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2025 Annual Performance Report for the North Cobalt Sewage Treatment Lagoon & Sewage Collection System

January 1, 2025 to December 31, 2025

PREPARED BY

Ontario Clean Water Agency
on behalf of the City of Temiskaming Shores

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Executive Summary

The North Cobalt Sewage Treatment Lagoon is located at 543083 Proctors Road in the Township of Buck and serves the residence of South Haileybury (North Cobalt). The lagoon is designed to treat an average daily flow of 1200 m^3/day and a peak flow of 2900 m^3/day. It is classified as a Class 2 wastewater treatment system under Ontario Regulation 129/04 and operates under Environmental Compliance Approval (ECA) No. 3-0077-94-006 for Municipal and Private Sewage Works issued on March 8, 1994 and amendment notices issued on September 20, 1994, January 30, 1995, February 8, 1995 and December 7, 1995.

The North Cobalt Lagoon Sewage Collection System is a Class 2 wastewater collection system under Ontario Regulation 129/04 that follows the requirements of ECA No. 218-W601 for Municipal Sewage Collection Systems issued on October 27, 2023.

This report summarizes the requirements of each Approval and describes the system's operational performance to demonstrate the production of quality effluent.

The North Cobalt Sewage Treatment Lagoon System performed well in 2025 producing a high quality effluent that met all effluent limits and objectives specified in the system's ECA.

The system, however was unable to consistently maintain the required operational pH range of 6.0–9.5 during July and August. Increased alum dosing was implemented to control algae growth and elevated TSS concentrations; however, unintended siphoning within the alum feed system resulted in over-application of alum to the lagoon, contributing to the observed low pH conditions.

The system operated within its average rated capacity, with an annual average daily flow of 377 m^3 which represents approximately 31% of the rated capacity. The total influent volume measured in 2025 was 137,362 m^3, compared with an effluent volume of 165,546 m^3.

There were two (2) overflow events that occurred at the Station Street sewage pumping station during the reporting period which are described in Section 10.

All requirements specified in the system's ECAs and any issues experienced at the facility are further explained throughout the report.

Introduction

Condition 17 of ECA No. 3-0077-94-006 for the North Cobalt Sewage Treatment Lagoon requires the Owner to prepare and submit a performance report to the Ministry of the Environment's District Manager on an annual basis within 90 days of the end of the reporting period, for the preceding calendar year. The 2025 Annual Performance Report was prepared by the Ontario Clean Water Agency (OCWA) on behalf of the City of Temiskaming Shores and is based on information kept on record by OCWA. The report must be completed in accordance with this approval and contains, but is not limited to the following information outlined in the ECA:

- A summary of all monitoring and compliance reports submitted in the reporting period, including an overview of the success and adequacy of the sewage treatment program;
- A comprehensive interpretation of all monitoring data and analytical data collected relative to the works during the reporting period and a comparison to the effluent quality and quantity criteria described in sections 11 and 12 of the ECA;
- A summary of any effluent quality assurance or control measures undertaken during the reporting period;
- A summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the works;
- A description of any operating problems encountered and corrective actions taken during the reporting period;
- A summary of any proposed alteration, extension or replacement in the process or operation of the works to be completed over the next reporting period which may require approval under the Ontario Water Resources Act;
- A tabulation of the volume of sludge generated in the reporting period and an outline of anticipated volumes to be generated over the next reporting period;
- An outline of the sludge handling methods and disposal areas to be utilized over the next reporting period;
- An evaluation of the calibration and maintenance procedures conducted on all monitoring equipment;
- An evaluation for the need for modifications to the works to improve performance and reliability and to minimize upsets and bypasses.

Condition 4.0(4.6) of ECA No. 218-W601 for the North Cobalt Lagoon Sewage Collection System requires the Owner to prepare and submit an annual performance report to the Ministry of the Environment's Director on or before March 31st of each year and covers a period from January 1st to December 31st of the preceding calendar year. This report must include, but is not limited to the following information;

- If applicable, includes a summary of all required monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations;
- Includes a summary of any operating problems encountered and corrective actions taken;
- Includes a summary of all calibration, maintenance, and repairs carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Municipal Sewage Collection System;
- Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints.
- Includes a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat;
- Includes a summary of all Collection System Overflow(s) and Spill(s) of Sewage, including: dates, volumes and durations. If applicable, loadings for total suspended solids, BOD_5, total phosphorus, and total Kjeldahl nitrogen, and sampling results for *E.coli*, disinfection, if any and any adverse impact(s) and any corrective actions, if applicable;
- Includes a summary of efforts made to reduce Collection System Overflows, Spills, STP Overflows, and/or STP Bypasses, including the following items, as applicable:
    a) A description of projects undertaken and completed in the Authorized System that result in overall overflow reduction or elimination including expenditures and proposed projects to eliminate overflows with estimated budget forecast for the year following that for which the report is submitted.
    b) If applicable, details of the establishment and maintenance of a Pollution Prevention Control Plan (PPCP), including a summary of project progresses compared to the PPCP's timelines.
    c) An assessment of the effectiveness of each action taken.
    d) An assessment of the ability to meet Procedure F-5-1 or Procedure F-5-5 objectives (as applicable) and if able to meet the objectives, an overview of next steps and estimated timelines to meet the objectives.
    e) Public reporting approach including proactive efforts.

The two reports have been merged into one and is presented as the 2025 Annual Performance Report. The report was prepared by the Ontario Clean Water Agency (OCWA) on behalf of the City of Temiskaming Shores and is based on information kept on record by OCWA.

1 System Description

Sewage System Name:	**North Cobalt Sewage Treatment Lagoon**
Sewage System Works Number:	110001382
Sewage System Address:	543083 Proctors Road, Part 13 & 14, Concession 2, Township of Buck, District of Timiskaming, ON
Sewage System Owner:	Corporation of the City of Temiskaming Shores
Sewage Treatment ECA:	3-0077-94-006, issued March 8, 1994
Sewage Collection ECA:	218-W601, issued October 27, 2023
Reporting Period:	January 1, 2025 to December 31, 2025

Capacity of Works:	1200 m^3/day annual average, 2900 m^3/day peak
Service Area:	Temiskaming Shores, subsection North Cobalt
Service Population:	980
Effluent Receiver:	Farr Creek
Major Process:	Three-celled Aerated, Phosphorus Removal Lagoon

The North Cobalt Sewage Treatment Lagoon serves the residents of North Cobalt (South Haileybury) and is designed to treat a daily average flow capacity of 1200 m^3/day and a peak flow of 2900 m^3/day. The system consists of three aerated facultative lagoons each having a capacity of 21,500 m^3. The lagoon continuously discharges to Farr Creek which eventually discharges to Lake Temiskaming.

The North Cobalt Lagoon system is a continuous discharge lagoon comprised of a grit removal facility, three aerated facultative lagoons and two sludge storage transfer lagoons. The control building contains a 27,200 L alum storage tank, air supply system, ultra-violet light disinfection system and Parshall flume for flow measurement. A 100 kW standby diesel generator set is available to supply power in emergency situations

The sewage treatment lagoon consists of the following;

Grit removal facility with manual bar screen consisting of three grit channels each 5m x 0.75m x 0.6m wide two of which are individually equipped with a v-notch weirs;

Aerated lagoon system with three cells in series each having a 0.86 hectare surface area, and a storage capacity of 19,100 m^3 at a nominal depth of 3.5 m. Each of the lagoon cells are equipped with fine bubble diffusers. The system is equipped with interconnecting sewers and chambers including a submersible sewage pump capable of delivering 13 L/s at 6.1 m TDH in Drain Chamber No. 3, and a 300 mm effluent discharge with a submerge outfall structure in Farr Creek. There

are two sludge storage cells with each cell having a capacity of 1500 m^3 at a nominal depth of three metres. Each cell is equipped with air diffusers, mixer and a common submersible sewage pump rated at 12.6 L/s at 8m TDH. In 2014, the lagoon's underdrain system was plugged and a pump was installed, which operates on level, to direct any underdrain wastewater to Cell No. 2.

Control Building housing the following;

- an ultra-violet disinfection system (Trojan UV 3000 B) comprised of two banks totaling 32 lamps with a nominal intensity of 11,000 mW/cm2 and 7.57 s retention time of 38.92 cm/s;
- a 27,200 L alum storage tank;
- an air supply system for the fine bubble diffusers consisting of three rotary positive blowers delivers air through a 150mm air header line to the diffusers in the lagoons cells;
- a Parshall Flume for measuring effluent flows to Farr Creek;
- a 100 kW diesel generator for back-up power

Alum Building houses two 1100 L alum feed tanks and feed lines for phosphorus removal and the building is located between Cell No. 1 and Cell No. 2. The system feeds alum into the cross over chamber located between Cell No. 1 and Cell No. 2 and a temporary feed to the cross over chamber between Cell No. 2 and No. 3 is set up in summer months to control pH.

Sludge Storage Transfer Lagoons each have a capacity of 1500 m^3 at a nominal depth of 3 meters. The lagoons are currently not in use as sludge has not been removed.

The North Cobalt sewage collection system consists of trunk sewers, separate sewers, nominally separate sewers, forcemains and two (2) sewage pumping stations that direct sanitary sewage to the lagoon North Cobalt Sewage Treatment Lagoon. One station is located on Station Street and the other on Groom Drive.

Station Street SPS is located on Lot 10, Con 2 on Station Street in the community of North Cobalt. The pumping station consists of a poured concrete wet well and two submersible pumps each capable of delivering sewage at a rate of 11.4 L/s at 14.6 meters TDH. It includes an overflow manhole equipped with an overflow pump, piping, valves, instrumentation, and mechanical/electrical equipment for the operation of the pumping station. The station is powered by an MCC (Motor Control Center) and fully controlled by a PLC SCADA system.

The wet well is equipped with a Milltronics level system as well as a back-up float system with a series of alarms. OCWA's remote monitoring system is used to monitor sewage levels and volumes.

The system has a flow meter and chlorine dosing system to measure and treat collection system overflows. The overflow discharge is to Farr Creek that flows to Lake Temiskaming.

The station is equipped with a 30 kW standby diesel generator which is located inside the pump house building.

Groom Drive SPS is located south of Groom Drive at Queen Street in the community of North Cobalt. The pumping station consists of a poured concrete wet well and two submersible pumps each capable of delivering sewage at a rate of 3.8 L/s at 7.4 meters TDH. The station is equipped with piping, valves, instrumentation, and mechanical/electrical equipment for the operation of the pumping station. It is powered by an MCC and fully controlled by a PLC SCADA system.

The wet well is equipped with a Milltronics level system as well as a back-up float system with a series of alarms. OCWA's remote monitoring system is used to monitor sewage levels and pumping hours.

A 30 kW portable diesel generator is stored off-site at the Temiskaming Shores Public Works Garage to ensure its operation in the winter months.

2 Monitoring Program

2.1 Monitoring Program as Outlined in the Environmental Compliance Approval

Table 1: Analytical Parameters

BOD_5	Five Day Biochemical Oxygen Demand – is measured in an unfiltered sample; includes carbonaceous and nitrogenous oxygen demand. It refers to the amount of oxygen consumed by organic matter in a specific volume of water at a specific temperature over a 5 day period. High BOD_5 in effluent means a large quantity of oxygen was needed to break down the organic matter and identifies a large amount of organic matter in the effluent indicating inadequate treatment.
TSS	Total Suspended Solids – the dry weight of suspended particles that are not dissolved in water and can be filtered. TSS is composed of settleable solids and non-settleable solids depending on the size, shape and weight of the solid particles. Settable solids are large sized particles that tend to settle more rapidly in a given period of time. High TSS may decrease water's natural dissolved oxygen levels and increase water temperature which may prevent organisms from surviving in the waters.
TP	Total Phosphorus – a measure of all phosphorus found in a sample, whether it is dissolved or particulate. Phosphorus is an essential nutrient that contributes to plant productivity. TP is commonly used to determine the health of water bodies and excess TP can stimulate algae and weed growth that may cause fluctuations in dissolved oxygen in the receiving waters.

Table 1: Analytical Parameters

TAN	Total Ammonia Nitrogen – the total amount of nitrogen in the forms of Ammonium (NH_4) and Ammonia (NH_3). Ammonia is one of several forms of nitrogen that exist in aquatic environments and can cause direct toxic effects on aquatic life. High levels of ammonia can corrode and damage critical pieces of infrastructure.
TKN	Total Kjeldahl Nitrogen – measures both total organic nitrogen and ammonium. Excess nitrogen in water bodies can lead to harmful algal blooms and other negative impacts on aquatic ecosystems.
NO_2-N	Nitrogen as Nitrite – can cause excessive algae and plant growth which can deplete oxygen of waterbodies resulting in the death of fish and other aquatic organisms.
NO_3-N	Nitrogen as Nitrate – nitrates are essential plant nutrients, but in excess amounts they can cause significant algae and plant growth and contribute to water quality problems.
E. coli	*Escherichia coli* – Thermally tolerant forms of Escherichia bacteria that can live in the intestines of humans and warm-blooded animals. There are hundreds of *E. coli* strains and most are relatively harmless, however a notorious exception is *E. coli* strain 0157:H7, an emerging pathogen that produces a powerful toxin and can cause severe illness. *E. coli* is used as the most widely adopted indicator of faecal pollution in water and wastewater.
Alkalinity	Alkalinity is an acid neutralizing agent that resists changes in pH. Wastewater systems which include biological processes function best at an optimal pH and alkalinity is needed to ensure pH remains in the optimal range.
pH	Potential of Hydrogen – expresses the degree or intensity of both acidic and alkaline reactions on a scale from 0 to 14 with 7 being neutral, number less than 7 signify increasingly greater acidic solutions, and numbers greater than 7 signify increasingly basic or alkaline reactions. Very high or very low pH levels can be corrosive to pipes, screening equipment and pumps, can damage biological processes and form undesirable toxic gases or heavy metals.

Table 2: Sampling Requirements for the Raw Sewage (Influent)

Parameter	Type of Sample	Minimum Frequency
BOD_5	24 hour composite	weekly
TSS	24 hour composite	weekly
TP	24 hour composite	weekly

Parameter	Type of Sample	Minimum Frequency
TKN	24 hour composite	weekly
Alkalinity	24 hour composite	weekly

Table 3: Sampling Requirements for the Final Effluent

Parameter	Type of Sample	Minimum Frequency
BOD_5	24 hour composite	weekly
TSS	24 hour composite	weekly
TP	24 hour composite	weekly
TKN	24 hour composite	weekly
TAN (NH_3^- + NH_4 as N)	24 hour composite	weekly
NO_2-N	24 hour composite	weekly
NO_3-N	24 hour composite	weekly
Alkalinity	24 hour composite	weekly
pH	24 hour composite	weekly
Temperature	grab	weekly
E. coli	grab	weekly

3 Interpretation of Monitoring and Analytical Data

3.1 Influent Flow

The influent flow is a measurement based on the total volume of wastewater taken in each day. The system is equipped with flow meters installed on two of three grit channels at the head of the treatment works to measure the raw sewage into the lagoon.

The rated capacity of the North Cobalt Wastewater Lagoon is 1200 m^3/day (average daily flow). The average flow is defined as the total flow to the sewage works during the period of operation upon which the report is based, divided by the number of days in the period.

Compliance is achieved when the average daily influent flow does not exceed 1200 m^3/day or a peak design flow of 2900 m^3/day. The average daily flow for 2025 was 377 m^3/day which is 31% of the average rated capacity. A peak flow of 3741 m^3/day was reached on March 16th during heavy rain and snow melt.

The total amount of sewage received by the lagoon in 2025 was 137,762 m^3.

Table 4 and Figure 1 compares the monthly influent flow rates recorded in 2025 to the rated capacity and peak capacity of the plant.

Flow trends are critical to assessing the adequacy of the size of the treatment system. Figure 2 shows both the annual average and annual peak values from 2010 to 2025 plotted against the average rated capacity and peak flow capacity of the wastewater system.

3.1.1 Monthly Influent Flows

Table 4: Comparison of the Monthly Influent Flows to the Rated Capacity

Month	Total Influent Flow (m^3/d)	Average Daily Influent Flow (m^3/d)	% of the Avg. Capacity (1200 m^3/d)	Maximum Daily Influent Flow (m^3/d)	% of the Max. Capacity (2900 m^3/d)
January	9008	291	24%	768	26%
February	6634	237	20%	326	11%
March	18,794	606	51%	3741	129%*
April	36,511	1217	101%**	2725	94%
May	15,095	487	41%	1773	61%
June	7926	264	22%	557	19%
July	9131	295	25%	1209	42%
August	6738	217	18%	263	9%
September	5619	187	16%	307	11%
October	5491	177	15%	348	12%
November	8244	275	23%	419	14%
December	8571	276	23%	587	20%

* Snow melt and/or heavy rainfall caused the plant to exceed its maximum rated capacity in March.

** Snow melt and heavy rainfall resulted in the system exceeding its average rated capacity in April.

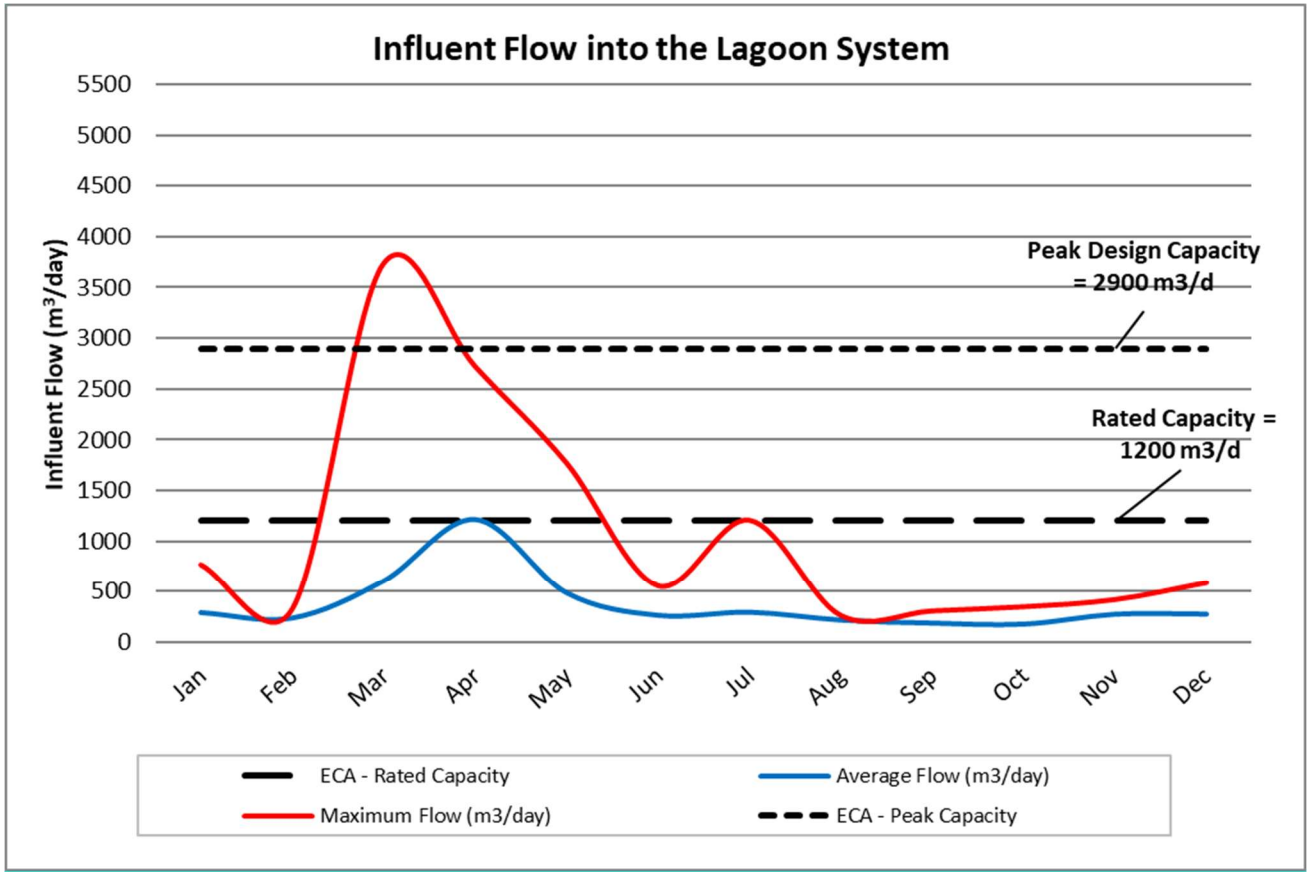


Figure 1 – 2025 Average Influent Flow into the North Cobalt Lagoon

3.1.2 Annual Influent Flows

Table 5: Comparison of the Annual Influent Flow to the Rated Capacity

Rated Design Capacity (m^3/day)	1200	Maximum Flow Capacity (m^3/day)	2900
2025 Average Flow (m^3/day)	377	2025 Maximum Flow (m^3/day)	3741
Percent of Capacity (%)	31%	Percent of Capacity (%)	129%
Total volume of sewage influent in 2025		137,762	

3.1.3 Historical Influent Flows

Table 6: Comparison of Historical Influent Flows (2010 to 2025)

Year	Total Influent Flow (m^3/d)	Maximum Influent Flow (m^3/d)	% Maximum of Peak Capacity (2900 m^3/d)	Average Day Flow (m^3/d)	% Average of Rated Capacity (1200 m^3/d)
2025	137,762	3741	129%	377	31%
2024	154,338	5049	174%	422	35%
2023	155,216	3455	119%	425	35%
2022	174,031	2818	97%	577	40%
2021	169,881	2408	83%	465	39%
2020	201,487	3083	106%	550	46%
2019	210,487	3068	106%	577	48%
2018	175,329	2545	88%	480	40%
2017	213,567	2455	85%	585	49%
2016	187,606	2972	102%	513	43%
2015	193,330	3752	129%	574	48%
2014	172,937	1983	68%	474	40%
2013	162,845	2379	82%	446	37%
2012	189,865	3770	130%	519	43%
2011	298,562	3619	125%	818	68%
2010	231,270	3136	108%	634	53%

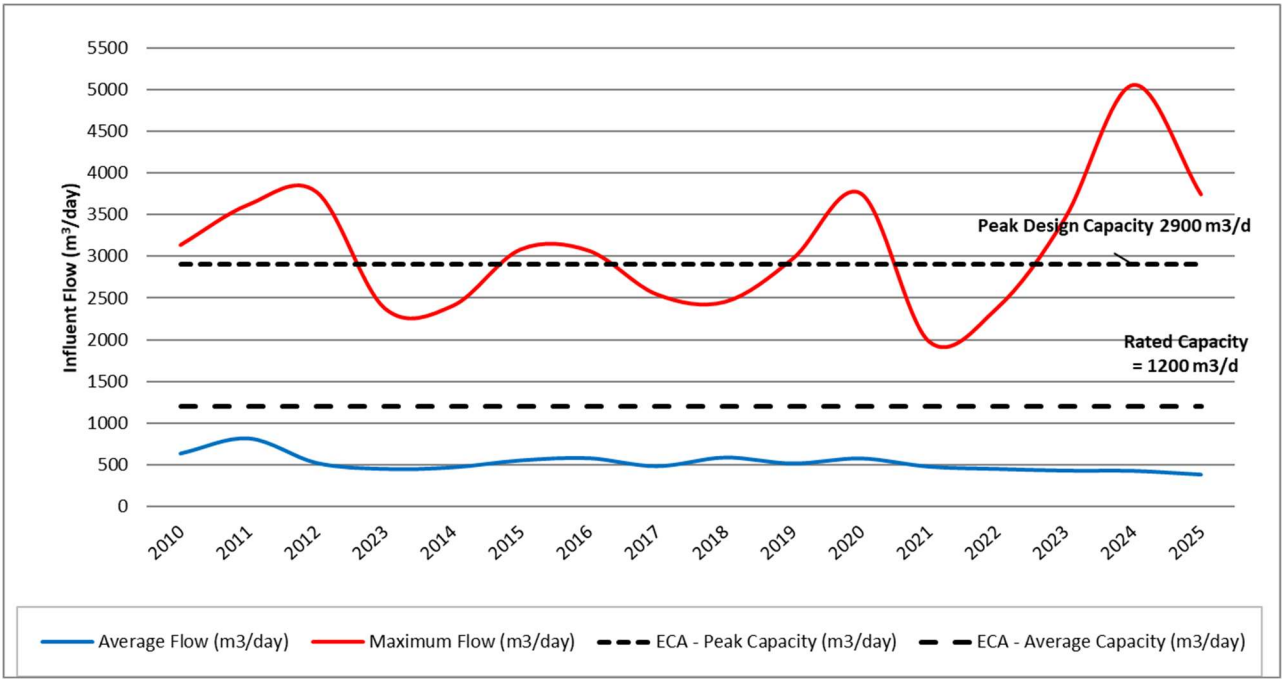


Figure 2 – Historical Influent Flow Trends (2010 to 2025)

3.2 Effluent Flows

The effluent flow is measured using a Parshall Flume located on the effluent discharge pipe to measure flows into Farr Creek. A summary of monthly effluent flows are provided in Table 7.

Table 7: Monthly Effluent Flow for 2025

Month	Total Effluent Flow (m^3)	Maximum Effluent Flow (m^3/day)	Average Effluent Flow (m^3/day)
January	10,078	1023	325
February	6579	325	235
March	24,276	5099	783
April	45,959	3602	1532
May	20,271	2175	654
June	11,339	937	378
July	10,996	1647	355
August	5737	406	185
September	5069	221	169
October	6371	622	206

Month	Total Effluent Flow (m^3)	Maximum Effluent Flow (m^3/day)	Average Effluent Flow (m^3/day)
November	9001	547	300
December	9871	784	318
2025	**165,546**	**5099**	**453**

3.3 Influent Verses Effluent Flows

The total volume of influent flow measured in 2025 was 137,762 compared to the effluent flow of 165,546 m^3.

Figure 3 presents a comparison of the monthly total influent flows and effluent flows for 2025.

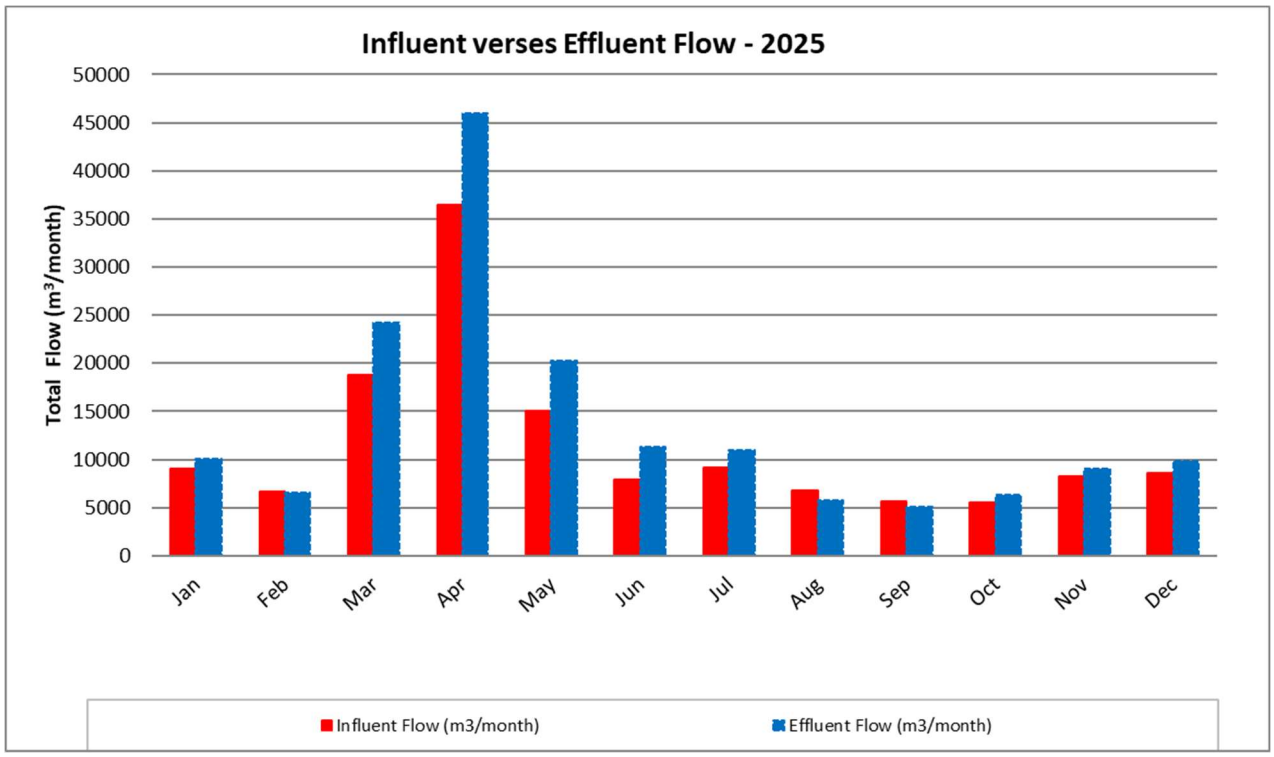


Figure 3 – Comparison of Influent and Effluent Flows (2025)

3.4 Influent (Raw Sewage) Quality

Influent samples are required to be collected on a weekly basis. This section summaries the annual average and maximum concentrations of the analytical parameters tested in 2025. A summary of the monthly monitoring data is available in Appendix A.

Table 8: Influent Concentrations

Parameter	Annual Average	Annual Maximum
BOD_5 (mg/L)	195	1900
TSS (mg/L)	247	3030
TP (mg/L)	5.65	61.5
TKN (mg/L)	36.5	326
Alkalinity (mg/L $CaCO_3$)	210	298

3.4.1 Historical Trends of Influent Characteristics

The characteristics of the raw wastewater influence the design and efficacy of the wastewater treatment process. Influent data and trend analyses for BOD_5, TSS, TP, TKN and Alkalinity covering the period from 2010 to 2025 are presented in Appendix B.

The trends show that the average BOD_5 concentration varied from 64 to 221 mg/L over the past 16 years with a maximum level of 2200 mg/L in 2018.

The average TSS concentration ranged from 58 to 328 mg/L with a maximum concentration of 3640 mg/L in 2021.

The average TP concentration varied slightly from 2.1 to 5.7 mg/L with a maximum concentration of 62 mg/L in 2025.

The average TKN concentration fluctuated from 18 to 37 mg/L with a maximum concentration of 326 mg/L in 2025.

The average alkalinity concentrations remained fairly consistent over the past 16 years having results ranging from 200 to 253 mg/L.

3.5 Effluent Quality

The North Cobalt sewage effluent quality is based on the carbonaceous biochemical oxygen demand ($cBOD_5$), total suspended solids (TSS), total phosphorus (TP) and *E. coli* levels. In 2025, the lagoon produced a high quality effluent which met the compliance limits specified in the system's ECA. Summaries of the minimum and maximum monthly averages for the final effluent concentrations are shown in Table 9 along with the annual minimum and maximum pH and temperature results. The effluent loadings are shown in ratory's method detection limit

* In July, elevated Total Suspended Solids (TSS) concentrations were recorded, primarily due to increased algal activity within the lagoon. In response, the alum dosing rate was increased to facilitate algae removal, which contributed to a decline in effluent pH. Although corrective

adjustments were made to the alum feed rate, an unintended siphoning event from the alum pump occurred, resulting in continued effluent pH levels below the operational guideline of 6.0. Corrective actions were implemented to address the alum dosing system malfunction and effluent pH levels returned to within operational range.

Table 10

Table 9: Effluent Concentrations

Parameter	Monthly Average (minimum)	Monthly Average (maximum)	Compliance Limit (monthly average)	Exceedance
BOD_5 (mg/L)	< 0.58	4.38	25	No
TSS (mg/L)	< 1.29	12.8	25	No
TP (mg/L)	< 0.01	0.22	1.5	No
E.coli (cfu/100mL)	0	1.2	200 (*geomean)*	No
TKN (mg/L)	3.30	12.7	N/A	N/A
TAN (mg/L)	1.35	12.8	N/A	N/A
NO_3-N (mg/L)	< 0.54	1.40	N/A	N/A
NO_2-N (mg/L)	< 0.05	0.12	N/A	N/A
Alkalinity (mg/L)	< 3.0	169	N/A	N/A

Parameter	Annual Minimum	Annual Maximum	Operational Guideline	Exceedance
pH (in field)	3.20*	8.18	6.0 to 9.5 (inclusive)	No
pH (tested by lab)	5.00*	8.11		No
Temperature (°C)	0.10	28.4	N/A	N/A

"<" means values include results that were less than the laboratory's method detection limit

* In July, elevated Total Suspended Solids (TSS) concentrations were recorded, primarily due to increased algal activity within the lagoon. In response, the alum dosing rate was increased to facilitate algae removal, which contributed to a decline in effluent pH. Although corrective adjustments were made to the alum feed rate, an unintended siphoning event from the alum pump occurred, resulting in continued effluent pH levels below the operational guideline of 6.0. Corrective actions were implemented to address the alum dosing system malfunction and effluent pH levels returned to within operational range.

Table 10: Effluent Loadings

Parameter	Monthly Average (minimum)	Monthly Average (maximum)	Compliance Limit (monthly average)	Exceedance
BOD_5 (kg/d)	0.106	6.71	30	No
TSS (kg/d)	< 0.239	6.05	30	No
TP (kg/d)	< 0.001	0.34	1.8	No

"<" means values include results that were less than the laboratory's method detection limit

Appendix A includes a Monthly Process Data Report which summarizes the effluent monitoring and analysis conducted at the facility during the reporting period.

3.6 Sewage Treatment Program Success and Adequacy

The Performance Summary shows the efficiency of the lagoon performance through pollutant removal rates from raw sewage through to the final effluent. Table 11 demonstrates that the lagoon treatment process was very successful in decreasing the levels of BOD_5, TSS and TP and quite effective in reducing TKN from the influent, producing a high quality effluent.

Table 11: Performance Summary

Parameter	Influent (annual average)	Effluent (annual average)	% Removal
BOD_5 (mg/L)	195	< 2.6	99%
TSS (mg/L)	247	< 4.2	98%
TP (mg/L)	5.65	< 0.56	90%
TKN (mg/L)	36.5	7.9	78%

4 Effluent Quality Assurance and Control Measures Undertaken

The following activities are included in regular operator and supervisory activities to assure high level performance of the sewage treatment operations including high effluent quality and accurate flow monitoring:

- Operational staff have current and appropriate level of certification for the operation of the facility and continue to learn and achieve knowledge of the process and equipment.

Experienced staff has a high level of regulatory competence. New staff receives on-going training to achieve operational knowledge and regulatory competence.

- The pumping stations and lagoon site are inspected by a certified OCWA operator regularly during the work week.
- Certified operators conduct daily reviews of selected data from continuous monitoring equipment which is captured by a remote monitoring system.
- In-house tests; pH and temperature, are conducted by licensed operators for monitoring purposes using standard methods for Water and Wastewater.
- Samples are collected as required and analyzed by Testmark Laboratories. Analysis of the samples is conducted in accordance with the Standard Council of Canada (SCC), in cooperation with the Canadian Association for Laboratory Accreditation Inc. (CALA). Quality control procedures are method specific and include laboratory duplicate samples, spiked blanks and spiked duplicates.
- A sampling system which includes an excel sample calendar, which is updated at the beginning of each year, and a chain of custody binder are used to ensure all samples are collected as per the requirements identified in the system's ECA.
- Operations and Compliance staff review facility round sheets and laboratory reports to monitor the routine operation of the treatment system and ensure compliance with the ECA.
- All process and laboratory data is logged in a process data management system.
- Routine maintenance is scheduled and tracked to completion using OCWA's Workplace Maintenance System (WMS). Instrumentation equipment is tested and maintained as per manufacturer's recommendations.
- Certified operators monitor chemical usage and make adjustments as required.
- Alum Sulphate is added to the lagoon to reduce total phosphorus levels and help settle solids.
- Any bypass, overflow or upset events that occur in the system are tested, monitored and reported to the local Health Unit and Spills Action Center (SAC).
- All flow, influent and effluent quality data is reviewed by the Overall Responsible Operator and Compliance staff to identify any changes in concentrations and/or emerging trends. All non-compliances are reported to Ministry's Spills Action Center (SAC) and the local MECP inspector.
- The North Cobalt Lagoon has produced high quality effluent with no regulatory limit or objective exceedances, however the operational pH guideline was not met in the warmer summer months due to elevated algae activity in the lagoon and issues with the alum dosing pump.

5 Efforts Made to Meet Effluent Objectives

The Effluent Design Objectives represents the performance levels which can be achieved by treatment processes when operating under optimum conditions on normal strength municipal sewage. A sewage treatment facility should be able to produce effluent quality approximately equal to the Effluent Design Objectives, but should not exceed the Effluent Compliance Limits. The objectives are used to promote continuous improvement in the operations of the works and to trigger corrective action before environmental impairment occurs.

OCWA uses a number of best efforts to achieve the Effluent Objectives.

- Certified operational staff have a high level of process knowledge and regulatory proficiency.
- The mechanical elements in the facility are regularly inspected, well maintained and kept in good repair. OCWA uses a computerized maintenance management program which generates works orders to ensure maintenance of equipment is proactively performed.
- Raw wastewater and effluent samples are collected as required and analyzed by Testmark Laboratories, an accredited laboratory. OCWA reviews these results on a regular basis to confirm compliance with ECA objective and limits.
- In-house sampling and testing for selected operational parameters provides real-time results which are used to enhance process and operational performance.
- Operations, maintenance and emergency procedures are available to ensure facilities are operated in compliance with applicable legal instruments. Facility staff have access to a network of operational compliance and support experts at the region and corporate levels.
- Alum is added to Cell No. 2 (and Cell No. 3 if needed) during the warmer months to support phosphorus removal and reduce TSS levels to maintain compliance.
- A five year rolling recommended capital and major maintenance report is used to assist the Owner and OCWA with planning infrastructure needs for the short and long terms. A letter summarizing capital work recommendations is provided to the Owner each year for their approval.

During the reporting period, the North Cobalt Lagoon met the monthly effluent objectives for BOD_5, TSS, and TP. A summary of results are provided in the tables below.

Table 12: Effluent Concentration Objectives

Parameter	Monthly Average (minimum)	Monthly Average (maximum)	Compliance Limit (monthly average)	Exceedance
BOD_5 (mg/L)	< 0.58	4.38	15	No

Parameter	Monthly Average (minimum)	Monthly Average (maximum)	Compliance Limit (monthly average)	Exceedance
TSS (mg/L)	< 1.29	12.8	15	No
TP (mg/L)	< 0.01	0.22	1.0	No

Table 13: Effluent Loading Objectives

Parameter	Monthly Average (minimum)	Monthly Average (maximum)	Compliance Limit (monthly average)	Exceedance
BOD_5 (mg/L)	0.106	6.71	18	No
TSS (mg/L)	< 0.239	6.05	18	No
TP (mg/L)	< 0.001	0.34	1.2	No

6 Operating Problems & Corrective Actions

Operating problems encountered during 2025 are summarized below.

- Algae growth in the warmer months can result in elevated TSS concentrations. Alum is injected into Cell No. 2 and Cell No. 3 to control these increases.
- Low pH conditions were observed from July 23 to August 20 following an increase in alum dosing intended to control algal growth and reduce total suspended solids (TSS). The persistent low pH was attributed to the unintentional siphoning from Alum Pump No. 2, which resulted in excess alum discharging into the lagoon. To resolve the issue, the alum dose was reduced, Alum Pump No. 2 was shut down to replace the check valve, and the plugged pressure-reducing valve (PRV) was cleaned to remove accumulated build-up. No further issues were observed.
- Station Street SPS – Two (2) overflow events occurred during heavy rainfall and spring snow melt. Refer to Section 10 for further details.

7 Maintenance Procedures Performed on the Works

Routine maintenance schedules are entered in OCWA's computerized Workplace Management System (WMS). This is a comprehensive maintenance program that is based on a pro-active and preventive approach. This program includes but is not limited to running weekly, monthly, and annually checks as required or as recommended by manufacturer's instructions. All routine and

preventative maintenance was conducted in 2025. A summary of maintenance performed, which includes preventative work, capital projects and emergency repairs is available in Appendix C.

Significant maintenance and improvements that took place during 2025 include:

North Cobalt Lagoon

- Blower servicing
- Replaced hour meters on blowers and pumps
- Replaced alum transfer pump receptacle
- Replaced DO probe sensor cap
- Replaced failed effluent pH probe
- Replaced a failed UV sensor
- Inspected and rebuilt back flow preventers
- Repaired radio power cable and pump cable
- Cleaned grit channels, wet well, cross over chamber and manholes

Station Street Sewage Pumping Station

- Replaced Pump No. 1

8 Calibration & Maintenance of all Monitoring Equipment

Influent and effluent monitoring equipment is calibrated based on requirements of the system's ECA or manufactures recommendations. Flow meters are calibrated annually to ensure a required accuracy of +/- 5%. pH meters are calibrated to ensure an acceptable tolerance and accuracy as specified by the manufacturer.

Routine maintenance was conducted as scheduled by qualified Instrumentation Technicians during the reporting period. Refer to Table 14 for a summary of calibrations conducted in 2025.

Table 14: Calibration Summary

Instrument	Calibration Date	% Accuracy	Requirement
Raw Flow Meter – Channel No. 1	July 24, 2025	100%	+/- 5%
Raw Flow Meter – Channel No. 2	July 24, 2025	99.0%	+/- 5%
Effluent Flow Meter	July 14, 2025	100%	+/- 5%
Station St. SPS Overflow Meter	July 11, 2025	99.7%	+/- 5%

Instrument	Calibration Date	% Accuracy	Requirement
pH Analyzer	January 9, April 2, July 23, October 3, 2025	Within tolerance	
Portable pH Analyzer	January 3, April 2, July 23, October 7, 2025	Within tolerance	

9 Sludge Generation and Disposal

The systems ECA requires sludge volumes to be tabulated each year and anticipated volumes to be generated over the next reporting period. No sludge was disposed of during this reporting period and it's anticipated that no sludge will be disposed of in 2026.

Sludge and water depths were measured in 2020, 2021, 2023 and 2025. Sludge depths were estimated for years 2022 and 2024.

Table 15: Sludge Volume Cell 1

Date	Sample Points	Average Depths (m)		Sludge Volume (m^3)	% Capacity
		Water	Sludge		
Oct. 8, 2020	6	3.2	0.37	3182	17%
Aug. 19, 2021	16	3.2	0.70	6020	32%
2022 (estimate)	-	-	0.50	4300	23%
Jun. 29, 2023	12	2.3	0.18	1548	8%
2024 (estimate)	-	-	0.25	2150	11%
Jul. 14, 2025	16	1.6	0.48	4128	22%

As per the Operations Manual: Operating depth = 3.5 m, Area = 8600 m2, Operating Capacity = 19,100 m3

Table 16: Sludge Volume Cell 2

Date	Sample Points	Average Depths (m)		Sludge Volume (m^3)	% Capacity
		Water	Sludge		
Oct. 8, 2020	9	3.5	0.31	2666	14%
Aug. 19, 2021	16	3.4	0.43	3698	19%
2022 (estimate)	-	-	0.37	3182	17%
Jun. 29, 2023	12	2.5	0.21	1806	9%
2024 (estimate)	-	-	0.30	2580	14%

Date	Sample Points	Average Depths (m)		Sludge Volume (m^3)	% Capacity
		Water	Sludge		
Jul. 14, 2025	16	1.4	0.46	3956	21%

As per the Operations Manual: Operating depth = 3.5 m, Area = 8600 m2, Operating Capacity = 19,100 m3

Table 17: Sludge Volume Cell 3

Date	Sample Points	Average Depths (m)		Sludge Volume (m^3)	% Capacity
		Water	Sludge		
Oct. 6, 2020	9	3.5	0.11	946	5%
Aug. 19, 2021	16	3.4	0.44	3784	20%
2022 (estimate)	-	-	0.37	3182	17%
Jun. 29, 2023	10	2.3	0.13	1118	6%
2024 (estimate)	-	-	0.20	1720	9%
Jul. 14, 2025	16	1.5	0.50	4300	23%

As per the Operations Manual: Operating depth = 3.5 m, Area = 8600 m2, Operating Capacity = 19,100 m3

10 Abnormal Discharge Events

10.1 Overflow, Bypass and Spill Events

Two (2) overflow events occurred at the Station Street (No. 2) sewage pumping station during the reporting period. The overflow events occurred during Spring snow melt and/or heavy periods of rainfall which caused the flow to exceed the station's capacity. The untreated wastewater was sampled and tested for BOD_5, TSS, TP, TKN and *E. coli* as required under condition 3.0(3.4)(3.4.1b) of the ECA. The discharge was chlorinated before entering the receiving waterbody. The events were reported to the Ministry's Spills Action Center (SAC) and local Health Unit as per the collection system's ECA and to Environment Canada as required under the Federal Fisheries Act.

Error! Reference source not found. summarizes the events and Appendix D provides a detailed record including sample results.

Table 18: Summary of Abnormal Discharge Events in 2025

Date	Duration	Type	Cause	Adverse Impacts	Estimated Volume (m^3)
March 16	8 hours & 45 minutes	Overflow	Heavy rains & snow melt	None	206.2
April 25	14 hours & 30 minutes	Overflow	Extreme rainfall	None	74.3

10.2 Efforts Made to Reduce System Overflows and Bypasses

The annual average daily influent flow into the lagoon is well below the rated capacity and overflow, bypass, and spill events at the lagoon are rare.

A review of historical data over the last 12 years (2014 to 2025) indicates that all abnormal discharge events occurred at the Station Street Sewage Pumping Station and discharge to a ditch next to the station, aka Mill Creek. Forty-four (44) overflow events occurred from 2014 to 2025 during heavy rains and/or snow melt.

In an effort to reduce and/or eliminate overflow, bypass and spill events and to conform with Procedure F-5-1, the following measures are in place.

- Emergency backup generators are installed at the lagoon site and sewage pumping station.
- A SCADA system is used to accurately monitor the sewage network and an alarm system is in place at key points in the process and at the sewage pumping station to alert operators of any issues; power failures, high levels, equipment failures, loss of communication and intrusions.
- Routine maintenance is carried out to help minimize overflow, bypass, and spill events. This includes monthly generator testing to confirm reliable start-up during power failures, monthly alarm testing, and regular equipment maintenance as detailed in the Maintenance Summary in Appendix C.
- Repairs to the collection system are done promptly as issues occur.
- Worn pumps at the Station Street SPS were recently replaced.
- A program is in place to prevent roof leaders and sump pumps from being connected with sanitary new builds.
- To more accurately measure and monitor overflow volumes, the Station Street pump station is equipped with a flow meter to measure flow during overflow events.

- An evaluation of wet-weather and dry-weather flows within the authorized sanitary sewer collection system was completed by EXP Services Inc. The report, dated January 20, 2025, identified the following key findings:
  - Extended data collection is recommended to better characterize localized surcharging conditions that may be occurring within the collection system.
  - Routine inspections have been carried out in accordance with established operational procedures.
  - Long-term corrective measures remain challenging to define due to the uncertainties associated with climate change; however, the municipality continues to pursue improvements to the sanitary collection system.

10.3 Summary of Alterations to the System to Reduce Overflows

Station Street SPS - Pump No. 1 was replaced with a new unit which is not worn out and can handle a larger volume of wastewater, allowing more flow to be directed to the sewage treatment lagoon during high flow events.

10.4 Public Notification

The system has a Public Notification Procedure to notify the public and downstream users that may be adversely affected in the event of an overflow or bypass at the lagoon.

Signage was posted at publicly accessible points located near all sewage collection system overflow outfall locations before May 21, 2025 as required under the ECA.

11 Complaints

No complaints were received during the reporting period.

12 Proposed Alterations to the Works

- Groom Drive SPS – installation of a data logger to trend wet well levels and pump status.
- Larger alum day tank in the alum shed or new chemical feed system from Blower Building,
- Blower room and UV room ventilation

APPENDIX A
Monthly Process Data Report

NE_N. Cobalt Lagoon_Annual Reg Report

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

Facility Name: NORTH COBALT WASTEWATER TREATMENT LAGOON
Receiver: Farr Creek

Facility Org Number: 5728
Facility Owner: Municipality: Temiskaming Shores
Service Population: 980

Works: 110001382
Facility Classification: Class 2 Wastewater Treatment
Total Design Capacity: 1200 m3/day

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

													2025			
Influent - Raw Sewage	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Alkalinity (as CaCO3) - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	274.00	298.00	241.00	271.00	272.00	280.00	297.00	186.00	206.00	190.00	186.00	198.00			298.00	
Lab Month.Mean	230.25	199.50	204.00	228.20	263.25	247.75	262.20	171.75	170.50	177.60	166.75	188.20		209.54		
Lab Month.Min	172.00	157.00	172.00	199.00	241.00	223.00	241.00	163.00	146.00	155.00	147.00	174.00				146.00
Biochemical Oxygen Demand: BOD5 - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	311.00	1700.00	348.00	30.00	160.00	580.00	150.00	140.00	431.00	160.00	170.00	1900.00			1900.00	
Lab Month.Mean	140.25	650.00	186.50	22.80	57.25	230.63	78.72	86.50	242.75	107.00	90.25	477.20		195.48		
Lab Month.Min	43.00	190.00	33.00	12.00	14.00	82.50	19.00	44.00	100.00	50.00	27.00	31.00				12.00
Total Kjeldahl Nitrogen: TKN - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	48.20	326.00	49.00	16.20	21.30	56.60	37.60	33.00	63.60	42.60	39.30	165.00			326.00	
Lab Month.Mean	29.33	107.88	27.43	11.98	14.65	37.55	25.18	28.05	42.28	37.14	28.18	53.40		36.53		
Lab Month.Min	17.60	20.00	11.20	9.10	7.10	22.90	18.70	25.10	29.80	25.20	18.90	18.10				7.10
Total Phosphorus: TP - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	6.83	61.50	6.48	4.38	2.57	10.00	6.89	5.10	15.90	5.47	5.87	27.30			61.50	
Lab Month.Mean	3.59	18.93	3.85	1.53	1.68	5.15	3.52	3.44	8.76	4.70	3.50	9.90		5.65		
Lab Month.Min	1.91	2.96	1.39	0.44	0.73	2.60	1.48	2.81	3.61	3.04	2.11	2.06				0.44
Total Suspended Solids: TSS - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	334.00	2350.00	478.00	66.70	32.00	835.00	203.00	202.00	670.00	562.00	176.00	3030.00			3030.00	
Lab Month.Mean	142.75	844.50	228.50	33.58	21.13	315.75	82.10	89.25	220.25	142.00	66.88	764.80		246.70		
Lab Month.Min	34.00	158.00	27.00	9.00	8.50	80.00	13.50	15.00	28.00	24.00	17.50	16.00				8.50

Final Effluent	**Jan 2025**	**Feb 2025**	**Mar 2025**	**Apr 2025**	**May 2025**	**Jun 2025**	**Jul 2025**	**Aug 2025**	**Sep 2025**	**Oct 2025**	**Nov 2025**	**Dec 2025**	**Total**	**Avg**	**Max**	**Min**
Alkalinity (as CaCO3) - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	180.00	181.00	152.00	144.00	128.00	60.00	35.00	6.00	38.00	42.00	38.00	64.00			181.00	
Lab Month.Mean	168.50	166.25	140.25	139.40	97.50	42.00	< 19.80	< 3.00	27.50	41.20	32.75	51.20		< 76.33		
Lab Month.Min	161.00	159.00	132.00	135.00	71.00	32.00	< 2.00	< 2.00	12.00	40.00	18.00	41.00				< 2.00
BOD5 (25 mg/L) - mg/L																

Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	3.80	3.50	6.30	7.20	4.00	3.80	4.60	0.80	3.00	2.70	3.60	3.20			7.20	
Lab Month.Mean	2.68	2.83	4.03	4.38	2.20	2.25	< 2.26	< 0.58	2.10	2.10	2.93	2.64		< 2.60		
Lab Month.Min	2.20	2.30	2.40	3.10	0.70	1.40	< 0.50	< 0.50	0.90	1.70	2.10	1.80				< 0.50
E. Coli: (200 geomean) - cfu/100mL																
GMD	0.00	0.00	1.19	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			2.00	
Lab Month.Mean	0.00	0.00	0.50	< 0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		< 0.10		
Lab Month.Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Total Ammonia Nitrogen: NH3 + NH4+ as N - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	11.60	13.40	13.50	12.10	2.72	1.42	3.72	3.90	4.31	3.96	6.95	11.70			13.50	
Lab Month.Mean	10.53	11.73	12.80	8.91	2.19	1.35	3.18	3.67	4.05	3.76	5.59	9.44		6.42		
Lab Month.Min	9.50	10.00	12.00	3.91	1.84	1.23	2.60	3.30	3.82	3.35	4.45	7.80				1.23
Nitrite as N: NO2-N - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	0.17	0.20	0.08	0.10	< 0.10	< 0.05	0.08	0.14	0.15	< 0.10	< 0.10	< 0.10			0.20	
Lab Month.Mean	< 0.08	< 0.12	0.07	0.08	< 0.06	< 0.05	< 0.05	0.11	< 0.12	< 0.08	< 0.07	< 0.10		< 0.08		
Lab Month.Min	< 0.05	< 0.05	0.06	0.07	< 0.05	< 0.05	0.04	0.07	0.09	0.03	0.01	< 0.10				0.01
Nitrate as N: NO3-N - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	0.74	0.65	0.60	0.90	1.50	1.58	1.20	2.00	1.20	1.30	1.12	0.90			2.00	
Lab Month.Mean	< 0.54	0.62	0.58	0.74	1.26	1.40	0.81	1.30	1.05	1.14	1.01	0.82		< 0.93		
Lab Month.Min	< 0.05	0.59	0.50	0.70	0.93	1.26	0.49	1.00	1.00	1.00	0.90	0.70				< 0.05
pH - ---																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	8.18	7.57	7.47	7.87	7.62	7.31	7.07	6.93	7.40	7.57	7.49	7.50			8.18	
Lab Month.Mean	7.75	7.49	7.37	7.61	7.52	7.20	6.14	5.43	7.25	7.49	7.31	7.25		7.15		
Lab Month.Min	7.40	7.41	7.29	7.37	7.43	7.12	3.20	4.74	7.14	7.43	7.16	7.10				3.20
pH Field: Lab Upload (6.0 to 9.5) - ---																
IH Edited Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
IH Month.Max	7.35	7.22	7.29	8.11	7.80	7.10	6.90	6.66	8.11	7.87	7.90	7.47			8.11	
IH Month.Mean	7.32	6.99	7.15	7.46	7.33	6.97	6.57	5.46	7.65	7.50	7.67	7.13		7.10		
IH Month.Min	7.27	6.88	7.07	7.17	7.05	6.80	5.86	5.00	7.15	7.11	7.40	6.98				5.00

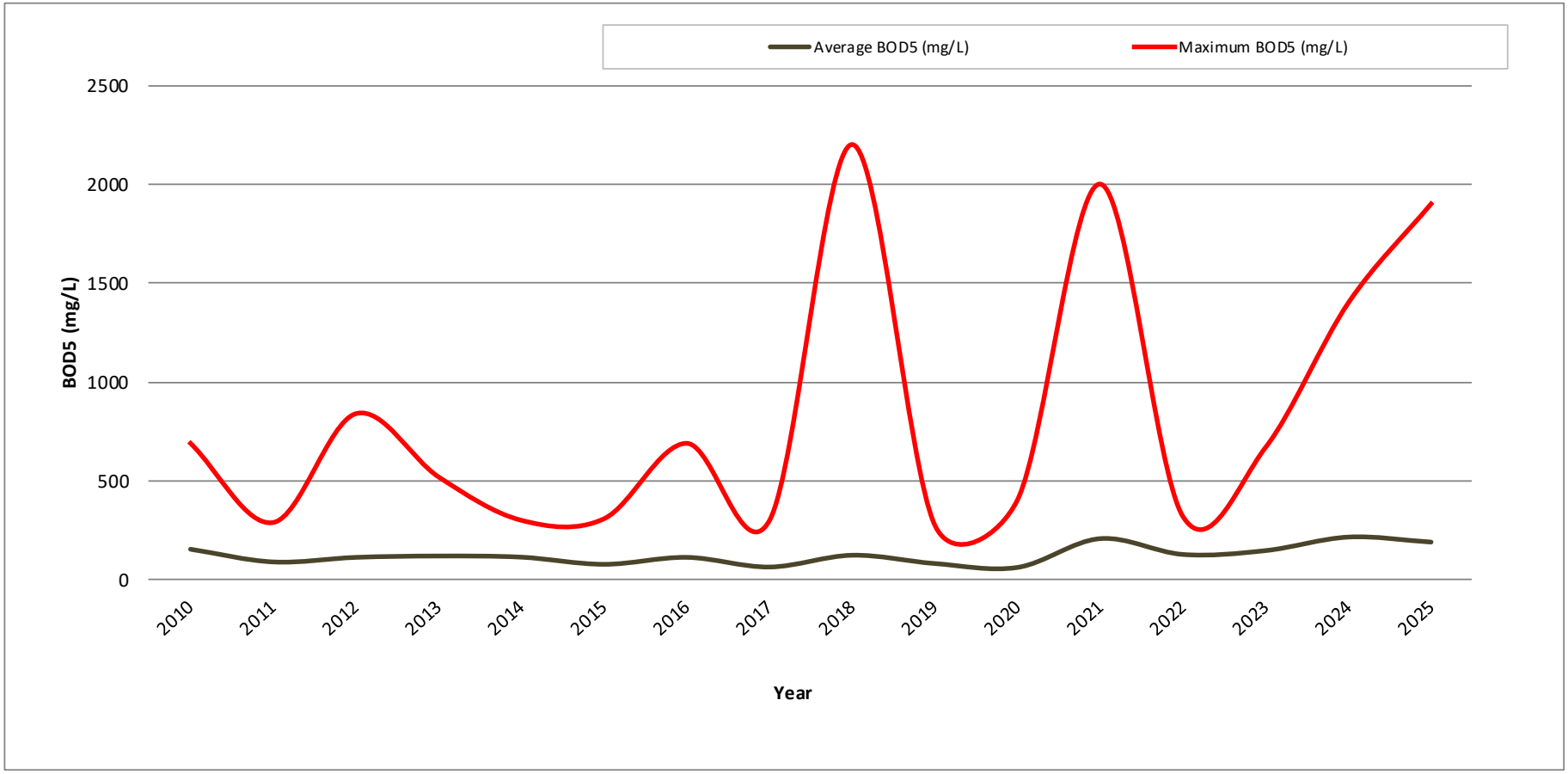
Temperature Field: Lab Upload - °C																
IH Edited Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
IH Month.Max	0.40	3.80	0.50	6.10	16.90	21.10	24.50	28.40	21.20	17.50	6.60	1.40			28.40	
IH Month.Mean	0.38	2.38	0.28	2.14	14.38	19.58	23.10	24.08	18.68	14.52	3.43	1.24		10.34		
IH Month.Min	0.30	0.30	0.10	0.20	11.40	17.50	21.40	20.20	17.30	11.40	2.20	1.10				0.10
Total Kjeldahl Nitrogen: TKN - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	12.90	13.70	13.40	13.10	4.80	5.20	4.70	6.00	7.20	7.30	9.30	14.30			14.30	
Lab Month.Mean	11.20	12.70	12.38	11.44	3.55	3.30	3.90	5.40	6.00	5.32	7.63	11.58		7.88		
Lab Month.Min	10.00	11.20	10.90	10.50	2.70	2.00	2.50	4.50	5.50	4.30	6.10	9.90				2.00
Total Phosphorus: TP (1.5 mg/L-Monthly) - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	0.081	0.050	0.317	0.688	0.023	0.023	0.026	0.009	0.035	0.025	0.063	0.045			0.688	
Lab Month.Mean	0.068	0.042	0.150	0.224	0.011	0.010	0.019	< 0.006	0.023	0.020	0.042	0.035		< 0.056		
Lab Month.Min	0.060	0.033	0.025	0.089	0.005	0.002	0.011	< 0.002	0.015	0.016	0.027	0.028				< 0.002
TSS (25 mg/L-Monthly) - mg/L																
Lab Count	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	52.00			
Lab Month.Max	3.30	6.00	7.00	7.33	4.30	8.50	47.00	2.00	4.00	6.00	4.50	5.50			47.00	
Lab Month.Mean	2.15	< 2.59	< 3.52	3.95	2.78	6.08	12.81	< 1.29	< 2.17	5.00	2.88	< 2.64		< 4.15		
Lab Month.Min	1.00	< 0.67	< 0.67	1.70	1.00	3.00	2.70	< 0.67	< 0.67	3.70	1.00	< 1.00				< 0.67

APPENDIX B
Historical Trends of Influent Characteristics

North Cobalt Sewage Treatment Lagoon
Influent Characteristics – Historical Results (2010 to 2025)

BOD5 – Five Day Biochemical Oxygen Demand

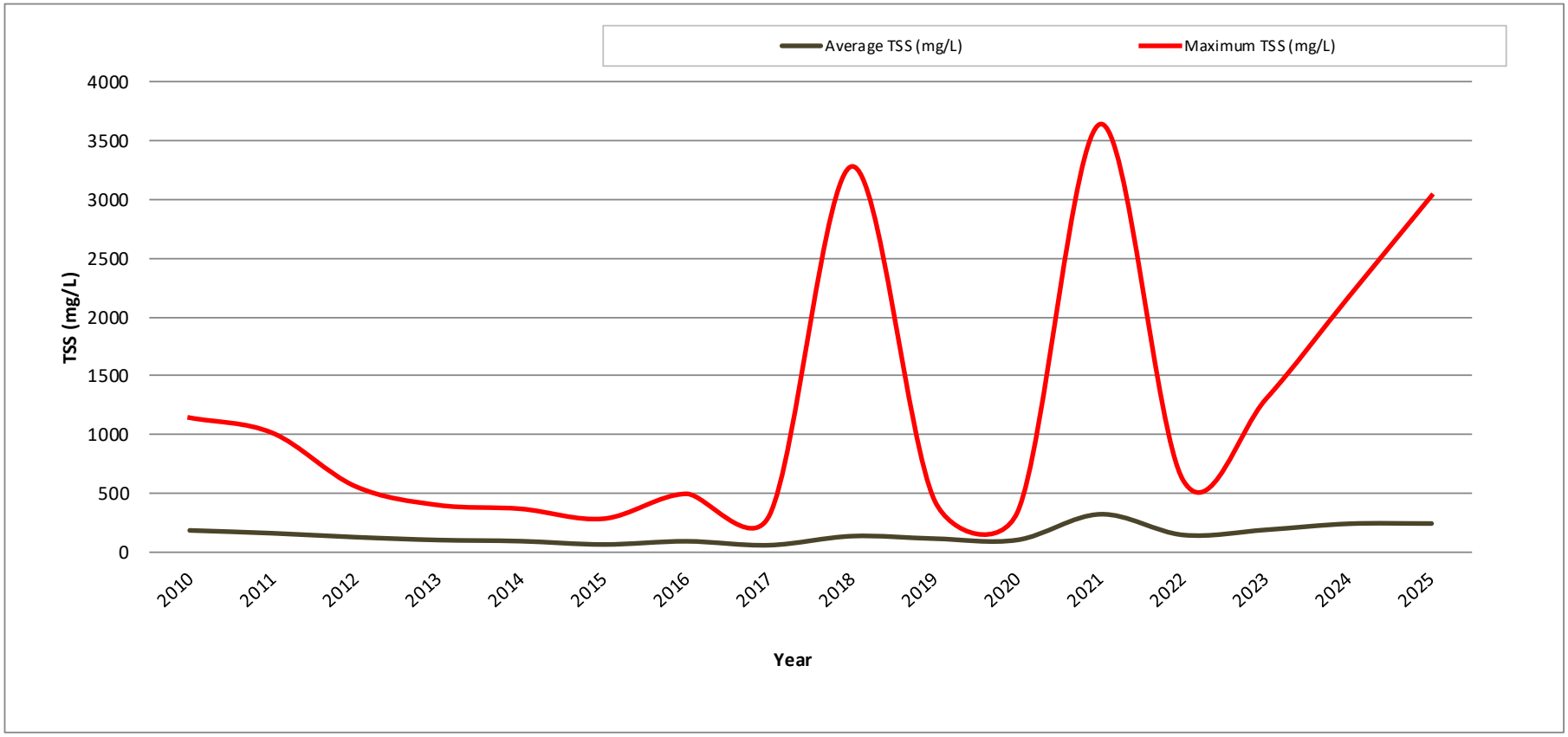
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Average BOD5 (mg/L)	158	92	116	123	117	80	116	66	127	84	64	213	131	151	221	195
Maximum BOD5 (mg/L)	690	290	840	520	301	309	690	300	2200	276	405	2000	320	670	1400	1900



North Cobalt Sewage Treatment Lagoon
Influent Characteristics – Historical Results (2010 to 2025)

TSS – Total Suspended Solids

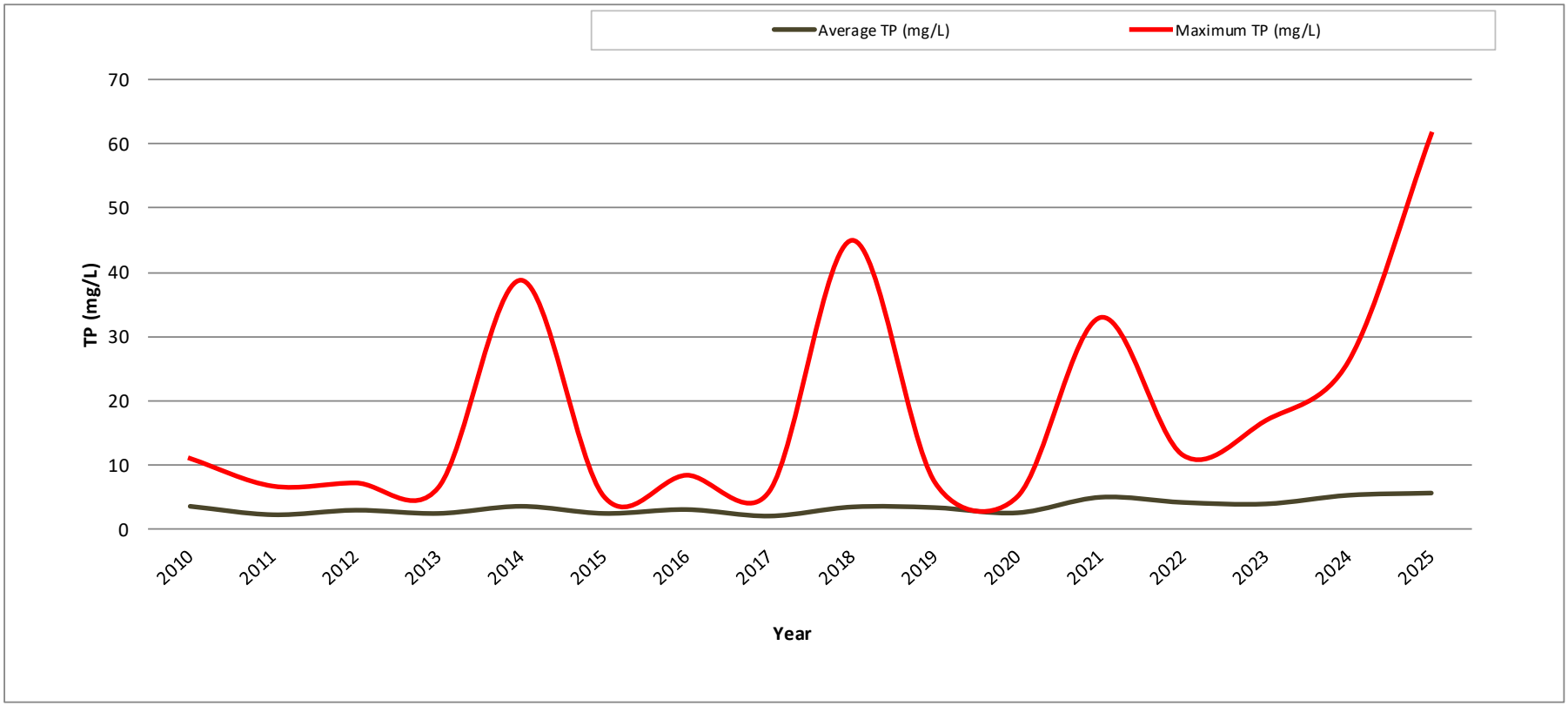
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Average TSS (mg/L)	187	162	128	103	93	64	92	58	137	115	104	328	147	192	245	247
Maximum TSS (mg/L)	1140	1010	556	396	364	280	492	306	3280	430	339	3640	606	1300	2170	3030



North Cobalt Sewage Treatment Lagoon
Influent Characteristics – Historical Results (2010 to 2025)

TP - Total Phosphorus

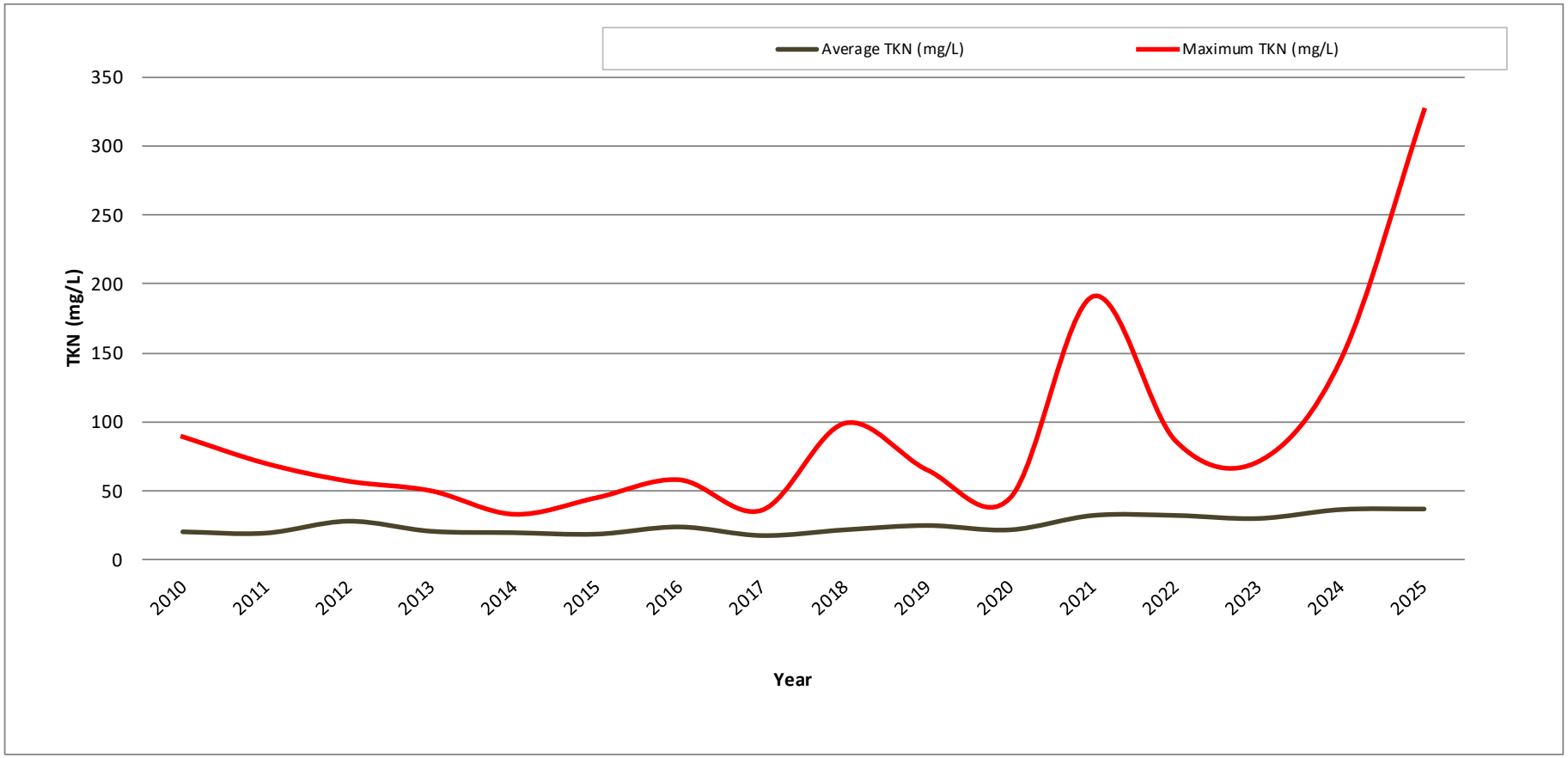
	2010	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***	***2017***	***2018***	***2019***	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***
Average TP (mg/L)	3.6	2.3	3.0	2.5	3.6	2.5	3.1	2.1	3.5	3.4	2.6	5.0	4.2	4.0	5.3	5.7
Maximum TP (mg/L)	11.1	6.8	7.3	6.6	39	5.2	8.5	6.0	45	7.4	5.2	33	12	17	26	62



North Cobalt Sewage Treatment Lagoon
Influent Characteristics – Historical Results (2010 to 2025)

TKN – Total Kjeldahl Nitrogen

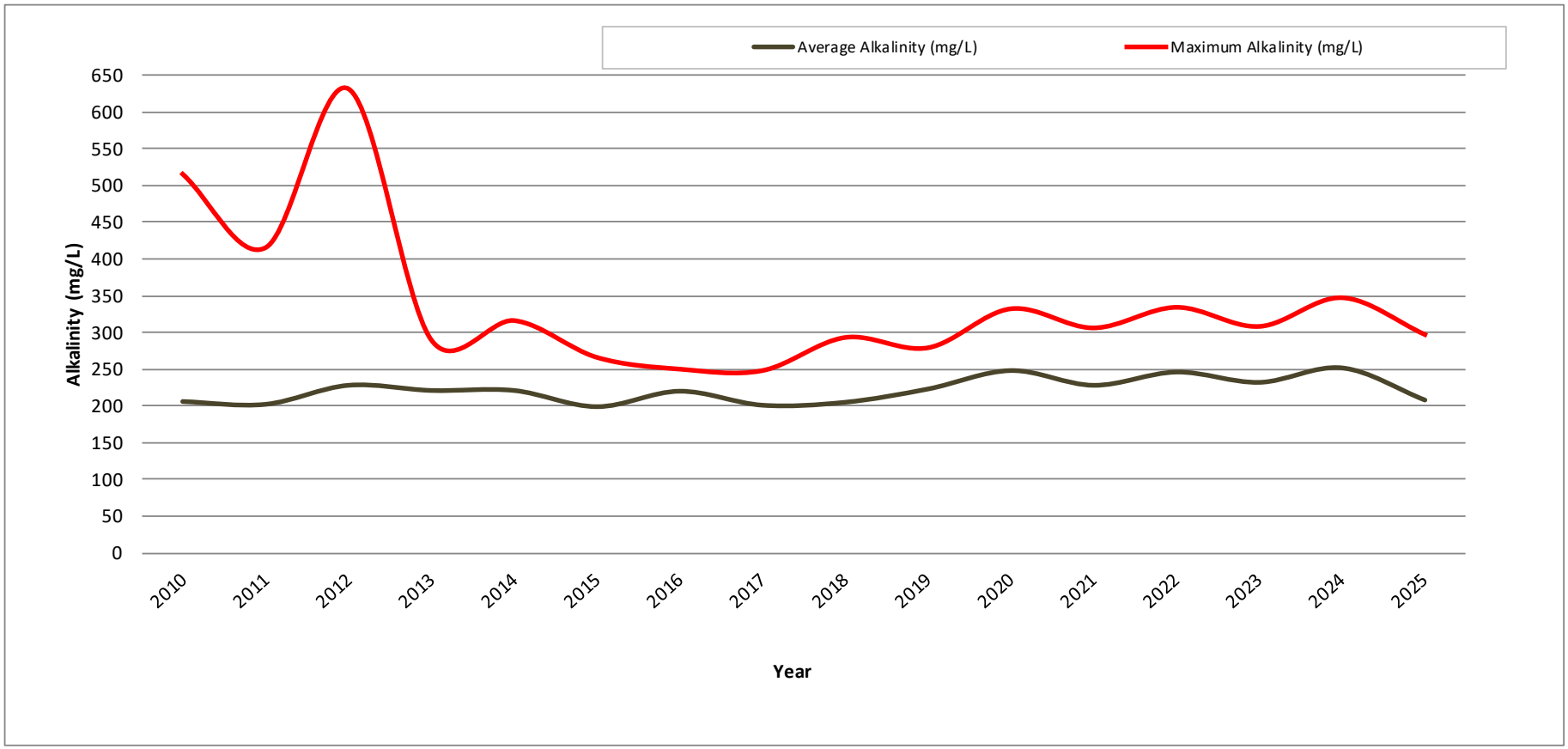
	2010	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***	***2017***	***2018***	***2019***	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***
Average TKN (mg/L)	21	20	28	21	20	19	24	18	22	25	22	32	32	30	36	37
Maximum TKN (mg/L)	89	70	57	50	33	45	58	36	99	65	45	191	86	71	146	326



North Cobalt Sewage Treatment Lagoon
Influent Characteristics – Historical Results (2010 to 2025)

Alkalinity

	2010	***2011***	***2012***	***2013***	***2014***	***2015***	***2016***	***2017***	***2018***	***2019***	***2020***	***2021***	***2022***	***2023***	***2024***	***2025***
Average Alkalinity (mg/L)	207	203	229	222	222	200	221	202	206	224	249	229	247	233	253	209
Maximum Alkalinity (mg/L)	516	416	632	291	317	267	251	249	294	280	333	307	335	309	348	298



APPENDIX C
Maintenance Summary

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Workorder Summary Report

Report Start Date: Jan 1, 2025 12:00 AM
Report End Date: Dec 31, 2025 11:59 PM
Location: 5728*
Work Order Type: CALL,CAP,CORR,EMER,OPER,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
4281849	0000060031	BLOWER CENTRIFUGAL 02	5728, North Cobalt Lagoon, Process, Secondary Treatment	PM	Refurbish/ Replace/Repair	1	YEARS	Blower Centrifugal 02 Inspection/ Service (1y) 5728	CLOSE	1/1/25 12:00 AM	6/1/25 08:41 PM	6/1/25 08:41 PM	Blower Centrifugal 02 Inspection/ Service (1y) 5728 - Changed oil and greased. Visually checked belt. OK No unusual noise or heat.
4281862	0000060029	BLOWER CENTRIFUGAL 03	5728, North Cobalt Lagoon, Process, Secondary Treatment	PM	Refurbish/ Replace/Repair	1	YEARS	Blower Centrifugal 03 Inspection/ Service (1y) 5728	CLOSE	1/1/25 12:00 AM	6/1/25 08:42 PM	6/1/25 08:42 PM	Blower Centrifugal 03 Inspection/ Service (1y) 5728 - Changed oil and greased. Visually checked belt. Ok No unusual noises or heat.
4281870	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	1/1/25 12:00 AM	1/7/25 03:25 PM	1/7/25 03:25 PM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.
4281886	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	1/1/25 12:00 AM	1/3/25 08:06 AM	1/3/25 08:06 AM	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.
4283343			5728, North Cobalt Lagoon	PM	HEALTH AND SAFETY	1	YEARS	WHMIS/SDS/NSF Review and Update (1y) 5728	CLOSE	1/1/25 12:00 AM	1/17/25 08:02 AM	1/17/25 08:02 AM	SDS Review & Update -Research SDS for chemicals. Copy/ organize in rounds binders
4283896	0000277366	SAMPLER RAW WEEKLY COMPOSITE	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	3	MONTHS	Sampler Raw Inspection (3m) 5728	CLOSE	1/1/25 12:00 AM	1/17/25 01:35 PM	1/17/25 01:35 PM	-Verified normal operation and calibration of sampler.
4283914			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	1/1/25 12:00 AM	1/25/25 04:01 PM	1/25/25 04:01 PM	Building and Grounds Maintenance (1m) 5728 - Cleaned plant throughout the month. Cleared snow as needed.

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

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Work Order Type: CALL,CAP,CORR,EMER,OPER,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
4287168	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	1/1/25 12:00 AM	2/21/25 07:37 AM	2/21/25 07:37 AM	Cleaned -Assisted Trevor with cleaning all UV's with acid. No burnt bulbs to replace. UV Light Reactor A Check - Performed Maintenance on UVA with Shannen. No burnt bulbs found during inspection.
4287171	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	1/1/25 12:00 AM	2/21/25 07:38 AM	2/21/25 07:38 AM	Cleaned -Assisted Trevor with cleaning all UV's with acid. No burnt bulbs to replace. UV Light Reactor B Check - Performed Maintenance on UVB with Shannen. No burnt bulbs found during inspection.
4287174	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	1/1/25 12:00 AM	1/14/25 03:07 PM	1/14/25 03:07 PM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 - Visually inspected pump and tank. Ran pump to verify operation
4287180	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	1/1/25 12:00 AM	2/3/25 07:42 AM	2/3/25 07:42 AM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - Hot flushed pump. ok
4287186	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	1/1/25 12:00 AM	2/3/25 07:53 AM	2/3/25 07:53 AM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - Hot flush pump. Not in service
4287192	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Diesel Generator Genset PS2 Inspection/Functional Test (1y) 5728	CLOSE	1/1/25 12:00 AM	5/12/25 01:55 PM	5/12/25 01:55 PM	completed by contractor -
4287204	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	YEARS	Diesel Generator Genset North Cobalt Inspection/Functional Test (1y) 5728	CLOSE	1/1/25 12:00 AM	5/12/25 01:54 PM	5/12/25 01:54 PM	completed by contractor -
4287216	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	YEARS	Diesel Generator Genset Portable Unit PS3 Inspection/Functional Test (1y) 5728	CLOSE	1/1/25 12:00 AM	5/12/25 01:53 PM	5/12/25 01:53 PM	completed by contractor -

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

Workorder Summary Report

Report Start Date: Jan 1, 2025 12:00 AM
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Location: 5728*
Work Order Type: CALL,CAP,CORR,EMER,OPER,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
4287228	0000060020	TANK STORAGE WET WELL PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	6	MONTHS	Tank Wet Well PS3 Inspection (6m) 5728	CLOSE	1/1/25 12:00 AM	9/19/25 03:10 PM	9/19/25 03:10 PM	Tank Wet Well PS3 Inspection (6m) 5728 -Pressure washed Station SPS grating, bar screens, piping and concrete walls with Cassie and Ken. Station St SPS Wet Well inspection - Concrete walls look good no cracking. Grating is good. Float level sensors are clean and wires look good. Ladder looks good and intact.
4292785	0000277318	ANALYZER PH LAB / PORTABLE SEWAGE LAGOONS	5728, North Cobalt Lagoon, Facility	PM	Inspection	3	MONTHS	ANALYZER PH SEWAGE LAGOON CALIBRATION (3M) 5726	CLOSE	1/1/25 12:00 AM	1/9/25 08:25 AM	1/9/25 08:25 AM	ANALYZER PH SEWAGE LAGOON CALIBRATION (3M) 5726 - Calibrated as per manufacturer's instructions. Calibration report is located on the Shared Drive.
4306777			5728, North Cobalt Station St Pumping Station	PM	Inspection	1	YEARS	ALARM PLANT #2 Station St. SPS ANNUAL TESTING (1Y) 5728	CLOSE	1/1/25 12:00 AM	10/9/25 10:28 AM	10/9/25 10:28 AM	ALARM PLANT #2 Station St. SPS ANNUAL TESTING (1Y) 5728 -Completed alarm dialer testing and recorded results on a spreadsheet provided to Marc Doyon
4306780			5728, North Cobalt Groom Drive Pumping Station	PM	Inspection	1	YEARS	ALARM PLANT #3 GROOM SPS ANNUAL TESTING (1Y) 5728	CLOSE	1/1/25 12:00 AM	10/9/25 10:31 AM	10/9/25 10:31 AM	
4306783			5728, North Cobalt Lagoon	PM	Inspection	1	YEARS	ALARM PLANT NC LAGOON ANNUAL TESTING (1Y) 5728	CLOSE	1/1/25 12:00 AM	4/9/25 10:54 AM	4/9/25 10:54 AM	-Tested all alarms as per attached document.
4320897	0000277468	ANALYZER PH Effluent	5728, North Cobalt Lagoon, Process	PM	Calibration	3	MONTHS	Analyzer pH Effluent Inspection (3m) 5728	CLOSE	1/1/25 12:00 AM	1/13/25 03:58 PM	1/13/25 03:58 PM	Analyzer pH Effluent Inspection (3m) 5728 - Calibrated as per manufacturer's instructions Calibration report located on shared drive.

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

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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
4331781			5728, North Cobalt Lagoon	OPER	Inspection	1	YEARS	Daily O&M Activities Wastewater Treatment (1y) 5728	COMP	1/1/25 12:00 AM	1/8/26 02:05 PM	1/8/26 02:05 PM	
4331786	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	1/1/25 12:00 AM	1/7/25 10:41 AM	1/7/25 10:41 AM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.
4331802			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	1/1/25 12:00 AM	1/25/25 04:08 PM	1/25/25 04:08 PM	TPM Inspection/Maintenance (1m) 5728 - Toured plant and inspected equipment Found no deficiencies.
4334068			5728, North Cobalt Lagoon	CAP	Compliance	0		North Cobalt Lagoon Chemicals 5728	COMP		1/13/26 01:18 PM	1/13/26 01:18 PM	
4339798	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	2/1/25 12:00 AM	2/20/25 08:49 AM	2/20/25 08:49 AM	Diesel Generator PS2 Genset Inspection/Functional Test - Inspected and tested Station st SPS Diesel Generator for 50mins. Vents working properly when running and no issues found. Power transfer worked properly. Set back in Auto.

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

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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
4339814	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	2/1/25 12:00 AM	2/28/25 03:44 PM	2/28/25 03:44 PM	Tested -Assisted Trevor by showing him how to properly run/test the portable generator. There happened to be an issue starting it as we had to try multiple times before a successful start-up and there was an 'auxiliary fault' that happened at the end and the generator would idle up and down, not staying consistent. ORO was informed. Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 - Inspected and tested the portable diesel generator for Groom Dr SPS. After 30mins the generator began showing low voltages and showed a Auxiliary Fault alarm. Notified manager.
4340947			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	2/1/25 12:00 AM	2/21/25 07:42 AM	2/21/25 07:42 AM	Building and Grounds Maintenance - Building and Ground checks; Swept floors and cleaned office area. Cleared snow.
4343351	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	2/1/25 12:00 AM	2/3/25 05:58 AM	2/3/25 05:58 AM	UV Light Reactor A Check (1m) 5728 - Cleaned UV Bank A
4343354	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	2/1/25 12:00 AM	2/3/25 05:59 AM	2/3/25 05:59 AM	UV Light Reactor B Check (1m) 5728 - Clean UV bank B
4343357	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	2/1/25 12:00 AM	2/20/25 08:51 AM	2/20/25 08:51 AM	Pump Diaphragm Hypo Bypass Inspection/Service - Inspected and tested Hypo bypass pump at Station St SPS. No leaks found and pump working properly in manual. Set back to Auto, and in the correct outlet.

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

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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
4343363	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	2/1/25 12:00 AM	2/19/25 08:32 AM	2/19/25 08:32 AM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - Performed a hot flush on the Alum pump with hot water. No leaks found and set the pump back to normal operation @ 8.0 L/hr.
4343369	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	2/1/25 12:00 AM	2/19/25 08:35 AM	2/19/25 08:35 AM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - Alum Pump #2 Offline for the winter.
4376973	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	2/1/25 12:00 AM	2/20/25 08:44 AM	2/20/25 08:44 AM	Diesel Generator North Cobalt Genset Inspection/Functional Test - Inspected and tested Diesel Generator with load for 45 mins. Took readings and power transferred over properly. Reviewed data logger - showed data drop to 0 during power transfer.
4376989			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	2/1/25 12:00 AM	2/20/25 08:40 AM	2/20/25 08:40 AM	TPM Inspection/Maintenance - Lagoon TPM; All exit doors have signs visible. Ventilation are clear of obstructions. Fire extinguishers inspected. Heat working in building.
4383019	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	3/1/25 12:00 AM	3/13/25 03:36 PM	3/13/25 03:36 PM	- recorded generator hours, checked oil, fuel level and block heater ran for 30 minutes recorded numbers returned to auto -

ONTARIO CLEAN WATER AGENCY
AGENCE ONTARIENNE DES EAUX

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Work Order Type: CALL,CAP,CORR,EMER,OPER,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
4383035	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	3/1/25 12:00 AM	3/18/25 02:21 PM	3/18/25 02:21 PM	Diesel Generator PS3 Genset Inspection/Functional Test - Ran and tested Portable Di
4384273			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	3/1/25 12:00 AM	3/13/25 03:55 PM	3/13/25 03:55 PM	-no burnt bulbs Cleared away snow Swept floors Cleared away obstructions from exits and points of maintenance. took out garbage
4387036	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	3/1/25 12:00 AM	3/11/25 03:36 PM	3/11/25 03:36 PM	UV Light Reactor A Check -locked out uv bank A manually switched uv bank B on cleaned uv bank A.
4387039	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	3/1/25 12:00 AM	3/11/25 03:48 PM	3/11/25 03:48 PM	- locked out uv bank B manually switched uv bank A on cleaned uv bank B replaced broken sleeve and burnt bulb -
4387042	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	3/1/25 12:00 AM	3/25/25 02:25 PM	3/25/25 02:25 PM	- inspected and tested hypo pump. no leaks or cuts were in hose. tested pump in manual, in good working condition inspected hypo tank. all good
4387048	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	3/1/25 12:00 AM	3/7/25 02:11 PM	3/7/25 02:11 PM	- hot flushed pump with hot water. no leaks or cut lines. put back in operation
4387054	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	3/1/25 12:00 AM	3/7/25 02:14 PM	3/7/25 02:14 PM	- hot flushed pump with hot water. no leaks or cut lines. put back in operation

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Work Order Type: CALL,CAP,CORR,EMER,OPER,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
4422745	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	3/1/25 12:00 AM	3/4/25 03:52 PM	3/4/25 03:52 PM	- recorded generator hours, checked oil, coolant ran for 30 minutes and recorded numbers put back in auto
4422761			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	3/1/25 12:00 AM	3/14/25 02:16 PM	3/14/25 02:16 PM	- Heaters in good working condition All Exit lights working All Ventilation working Inspected all Fire Extinguishers - All in the green No unusual noises detected
4425987	0000060033	BLOWER CENTRIFUGAL 01	5728, North Cobalt Lagoon, Process, Secondary Treatment	PM	Refurbish/ Replace/Repair	1	YEARS	Blower Centrifugal 01 Inspection/ Service (1y) 5728	CLOSE	3/13/25 12:00 AM	6/1/25 08:39 PM	6/1/25 08:39 PM	Blower Centrifugal 01 Inspection/ Service (1y) 5728 - Changed oil and greased. Visually checked belt. OK No unusual noises or heat
4426800			5728, North Cobalt Station St Pumping Station	CALL	Predictive Maintenance	0		Call In - Overflow at Station SPS, 5728	CLOSE		3/16/25 12:10 PM	3/16/25 08:45 PM	Call In - Overflow at Station SPS, 5728 - Called in for major at Statio onsite, noticed overflow. Cc Checked Groom. Opened h
4427289			5728, North Cobalt Lagoon, Facility	CALL	Refurbish/ Replace/Repair	0		loss of comms nc lagoon 5728	CLOSE		3/19/25 06:45 PM	3/19/25 07:15 PM	loss of comms - Got Called at 1816 for loss Drove to site, reset radio After a couple minutes, Rer

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4429626	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	4/1/25 12:00 AM	4/10/25 08:06 AM	4/10/25 08:06 AM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 - Completed genset test: checked fuel, coolant, block heater and oil. ok no faults displayed recorded running values on sheet
4429642	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	4/1/25 12:00 AM	4/14/25 03:57 PM	4/14/25 03:57 PM	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 - Completed genset test: checked fuel, coolant, block heater and oil. ok recorded running values on sheet. *Took attempts to start before I got the generator to run. Brought it up to Bryce.
4430981	0000277366	SAMPLER RAW WEEKLY COMPOSITE	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	3	MONTHS	Sampler Raw Inspection (3m) 5728	CLOSE	4/1/25 12:00 AM	4/2/25 03:06 PM	4/2/25 03:06 PM	-Verified calibration of sampler to make sure that it is sampling as per the desired amount. Inspected the hoses and operation of sampler. No issues found.
4431053			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	4/1/25 12:00 AM	5/1/25 04:36 PM	5/1/25 04:36 PM	Building and Grounds Maintenance (1m) 5728 - Wash UV bank floor Cleaned shop room (Alum Trailer) Cleaned bathroom and removed garbage, Checked lighting, ok

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4433882	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	4/1/25 12:00 AM	5/1/25 11:11 AM	5/1/25 11:11 AM	UV Light Reactor A Check (1m) 5728 - Cleaned UV A Bank UV after cleaning 3.5 Visually inspected sleeve and lamps during cleaning. ok
4433885	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	4/1/25 12:00 AM	5/1/25 11:16 AM	5/1/25 11:16 AM	UV Light Reactor B Check (1m) 5728 - Cleaned UVB UV after cleaning 3.3 Inspected UV. ok
4433888	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	4/1/25 12:00 AM	4/29/25 09:20 AM	4/29/25 09:20 AM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 - Andrew inspected the pump during an overflow on April 26, 2025 ok
4433894	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	4/1/25 12:00 AM	4/9/25 03:57 PM	4/9/25 03:57 PM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - Hot flushed alum pump. Completed drawdown: Pump rate at 8.00 L/h and results 148 mL per min (8.88 L/m)
4433900	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	4/1/25 12:00 AM	4/13/25 09:12 PM	4/13/25 09:12 PM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - Pump is not in service at the moment but will be installed soon. Hot flushed pump and inspected. ok

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4433906	0000060013	TANK STORAGE WET WELL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	6	MONTHS	Tank Wet Well PS2 Inspection (6m) 5728	CLOSE	4/1/25 12:00 AM	7/18/25 02:26 PM	7/18/25 02:26 PM	Tank Wet Well PS2 Inspection (6m) 5728 -Visually inspected the wet well. Noticed a lot of grease build-up in the wet well. See pictures attached Tank Wet Well PS2 Inspection (6m) 5728 - Manually turned on pump to drain wetwell down. Cleaned wetwell using City Vac and high pressure washer with hot water. Wash not able to reach the basket and was suggested to use 3" pipe and attachment to clean. Will discuss with the town to come back. Also lots of grease on the walls and was told by Shannen that it was previously scraped off when they put in new pump recently. Visually checked concrete structure, float, grate. ok
4439085	0000277318	ANALYZER PH LAB / PORTABLE SEWAGE LAGOONS	5728, North Cobalt Lagoon, Facility	PM	Inspection	3	MONTHS	ANALYZER PH SEWAGE LAGOON CALIBRATION (3M) 5726	CLOSE	4/1/25 12:00 AM	4/2/25 01:22 PM	4/2/25 01:22 PM	-Please refer to shared drive for cal slip.
4465518	0000277468	ANALYZER PH Effluent	5728, North Cobalt Lagoon, Process	PM	Calibration	3	MONTHS	Analyzer pH Effluent Inspection (3m) 5728	CLOSE	4/1/25 12:00 AM	4/2/25 02:03 PM	4/2/25 02:03 PM	-Please refer to shared drive for cal slip
4468296	0000293723	METER LEVEL Alum Tank	5728, North Cobalt Lagoon	PM	Inspection	1	YEARS	Level Ferric Tank Verification NCL 5728 (1y)	CLOSE	4/1/25 12:00 AM	4/2/25 02:19 PM	4/2/25 02:19 PM	-Please refer to shared drive for cal slip.
4483669	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	4/1/25 12:00 AM	4/10/25 08:34 AM	4/10/25 08:34 AM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 - Completed genset test: checked oil, coolant, block heater, fuel. ok no faults displayed recorded running values on sheet

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Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
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4483713			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	4/1/25 12:00 AM	5/1/25 11:34 AM	5/1/25 11:34 AM	TPM Inspection/Maintenance (1m) 5728 - NC Lagoon: Visually inspected blowers. Shut it down and inspected oil level and checked belt. The blowers will need an oil change, notified Bryce. Groom SPS Recorded pump hours Station SPS checked pump on SCADA and reviewed pump trends.
4489732			5728, North Cobalt Station St Pumping Station	CALL	Refurbish/ Replace/Repair	0		call in - Station St overflow	CLOSE		4/25/25 10:12 PM	4/26/25 07:00 PM	call in - Station St overflow - 0852 call for major alarm at station sps 0853 remote login, high level 0903 driving to site to check hypo tank level 9010 arrived to site 0913 hypo at 3/4 tank level 0914 level increasing slowly in wet well (1.73m) 0921 critical alarm at station sps, overflow occurrence and verified operation of hypo pump on site. 0923 leaving site and will monitor remotely Sac event # 1-O5P57K
4490578	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	5/1/25 12:00 AM	5/27/25 07:54 AM	5/27/25 07:54 AM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.

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4490594	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	5/1/25 12:00 AM	5/27/25 11:54 AM	5/27/25 11:54 AM	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.
4491771			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	5/1/25 12:00 AM	5/26/25 07:49 AM	5/26/25 07:49 AM	Building and Grounds Maintenance (1m) 5728 -Cleaned floor previously, emptied garbages as required and inspected for overall cleanliness
4494531	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	5/1/25 12:00 AM	5/29/25 02:59 PM	5/29/25 02:59 PM	UV Light Reactor A Check (1m) 5728 - Cleaned UV glass tubes and frame. Inspected to ensure all bulbs were still functioning Changed a lamp and glass
4494534	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	5/1/25 12:00 AM	5/29/25 03:01 PM	5/29/25 03:01 PM	UV Light Reactor B Check (1m) 5728 - Cleaned UV glass tubes and frame. Inspected to ensure all bulbs were still functioning
4494537	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	5/1/25 12:00 AM	5/27/25 07:59 AM	5/27/25 07:59 AM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 - performed visual inspection of hypo pump. Plugged into live receptable to verify pump is operational. Checked level of hypo tank.
4494543	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	5/1/25 12:00 AM	5/27/25 11:58 AM	5/27/25 11:58 AM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - hot flushed and performed draw down test pump rate: 9L/h vs draw down of 11.5L/h

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4494549	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	5/1/25 12:00 AM	5/27/25 12:00 PM	5/27/25 12:00 PM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - performed hot flushing and draw down test Pump rate: 6.5L/h vs draw down 7.5L/h
4539297			5728, North Cobalt Groom Drive Pumping Station	OPER	Inspection	1	YEARS	Grating Insp (1y) - 5728, North Cobalt Groom Drive Pur	CLOSE	5/1/25 12:00 AM	7/3/25 06:09 AM	7/3/25 06:09 AM	No Surface Grating On Site -
4539309			5728, North Cobalt Lagoon	OPER	Inspection	1	YEARS	Grating Insp (1y) - 5728, North Cobalt Lagoon	CLOSE	5/1/25 12:00 AM	7/17/25 01:14 PM	7/17/25 01:14 PM	Grating Insp (1y) - 5728, North Cobalt Lagoon -Completed grating inspection at North Cobalt Lagoon. All grating is in good condition. See attachment for more details
4539321			5728, North Cobalt Station St Pumping Station	OPER	Inspection	1	YEARS	Grating Insp (1y) - 5728, North Cobalt Station St Pumpi	CLOSE	5/1/25 12:00 AM	7/17/25 01:12 PM	7/17/25 01:12 PM	Grating Insp (1y) - 5728, North Cobalt Station St Pumpin -Completed annual grating inspection for Station SPS. No issues observed. See attachment for more details
4550170	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	5/1/25 12:00 AM	5/9/25 09:28 AM	5/9/25 09:28 AM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 - Completed genset test: checked oil, coolant, block heater and fuel. no faults displayed recorded running values on sheet
4550186			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	5/1/25 12:00 AM	5/27/25 12:01 PM	5/27/25 12:01 PM	TPM Inspection/Maintenance (1m) 5728 -walked thru facility various times throughout the month of may and did not notice any deficiencies
4551780			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Failed DO Probe Sensor Cap 5728	CLOSE		5/13/25 08:15 AM	5/13/25 08:15 AM	

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4552757			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		NC Lagoon Blower Servicing 5728	CLOSE		6/1/25 08:32 PM	6/1/25 08:32 PM	NC Lagoon Blower Servicing 5728 - Changed oil and grease Blower 1, 2 and 3. Visually inspected belts. OK Checked for unusual noises or heat. OK I put my time to WO 4552757
4555314			5728, North Cobalt Lagoon	CORR	Predictive Maintenance	0		Grit Channels at North Cobalt Lagoon, 5728	CLOSE		9/19/25 07:51 AM	9/19/25 07:51 AM	Grit Channels at North Cobalt Lagoon, 5728 - Cleaned the bar screen, grit channels and raw wetwell with pressure washer and vac truck. Cleaned two manholes Grit Channels at North Cobalt Lagoon, 5728 - Trained Trevor on the locations and how to clean Grit channels, bar screen, two manholes and crossover chamber. Grit Channels at North Cobalt Lagoon, 5728 -Vacuumed, and washed out grit channels, the weirs, bar screen, manholes and wet well beside lagoon with Cassie and Ken from town-works.
4557021	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	6/1/25 12:00 AM	6/26/25 02:21 PM	6/26/25 02:21 PM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 -Ran and tested the Station st Sps diesel generator with load for 1 hour. Recorded all levels and no leaks found. Power Transfer was good.

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4557037	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	6/1/25 12:00 AM	6/27/25 03:15 PM	6/27/25 03:15 PM	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 -Ran and tested the Groom dr sps portable diesel generator for 1 hour. The block heater had no heat to the touch and the extension cord was showing power. The generator had over cranked a couple times before being able to start up. There is a low battery voltage on the unit while trying to start. No leaks found.
4558125			5728, North Cobalt Lagoon	PM	Compliance	1	YEARS	Facility Emergency Plan Review (1y) 5728	CLOSE	6/1/25 12:00 AM	8/18/25 07:52 AM	8/18/25 07:52 AM	Facility Emergency Plan Review (1y) 5728 -FEP binder reviewed by operator and a few updates needed. Will be completed before the end of the year.
4558398			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	6/1/25 12:00 AM	6/18/25 12:52 PM	6/18/25 12:52 PM	Building and Grounds Maintenance (1m) 5728 - Building & grounds checks; cleaned and washed floors, doors and gates look good.
4561077	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	6/1/25 12:00 AM	6/27/25 12:00 PM	6/27/25 12:00 PM	UV Light Reactor A Check -locked out and Cleaned all four sleeves on all four light sets including the sensor, with a mild cleanser with mark ziller UV Light Reactor A Check -Clean all four sleeves on all four light sets including the sensor, with a mild cleanser with Danny Regele.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
4561080	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	6/1/25 12:00 AM	6/27/25 12:02 PM	6/27/25 12:02 PM	UV Light Reactor B Check -locked out uv bank B. cleaned all four sleeves on all four light sets including the sensor, with a mild cleanser with mark ziller. Replaced bulb #4 UV Light Reactor B Monthly Check -Clean all four sleeves on all four light sets including the sensor, with a mild cleanser with Danny Regele. Replaced one burned out bulb.
4561083	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Refurbish/ Replace/Repair	1	YEARS	UV Light Reactor A Check (1y) 5728	CLOSE	6/1/25 12:00 AM	9/9/25 12:09 PM	9/9/25 12:09 PM	Yearly Maintenance Inspection -Checked control panel for any alarms. Checked power distribution panel. All good. Cleaned sleeves and replaced a burned lamp and sleeve on the 2nd set of four lamps,2nd from the top. Checked the power lines for any nicks from animals etc
4561086	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Refurbish/ Replace/Repair	1	YEARS	UV Light Reactor B Check (1y) 5728	CLOSE	6/1/25 12:00 AM	9/9/25 12:12 PM	9/9/25 12:12 PM	Yearly Maintenance Inspection -Checked control panel for any alarms. Checked power distribution panel. All good. Cleaned sleeves and replaced a burned lamp and sleeve on the 2nd set of four lamps,2nd from the top. Checked the power lines for any nicks from animals etc. UV Sensor on this bank is defective and a new one is on order.
4561089	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	6/1/25 12:00 AM	6/13/25 08:25 AM	6/13/25 08:25 AM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 - Tested the Hypo bypass pump at Station St. Set it to run on different outlet and ran it on Percentage mode. Runs good and no leaks found. Set back to auto on its correct outlet.

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4561095	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	6/1/25 12:00 AM	6/24/25 10:13 AM	6/24/25 10:13 AM	Pump Diaphragm Alum 01 Inspection - hot flushed pump and completed drawdown test drawdown results 10l/h -work order was completed on june 19th
4561101	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection	CLOSE	6/1/25 12:00 AM	6/24/25 10:14 AM	6/24/25 10:14 AM	Pump Diaphragm Alum 02 Inspection/ - hot flushed pump and completed drawdown test drawdown results 7 l/h -work order was completed on june 19th
4603243	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	6/1/25 12:00 AM	6/8/25 03:45 PM	6/8/25 03:45 PM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 - Inspected and tested diesel generator at NC lagoon with load for 1 hour. Recorded numbers and check levels. No issues found and power transfer was good.
4603259			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	6/1/25 12:00 AM	6/8/25 03:46 PM	6/8/25 03:46 PM	TPM Inspection/Maintenance (1m) 5728 - Completed TPM inspections; checked ventilation, tested exhaust fan in garage room and working, all exit signs visible and lit. Doors are clear of obstructions.

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4619657	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	7/1/25 12:00 AM	7/17/25 03:35 PM	7/17/25 03:35 PM	-Checked the oil, coolant and fuel levels, Checked the block heater operation. All OK. Ran for 42 min and then recorded the operational data. put back in auto -
4619673	0000060065	METER FLOW EFFLUENT	5728, North Cobalt Lagoon, Process, Process Controls	PM	Calibration	1	YEARS	Meter Flow Lagoon Effluent Calibration (1y) 5728	CLOSE	7/1/25 12:00 AM	7/17/25 09:08 AM	7/17/25 09:08 AM	- Verify accuracy of head measurement by comparing height measurement on display of flowmeter to the actual measurement of a physical standard placed below the level element. mA reading compared to span, ((13.78-4.00)/ 16.00)x70.0 = 42.79 l/s.
4619679	0000277365	METER FLOW RAW	5728, North Cobalt Lagoon, Process, Process Controls	PM	Calibration	1	YEARS	Meter Flow Lagoon Raw Calibration (1y) 5728	CLOSE	7/1/25 12:00 AM	7/24/25 03:42 PM	7/24/25 03:42 PM	- Verified calibration by comparing a physical measurement from the transducer face to liquid level and the distance measurement on the flowmeter. Liquid level in channel two was stagnent and the surface was not smooth possibly accounting for the slight error.
4619686	0000115983	METER LEVEL ALUM	5728, North Cobalt Lagoon, Process, Process Controls	PM	Calibration	1	YEARS	Meter Level Alum Inspection/ Service (1y) 5728	CLOSE	7/1/25 12:00 AM	7/23/25 11:44 AM	7/23/25 11:44 AM	-See shared drive for cal slip
4619691			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	7/1/25 12:00 AM	7/31/25 03:26 PM	7/31/25 03:26 PM	- no unusal sounds while blowers were running. hour counter needs replaced on blower 1 and 3. vents in good working condition.

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4620197	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	7/1/25 12:00 AM	7/15/25 03:24 PM	7/15/25 03:24 PM	- Checked the oil, coolant and fuel levels, Checked the block heater operation. All OK. Ran for 40 min and then recorded the operational data. put back in auto
4620213	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	7/1/25 12:00 AM	7/15/25 03:26 PM	7/15/25 03:26 PM	- Checked the oil, coolant and fuel levels, Checked the block heater operation. All OK. Ran for 41 min and then recorded the operational data.
4621030	0000277359	METER FLOW PS2 BYPASS	5728, North Cobalt Station St Pumping Station	PM	Calibration	1	YEARS	Meter Flow PS2 Bypass Calibration (1y) 5728	CLOSE	7/1/25 12:00 AM	7/29/25 08:15 AM	7/29/25 08:15 AM	Meter Flow PS2 Bypass Calibration (1y) 5728 -Received training from Chris on how to perform the calibration verification.
4621041	0000277467	SAMPLER Effluent	5728, North Cobalt Lagoon, Facility	PM	Refurbish/ Replace/Repair	1	YEARS	Sampler Effluent Inspection (1y) 5728	CLOSE	7/1/25 12:00 AM	7/23/25 02:36 PM	7/23/25 02:36 PM	-Performed yearly inspecting including tubing replacement and sample testing for accuracy.
4621786	0000277366	SAMPLER RAW WEEKLY COMPOSITE	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	3	MONTHS	Sampler Raw Inspection (3m) 5728	CLOSE	7/1/25 12:00 AM	7/14/25 01:15 PM	7/14/25 01:15 PM	-Tested operations and calibration. Performed maintenance on hoses and placed back in online before leaving site
4621802	0000060018	METER LEVEL PS3 WET WELL	5728, North Cobalt Groom Drive Pumping Station	PM	Calibration	1	YEARS	Meter Level PS3 Wet Well Inspection/Service (1y) 5728	CLOSE	7/1/25 12:00 AM	7/14/25 01:12 PM	7/14/25 01:12 PM	-See shared drive for cal slip
4621830			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	7/1/25 12:00 AM	7/31/25 03:31 PM	7/31/25 03:31 PM	- water enters the mcc room through outside wall, cleaned/ washed floors, cleaned facility. took out garbage/ recycling

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4624464	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	7/1/25 12:00 AM	7/17/25 03:49 PM	7/17/25 03:49 PM	- **locked out and Cleaned all four sleeves on all four light sets including the sensor, with a mild cleanser with cassie legros replaced uv bulb in bank A set 3 bulb 4**
4624467	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	7/1/25 12:00 AM	7/17/25 03:51 PM	7/17/25 03:51 PM	**-locked out and Cleaned all four sleeves on all four light sets including the sensor, with a mild cleanser with cassie legros**
4624470	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	7/1/25 12:00 AM	7/15/25 03:37 PM	7/15/25 03:37 PM	- performed visual inspection of hypo pump. Plugged into live receptable to verify pump is operational. Checked level of hypo tank.
4624476	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	7/1/25 12:00 AM	7/17/25 03:40 PM	7/17/25 03:40 PM	- hot flushed pump and completed drawdown test drawdown results 85 liters/ 30 seconds
4624482	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	7/1/25 12:00 AM	7/17/25 03:51 PM	7/17/25 03:51 PM	- hot flushed pump and completed drawdown test drawdown results 85 L / 30 seconds

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4624488	0000060020	TANK STORAGE WET WELL PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	6	MONTHS	Tank Wet Well PS3 Inspection (6m) 5728	CLOSE	7/1/25 12:00 AM	9/18/25 02:54 PM	9/18/25 02:54 PM	Tank Wet Well PS3 Inspection (6m) 5728 - Completed wetwell inspection: Manually turned on both pumps and drained wetwell until pumps were exposed. Using the high pressure washer and hot water from the City VAC truck, washed down the walls, grating, chains, floats, and any grease. Visually checked wiring, chains, floats, LT, concrete structure. ok Tank Wet Well PS3 Inspection (6m) 5728 -Pressure washed out Groom SPS grating, concrete walls, pipes and manhole with Cassie and Ken from town-works. Inspected wet well - Concrete looks intact and clean, ladder looks good, floats are visible and clean, piping is clean and pumps working properly.
4629494	0000277318	ANALYZER PH LAB / PORTABLE SEWAGE LAGOONS	5728, North Cobalt Lagoon, Facility	PM	Inspection	3	MONTHS	ANALYZER PH SEWAGE LAGOON CALIBRATION (3M) 5726	CLOSE	7/1/25 12:00 AM	7/23/25 02:34 PM	7/23/25 02:34 PM	-see shared drive for cal slip
4631867	0000293291	TRANSMITTER PRESSURE BLOWER CONTROL (0-20.0 PSI)	5728, North Cobalt Lagoon, Process	PM	Refurbish/ Replace/Repair	1	YEARS	TRANSMITTER PRESSURE CALIBRATION (1Y) 5728	CLOSE	7/1/25 12:00 AM	7/15/25 03:26 PM	7/15/25 03:26 PM	- Applied pressure equal to 0,25,50,75 and 100% values and compared reading to HMI. Unit required no calibration at this time.

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4635990	0000293294	TRANSMITTER PRESSURE DISTRIBUTION STATION SPS	5728, North Cobalt Station St Pumping Station	PM	Calibration	1	YEARS	TRANSMITTER PRESSURE CALIBRATION (1Y) 5728	CLOSE	7/2/25 12:00 AM	7/24/25 08:10 AM	7/24/25 08:10 AM	- Calibrated distribution pressure transmitter with a Fluke pressure calibrator at 0,25,50,75 and100% values. Verified reading on HMI and datalogger.
4639614	0000293322	RECORDER DATA LOGGER NC LAGOON	5728, North Cobalt Lagoon, Process, Process Controls	PM	Calibration	1	YEARS	DATA LOGGER NC LAGOON CALIB / VERIF. (1Y) 5728	CLOSE	7/2/25 12:00 AM	7/24/25 01:31 PM	7/24/25 01:31 PM	- See shared drive for cal slip
4639792	0000293324	RECORDER DATA LOGGER SPS#2 STATION ST	5728, North Cobalt Station St Pumping Station	PM	Calibration	1	YEARS	DATA LOGGER SPS2 CALIBRATION (1Y) 5728	CLOSE	7/2/25 12:00 AM	7/24/25 03:36 PM	7/24/25 03:36 PM	-Performed data logger signal calibration verification. No issues found and calibration is holding within 99.9% accuracy
4641734	0000277423	METER LEVEL Wet Well #2 PS Station St. 5728	5728, North Cobalt Station St Pumping Station	PM	Calibration	1	YEARS	Level Wet Well Verification Station St. (1y) 5728	CLOSE	7/2/25 12:00 AM	7/14/25 01:20 PM	7/14/25 01:20 PM	-See shared drive for cal slip
4656176	0000277468	ANALYZER PH Effluent	5728, North Cobalt Lagoon, Process	PM	Calibration	3	MONTHS	Analyzer pH Effluent Inspection (3m) 5728	CLOSE	7/3/25 12:00 AM	7/23/25 03:47 PM	7/23/25 03:47 PM	Analyzer pH Effluent Inspection (3m) 5728 - Please refer to the calibration record which can be found on the shared drive.
4664959			5728, North Cobalt Station St Pumping Station	CALL	Refurbish/ Replace/Repair	0		Call in Loss of Comm Station PS 5728	CLOSE		7/30/25 10:33 AM	7/30/25 10:39 AM	-Called for critical alarm. Found loss of comm on scada system. Arrived on site and found comms restored but failed again shortly after. Re booted radio and comms were restored. Comms failed again at 0330 so I disabled the loss of comm alarm. City was notified first thing in the morning and IT went and fixed it. Comms are now restored.
4664997			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Faulty Hour Meter on blowers and pumps NC Lagoon 5728	CLOSE		8/28/25 09:13 AM	8/28/25 09:13 AM	

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4665459	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	8/1/25 12:00 AM	8/6/25 03:49 PM	8/6/25 03:49 PM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 - Completed genset test: checked fuel, coolant, block heater and oil no faults displayed recorded running values on sheet.
4665475	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	8/1/25 12:00 AM	8/20/25 09:53 AM	8/20/25 09:53 AM	- recorded generator hours, fuel level and oil level. checked block heater. good. ran for 30 minutes recorded generator sheet numbers while in operation. put back in auto recorded generator hours
4666621			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	8/1/25 12:00 AM	8/28/25 03:50 PM	8/28/25 03:50 PM	Building and Grounds Maintenance (1m) 5728 - Swept the floor in office, lab and bathroom. Checked lighting. ok Removed garbage from bathroom, lab and office. Noticed black mold developing on the ceiling at the shop of NC Lagoon. Notified Bryce.
4669137	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	8/1/25 12:00 AM	8/28/25 03:37 PM	8/28/25 03:37 PM	- locked out uv bank A. cleaned / wiped down uv sleeves. no burnt bulbs cleaned sensor UV Light Reactor A Check (1m) 5728 -Cleaned UV Bank A. Light indicator shows are bulb are functioning.

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4669140	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	8/1/25 12:00 AM	8/28/25 03:43 PM	8/28/25 03:43 PM	- locked out uv bank B. cleaned/ rinsed sleeves. bank 2 bulb 2 was burnt changed sleeve and bulb. put back in auto UV Light Reactor B Check (1m) 5728 -Cleaned UV bank B and replaced a lamp and sleeve on row 2. However, displayed indicator 0. Will have to get a quote for a new sensor.
4669143	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	8/1/25 12:00 AM	8/7/25 07:43 AM	8/7/25 07:43 AM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 - Visually checked pump and checked settings. ok Filled hypo tank with water.
4669149	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	8/1/25 12:00 AM	8/6/25 03:56 PM	8/6/25 03:56 PM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - Hot flushed alum pump and completed drawdown: First drawdown was 148 mL per min (8.88 L/h) Pump rate was 8.00 L/s Took apart the PRV and cleaned it and made an adjustment and completed another drawdown Second drawdown: 138 mL per min (8.25 L/h)

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4669155	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	8/1/25 12:00 AM	8/7/25 07:42 AM	8/7/25 07:42 AM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - Hot flushed pump and completed drawdown: First drawdown, sight glass drained completely and pump was not running indicating siphoning. Changed check valves and completed another drawdown 110 mL per min (6.6 L/h) and pump rate is 6.0 L/h
4706511	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	8/2/25 12:00 AM	8/4/25 10:09 PM	8/4/25 10:09 PM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 - Completed monthly genset test: checked fuel, coolant, block heater and oil. no faults displayed recorded running values on sheet
4706527			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	8/2/25 12:00 AM	8/29/25 03:06 PM	8/29/25 03:06 PM	TPM Inspection/Maintenance (1m) 5728 - Completed TPM: visually checked oil level of all blowers. ok visually checked rake turning in both plants. visually checked hypo pumps and declore pumps. visually checked exhaust. ok

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4708526			5728, North Cobalt Lagoon	CALL	Refurbish/ Replace/Repair	0		Power Outage at North Cobalt Lagoon 5728	CLOSE		8/10/25 08:10 AM	8/10/25 08:13 AM	Power Outage at North Cobalt Lagoon 5728 -Got a call at 1130 for a minor alarm now normal at North Cobalt Lagoon. Logged in remotely, reviewed the alarm history and noticed there was a power outage. I also noticed that Station St SPS generator was also running. By the time I had gotten to station st. The power had restored and the generator had shut down on its own. The ATS was not working during a power outage on August 7th but ended up working today. Everything is back to normal for Station and the lagoon. I drove to Groom to verified everything was back to normal as we don’t have communication to this site, I had to reset both pumps as they were locked out from the power blip. The level immediately started decreasing one the pump was reset
4709109			5728, North Cobalt Lagoon, Facility	CORR	Refurbish/ Replace/Repair	0		Hourmeter replacement NCLagoon Blowers 5728	CLOSE		8/12/25 02:58 PM	8/12/25 02:58 PM	-Replaced hourmeter on no. 3 blower and found meter on no. 1 blower was not working either. Removed hourmeter from compressor tub as it is no longer used and put in no. 1 blower.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
4710159			5728, North Cobalt Lagoon, Facility	CORR	Refurbish/ Replace/Repair	0		pH Effluent Probe Replace North Cobalt Lagoon 5728	CLOSE		8/18/25 03:01 PM	8/18/25 03:01 PM	-Effluent pH probe reading 0.0 at lagoon. Replace probe and verify calibration. Update Sc controller to latest version.
4710331			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Failed Effluent PH Probe 5728	CLOSE		9/18/25 07:54 AM	9/18/25 07:54 AM	
4711625			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Rebuild Failed Backflow Preventers 5728	CLOSE		10/22/25 10:04 AM	10/22/25 10:04 AM	Rebuild Failed Backflow Preventers 5728 -Replaced both check valves and relief vent with a new repair kit. The relief vent started leaking as soon as it was put back into service meaning that it wouldn't pass the inspection. I tested it 3 times and it failed. I took it apart and made sure the was no debris nor cuts on the seat rubber. At this point i changed the relief vent with a new one again and it passed it's inspection right away.
4712355	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	9/1/25 12:00 AM	9/3/25 03:05 PM	9/3/25 03:05 PM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
4712371	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	9/1/25 12:00 AM	9/3/25 03:05 PM	9/3/25 03:05 PM	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet. Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 - previous log was put on the wrong work order work was complete 09/05/25 Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.
4713454			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	9/1/25 12:00 AM	9/11/25 01:32 PM	9/11/25 01:32 PM	Building and Grounds Maintenance (1m) 5728 -Performed general housekeeping within the facility.
4716325	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	9/1/25 12:00 AM	9/9/25 03:10 PM	9/9/25 03:10 PM	UV Light Reactor A Check (1m) 5728 -Cleaned and inspected UV A with Mark Ziller. Changed out 1 bulb and sleeve on UV A bank. -
4716328	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	9/1/25 12:00 AM	9/9/25 03:12 PM	9/9/25 03:12 PM	UV Light Reactor B Check (1m) 5728 -Cleaned and inspected UV B with Mark Ziller. Changed out 1 bulb and sleeve on UV A bank. UV B eye sensor will need to be changed out when new one arrives.
4716331	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	9/1/25 12:00 AM	9/3/25 03:08 PM	9/3/25 03:08 PM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 -Tested hypo pump operation and verified.

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4716337	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	9/1/25 12:00 AM	9/9/25 02:39 PM	9/9/25 02:39 PM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - Performed hot flushing and draw down of pumps. Performed visual inspection of pumps and connected tubing.
4716343	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	9/1/25 12:00 AM	9/9/25 02:41 PM	9/9/25 02:41 PM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - Performed hot flushing and draw down of pumps. Performed visual inspection of pumps and connected tubing.
4758584	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	9/2/25 12:00 AM	9/5/25 10:03 AM	9/5/25 10:03 AM	Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet - Visually inspected generator. Performed monthly generator pm. Filled out generator maintenance sheet.
4758600			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	9/2/25 12:00 AM	9/11/25 07:42 AM	9/11/25 07:42 AM	TPM Inspection/Maintenance (1m) 5728 -Toured facility and inspected equipment visually and audibly for any abnormalities.

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4759444			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Failed UV Sensor 5728	CLOSE		9/16/25 08:37 AM	9/16/25 08:37 AM	Replace Failed UV Sensor 5728 -Assisted Marc with replacing faulty sensor on UV B. Put the new replacement online and noticed that the dosage would go up to 5.2 then drop back down to 0. We swapped the sensors from UV A to UV B and UV B to UV A to see if the issue would follow the sensor and it did. Marc called Trojan and notified them of the faulty sensor that they sent us and a new one will be shipped immediately. We had another new back up sensor on hand, reassembled and put online. Both UV's are now back in service
4760945			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Number 2 Pump at Station St 5728	CLOSE		9/16/25 11:55 AM	9/16/25 11:55 AM	Replace Number 1 Pump at Station St 5728 -Replaced pump #1 at station st SPS with a new pump. The old one still works and will be kept as a spare. Cleaned major grease build up around the wet well and from the bar screen. The bar screen will need to be sucked out with a vac truck. This work was completed with Chris and Marc

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4765271	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	10/1/25 12:00 AM	10/14/25 01:00 PM	10/14/25 01:00 PM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 -Ran and tested Station st Sps Generator with load for 30mins. Recorded levels and readings. All looks good.
4765287	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	10/1/25 12:00 AM	10/8/25 01:20 PM	10/8/25 01:20 PM	-Checked fuel/oil and coolant levels and checked block heater operation. All OK. Let it run for roughly 45 minutes and then recorded the operational data on the monthly checklist.
4766663	0000277366	SAMPLER RAW WEEKLY COMPOSITE	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	3	MONTHS	Sampler Raw Inspection (3m) 5728	CLOSE	10/1/25 12:00 AM	10/7/25 01:45 PM	10/7/25 01:45 PM	Sampler Raw Inspection (3m) 5728 - Please refer to the calibration record which can be found on the shared drive.
4766690			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	10/1/25 12:00 AM	10/24/25 04:30 PM	10/24/25 04:30 PM	Building and Grounds Maintenance (1m) 5728 -Building and Grounds inspections. Cleaned floors, checked garbage and removed any obstructions from exits.
4769450	0000115990	TANK PROCESS GRIT CHANNELS 1	5728, North Cobalt Lagoon, Process, Headworks	PM	Refurbish/ Replace/Repair	1	YEARS	Channel Grit 01 Inspection (1y) 5728	CLOSE	10/1/25 12:00 AM	10/7/25 02:03 PM	10/7/25 02:03 PM	Grit Channel 1 Inspection -This worker order was completed with Cassie, Trevor and Ken from the City of Temiskaming Shores who operated the sucker truck on September 16th, to clean the grit channels.
4769452	0000115991	TANK PROCESS GRIT CHANNELS 2	5728, North Cobalt Lagoon, Process, Headworks	PM	Refurbish/ Replace/Repair	1	YEARS	Channel Grit 02 Inspection (1y) 5728	CLOSE	10/1/25 12:00 AM	10/7/25 02:05 PM	10/7/25 02:05 PM	Grit Channel #2 Inspection -This worker order was completed with Cassie, Trevor and Ken from the City of Temiskaming Shores who operated the sucker truck on September 16th, to clean the grit channels.

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4769454	0000115992	TANK PROCESS GRIT CHANNELS 3	5728, North Cobalt Lagoon, Process, Headworks	PM	Refurbish/ Replace/Repair	1	YEARS	Channel Grit 03 Inspection (1y) 5728	CLOSE	10/1/25 12:00 AM	10/7/25 02:06 PM	10/7/25 02:06 PM	Grit Channel #3 Inspection -This worker order was completed with Cassie, Trevor and Ken from the City of Temiskaming Shores who operated the sucker truck on September 16th, to clean the grit channels.
4769456	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	CLOSE	10/1/25 12:00 AM	10/8/25 01:42 PM	10/8/25 01:42 PM	-locked out cleaned uv bank A with Trevor. all lights in good operation UV Light Reactor A Check (1m) 5728 -Cleaned and performed maintenance on UV Bank A & B. Replaced a burnt bulb on UV B bank 2 with Danny. Tested both UV banks and everything is working and all bulbs are on.
4769459	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	CLOSE	10/1/25 12:00 AM	10/14/25 01:07 PM	10/14/25 01:07 PM	-locked out cleaned uv bank B with Trevor. row 2 bulb 2 was burnt and was replaced. UV Light Reactor B Check (1m) 5728 -Cleaned and performed maintenance on UV Bank A & B. Replaced a burnt bulb on UV B bank 2 with Danny. Tested both UV banks and everything is working and all bulbs are on.

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4769462	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	10/1/25 12:00 AM	10/24/25 04:21 PM	10/24/25 04:21 PM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 -Tested and Inspected Station St SPS hypo bypass pump. Tested in lower frequencies for functionality and looks to be pumping accordingly. Pump looks good no leaks or cracks found. Hypo tank is full.
4769468	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	10/1/25 12:00 AM	10/14/25 01:01 PM	10/14/25 01:01 PM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 - Performed hot flush to Alum Pump 1 and performed drawdown.
4769474	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	10/1/25 12:00 AM	10/14/25 01:02 PM	10/14/25 01:02 PM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 - Performed hot flush to Alum Pump 2 and performed drawdown.
4769480	0000060013	TANK STORAGE WET WELL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	6	MONTHS	Tank Wet Well PS2 Inspection (6m) 5728	CLOSE	10/1/25 12:00 AM	10/27/25 07:26 AM	10/27/25 07:26 AM	Tank Wet Well PS2 Inspection (6m) 5728 -Pressure washed and vacuumed out bar screens cages and washed away build up grease on pipes and sensors at Station SPS with Kevin from township. Had to drop wet well level for proper cleaning. Everything looks good.
4774640	0000277318	ANALYZER PH LAB / PORTABLE SEWAGE LAGOONS	5728, North Cobalt Lagoon, Facility	PM	Inspection	3	MONTHS	ANALYZER PH SEWAGE LAGOON CALIBRATION (3M) 5726	CLOSE	10/1/25 12:00 AM	10/7/25 10:08 AM	10/7/25 10:08 AM	ANALYZER PH SEWAGE LAGOON CALIBRATION (3M) 5726 - Please refer to the calibration record which can be found on the shared drive.

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4813215	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	10/2/25 12:00 AM	10/14/25 12:58 PM	10/14/25 12:58 PM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 -Ran and tested NC lagoon Generator with load for 1 hour. Recorded levels and readings. All looks good.
4813231			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	10/2/25 12:00 AM	10/28/25 02:21 PM	10/28/25 02:21 PM	TPM Inspection/Maintenance (1m) 5728 -TPM inspections; Inspected air blowers and vents, looks good. Heating is working at Plant and at Station SPS.
4813975	0000277468	ANALYZER PH Effluent	5728, North Cobalt Lagoon, Process	PM	Calibration	3	MONTHS	Analyzer pH Effluent Inspection (3m) 5728	CLOSE	10/3/25 12:00 AM	10/3/25 03:49 PM	10/3/25 03:49 PM	Analyzer pH Effluent Inspection (3m) 5728 - Replaced pH probe due to broken glass. Installed and calibrated new probe and returned to service. Calibration record can be found on the shared drive.
4814326			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Faulty Alum Transfer pump Receptacle- NC Lagoon 5728	CLOSE		11/3/25 12:38 PM	11/3/25 12:38 PM	-The alum transfer pump receptable failed today and is required to transfer alum by the operators. Replace Faulty Alum Transfer pump Receptacle For Operators - NC Lagoon 5728 -Troubleshooting GFI receptacle. It failed and has been replaced by a 15A receptacle.
4820158	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	CLOSE	11/1/25 12:00 AM	11/14/25 04:28 PM	11/14/25 04:28 PM	-Checked fuel/oil. coolant levels and checked block heater operation. All OK. Let it run for roughly 45 minutes and then recorded the operational data on the monthly checklist

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4820174	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	CLOSE	11/1/25 12:00 AM	11/14/25 04:29 PM	11/14/25 04:29 PM	-Checked fuel/oil. coolant levels and checked block heater operation. All OK. Let it run , then recorded the operational data on the monthly checklist
4821311			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	CLOSE	11/1/25 12:00 AM	11/14/25 04:32 PM	11/14/25 04:32 PM	- Removed garbage from sites Swept floor Checked facility interior and exterior. ok
4823709	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	COMP	11/1/25 12:00 AM	11/21/25 03:14 PM	11/21/25 03:14 PM	-Cleaned and performed maintenance on UV Bank A & B. Tested both UV banks and everything is working and all bulbs are on. UV Light Reactor Check A - Helped Danny clean UV Light Reactor Bank A.
4823712	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	COMP	11/1/25 12:00 AM	11/21/25 03:13 PM	11/21/25 03:13 PM	-Cleaned and performed maintenance on UV Bank A & B. Tested both UV banks and everything is working and all bulbs are on. UV Light Reactor B Monthly Check -Helped Danny clean UV Light Reactor Bank B

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4823715	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	CLOSE	11/1/25 12:00 AM	11/7/25 02:44 PM	11/7/25 02:44 PM	- Tested and Inspected Station St SPS hypo bypass pump. Tested in lower frequencies for functionality and Pump looks good no leaks or cracks found. checked Hypo tank. full
4823721	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	CLOSE	11/1/25 12:00 AM	11/7/25 04:04 PM	11/7/25 04:04 PM	- Performed hot flush to Alum Pump 2 and performed drawdown. - Performed hot flush to Alum Pump 1 and performed drawdown. correct pump for this work order
4823727	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	CLOSE	11/1/25 12:00 AM	11/7/25 04:04 PM	11/7/25 04:04 PM	- Performed hot flush to Alum Pump 2 and performed drawdown.
4860126	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	CLOSE	11/2/25 12:00 AM	11/13/25 02:06 PM	11/13/25 02:06 PM	- Checked fuel/oil. coolant levels and checked block heater operation. All OK. Let it run for roughly 45 minutes and then recorded the operational data on the monthly checklist
4860142			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	CLOSE	11/2/25 12:00 AM	11/18/25 03:59 PM	11/18/25 03:59 PM	- checked fans and blowers. all in good working condition checked oil in blowers, vents are clear of obstruction

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4863302			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		Replace Failed Alum Transfer Pump 5728	BUSCOMP		2/10/26 07:56 AM	2/13/26 01:58 PM	Replace Failed Alum Transfer Pump 5728 -Epoxied shaft nut to avoid corrosion while inside alum storage tank. New pump is now operational
4865308	0000060002	ENGINE DIESEL PS2	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728	COMP	12/1/25 12:00 AM	12/5/25 03:20 PM	12/5/25 03:20 PM	Diesel Generator PS2 Genset Inspection/Functional Test (1m) 5728 -As per OIC Cassandra Legros: Completed generator testing at station st sps and filled out monthly maintenance records. All tested okay
4865324	0000060053	ENGINE DIESEL PORTABLE UNIT PS3	5728, North Cobalt Groom Drive Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728	COMP	12/1/25 12:00 AM	12/8/25 03:54 PM	12/8/25 03:54 PM	Diesel Generator PS3 Genset Inspection/Functional Test (1m) 5728 -As per OIC Cassandra Legros: Tested Generac generator. Starts easily and runs good. Hours not being kept properly on machine itself. Resets hours to last known value upon restart. ORO aware Recorded hours and maintenance info on monthly rounds sheet.

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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
4866429			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	Building and Grounds Maintenance (1m) 5728	COMP	12/1/25 12:00 AM	12/23/25 02:13 PM	12/23/25 02:13 PM	Building and Grounds Maintenance (1m) 5728 - Shovelled snow Tidied building Cleaned garage floor Building and Grounds Maintenance (1m) 5728 - Shovelled snow Removed garbage Tidied plant Building and Grounds Maintenance (1m) 5728 - Removed garbage and recycling Shoveled snow Sprayed down alum chemical trailer and garage floor
4868903	0000277363	UV LIGHT A	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor A Check (1m) 5728	COMP	12/1/25 12:00 AM	12/12/25 03:52 PM	12/12/25 03:52 PM	UV Light Reactor A Check (1m) 5728 -Cleaned UV sleeves. Bulbs tested okay
4868906	0000277364	UV LIGHT B	5728, North Cobalt Lagoon, Process, Disinfection	PM	Inspection	1	MONTHS	UV Light Reactor B Check (1m) 5728	COMP	12/1/25 12:00 AM	12/12/25 03:54 PM	12/12/25 03:54 PM	UV Light Reactor B Check (1m) 5728 -Cleaned UV sleeves. When testing noticed a bulb not coming back on. Changed the bulb and sleeve. Tested okay.

ONTARIO CLEAN WATER AGENCY
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Workorder Summary Report

Report Start Date: Jan 1, 2025 12:00 AM
Report End Date: Dec 31, 2025 11:59 PM
Location: 5728*
Work Order Type: CALL,CAP,CORR,EMER,OPER,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
4868909	0000076339	PUMP DIAPHRAGM HYPO BYPASS	5728, North Cobalt Station St Pumping Station	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728	COMP	12/1/25 12:00 AM	12/8/25 07:32 AM	12/8/25 07:32 AM	Pump Diaphragm Hypo Bypass Inspection/Service (1m) 5728 - As per OIC Cassandra Legros: Inspected and tested bypass pump at station st sps Running okay Could not visually confirm flow in the ditch due to weather conditions, but confirmed flow at pump
4868915	0000293787	PUMP DIAPHRAGM Chemical Feed Pump	5728, North Cobalt Lagoon	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728	COMP	12/1/25 12:00 AM	12/16/25 07:41 AM	12/16/25 07:41 AM	Pump Diaphragm Alum 01 Inspection/Service (1m) 5728 -Hot flushed alum pump one with no issues. Pump working well.
4868921	0000115985	PUMP DIAPHRAGM ALUM 2	5728, North Cobalt Lagoon, Process, Process Controls	PM	Refurbish/ Replace/Repair	1	MONTHS	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728	COMP	12/1/25 12:00 AM	12/16/25 07:44 AM	12/16/25 07:44 AM	Pump Diaphragm Alum 02 Inspection/Service (1m) 5728 -When hot flushing alum pump 2 found it plugged solid with chemical. Took check valves off to hot soak and flush. Confirmed pump operational before priming with water to prevent future clogging until it is put into service.
4905925	0000060036	ENGINE DIESEL NORTH COBALT	5728, North Cobalt Lagoon, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728	COMP	12/2/25 12:00 AM	12/5/25 03:27 PM	12/5/25 03:27 PM	Diesel Generator North Cobalt Genset Inspection/Functional Test (1m) 5728 - As per OIC Cassandra Legros: Completed generator testing. Recorded monthly hours and levels. All okay
4905941			5728, North Cobalt Lagoon	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5728	COMP	12/2/25 12:00 AM	12/23/25 02:10 PM	12/23/25 02:10 PM	
4906921			5728, North Cobalt Lagoon	CAP	Refurbish/ Replace/Repair	0		NC Lagoon Radio Power cable and Pump Cable repair 5728	BUSCOMP		12/15/25 11:12 AM	12/19/25 03:36 PM	

APPENDIX D

Summary of Abnormal Discharge Events

North Cobalt Lagoon Sewage Collection System

Summary of Abnormal Discharge Events

Facility Works Number: **110001382**
Facility Owner: **City of Temiskaming Shores**
Service Population: **980**
Period Being Reported: **01/2025** **12/2025**

Station Name: **Station Street Pump Station (No. 2)**

								Concentrations					Loadings			
Date	Start Time (hh:mm)	Stop Time (hh:mm)	Duration (hours)	Type	Volume (m3)	Disinfection Provided	Reason	BOD5 (mg/L)	TSS (mg/L)	TP (mg/L)	TKN (mg/L)	E.coli (cfu/100mL)	BOD5 (kg)	TSS (kg)	TP (kg)	TKN (kg)
16-Mar-25	11:57	20:42	8.8	Overflow	206.2	Yes	Heavy rain and melting snow	6.9	176	0.217	3.5	5	1.40	36.3	0.045	0.72
25-Apr-25	10:48		14.5	Overflow	74.3	Yes	Extreme rainfall event	3.1	5.0	0.250	3.7	2,300	0.2	0.4	0.019	0.3
26-Apr-25		13:18														