verification of original calibration

Coil Temp - 366.9 F
Electrode Temp - 100.1 F
Conductivity - 594.8 uS/cm
Coil Resistance - 98.9 Ω

Signature: 
Greg Pierce, CCST



**Pierce Services
& Solutions Inc.**

PO Box 26027
Guelph, ON N1E 6W1

Phone: 519.820.4853
Fax: 519.824.9402

Flowmeter Report

Verification:

Calibration:

Client: OCWA Bluewater
Description: Mag Flow Meter
Manufacturer: ABB
Model: Watermaster
Inventory No.: 249197

Location: Bayfield Lagoons
Date: 04-Apr-22
Checked By: Greg Pierce
Serial No.: 3K620000215245

Velocity	Input	As Found	As Left	Pass/Fail
0 m/s	0.00 l/s	0.00 l/s	0.00 l/s	Pass
1.99 m/s	3.9 l/s	3.92 l/s	3.92 l/s	
3.05 m/s	6.00 l/s	6.00 l/s	6.00 l/s	

Confirmed Run Mode:

Returned to service:

Service Comments:

Flowmeter Information

Flow Unit: l/s
Meter Size: 50 mm
Pipe Material: Cast Steel
Liner Material: PU
Range: 0-6 l/s
Tag Number: Park Flow



Comments:

Verification of original calibration

No Alarms

E1 - 1.40 kΩ
E2 - 1.42 kΩ
E1 - 0.051 V
E2 - 0.003 V
E12 - -0.048 V
CDI - 179.93 mA
CDR - 25.75 Ω

Signature:

Greg Pierce, CCST



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& Solutions Inc.

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Instrument Verification Sheet

Client Name: Ontario Clean Water Agency

Date: April 4, 2022

Equipment Description: Level Sensor

Assigned Number: Alum Tank Level

Area Located: Bayfield Lagoons

Inventory Number: N/A

Instrument Data

Manufacturer: Milltronics

Model Number: MultiRanger Plus

Type: Ultrasonic

Serial Number: N/A

Range: 0 - 3.700 m

Accuracy: +/- 5%

Method Of Calibration: Standard Measurement

Application: Waste Water

Calibration Data

Input %	Input	As Found	As Left	% Error
	7.687 mA	0.853 m	0.853 m	

Confirmed Run Mode:

Placed back in service:

Comments:



Checked By: Greg Pierce CCST

Signature: 



Tag # Alum Tank Level

Date: April 4, 2022

#	Parameter	Value	#	Parameter	Value
P-0	Security	1954	P-50	OCM mA output	1
P-1	Units	1	P-51	OCM simulation	--
P-2	Mode of Measurement	1	P-52	Totalizer display factor	0
P-3	Empty Distance	3.739	P-53	Totalizer decimal point	2
P-4	Span	3.700	P-54	Low total	00.00
P-5	Blanking	0.300	P-55	High total	0000
P-6	Analog Output	2	P-56	Remote totalizer contact	0
P-7	Decimal Point	2	P-57	Flow sampler control	0
P-8	Relay 1, Function	0	P-58	Flow sampler control	1.000
P-9	Relay 1, Setpoint On	--	P-59	Time sampler control	--
P-10	Relay 1, Setpoint Off	--	P-60	Full Calibration	--
P-11	Relay 2, Function	0	P-61	Empty Calibration	--
P-12	Relay 2, Setpoint On	--	P-62	Measurement Offset	0.000
P-13	Relay 2, Setpoint Off	--	P-63	Sound Velocity at 20° C	344.1
P-14	Relay 3, Function	0	P-64	Velocity at P-65	344.1
P-15	Relay 3, Setpoint On	--	P-65	Air temperature	20 C
P-16	Relay 3, Setpoint Off	--	P-66	Maximum air temperature	163 C
P-17	Relay 4, Function	0	P-67	Minimum air temperature	9 C
P-18	Relay 4, Setpoint On	--	P-68	Fill damping	10.00
P-19	Relay 4, Setpoint Off	--	P-69	Empty damping	10.00
P-20	Relay 5, Function	0	P-70	Process rate display	0.000
P-21	Relay 5, Setpoint On	--	P-71	Process rate filter	1
P-22	Relay 5, Setpoint Off	--	P-72	Fuzz filter	1
P-23	Transducer, Submersible	0	P-73	Agitator discrimination	1
P-24	Pump 1, hours	0.000	P-74	Fail-safe mode	3
P-25	Pump 2, hours	0.000	P-75	Fail-safe timer	15.00
P-26	Pump 3, hours	0.000	P-76	Reading	0.85
P-27	Pump 4, hours	0.000	P-77	Material level	0.853
P-28	Pump 5, hours	0.000	P-78	Space or distance	2.886
P-29	Pump, run on, interval	0.000	P-79	Scope displays	--
P-30	Pump, run off, duration	0	P-80	Echo confidence	0:23
P-31	Transducer	0	P-81	Confidence threshold long	10
P-32	DLD milliamp output	1	P-82	Confidence threshold long	5
P-33	Inflow/discharge totaling	1	P-83	Echo strength	73
P-34	Tank Shape	0	P-84	Noise	22:32
P-35	Tank dimension A	0.000	P-85	Algorithms	1
P-36	Tank dimension L	0.000	P-86	TVT curve	1
P-37	Convert display	1.000	P-87	Range extension	20
P-38	Display offset	0.000	P-88	Number of transmit pulses	4
P-39	Display reading options	0	P-89	Software version	1.22
P-40	Primary measuring device	1	P-90	Memory test	PASS
P-41	Flow rate time units	4	P-91	LCD,LED and relay test	PASS
P-42	OCM exponent	1.550	P-92	mA output test	7.687
P-43	Flume Dimensions	1.000	P-93	Temperature sensor test	255.0
P-45	Maximum head	3.700	P-94	Transmitter test	PASS
P-46	Maximum flow rate	1000	P-95	Programmer test	PASS
P-47	Auto zero	--	P-96	Watchdog reset test	PASS
P-48	OCM low head cutoff	5.000	P-97	Trim for 4 mA	228
P-49	OCM decimal point	2	P-98	Trim for 20 mA	3528
			P-99	Master reset	



Client Name: Ontario Clean Water Agency

Date: April 4, 2022

Equipment Description: Flow Transmitter

Assigned Number: Lagoon Filter Flow

Area Located: Bayfield Lagoons

Inventory Number: 114632

Instrument Data

Manufacturer: Krohne

Model Number: AquaFlux

Type: Magmeter

Serial Number: A00 12009

Range: 0-300 l/s

Accuracy: +/- 5%

Method Of Calibration: Standard Verification

Application: Wastewater

Meter Size: 300mm

PASS/FAIL: Pass

Calibration Data

Input	Input	Theoretical	As Found	Pass/Fail
	0.00 l/s	0.00 l/s	0.00 l/s	Pass
	135.96 l/s	135.96 l/s	135.96 l/s	Pass

Confirmed Run Mode: ✓

Placed back in service: ✓

Comments:

Verification of original calibration only.



Checked By: Greg Pierce CCST

Signature:



Pierce Services
& Solutions Inc.

519.820.4853 Fax 519.824.9402

Instrument Verification Sheet

Client Name: Ontario Clean Water Agency

Date: April 4, 2022

Equipment Description: Level Sensor

Assigned Number: LIT 103

Area Located: Bayfield Lagoons Chamber

Inventory Number: 114630

Instrument Data

Manufacturer: Milltronics

Model Number: MultiRanger Plus

Type: Ultrasonic

Serial Number: N/A

Range: 0 - 3.500 m

Accuracy: +/- 5%

Method Of Calibration: Standard Measurement

Application: Waste Water

Calibration Data

Input %	Input	As Found	As Left	Pass/Fail
	19.38 mA	3.075 m	3.075 m	Pass

Confirmed Run Mode:

Placed back in service:

Comments:



Checked By: Greg Pierce CCST

Signature: 



#	Parameter	Value	#	Parameter	Value
P-0	Security	1954	P-50	OCM mA output	1
P-1	Units	1	P-51	OCM simulation	--
P-2	Mode of Measurement	1	P-52	Totalizer display factor	0
P-3	Empty Distance	3.500	P-53	Totalizer decimal point	2
P-4	Span	3.200	P-54	Low total	00.00
P-5	Blanking	0.300	P-55	High total	0000
P-6	Analog Output	2	P-56	Remote totalizer contact	0
P-7	Decimal Point	2	P-57	Flow sampler control	0
P-8	Relay 1, Function	0	P-58	Flow sampler control	1.000
P-9	Relay 1, Setpoint On	--	P-59	Time sampler control	--
P-10	Relay 1, Setpoint Off	--	P-60	Full Calibration	--
P-11	Relay 2, Function	0	P-61	Empty Calibration	--
P-12	Relay 2, Setpoint On	--	P-62	Measurement Offset	0.000
P-13	Relay 2, Setpoint Off	--	P-63	Sound Velocity at 20° C	344.1
P-14	Relay 3, Function	0	P-64	Velocity at P-65	420.4
P-15	Relay 3, Setpoint On	--	P-65	Air temperature	164. C
P-16	Relay 3, Setpoint Off	--	P-66	Maximum air temperature	164 C
P-17	Relay 4, Function	0	P-67	Minimum air temperature	-48 C
P-18	Relay 4, Setpoint On	--	P-68	Fill damping	10.00
P-19	Relay 4, Setpoint Off	--	P-69	Empty damping	10.00
P-20	Relay 5, Function	0	P-70	Process rate display	0.000
P-21	Relay 5, Setpoint On	--	P-71	Process rate filter	1
P-22	Relay 5, Setpoint Off	--	P-72	Fuzz filter	1
P-23	Transducer, Submersible	0	P-73	Agitator discrimination	1
P-24	Pump 1, hours	0.000	P-74	Fail-safe mode	3
P-25	Pump 2, hours	0.000	P-75	Fail-safe timer	15.00
P-26	Pump 3, hours	0.000	P-76	Reading	3.08
P-27	Pump 4, hours	0.000	P-77	Material level	3.075
P-28	Pump 5, hours	0.000	P-78	Space or distance	0.425
P-29	Pump, run on, interval	0.000	P-79	Scope displays	--
P-30	Pump, run off, duration	0	P-80	Echo confidence	8: E
P-31	Transducer	0	P-81	Confidence threshold long	10
P-32	DLD milliamp output	1	P-82	Confidence threshold long	5
P-33	Inflow/discharge totaling	1	P-83	Echo strength	0
P-34	Tank Shape	0	P-84	Noise	6:17
P-35	Tank dimension A	0.000	P-85	Algorithms	1
P-36	Tank dimension L	0.000	P-86	TVT curve	1
P-37	Convert display	1.000	P-87	Range extension	20
P-38	Display offset	0.000	P-88	Number of transmit pulses	4
P-39	Display reading options	0	P-89	Software version	1.22
P-40	Primary measuring device	1	P-90	Memory test	PASS
P-41	Flow rate time units	4	P-91	LCD,LED and relay test	PASS
P-42	OCM exponent	1.550	P-92	mA output test	19.38
P-43	Flume Dimensions	1.000	P-93	Temperature sensor test	190.0
P-45	Maximum head	3.700	P-94	Transmitter test	PASS
P-46	Maximum flow rate	1000	P-95	Programmer test	PASS
P-47	Auto zero	--	P-96	Watchdog reset test	PASS
P-48	OCM low head cutoff	5.000	P-97	Trim for 4 mA	228
P-49	OCM decimal point	2	P-98	Trim for 20 mA	3528
			P-99	Master reset	

Appendix C: WMS Work Order Summary

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2591352	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:18 PM	1/20/22 04:18 PM	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655 - Hydro outage area wide Generator called generator running all normal.
2591357	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:26 PM	1/20/22 04:26 PM	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655 -Area wide power outage on call operator got calls from station
2591362	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:32 PM	1/20/22 04:32 PM	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655 -Area wide power outage on call operator received notification
2591367	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:32 PM	1/20/22 04:32 PM	monthly test - • set off alum room flood alarm • monthly test • all normal
2591372	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	1/1/22 12:00 AM	1/25/22 03:34 PM	1/25/22 03:34 PM	power fail alarm - • received power fail alarm • Jan 19 2022 04:48 • all normal
2591561			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Spill Kit Inspect (1y) 6655/5876/5695	CLOSE	1/1/22 12:00 AM	5/14/22 11:07 AM	5/14/22 11:07 AM	Checked all stations - • All normal
2591996	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:20 PM	1/20/22 04:20 PM	Engine Diesel Bayfield South PS Insp/Test (1m) 6655 -Area wide power outage generator running all normal.
2592015	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:29 PM	1/20/22 04:29 PM	Engine Diesel North Lift PS Insp/ Test (1m) 6655 -Area wide power outage Generator running all normal
2592034	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	1/1/22 12:00 AM	1/20/22 04:24 PM	1/20/22 04:24 PM	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655 -Area wide power outage Generator running all normal

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM
 Report End Date: Dec 31, 2022 11:59 PM
 Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF
 Work Order Type: PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2616205			6655, Bayfield WWL & CS	PM	Inspection	1	YEARS	Wet Well Bar Screens & Floats Cleaning (1y) 6655	COMP	1/1/22 12:00 AM	1/13/23 11:43 AM	1/13/23 11:43 AM	south bar screens - • south bar screens south bar screens - • south bar screens main and south bar screens - • main and south bar screens Wet Well Bar Screens & Floats Cleaning (1m) 6655 -Cleaned South lift and North list sps north and south bar screens - • north and south bar screens South Bar Screens -Cleaned south bar screens on feb 03,2022 south lift bar screens - • south lift bar screens Wet Well Bar Screens & Floats Cleaning (1y) 6655 -Cleaned south lift bar screens maiin,south and north bar screens - • maiin,south and north bar screens Clean Bar Screens - • Cleaned bar screens at the Main SPS, North SPS and South SPS with Scott Bedard on Feb 24, 2022 south bar screens - • south bar screens south bar screens - • south bar screens

Workorder Summary Report

 Report Start Date: Jan 1, 2022 12:00 AM
 Report End Date: Dec 31, 2022 11:59 PM
 Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF
 Work Order Type: PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													Wet Well Bar Screens & Floats Cleaning (1y) 6655 - On site cleaning bar screens with scott bedard south bar screens - • south bar screens Wet Well Bar Screens & Floats Cleaning (1y) 6655 - completed south bar screens cleaned Main,South and North bar screens - • cleaned Main,South and North bar screens Wet Well Bar Screens & Floats Cleaning (1y) 6655 - Cleaned North, south, and main pumping station bar screens south bar screens - • south bar screens Wet Well Bar Screens & Floats Cleaning (1y) 6655 - cleaned south bar screens Cleaning Bar screens - Cleaned south bar screens with scott bedard main and south bar screens - • main and south bar screens south bar screens - On site assisting with scott bedard cleaning bar screens

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM
 Report End Date: Dec 31, 2022 11:59 PM
 Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF
 Work Order Type: PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													south bar screens - • south bar screens Deep Clean of all Wet Wells April 28, 2022 with CT - • Onsite at all wet wells throughout Bluewater with CT Environmental to complete a deep clean of all wet wells as we do every April and October. CT Technician went down each wet well with a pressure washer to clean all floats and milltronic eye. South Bar screens - cleaned south Lift Bar screens south bar screens - • south bar screens Bar screens cleaned with Bennett Taylor South lift - Wet Well Bar Screens & Floats Cleaning (1y) 6655 - Cleaned south lift bar screens with Mike Green Cleaned bar screens south lift station - north and south bar screens - • north and south bar screens South lift raked bar screens - south bar screens - • south bar screens south bar screens - • south bar screens

Workorder Summary Report

 Report Start Date: Jan 1, 2022 12:00 AM
 Report End Date: Dec 31, 2022 11:59 PM
 Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF
 Work Order Type: PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													south bar screens - • south bar screens South lift cleaning of bar screens - - South lift bar screen cleaning. Cleaned low level float - Cleaned South SPS bar screens - Raked bar screens south lift bayfield - Wet Well Bar Screens & Floats Cleaning (1y) 6655 - cleaned north, south, and main pumping station Cleaned bar screens Main/North/ South SPS - Cleaned bar screens with Bennett Taylor-south and north sps - Wet Well Bar Screens & Floats Cleaning (1y) 6655 - cleaned bar screens All lift stations cleaned - Wet Well Bar Screens & Floats Cleaning south - cleaned bar screens - Wet Well Bar Screens & Floats Cleaning (1y) 6655 - cleaned bar screens south bar screens - cleaned south bar screens with MG South lift station cleaned -

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM
 Report End Date: Dec 31, 2022 11:59 PM
 Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF
 Work Order Type: PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													North SPS - Raked bar screen with Kevin R South Bar Screen - south bar screens - - Cleaned bar screens with Kevin Reiger South SPS - • Cleaned Bar Screens with Katelyn B.
2616613			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	1/1/22 12:00 AM	1/28/22 05:11 PM	1/28/22 05:11 PM	campground meter reads - • campground meter reads
2620494			6655, Bayfield WWL & CS	PM	Inspection	1	YEARS	72 Hour Trending Review (1y) - 6655/5876/5695	COMP	1/1/22 12:00 AM	1/13/23 11:44 AM	1/13/23 11:44 AM	72 Hour Trending Review (1y) - 6655/5876/5695 -Reviewed Previous operators trending 72 Hour Trending Review (1y) - 6655/5876/5695 - • 72 Hour Trending Review (1y) - 6655/5876/5695 Trained Katelyn B - 72 Hour Trending Review (1y) - 6655/5876/5695 - Completed trending Trending - Trending - Trending - Trending - Trending - 72 hour trending -

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2623412			6655, Bayfield WWL & CS	PM	Administrative	1	YEARS	Chemical Receiving (1y) 6655/6676/5695	COMP	1/1/22 12:00 AM	1/13/23 11:45 AM	1/13/23 11:45 AM	Zurich Lagoon Alum Delivery April 26, 2022 - • Received alum delivery from ChenTrade, all normal. Received Jutzi Order - Zurich Lagoon Alum Delivery Nov 23, 2022 - • Received alum delivery from Chem Trade, all normal.
2623577			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	1/1/22 12:00 AM	1/25/22 07:59 AM	1/25/22 07:59 AM	e.Ris Data Collection (1m) 6655 -
2635281			6655, Bayfield South Pumping Station	PM	Administrative	1	YEARS	Client Reports Bluewater Area (1m) t	CLOSE	1/8/22 12:00 AM	2/3/22 12:42 PM	2/3/22 12:42 PM	Completed Report -
2644734	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:00 PM	2/23/22 05:00 PM	monthly test - • power fail,generator running alarm while testing generator • monthly test • all normal
2644739	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:14 PM	2/23/22 05:14 PM	monthly test - • power fail and generator running alarm while testing generator • all normal
2644744	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:22 PM	2/23/22 05:22 PM	monthly test - • power fail and generator running alarm while testing generator • all normal
2644749	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	2/1/22 12:00 AM	5/14/22 11:15 AM	5/14/22 11:15 AM	Completed by operator - • all normal

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2644754	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:17 PM	2/23/22 05:17 PM	monthly test - • set off high level alarm • monthly test • all normal
2645359	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:06 PM	2/23/22 05:06 PM	monthly test - • ran generator for monthly test • recorded data • generator in auto • all normal
2645378	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:20 PM	2/23/22 05:20 PM	monthly test - • ran generator for monthly test • recorded data • generator in auto • all normal
2645397	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	2/1/22 12:00 AM	2/23/22 05:10 PM	2/23/22 05:10 PM	monthly test - • ran generator for monthly test • recorded data • generator in auto • all normal
2662405			6655, Bayfield WWL & CS	PM	Inspection	1	YEARS	Wet Well Bar Screens & Floats Cleaning (1m) 6655	CLOSE	2/1/22 12:00 AM	2/9/22 01:03 PM	2/9/22 01:03 PM	Changed to an annual per Kevin -
2662708			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	2/1/22 12:00 AM	3/4/22 02:20 PM	3/4/22 02:20 PM	campground data logger reads - • campground data logger reads
2667659			6655, Bayfield WWL & CS	PM	Administrative	1	YEARS	Chemical Receiving (1m) 6655/6676/5695	CLOSE	2/1/22 12:00 AM	2/9/22 12:24 PM	2/9/22 12:24 PM	Changed to an annual per Kevin -
2667775			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	2/1/22 12:00 AM	2/16/22 03:12 PM	2/16/22 03:12 PM	e.ris data extraction -
2677465			6655, Bayfield South Pumping Station	PM	Administrative	1	YEARS	Client Reports Bluewater Area (1y) 6	CLOSE	2/8/22 12:00 AM	3/4/22 02:26 PM	3/4/22 02:26 PM	Completed Report -
2686862			6655, Bayfield WWL & CS	PM	Inspection	1	YEARS	Lifting Device Route (1y) 6655	CLOSE	3/1/22 12:00 AM	7/14/22 10:28 AM	7/14/22 10:28 AM	Lifting Device Route (1y) 6655 - -Konecranes completed on May 9th/ 2022 - Bayfield lagoon completed

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2687064	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:35 PM	4/11/22 03:35 PM	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655 - run generator alarmed called okay monthly test - • generator running and power fail alarm
2687069	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:36 PM	4/11/22 03:36 PM	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655 - tested alarm generator
2687074	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:37 PM	4/11/22 03:37 PM	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655 - tested alarm generator running
2687079	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:31 PM	4/11/22 03:31 PM	monthly test - • set off alum room flood alarm • for monthly test • all normal
2687084	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:33 PM	4/11/22 03:33 PM	monthly test - • set off high level alarm • for monthly test • all normal
2687612	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:38 PM	4/11/22 03:38 PM	monthly test - • ran generator for monthly test • recorded data • generator in auto • all normal
2687631	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:48 PM	4/11/22 03:48 PM	Engine Diesel North Lift PS Insp/ Test (1m) 6655 - Ran North Lift generator all normal

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2687650	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	3/1/22 12:00 AM	4/11/22 03:49 PM	4/11/22 03:49 PM	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655 - Ran generator at main lift all normal
2687799			6655, Bayfield WWL & CS	PM	Health and Safety	1	YEARS	OG15 Facility OHSA Inspection (1y) 6655	CLOSE	3/1/22 12:00 AM	7/26/22 10:31 AM	7/26/22 10:31 AM	OG15 Facility OHSA Inspection (1y) 6655 - Completed February 2022 by operational staff - Inspection details uploaded onto OCWA shared drive
2706426			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	3/1/22 12:00 AM	5/14/22 11:22 AM	5/14/22 11:22 AM	Paul Bunyan read - Paul Bunyan read
2711329			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	3/1/22 12:00 AM	4/8/22 01:47 PM	4/8/22 01:47 PM	e.Ris Data Collection (1m) 6655 -
2733756	0000156279	FILTER SAND 01	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Filter Sand 01 Insp/Service (1y) 6655	CLOSE	4/1/22 12:00 AM	5/14/22 11:31 AM	5/14/22 11:31 AM	Needs to be tilled -
2733759	0000156280	FILTER SAND 02	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Filter Sand 02 Insp/Service (1y) 6655	CLOSE	4/1/22 12:00 AM	5/14/22 11:32 AM	5/14/22 11:32 AM	Needs to be tilled -
2733762	0000156277	LAGOON CELL 01	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	6	MONTHS	Lagoon 01 Insp/Service (6m) 6655	CLOSE	4/1/22 12:00 AM	5/14/22 11:33 AM	5/14/22 11:33 AM	Inspection Complete - all normal
2733773	0000156278	LAGOON CELL 02	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	6	MONTHS	Lagoon 02 Insp/Service (6m) 6655	CLOSE	4/1/22 12:00 AM	5/14/22 11:34 AM	5/14/22 11:34 AM	Inspection Complete - all normal
2733784	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:46 PM	4/11/22 03:46 PM	monthly test - generator running - power fail alarm
2733789	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:54 PM	4/11/22 03:54 PM	monthly test - generator running - power fail alarms
2733794	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:56 PM	4/11/22 03:56 PM	monthly test - generator running - power fail alarms

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
2733799	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:51 PM	4/11/22 03:51 PM	monthly test - • set off alum room flood alarm • monthly test
2733804	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:49 PM	4/11/22 03:49 PM	monthly test - • set off high level alarm • monthly test
2733809	0000156240	SAMPLER 01 AUTO COMPOSITE PS3	6655, Bayfield Main Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Sampler 01 Auto Composite Insp/ Service (1y) 6655	CLOSE	4/1/22 12:00 AM	10/20/22 03:20 PM	10/20/22 03:20 PM	Sampler 01 Auto Composite Insp/ Service (1y) 6655 -inspected final effluent auto sampler all normal
2733815	0000156258	SAMPLER 02 AUTO COMPOSITE	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Sampler 02 Auto Composite Insp/ Service (1y) 6655	CLOSE	4/1/22 12:00 AM	11/15/22 10:10 AM	11/15/22 10:10 AM	Completed by operator -
2734384	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:48 PM	4/11/22 03:48 PM	monthly test - • ran generator for monthly test • recorded data • in auto • all normal
2734403	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:58 PM	4/11/22 03:58 PM	monthly test - • ran generator for monthly test • recorded data • in auto • all normal
2734422	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	4/1/22 12:00 AM	4/11/22 03:53 PM	4/11/22 03:53 PM	monthly test - • ran generator for monthly test • recorded data • in auto • all normal
2754671			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	4/1/22 12:00 AM	5/14/22 11:46 AM	5/14/22 11:46 AM	Completed by operator -
2761095			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	4/1/22 12:00 AM	4/8/22 01:48 PM	4/8/22 01:48 PM	e.Ris Data Collection (1m) 6655 -

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2782787	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	5/1/22 12:00 AM	5/11/22 03:39 PM	5/11/22 03:39 PM	generator running alarm - • generator running alarm
2782792	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	5/1/22 12:00 AM	6/29/22 12:59 PM	6/29/22 12:59 PM	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655 - -Alarmed for generator running -All normal
2782797	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	5/1/22 12:00 AM	5/11/22 03:38 PM	5/11/22 03:38 PM	monthly test - • generator running alarm
2782802	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	5/1/22 12:00 AM	5/9/22 03:27 PM	5/9/22 03:27 PM	monthly test - • set off alum room flood alarm • for monthly test
2782807	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	5/1/22 12:00 AM	5/9/22 03:29 PM	5/9/22 03:29 PM	monthly test - • set off high level alarm • for monthly test
2783362	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	5/1/22 12:00 AM	5/11/22 03:26 PM	5/11/22 03:26 PM	monthly test - • ran generator for monthly test • recorded data • generator in auto • all normal
2783381	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	5/1/22 12:00 AM	5/11/22 03:35 PM	5/11/22 03:35 PM	monthly test - • ran generator for monthly test • recorded data • generator in auto • all normal
2783400	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	5/1/22 12:00 AM	5/14/22 11:52 AM	5/14/22 11:52 AM	Tested Generator - all normal
2802352			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	5/1/22 12:00 AM	7/14/22 10:23 AM	7/14/22 10:23 AM	Data Logger Insp/Service - Campgrounds (1m) 6655 - -Completed by Bennett Taylor
2807231			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	5/1/22 12:00 AM	5/13/22 01:00 PM	5/13/22 01:00 PM	e.ris data extraction -

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2830227			6655, Bayfield WWL & CS	PM	Calibration	1	YEARS	Analyzer Gas Tri Detector Insp/ Calib (1y) 6655	CLOSE	6/1/22 12:00 AM	7/25/22 11:25 AM	7/25/22 11:25 AM	
2830230	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 12:59 PM	6/29/22 12:59 PM	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655 - -Ran generator for monthly testing-triggered alarm -All normal
2830236	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 01:00 PM	6/29/22 01:00 PM	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655 - -All normal
2830241	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 01:01 PM	6/29/22 01:01 PM	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655 - -Completed by oncall operator due to power outage-alarm was triggered -All normal
2830246	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	6/1/22 12:00 AM	7/4/22 05:05 PM	7/4/22 05:05 PM	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655 - -tested bayfield lagoon alarm dialer all normal
2830251	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 01:02 PM	6/29/22 01:02 PM	Alarm Dialer Marina PS Testing (1m) 6655 - -Triggered alarm for monthly testing -All normal
2830393			6655, Bayfield WWL & CS	PM	Health and Safety	6	MONTHS	MSDS Review - (6m) 6655	CLOSE	6/1/22 12:00 AM	8/26/22 08:50 AM	8/26/22 08:50 AM	MSDS Review - (6m) 6655 - -Reviewed with PCT onsite June 2022
2830836	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 12:57 PM	6/29/22 12:57 PM	Engine Diesel Bayfield South PS Insp/Test (1m) 6655 - -Ran generator for monthly testing -All normal

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2830855	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/Test (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 12:38 PM	6/29/22 12:38 PM	Engine Diesel North Lift PS Insp/Test (1m) 6655 - -Completed by operator OnCall due to power outage -All normal
2830874	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	6/1/22 12:00 AM	6/29/22 12:37 PM	6/29/22 12:37 PM	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655 - -completed by operator OnCall due to power outage
2830951			6655, Bayfield WWL & CS	PM	Compliance	1	YEARS	OG35 FEP Review (1y) 6655/5695/5	CLOSE	6/1/22 12:00 AM	9/30/22 12:15 PM	9/30/22 12:15 PM	- The Municipality of Bluewater Wastewater Facilities Annual FEP binder review was completed; revisions were made as applicable during the review process. A 2022 Annual FEP binder review document noting all revisions made was filed accordingly on the shared drive. A training package was prepared and will be presented to applicable staff drawing attention to revisions made and why.
2851309			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	6/1/22 12:00 AM	7/14/22 10:22 AM	7/14/22 10:22 AM	Data Logger Insp/Service - Campgrounds (1m) 6655 - -Completed by Bennett Taylor-Sugarbush -Complete by Mike Green -Paul Bunyan -Uploaded to the shared drive -Send file to Shelly to municipality
2856649			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	6/1/22 12:00 AM	8/26/22 09:00 AM	8/26/22 09:00 AM	e.Ris Data Collection (1m) 6655 - -Completed by Dylan Johns and Paul Sherban June 2022

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2880318	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	7/1/22 12:00 AM	7/28/22 01:30 PM	7/28/22 01:30 PM	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655 - -Tested generator. Alarmed out. -All normal
2880323	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	7/1/22 12:00 AM	7/28/22 01:32 PM	7/28/22 01:32 PM	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655 - -Tested generator. Alarmed out -All normal
2880328	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	7/1/22 12:00 AM	8/26/22 08:58 AM	8/26/22 08:58 AM	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655 - -Completed by Bennett Taylor on July 25, 2022
2880333	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	7/1/22 12:00 AM	8/26/22 08:56 AM	8/26/22 08:56 AM	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655 - -Completed by Katelyn Barrowcliffe on July 28, 2022
2880338	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	7/1/22 12:00 AM	8/8/22 03:35 PM	8/8/22 03:35 PM	Alarm Dialer Marina PS Testing (1m) 6655 - Completed alarm testing last week of July All normal
2880887	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	7/1/22 12:00 AM	7/28/22 01:27 PM	7/28/22 01:27 PM	Engine Diesel Bayfield South PS Insp/Test (1m) 6655 - -Ran generator for monthly testing -All normal
2880906	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	7/1/22 12:00 AM	8/26/22 08:59 AM	8/26/22 08:59 AM	Engine Diesel North Lift PS Insp/ Test (1m) 6655 - -Completed by Bennett Taylor on July 25, 2022
2880925	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	7/1/22 12:00 AM	7/28/22 01:29 PM	7/28/22 01:29 PM	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655 - -Ran generator for monthly testing -All normal

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM
 Report End Date: Dec 31, 2022 11:59 PM
 Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF
 Work Order Type: PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2900087			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	7/1/22 12:00 AM	8/29/22 01:00 PM	8/29/22 01:00 PM	Data Logger Insp/Service - Campgrounds (1m) 6655 - completed monthly meter reads from Paul Bunyan and sugar bush
2905771			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	7/1/22 12:00 AM	9/15/22 10:57 AM	9/15/22 10:57 AM	Completed by operator -
2928428	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	8/1/22 12:00 AM	8/29/22 01:14 PM	8/29/22 01:14 PM	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655 - tested alarm all normal
2928433	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	8/1/22 12:00 AM	8/29/22 01:15 PM	8/29/22 01:15 PM	Alarm tested by running generator Aug 29, 2022 - -Tested generator -All normal
2928438	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	8/1/22 12:00 AM	8/29/22 01:20 PM	8/29/22 01:20 PM	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655 - Completed alarm test all normal
2928443	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	8/1/22 12:00 AM	9/2/22 02:47 PM	9/2/22 02:47 PM	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655 - -Completed by operator Aug 2022
2928448	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	8/1/22 12:00 AM	9/2/22 02:48 PM	9/2/22 02:48 PM	Alarm Dialer Marina PS Testing (1m) 6655 - -Completed by operator Aug 2022
2929055	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	8/1/22 12:00 AM	9/2/22 02:49 PM	9/2/22 02:49 PM	Engine Diesel Bayfield South PS Insp/Test (1m) 6655 -tested generator all normal
2929074	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	8/1/22 12:00 AM	8/29/22 01:22 PM	8/29/22 01:22 PM	Engine Diesel North Lift PS Insp/ Test (1m) 6655 - tested generator all normal
2929093	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	8/1/22 12:00 AM	8/29/22 01:16 PM	8/29/22 01:16 PM	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655 - -Completed generator monthly testing -All normal-placed back into auto once competed

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2946960			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	8/1/22 12:00 AM	9/2/22 02:51 PM	9/2/22 02:51 PM	Data Logger Insp/Service - Campgrounds (1m) 6655 - -Completed by Bennett Taylor in August 2022-Did July reads
2951727			6655, Bayfield WWL & CS	PM	Refurbish/Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	8/1/22 12:00 AM	9/1/22 09:07 AM	9/1/22 09:07 AM	e.Ris Data Collection (1m) 6655 - -Extracted files off Zurich computer and uploaded to shared drive
2974374	0000156160	PANEL ALARM/DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:21 PM	9/30/22 02:21 PM	Tested Power Fail alarm - All normal
2974379	0000156242	PANEL ALARM/DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:22 PM	9/30/22 02:22 PM	Tested Power Fail alarm - All Normal
2974384	0000156186	PANEL ALARM/DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:22 PM	9/30/22 02:22 PM	Tested Power Fail alarm - All Normal
2974389	0000156272	PANEL ALARM/DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:23 PM	9/30/22 02:23 PM	Tested Alum Room Flood Alarm - All Normal
2974394	0000207037	PANEL ALARM/DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:24 PM	9/30/22 02:24 PM	Tested High Level Alarm - All normal
2975114	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:30 PM	9/30/22 02:30 PM	Tested Generator - All Normal
2975133	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Refurbish/Replace/Repair	1	YEARS	Engine Diesel Bayfield South PS Insp/Service (1y) 6655	CLOSE	9/1/22 12:00 AM	11/14/22 01:40 PM	11/14/22 01:40 PM	completed by Sommers Nov 8 2022 -
2975172	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/Test (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:31 PM	9/30/22 02:31 PM	Tested Generator - All Normal
2975191	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Refurbish/Replace/Repair	1	YEARS	Engine Diesel North Lift PS Insp/Service (1y) 6655	CLOSE	9/1/22 12:00 AM	11/14/22 01:47 PM	11/14/22 01:47 PM	completed Nov 8 by Sommers -
2975230	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	9/1/22 12:00 AM	9/30/22 02:32 PM	9/30/22 02:32 PM	Tested Generator - All Normal
2975249	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Refurbish/Replace/Repair	1	YEARS	Engine Diesel Bayfield Main PS Insp/Service (1y) 6655	CLOSE	9/1/22 12:00 AM	11/14/22 01:50 PM	11/14/22 01:50 PM	completed by Sommers Nov 8 -
2982059			6655, Bayfield WWL & CS	PM	Refurbish/Replace/Repair	1	YEARS	Backflow Preventer Inspection (1y) 6655	CLOSE	9/1/22 12:00 AM	11/14/22 02:12 PM	11/14/22 02:12 PM	with Greg Masse - completed by Greg Masse Oct 28 2022 -

Workorder Summary Report

Report Start Date: Jan 1, 2022 12:00 AM

Report End Date: Dec 31, 2022 11:59 PM

Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
2986929	0000249217	METER FLOW EFFLUENT BAYFIELD LAGOON	6655, Bayfield WWL & CS	PM	Calibration	1	YEARS	Meter Level Effluent Bayfield Lagoon Insp/Service (1y) 6655	CLOSE	9/1/22 12:00 AM	9/15/22 01:45 PM	9/15/22 01:45 PM	Completed by Pierce Services -
2986934	0000249216	METER LEVEL 04 ALUM	6655, Bayfield WWL & CS	PM	Calibration	1	YEARS	Meter Level 04 Alum Insp/Service (1y) 6655	CLOSE	9/1/22 12:00 AM	9/15/22 01:45 PM	9/15/22 01:45 PM	Completed by Pierce Services -
2995051			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	9/1/22 12:00 AM	9/19/22 09:04 AM	9/19/22 09:04 AM	August Data Logger Insp/Service - Campgrounds (1m) 6655 - Completed monthly campground data logger reads
3000449			6655, Bayfield WWL & CS	PM	Refurbish/Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	9/1/22 12:00 AM	9/15/22 01:57 PM	9/15/22 01:57 PM	Completed by operator -
3024841	0000156277	LAGOON CELL 01	6655, Bayfield WWL & CS	PM	Refurbish/Replace/Repair	6	MONTHS	Lagoon 01 Insp/Service (6m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:30 AM	10/20/22 10:30 AM	Visual Inspection Only -
3024852	0000156278	LAGOON CELL 02	6655, Bayfield WWL & CS	PM	Refurbish/Replace/Repair	6	MONTHS	Lagoon 02 Insp/Service (6m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:31 AM	10/20/22 10:31 AM	Visual Inspection Only -
3024863	0000156154	METER LEVEL 01 WET WELL PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	YEARS	Meter Level 01 Wet Well Ps1 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	12/13/22 12:23 PM	12/13/22 12:23 PM	Completed by Pierce Services -
3024865	0000156233	METER LEVEL 01 WET WELL PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	YEARS	Meter Level 01 Wet Well Ps3 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	12/13/22 12:24 PM	12/13/22 12:24 PM	Completed by Pierce Services -
3024867	0000156177	METER LEVEL 02 WET WELL PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	YEARS	Meter Level 02 Wet Well Ps2 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	12/13/22 12:24 PM	12/13/22 12:24 PM	Completed by Pierce Services -
3024869	0000156160	PANEL ALARM/DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:32 AM	10/20/22 10:32 AM	Tested Power Fail alarm -
3024874	0000156242	PANEL ALARM/DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:32 AM	10/20/22 10:32 AM	Tested Power Fail alarm -
3024879	0000156186	PANEL ALARM/DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:33 AM	10/20/22 10:33 AM	Tested Power Fail alarm -
3024884	0000156272	PANEL ALARM/DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:34 AM	10/20/22 10:34 AM	Tested Alum Room Flood Alarm -
3024889	0000207037	PANEL ALARM/DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:34 AM	10/20/22 10:34 AM	Tested high level alarm -
3024894	0000207003	PUMP SUBMERSIBLE 01 HARBOUR PS	6655, Bayfield North Pumping Station	PM	Refurbish/Replace/Repair	1	YEARS	Pump Subm 01 Marina PS Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:35 AM	10/20/22 10:35 AM	Visual Inspection Only -

Workorder Summary Report

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Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3024903	0000207002	PUMP SUBMERSIBLE 02 HARBOUR PS	6655, Bayfield North Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm 02 Marina PS Insp/ Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:35 AM	10/20/22 10:35 AM	Visual Inspection Only -
3024912	0000156178	PUMP SUBMERSIBLE H1 WET WELL PS2	6655, Bayfield North Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm H1 North Lift Ps2 Insp/ Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:36 AM	10/20/22 10:36 AM	Visual Inspection Only -
3024921	0000156179	PUMP SUBMERSIBLE H2 WET WELL PS2	6655, Bayfield North Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm H2 North Lift Ps2 Insp/ Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:36 AM	10/20/22 10:36 AM	Visual Inspection Only -
3024930	0000156234	PUMP SUBMERSIBLE M1 WET WELL PS3	6655, Bayfield Main Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm M1 Bayfield Main Ps3 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:37 AM	10/20/22 10:37 AM	Visual Inspection Only -
3024939	0000156235	PUMP SUBMERSIBLE M2 WET WELL PS3	6655, Bayfield Main Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm M2 Bayfield Main Ps3 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:37 AM	10/20/22 10:37 AM	Visual Inspection Only -
3024948	0000156236	PUMP SUBMERSIBLE M3 WET WELL PS3	6655, Bayfield Main Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm M3 Bayfield Main Ps3 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:38 AM	10/20/22 10:38 AM	Visual Inspection Only -
3024957	0000156161	PUMP SUBMERSIBLE S1 PS1	6655, Bayfield South Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm S1 Bayfield South Ps1 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:38 AM	10/20/22 10:38 AM	Visual Inspection Only -
3024966	0000156162	PUMP SUBMERSIBLE S2 PS1	6655, Bayfield South Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm S2 Bayfield South Ps1 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:39 AM	10/20/22 10:39 AM	Visual Inspection Only -
3024975	0000156163	PUMP SUBMERSIBLE S3 PS1	6655, Bayfield South Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm S3 Bayfield South Ps1 Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:39 AM	10/20/22 10:39 AM	Visual Inspection Only -
3024984	0000156169	VALVE BALL 01 AIR RELIEF PS1	6655, Bayfield South Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Valve Ball 01 Air Relief Ps1 Insp/ Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:40 AM	10/20/22 10:40 AM	Visual Inspection Only -
3024987	0000156193	VALVE BALL 02 AIR RELIEF PS2	6655, Bayfield North Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Valve Ball 02 Air Relief Ps2 Insp/ Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:41 AM	10/20/22 10:41 AM	Visual Inspection Only -
3024990	0000156253	VALVE BALL 03 AIR RELIEF PS3	6655, Bayfield Main Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Valve Ball 03 Air Relief Ps3 Insp/ Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:41 AM	10/20/22 10:41 AM	Visual Inspection Only -
3025615	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:46 AM	10/20/22 10:46 AM	Tested Generator -
3025634	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:47 AM	10/20/22 10:47 AM	Tested Generator -
3025653	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:48 AM	10/20/22 10:48 AM	Tested Generator -

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Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3036981	0000249219	PUMP SUBMERSIBLE P1 FILTER	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm P1 Bayfield Lagoon Filter Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:50 AM	10/20/22 10:50 AM	Visual Inspection Only -
3036990	0000249220	PUMP SUBMERSIBLE P2 FILTER	6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm P2 Bayfield Lagoon Filter Insp/Service (1y) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:51 AM	10/20/22 10:51 AM	Visual Inspection Only -
3045153			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	10/1/22 12:00 AM	10/20/22 10:55 AM	10/20/22 10:55 AM	Completed by operator -
3050647			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	10/1/22 12:00 AM	12/13/22 12:41 PM	12/13/22 12:41 PM	Completed by operator -
3073337	0000156160	PANEL ALARM/ DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 11:54 AM	11/15/22 11:54 AM	Tested Power Failure alarm -
3073342	0000156242	PANEL ALARM/ DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 11:54 AM	11/15/22 11:54 AM	Tested Power Failure alarm -
3073347	0000156186	PANEL ALARM/ DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 11:55 AM	11/15/22 11:55 AM	Tested Power Failure alarm -
3073352	0000156272	PANEL ALARM/ DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 11:56 AM	11/15/22 11:56 AM	Tested alum room flood alarm -
3073357	0000207037	PANEL ALARM/ DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 02:03 PM	11/15/22 02:03 PM	Tested High Level alarm -
3073362			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	YEARS	Tank Wet Well Insp/Service (1y) 6655	CLOSE	11/1/22 12:00 AM	12/13/22 12:43 PM	12/13/22 12:43 PM	Completed by operator -
3074016	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 01:20 PM	11/15/22 01:20 PM	Tested Generator -
3074035	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/ Test (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 01:21 PM	11/15/22 01:21 PM	Tested Generator -
3074054	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	CLOSE	11/1/22 12:00 AM	11/15/22 01:22 PM	11/15/22 01:22 PM	Tested Generator -
3090618			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/ Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	CLOSE	11/1/22 12:00 AM	12/13/22 01:01 PM	12/13/22 01:01 PM	Completed by operator -
3095196			6655, Bayfield WWL & CS	PM	Refurbish/ Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	CLOSE	11/1/22 12:00 AM	12/13/22 01:03 PM	12/13/22 01:03 PM	Completed by operator -

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Location: 6655,6655-SPBM,6655-SPBN,6655-SPBS,6655-SPMR,6655-WLBF

Work Order Type: PM

Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3113608	0000156160	PANEL ALARM/DIALER 01 PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 South Lift PS1 Testing (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 08:20 AM	1/23/23 08:20 AM	Tested power failure alarm -
3113613	0000156242	PANEL ALARM/DIALER 01 PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 01 Main Lift PS3 Testing (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 08:56 AM	1/23/23 08:56 AM	Tested alarm. All normal -
3113618	0000156186	PANEL ALARM/DIALER 02 PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer 02 North Lift PS2 Testing (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 09:00 AM	1/23/23 09:00 AM	Tested alarm, all normal -
3113623	0000156272	PANEL ALARM/DIALER 04 FILTER BLDG	6655, Bayfield WWL & CS	PM	Inspection	1	MONTHS	Alarm Dialer 04 Bayfield Lagoon Testing (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 09:01 AM	1/23/23 09:01 AM	Tested alarm. All normal -
3113628	0000207037	PANEL ALARM/DIALER MARINA PS	6655, Bluewater Marina Pumping Station	PM	Inspection	1	MONTHS	Alarm Dialer Marina PS Testing (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 09:05 AM	1/23/23 09:05 AM	Tested alarm. All normal -
3113774			6655, Bayfield WWL & CS	PM	Health and Safety	6	MONTHS	MSDS Review - (6m) 6655	CLOSE	12/1/22 12:00 AM	12/13/22 01:08 PM	12/13/22 01:08 PM	Task Complete -
3113781			6655, Bayfield WWL & CS	PM	Inspection	1	YEARS	Do Probe Calibration (1y) 6655/5876	COMP	12/1/22 12:00 AM	2/27/23 11:41 AM	2/27/23 11:41 AM	Completed by Greg Pierce -
3114253	0000156159	ENGINE DIESEL 01 GENSET PS1	6655, Bayfield South Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield South PS Insp/Test (1m) 6655	CLOSE	12/1/22 12:00 AM	12/15/22 08:06 AM	12/15/22 08:06 AM	Tested generator -
3114272	0000156182	ENGINE DIESEL 02 STANDBY PS2	6655, Bayfield North Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel North Lift PS Insp/Test (1m) 6655	COMP	12/1/22 12:00 AM	12/21/22 03:50 PM	12/21/22 03:50 PM	tested generator -
3114291	0000156238	ENGINE DIESEL 03 STANDBY PS3	6655, Bayfield Main Pumping Station	PM	Inspection	1	MONTHS	Engine Diesel Bayfield Main PS Insp/Test (1m) 6655	COMP	12/1/22 12:00 AM	12/21/22 03:49 PM	12/21/22 03:49 PM	tested generator -
3131156			Bayfield Wastewater Lagoons and Collection System	PM	Refurbish/Replace/Repair	1	MONTHS	Data Logger Insp/Service - Campgrounds (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 09:12 AM	1/23/23 09:12 AM	Completed data downloads -
3135760			6655, Bayfield WWL & CS	PM	Refurbish/Replace/Repair	1	MONTHS	e.Ris Data Collection (1m) 6655	COMP	12/1/22 12:00 AM	1/23/23 09:26 AM	1/23/23 09:26 AM	Date collected and reviewed -
3147396			6655, Bayfield WWL & CS	PM	Compliance	1	YEARS	Sampling Calendar Review (1y) 6655	COMP	12/15/22 12:00 AM	12/20/22 07:01 AM	12/20/22 07:01 AM	- Prepared 2023 Bluewater wastewater facilities sampling schedules and updated applicable sampling plans as needed; presented sampling schedules to operational staff during Dec. 14 2022 Operational Meeting and training sessions

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				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3147564			Bayfield Wastewater Lagoons and Collection System	PM	Inspection	0		ESA inspections Bayfield Lagoon, North PS, South PS , Zurich lagoon, Main PS 6655	CLOSE		12/15/22 07:57 AM	12/15/22 07:57 AM	ESA inspections Bayfield Lagoon, North PS, South PS , Zurich lagoon, Main PS 6655 - • ESA inspections Bayfield Lagoon, North PS, South PS , Zurich lagoon, Main PS 6655