



March 21st, 2025

Pierre Adrien
Ministry of the Environment, Conservation and Parks
733 Exeter Road
London, ON N6E 1L3

Dear Mr. Adrien,

**Re: Annual Wastewater Report
Thorndale Wastewater Treatment Plant and Sanitary Collection System**

Attached is the 2024 Annual Performance Report for the Thorndale Wastewater Treatment Facility, all associated sewage pumping stations (SPS's) and the Thorndale Linear Infrastructure. This report has been completed in accordance with the following Approvals:

- Environmental Compliance Approval 3804-D6TL9K issued September 25, 2024
- CLI-ECA Number: 059-W601

This report, as it pertains to the WWTF and the SPS was prepared by the Ontario Clean Water Agency on behalf of the Municipality of Thames Centre, based on the information contained in our records. The report included in Appendix A on the Thorndale linear infrastructure was provided by the Municipality of Thames Centre. The report covers the period from January 1, 2024 to December 31, 2024.

Please feel free to contact me should you require any additional information regarding this report. I can be reached at 519-870-7841.

Sincerely,

Matthew Belding

Process and Compliance Technician
Ontario Clean Water Agency

Cc. Andrew Winkler, Water Inspector, Ministry of the Environment, Conservation and Parks
Jarrod Craven, Director of Public Works, Thames Centre
Kevin Willson, Environmental Services Superintendent, Thames Centre
Sam Sianas, Regional Hub Manager, Ontario Clean Water Agency
Vitaliy Talashok, Senior Operations Manager, Ontario Clean Water Agency
Maegan Garber, Safety, Process and Compliance Manager, Ontario Clean Water Agency

Table of Contents

Section 1: Overview of System.....	1
Section 2: Summary and Interpretation Monitoring Data.....	3
a) Influent Monitoring Data.....	3
b) Effluent Morning Data.....	6
Section 3: Operating Issues and Corrective Actions	9
Section 4: Normal and Emergency Repairs and Maintenance Activities.....	10
Section 5: Effluent Quality Assurance	10
Section 6: Calibration and Maintenance on Influent and Effluent Monitoring Equipment	11
Section 7: Summary of Efforts Made to Achieve the Design Objectives.....	11
Section 8: Sludge Generation and Disposal	12
Section 9: Complaints By-pass, Spill or Abnormal Discharge Events	12
Section 10: By-pass, Spills or Abnormal Discharge Events.....	12
Section 11: Notice of Modifications to Sewage Works.....	12
Section 12: Summary of Efforts Made to Achieve Conformance with Procedure F-5-1.....	13
Section 13: Deviations from the Monitoring Schedule.....	13
Appendix A: Linear Infrastructure Annual Report prepared by the Municipality of Thames Centre	
Appendix B: Monitoring Data	
Appendix C: Sampling Schedule	
Appendix D: Preventative Maintenance Schedule	

Section 1: Overview of System

The Thorndale Wastewater Treatment Plant was commissioned in October 2014, with the first effluent being discharged on October 22nd, 2014. The wastewater treatment plant is a modified sequential batch reactor (SBR) treatment plant, known as intermittent cycle extended aeration system (ICEAS). This process differs from the conventional SBR system by allowing for continuous inflow of wastewater. This supplies a constant food source to the basins and optimizes biological treatment. The process is as follows:

Raw Wastewater Collection

The wastewater is collected by gravity and directed to the pump station located onsite at the treatment plant. Given the location of this pump station, it is not included as part of CLI-ECA Number: 059-W601. This pump station is equipped with three submersible pumps (two duty and one stand by) with rated capacity of 28.2L/s. The pumps are controlled by the Milltronics ultrasonic level control system, with a back-up float system.

Inlet Works

The raw wastewater is pumped from the pump station to the grit channel and auger screen for removal of larger material. A flow splitting and weir system is set up to direct the flow to either SBR basins, the mini SBR or the sludge holding tank. This is completed by the operator manually.

Sequential Batch Reactors

There are a total of three reactors (basins) at the Thorndale WWTP. They are each equipped with fine bubble aeration system, decanter, level control and waste activated sludge pumps. One basin, the mini SBR, was used from October 2014 until October 2015 when the influent flows were low. In 2022, the mini SBR was converted to sludge storage as it was designed. Since November 2020 both regular size basins have been online as flows are sufficient. The wastewater from the inlet works enters the SBR. The basin has two compartments. The wastewater first enters what is known as the pre-react zone. There is a baffle wall that expands the width of the tank with openings at the bottom to hydraulically connect to the main react zone. This baffle wall prevents short circuiting of the raw wastewater.

React Phase

During the react phase the raw wastewater flows into the pre-react zone and main-react zone continuously to react with the mixed liquor suspended solids. During this phase the basin contents are aerated, anoxically mixed and reacted anaerobically based on a timer. The react phase allows for biological oxidation/reduction reactions to take place to treat the incoming wastewater. Aluminum sulfate is added towards the end of this phase to chemically remove phosphorus. The alum system consists of a 16,200L tank with two (duty/standby) metering pumps. There are two blowers onsite for the fine bubble diffuser aeration system. The SBRs each contain 128 fine bubble diffusers.

Settle Phase

After the react phase the basin is allowed to settle during the settle phase. This allows the solids to settle to the bottom of the basin. The raw wastewater continues to flow into the pre-react zone as the main react zone is settling. A clear layer of water will form on the top of the basin during this phase.

Decant Phase

Once the timer is complete on the settling phase the decant phase begins. The decant motor lowers the decanter into the basin to draw off the clarified supernatant formed during the settle phase. This clear liquid is then directed to the effluent line. The raw wastewater continues to flow into the pre-react zone as this phase continues. Settled solids (sludge) on the bottom of the basin are wasted to the sludge holding tank during this cycle.

Disinfection Phase

The effluent is directed by gravity to the open channel ultra-violet (UV) disinfection system before being finally discharged to the Thames River.

Sludge Management System

The mixed liquor suspended solids in the react phase are controlled by the wasting pumps operated in the decant phase. This waste sludge is directed to the sludge holding tank. This tank is equipped with a fine bubble aeration system controlled by a blower. The tank also contains a decanter to remove the clear liquid and return it to the head of the plant for re-processing. Periodically the sludge is hauled by a licensed hauler and land applied if possible or hauled to another facility for further processing. Since the mini SBR is no longer needed it is being used as part of the sludge management system to provide additional sludge storage when needed.

Standby Power

The wastewater treatment plant has an automatic standby generator that will transfer over when there is a power failure. This allows for continuous running of the pump station and treatment plant when outages occur.

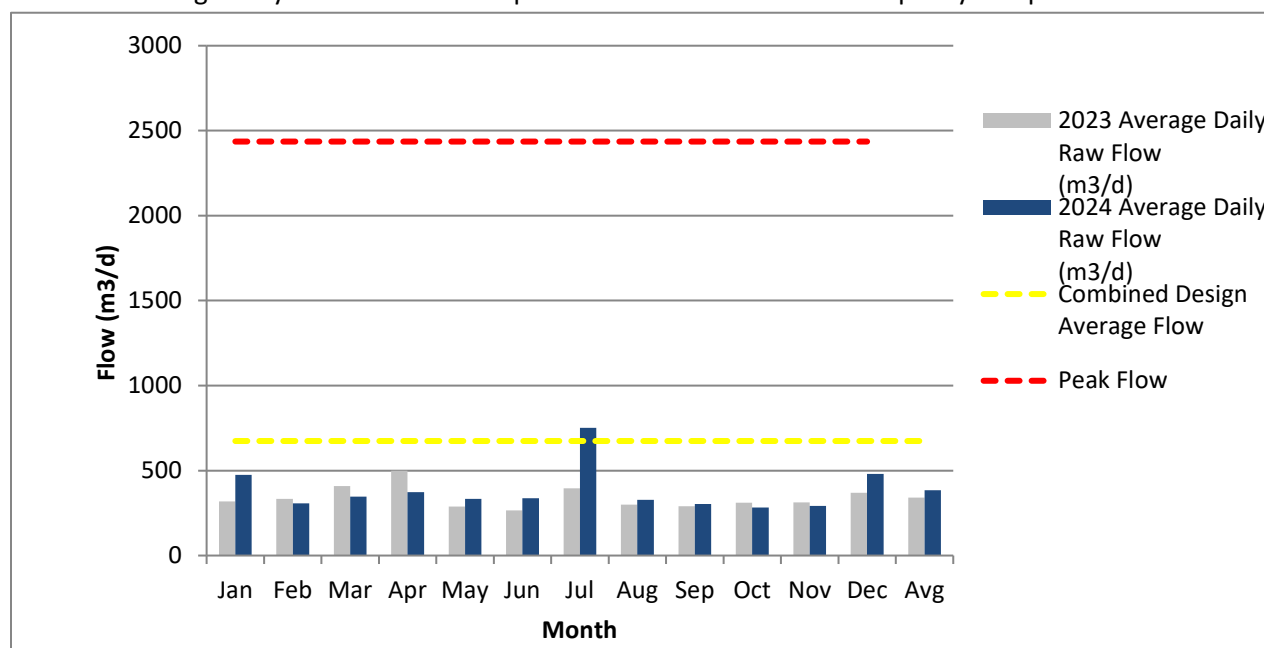
Section 2: Summary of Monitoring Data

The Thorndale Wastewater Treatment Plant is monitored as per the Environmental Compliance Approval requirements. Detailed monitoring data is supplied in Appendix B. The Sanitary Collection System in Thorndale is operated under CLI-ECA Number: 059-W601.

a) Influent Monitoring Data

The average daily flow of raw wastewater that entered the WWTP in 2024 was 384.0m³/d compared to 341.1m³/d in 2023. The rated capacity identified in the ECA is 674m³/d with a peak flow of 2,436m³/d. As depicted in Chart 1, the WWTP is currently at 57.0% of the rated capacity for the entire plant as identified in the ECA. It was required by the ECA that when the plant reaches 50% of the rated capacity the *Owner* shall complete a detailed performance assessment of the *Works* to determine whether the *Works* will have to be upgraded in order to be able to meet the effluent objectives and effluent limits in the ECA. This threshold was exceeded in 2023 and thus the required report was submitted to the Director on February 29th, 2024. In September of 2024, Thorndale was issued a new ECA stating that when the plant reaches 75% of its rated capacity, the owner shall complete a detailed performance assessment of the *Works* to determine whether the *Works* will have to be upgraded in order to be able to meet the effluent objectives and effluent limits in the ECA.

Chart 1. Average daily influent flows compared to the SBR basins rated capacity and peak flow.



There were sixteen instances where the flow exceeded the rated capacity of the treatment plant, refer to Table 1. In 2024, there were sixteen instances compared to eight recorded instances in 2023. These high flows are the result of inflow and infiltration in the collection system. In most instances, the Municipality has located the source and has made the necessary repairs. Monitoring inflow and infiltration continues to be a priority for the Municipality.

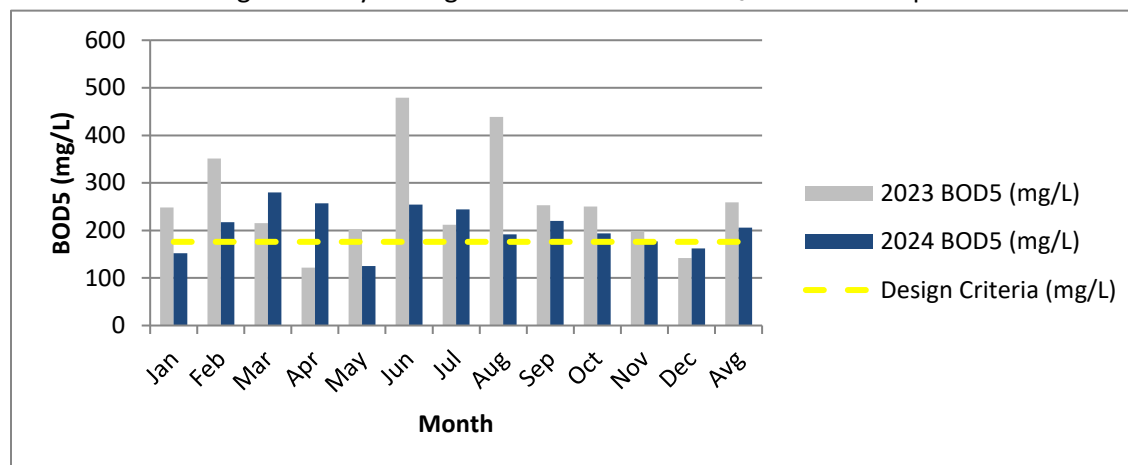
Table 1. Daily flow readings above the SBRs rated capacity of 674m³/d in 2024.

Date	Flow (m ³ /d)
01/13/2024	895.11
01/25/2024	681.06
01/26/2024	2299.42
01/27/2024	704.50
04/12/2024	697.75
05/27/2024	707.35
07/10/2024	1068.52
07/15/2024	970.74
07/16/2024	4693.18
07/17/2024	3482.07
07/30/2024	3467.56
07/31/2024	1264.81
12/16/2024	847.92
12/17/2024	1670.4
12/29/2024	1182.03
12/30/2024	1058.01

The raw wastewater is monitored for BOD₅, total suspended solids (TSS), total phosphorus (TP) and total Kjeldahl nitrogen (TKN) at a minimum on a monthly basis by composite sample. The plant was designed to treat based on raw water characteristics identified in the Operations Manual from the design engineers. Refer to Appendix B for more detailed monthly results and design parameters.

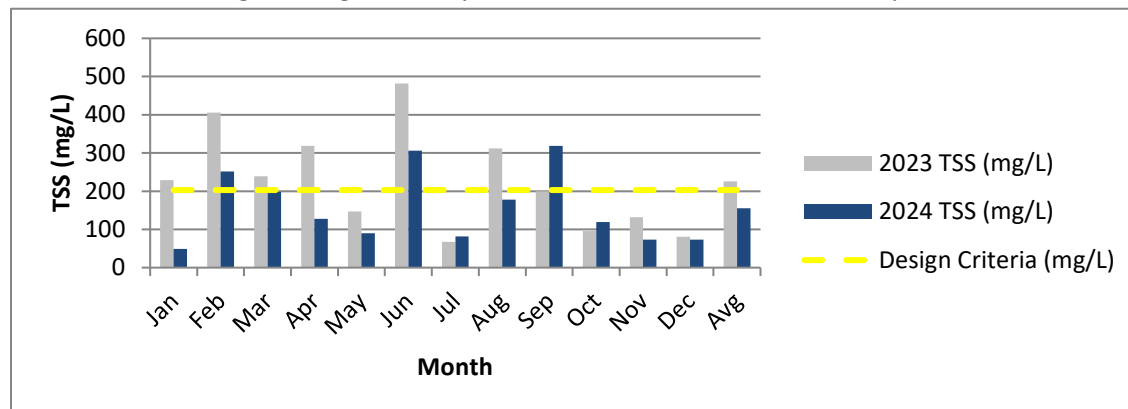
The annual average for raw sewage BOD₅ concentration to the plant in 2024 was 206.2mg/L. This is a decrease from the 2023 raw BOD₅ concentrations by 20.5%. Refer to Chart 2 for a comparison of the monthly average concentrations in 2024 and 2023. In 2024, BOD₅ was above the design characteristics in nine (9) out of the twelve months. The average BOD₅ loading to the plant was 79.2kg/d in 2024.

Chart 2. Raw sewage monthly average concentration of BOD₅ for 2024 compared to 2023.



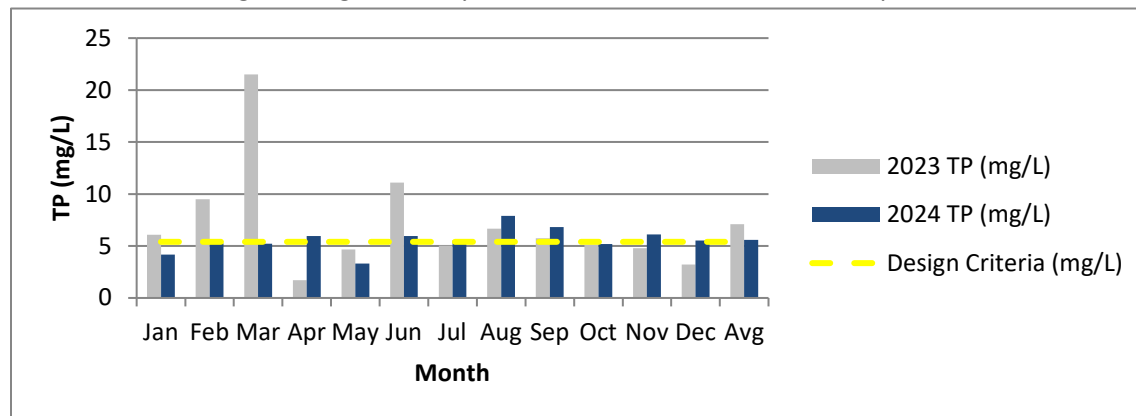
The annual average for raw sewage total suspended solids (TSS) concentration to the plant in 2024 was 155.6mg/L. Refer to Chart 3 for a comparison of the monthly average concentrations in 2024 to 2023. Overall, the average TSS concentration is down by 31.1% when compared to 2023. In 2024, TSS was above the design characteristics in three (3) out of the twelve months. The average TSS loading to the plant was 59.7kg/d for 2024.

Chart 3. Raw sewage average monthly concentration of TSS for 2024 compared to 2023.



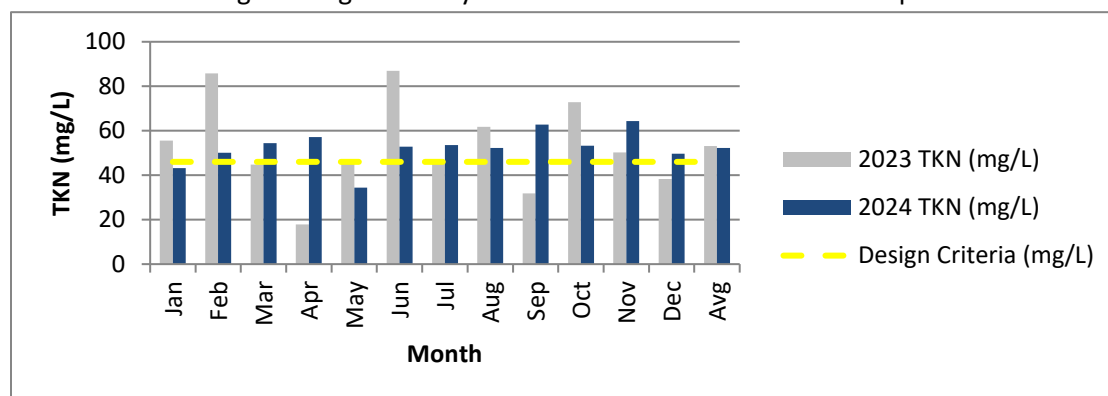
The annual average for raw sewage total phosphorus (TP) concentration to the plant in 2024 was 5.6mg/L. Refer to Chart 4 for a comparison of the monthly average concentrations in 2024 to 2023. Overall, the TP concentration has decreased by 21.4% in 2024 compared to 2023. In 2024, TP was above the design concentrations in seven (7) out of the twelve months. The average TP loading to the plant was 2.1kg/d for 2024.

Chart 4. Raw sewage average monthly concentration of TP for 2024 compared to 2023.



The annual average for raw sewage total Kjeldahl nitrogen (TKN) concentration to the plant in 2024 was 52.3mg/L. This is an overall decrease of 1.6% in 2024 compared to 2023. Refer to Chart 5 for a comparison of the monthly average concentrations in 2024 compared to 2023. In 2024, TKN was above the design characteristics in ten (10) out of the twelve (12) months. The average TKN loading to the plant was 20.1kg/d for 2024.

Chart 5. Raw sewage average monthly concentration of TKN for 2024 compared to 2023.



The influent characteristics have changed throughout the year. This is to be expected with the flow variations that are experienced. Concentrations are also affected by infiltration issues, essentially diluting the raw wastewater as well as potential discharges to the collection system which have caused extremely high influent parameter concentrations.

b) Effluent Monitoring Data

Effluent is sampled on a weekly basis and tested for cBOD₅, total suspended solids, total phosphorus and total ammonia as a composite sample in accordance with the ECA. A grab sample is also taken weekly and tested for E. coli, pH and temperature. Detailed results are found in Appendix B. Table 2 below shows the monthly average effluent results and loadings. Section 3 describes the results in more detail.

Table 2. Monthly average effluent ranges for 2024.

Parameter	Effluent Monthly Average Limits	Monthly Average Effluent Result Ranges	Monthly Average Effluent Loading Limits	Monthly Average Loadings Result Ranges (kg/d)
cBOD ₅ (mg/L)	10	2.0 – 5.5	6.74	0.62 – 2.71
TSS (mg/L)	10	2.2 – 54.8	6.74	0.69 – 37.0
TP (mg/L)	0.65	0.09 – 0.40	0.44	0.04 -0.27
TAN (mg/L)	4.1	0.13 – 2.62	2.76	0.05 – 0.27
TAN (mg/L)	8.6	0.35 – 4.46	5.80	0.06 – 0.84
Freezing				
E. coli (cfu/100mL)*	100	8.99 – 184.6	n/a	n/a
pH**	6-9.5	6.97 – 8.13	n/a	n/a
Temperature (°C)**	n/a	6.1 – 21.8	n/a	n/a

*geometric mean

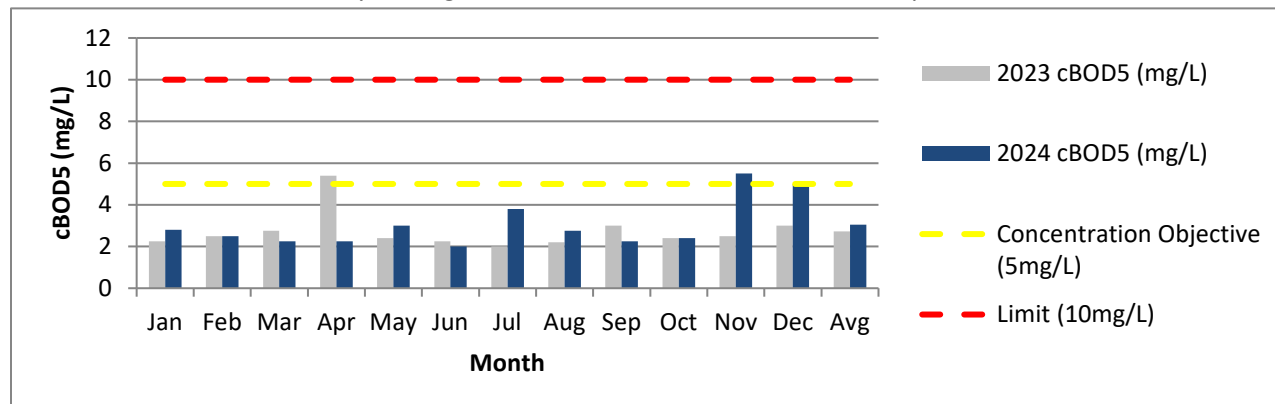
**minimum and maximum result (not monthly averages)

Note: TAN Freezing Limit is from December 1 to April 30

The annual average effluent cBOD₅ concentration in 2024 was 3.04mg/L; this value has increased by 11.9% when compared to the 2023 annual average. The annual average loading of cBOD₅ was 1.09kg/d. The limit of 10mg/L was not exceeded in 2024. The concentration objective of 5mg/L was exceeded

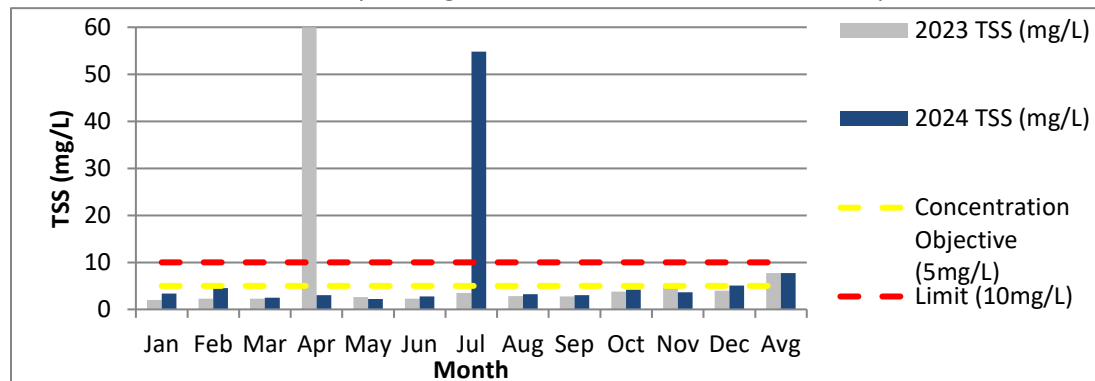
once in 2024. The elevated concentration in November was due to equipment failure and only operating one SBR. Refer to Chart 6 for a comparison of effluent monthly average concentration of CBOD₅.

Chart 6. The effluent monthly average concentration of cBOD₅ in 2024 compared to 2023.



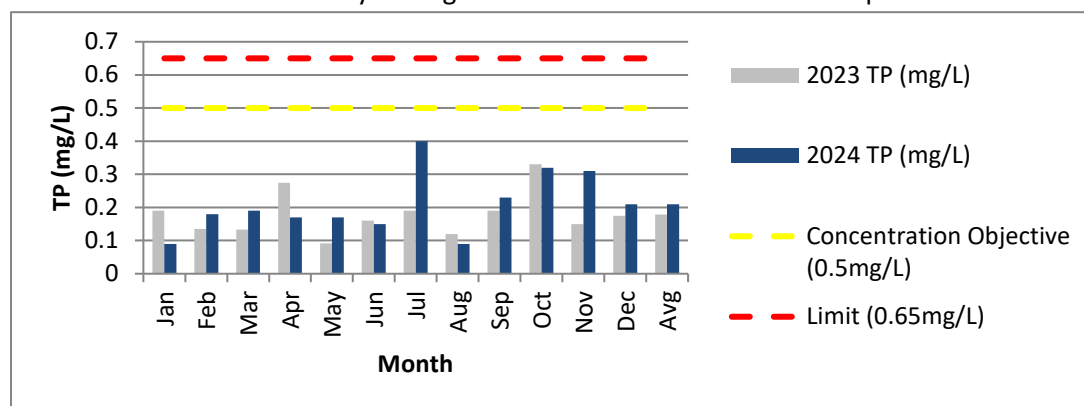
The annual average effluent TSS concentration in 2024 was 7.70mg/L; this value has decreased by 0.65% from the annual average in 2023. The annual average loading of TSS was 2.75kg/d. The limit of 10mg/L was exceeded once in 2024 and then objective of 5mg/L was also exceeded once in 2024. The elevated concentration in July was due to results from a grab sample taken during a peak flow exceedance. Refer to Chart 7 for a comparison of the effluent monthly average concentration of TSS.

Chart 7. The effluent monthly average concentration of TSS in 2024 compared to 2023.



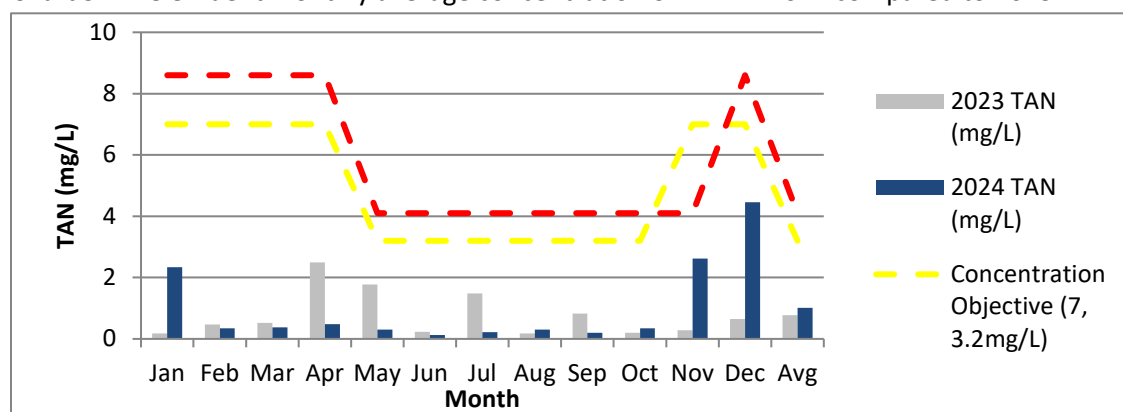
The annual average effluent TP concentration in 2024 was 0.21mg/L. The annual average result for TP in 2024 is up by 17.3% compared to the 2023 annual average. The annual average loading of TP was 0.07kg/d. There were no objective or limit exceedances in 2024. Refer to Chart 8 for a comparison of the effluent monthly average concentration of TP.

Chart 8. The effluent monthly average concentration of TP in 2024 compared to 2023.



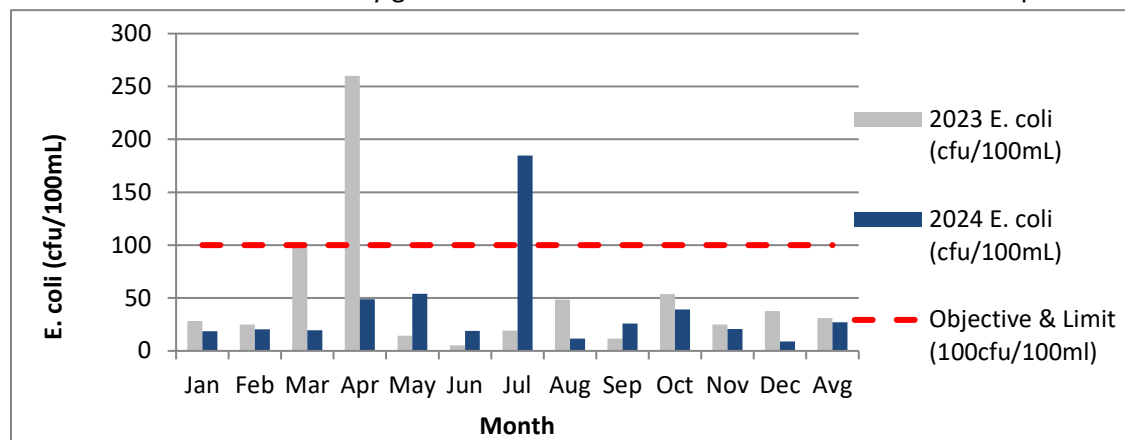
The annual average effluent Total Ammonia Nitrogen (TAN) concentration in 2024 was 1.01mg/L. The annual average result for TAN in 2024 has increased by 30.25% compared to the 2023 annual average. The annual average loading of TAN was 0.36 kg/d during the freezing period and 0.14 kg/d during the non-freezing period. The limits and objectives for TAN vary based on the freezing period, which between December 1st and April 30th is 8.6 mg/L, while during the warmer months of May 1st and Oct 31st is 4.1mg/L. There were no limit or objective exceedances (refer to Table 4) for TAN in 2024. Refer to Chart 9 for a comparison of the effluent monthly average concentrations.

Chart 9. The effluent monthly average concentration of TAN in 2024 compared to 2023.



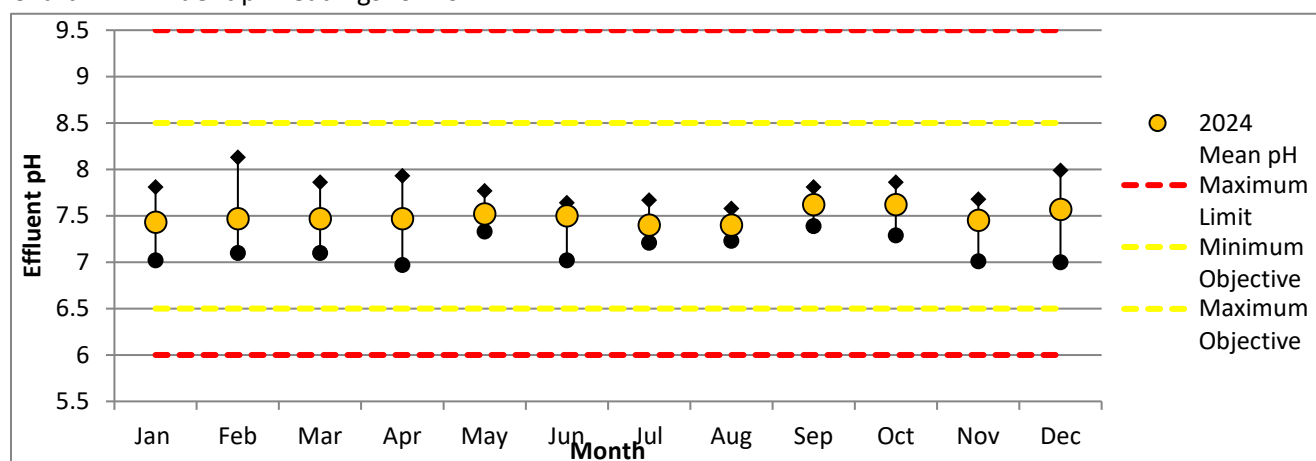
The annual geometric mean for effluent E. coli in 2024 was 26.9cfu/100mL. The annual geometric mean result for E. coli in 2024 was down 13.1% when compared to the annual geometric mean for E. coli in 2023. There was one objective and limit exceedance reported in 2024 (refer to Chart 10). In July, a sample was collected due to the flow exceeding the daily peak flow. *Note: Both the objective and limit for E. coli is 100cfu/100mL.*

Chart 10. The effluent monthly geometric mean concentration of E. coli in 2024 compared to 2023.



The effluent pH is monitored weekly at a minimum at the Thorndale WWTP. Overall, the plant has provided effective treatment as there have been no results below or above the compliance limits of 6.0-9.5 in 2024. The pH is required to be maintained between 6.0-9.5 at all times. Refer to Chart 11 for the monthly minimum, maximum and mean pH readings.

Chart 11. Effluent pH readings for 2024.



In accordance with Section 10. Special Condition in ECA #3804-D6TL9K, two (2) or more effluent non-compliance situations were not encountered in the calendar year. The non-compliance reported in July for effluent average TSS, TSS loading and E.coli were the result of a significant rainfall event. The Operating Authority and the Owner continue to work towards identifying sources of infiltration in the collection system.

Section 3: Operating Issues and Corrective Actions

The collection system is experiencing inflow and infiltration issues during rain and snow melt events. The Owner of the system has made an effort to inspect new building developments and video the collection system to try and reduce these occurrences. There were sixteen (16) days in 2024 when the daily flow rate exceeded the capacity of the plant, compared to eight (8) events in 2023, five (5) events in 2022 and seven (7) events in 2021.

In February 2021, the Owner undertook collection system monitoring, obtaining samples from various points in the collection system in an effort to determine the locations of elevated concentrations. Since February, 2021 influent results appear to increase on a seasonal basis with higher concentrations noted from October to February. Operators at the treatment plant have been closely monitoring influent results and adjusting the chemical dosages, as required.

In November of 2024, SBR#2 experienced an equipment failure rendering an SBR basin inoperable. Since the failure, the plant has been operating on one SBR. A new gearbox has been ordered and is expected to arrive in March, 2025. Relief from the requirement to sample when flows exceed $337m^3$ was requested and approved by the MECP's local branch. As stated in the letter, samples are now required if flows exceed $400m^3$.

Section 4: Normal and Emergency Repairs and Maintenance Activities

Regular scheduled monthly preventative maintenance is assigned and monitored using the Workplace Management System (WMS) program. Some items that were repaired or replaced in 2024 were:

- Replaced PLC Power adapter and battery.
- Purchased new handheld multi-meter with dissolved oxygen and pH probes.
- Datasoft installed new WIN911 hardware. SCADA and alarming programming.
- Trojan UV replaced control board in bank A rack 3 and lamp 5/6 ballast in Bank A rack 1.
- Replaced SC4500 DO probe control unit.
- Replaced/repairs air valve actuators.
- Replaced SBR1 wasting pump display screen.
- Installed cover over SBR1 wasting pump display screen to prevent sun bleaching of new unit.
- Repair effluent flow meter screen.
- Replaced power chord in Raw autosampler.
- Replaced multiple bulbs, ballasts and UV sleeves on Bank B. Spares purchased.
- Replacement gearbox ordered and due to be delivered March 2025.

Section 5: Effluent Quality Assurance

Effluent quality assurance is evaluated by monitoring parameters and changes throughout the plants processes. The operators monitor the basins by performing weekly tests on the mixed liquor. These tests include dissolved oxygen, pH, temperature, settling tests and Mixed Liquor Suspended Solids (MLSS). As well, monitoring of the alum dosages and wasting volumes are completed. Data collected from these tests provide valuable information to the operators to make the appropriate adjustments in the treatment process and take corrective actions before the plant reaches its effluent limits.

Section 6: Calibration and Maintenance on Influent and Effluent Monitoring Equipment

The raw flow meter was calibrated by SCG Flowmetrix on November 14th, 2024. In house meters for pH and dissolved oxygen are calibrated by OCWA operators as per manufacturer's instructions.

Section 7: Summary of Efforts made to achieve the Design Objectives

The Thorndale WWTP performed well in 2024 producing quality effluent. However, there were four (4) monthly objective exceedances that occurred during the reporting period. In July, the TSS and E.coli exceeded the objective and limit as a result of an additional sample that was collected during a high flow event which exceeded the peak flow rate of the plant. In November, the CBOD₅ and in December, the TSS exceeded the objectives due to an equipment failure and the plant operating on only one SBR. As specified in the ECA, objectives are based on single concentrations. However, on April 21st, 2021 clarification was provided from the MECP's Policy Branch indicating that the intent of Table 1 in the ECA was to compare the Monthly Average Results of the effluent parameters to the Objectives present in the table.

Table 3. Monthly average effluent result ranges compared against the effluent objectives.

Parameter	Effluent Objective	Monthly Effluent Result Ranges	# of Objective Exceedances	Effluent Loading Objective	Monthly Loadings Result Ranges (kg/d)	# of Objective Loading Exceedances
cBOD ₅ (mg/L)	5	2.0 – 5.5	1	3.37	0.62 – 2.71	0
TSS (mg/L)	5	2.2 – 54.8	2	3.37	0.69 – 37.0	1
TP (mg/L)	0.5	0.09 – 0.40	0	0.34	0.04 – 0.27	0
TAN (mg/L)	3.2	0.13 – 2.62	0	2.16	0.05 – 0.27	0
TAN (mg/L)	7.0	0.35 – 4.46	0	4.72	0.06 – 0.84	0
Freezing						
E. coli	100	8.99 – 184.6	1	n/a	n/a	n/a
(cfu/100mL)*						
pH**	6.5 – 8.5	6.97 – 8.13	0	n/a	n/a	n/a

*expressed as geometric mean

**minimum and maximum result (not monthly averages)

Note: TAN Freezing objective is from November 1 to April 30

Table 4. Objective exceedances in 2024.

Date	Parameter	Concentration mg/L	Loadings kg/d	Comment
07/2024	TSS	54.83	37.0	Due to Flow Exceedance
07/2024	E.coli	184.6	-	Due to Flow Exceedance
11/2024	CBOD	5.50	1.51	Equipment Failure
12/2024	TSS	5.05	2.37	Equipment Failure

As per Table 3 above, all design objectives were achieved more than 50% of the time in the reporting year and there were no increasing trends in the deterioration of the final effluent quality. In order to ensure compliance, the operators continue to closely monitor the treatment process and utilize best operating practices.

The rated capacity of the Thorndale WWTP was exceeded on sixteen (16) occasions in 2024. *Refer to Section 2.a) for additional details.* These exceedances were the result of heavy rainfall events and infiltration in the collection system. The treatment plant does short circuit during these high flow events and effluent quality can be compromised. Samples are collected during high flow events in accordance with the ECA to ensure effective treatment. The annual average influent flow was 57% of the rated capacity in 2024.

Section 8: Sludge Generation and Disposal

Sludge is pumped from the SBR basins to the aerated sludge holding tank. Periodically, the air is shut off to allow the sludge to settle to the bottom while the clear liquid is decanted back to the plant.

In 2024, 627 m³ of sludge was removed by Bartels and assessed for land application. The approximate amount of sludge produced in 2024 was 1,200m³. It is anticipated that more sludge will be produced in 2025 as it is expected that the system will have additional connections and therefore additional flow. The approximate amount of sludge estimated to be generated in 2025 is 1,300m³.

Section 9: Complaints

There were no community complaints received for the Thorndale WWTP or the sewage pumping stations in 2024.

Section 10: By-pass, Spill or Abnormal Discharge Events

On July 16th, 2024 the peak daily flow of 2,436m³/day was exceeded. The plant received 4,693.18m³ of raw flow due to heavy rainfall and infiltration. The increased flow overwhelmed the pumps in the sewage pump station located on the property of the sewage treatment plant. As a result of this heavy rainfall event, 30m³ of flow from the wetwell bypassed the treatment plant and was discharged to the UV channel, where it was disinfected before being discharged to the Thames River. As per the ECA, a grab sample was collected and the results were used in the calculation of the average monthly effluent concentrations for all required parameters. This additional sample resulted in an ECA limit exceedance for E.coli, TSS, and TSS loading.

There still remains infiltration issues during wet weather events, which can impact the effluent quality. These events are monitored as they occur to ensure effluent limits are met. With both SBRs in operation, the plant is operating at 57.0% capacity and is providing effective treatment. In September of 2024, Thorndale was issued a new ECA stating that when the plant reaches 75% of its rated capacity, the owner shall complete a detailed performance assessment of the *Works* to determine whether the *Works* will have to be upgraded in order to be able to meet the effluent objectives and effluent limits in the ECA.

Section 11: Notice of Modifications to Sewage Works

There were no modifications to the process at the Thorndale WWTP that required a Notice of Modification to Sewage Works Form in 2024.

Section 12: Summary of Efforts to achieve conformance with Procedure F-5-1

The Thorndale WWTP is a fill-and- draw activated sludge system for wastewater treatment which uses two (2) sequential batch reactor basins. The treatment plant provides treatment by preliminary screening, secondary biological treatment, and disinfection by way of UV. Supplementary phosphorus removal is also achieved with the addition of aluminum sulphate. The treatment components are capable of producing effluent quality that exceeds the effluent design objectives specified in F-5-1. The Thorndale WWTP is required to achieve higher effluent quality standards than the Effluent guideline criteria as specified in the ECA.

Section 13: Deviations from the Monitoring Schedule

The monitoring schedule for 2025 is set out in Appendix C. The monitoring schedule for 2024 was adhered to by the operators with the exception of:

Date Scheduled	Date Sampled	Reasons
January 3rd	January 4th	Aligned with Dorchester Sample
February 14th	February 15th	Aligned with Dorchester Sample
June 12th	June 13th	Autosampler Error

There were only three instances where changes to the sampling schedule were required.

The operators have flexibility with dates for in house sampling, however, all sampling to meet the requirements of the ECA are to be followed. Any changes to the ECA sampling dates requires permission from compliance staff or the Senior Operations Manager.

APPENDIX A

Appendix A

Linear Infrastructure 2024 Annual Performance Report Thorndale Collection System

Prepared by: the Municipality of Thames Centre

Section 1: Operating Problems and Corrective Actions

No operating problems encountered in this reporting period for the linear infrastructure.

Section 2: Calibration, Maintenance and Repairs

2024 Repairs:

- No Repairs in this reporting period in the Thorndale Collection System.

2024 Maintenance:

- Flushing and CCTV inspections – 4,102m, Approximately 30% of Thorndale collection system.

Section 3: Alterations to the System

Authorized Alterations to system

- No Alterations to the Thorndale Collection System noted in 2024.

Section 4: Community Complaints and Concerns

No community complaints or concerns on the operation of the sanitary system.

Section 5: Spills of Sewage

No spills in the linear infrastructure through the reporting year.

Final OCWA reports will be posted on the Municipal Website.

APPENDIX B

1248 THORNDALE WWTP 110001443

	1 / 2024	2 / 2024	3 / 2024	4 / 2024	5 / 2024	6 / 2024	7 / 2024	8 / 2024	9 / 2024	10 / 2024	11 / 2024	12 / 2024	<--Total-->	<--Avg-->	<--Max-->	<Criteria-->
Flows																
Raw Flow: Total - Raw m ³ /d	14,712.35	8,924.12	10,743.29	11,216.02	10,346.00	10,090.11	23,302.38	10,158.49	9,081.36	8,735.72	8,737.41	14,877.28	140,924.53			0.00
Raw Flow: Avg - Raw m ³ /d	474.59	307.73	346.56	373.87	333.74	336.34	751.69	327.69	302.71	281.80	291.25	479.91		385.04		674.00
Raw Flow: Max - Raw m ³ /d	2,299.42	360.09	635.92	697.75	707.35	571.73	4,693.18	516.35	365.98	345.04	342.69	1,670.40			4,693.18	2,436.00
Raw Flow: Count - Raw m ³ /d	31.00	29.00	31.00	30.00	31.00	30.00	31.00	31.00	30.00	31.00	30.00	31.00	366.00			0.00
Eff. Flow: Total - Effluent m ³ /d	13,631.00	8,156.00	9,977.00	10,520.00	9,782.00	9,479.00	20,932.00	9,382.00	8,312.00	8,233.00	8,246.00	14,534.00	131,184.00			0.00
Eff. Flow: Avg - Effluent m ³ /d	439.71	281.24	321.84	350.67	315.55	315.97	675.23	302.65	277.07	265.58	274.87	468.84		382.46		0.00
Eff. Flow: Max - Effluent m ³ /d	2,122.00	335.00	589.00	686.00	686.00	520.00	3,722.00	447.00	325.00	314.00	343.00	1,554.00			3,722.00	0.00
Eff Flow: Count - Effluent m ³ /d	31.00	29.00	31.00	30.00	31.00	7.00	31.00	31.00	30.00	31.00	30.00	31.00	343.00			0.00
Carbonaceous Biochemical Oxygen Demand: CBOD																
Eff: Avg cBOD5 - Effluent mg/L	< 2.80	< 2.50	< 2.25	< 2.25	< 3.00	< 2.00	< 3.83	< 2.75	< 2.25	< 2.40	< 5.50	5.00		< 3.04	< 5.50	10.00
Eff: # of samples of cBOD5 - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	6.00	4.00	4.00	5.00	6.00	21.00	72.00			0.00
Loading: cBOD5 - Effluent kg/d	< 1.231	< 0.703	< 0.724	< 0.789	< 0.947	< 2.708	< 2.588	< 0.832	< 0.623	< 0.637	< 1.512	2.344			< 2.71	6.74
Biochemical Oxygen Demand: BOD5																
Raw: Avg BOD5 - Raw mg/L	152.00	217.00	280.00	257.00	125.00	254.00	244.00	192.00	220.00	194.00	177.00	162.00		206.17	280.00	0.00
Raw: # of samples of BOD5 - Raw	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Total Suspended Solids: TSS																
Raw: Avg TSS - Raw mg/L	49.00	252.00	198.00	128.00	90.00	306.00	82.00	178.00	319.00	119.00	73.00	73.00		155.58	319.00	0.00
Raw: # of samples of TSS - Raw	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TSS - Effluent mg/L	3.40	4.50	< 2.50	< 3.00	< 2.20	< 2.75	54.83	3.25	< 3.00	4.20	< 3.67	5.05		7.70	54.83	10.00
Eff: # of samples of TSS - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	6.00	4.00	4.00	5.00	6.00	21.00	72.00			0.00
Loading: TSS - Effluent kg/d	1.495	1.266	< 0.805	< 1.052	< 0.694	< 3.724	37.025	0.984	< 0.831	1.115	< 1.008	2.367		3.09	37.02	6.74
Percent Removal: TSS - Raw %	93.06	98.21	98.74	97.66	97.56	99.10	33.13	98.17	99.06	96.47	94.98	93.09		91.60	99.10	0.00
Total Phosphorus: TP																
Raw: Avg TP - Raw mg/L	4.17	5.25	5.23	5.96	3.32	5.96	5.52	7.91	6.81	5.18	6.10	5.53		5.58	7.91	0.00
Raw: # of samples of TP - Raw	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TP - Effluent mg/L	0.09	0.18	0.19	0.17	0.17	0.15	0.40	0.09	0.23	0.32	0.31	0.21		0.22	0.40	0.65
Eff: # of samples of TP - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	6.00	4.00	4.00	5.00	6.00	21.00	72.00			0.00
Loading: TP - Effluent kg/d	0.040	0.050	0.060	0.058	0.054	0.196	0.269	0.026	0.063	0.085	0.085	0.101		0.08	0.27	0.44
Percent Removal: TP - Raw %	97.79	96.62	96.41	97.23	94.82	97.57	92.78	98.93	96.66	93.82	94.92	96.12		96.14	98.93	0.00
Nitrogen Series																
Raw: Avg TKN - Raw mg/L	43.20	50.10	54.40	57.10	34.40	52.80	53.60	52.30	62.70	53.30	64.30	49.60		52.32	64.30	0.00
Raw: # of samples of TKN - Raw	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12.00			0.00
Eff: Avg TAN - Effluent mg/L	2.34	0.35	0.38	< 0.48	0.30	< 0.13	< 0.22	0.30	0.20	0.34	2.62	4.46		1.01	4.46	8.60
Eff: # of samples of TAN - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	6.00	4.00	4.00	5.00	6.00	21.00	72.00			0.00
Loading: TAN - Effluent kg/d	0.835	0.056	0.097	0.105	0.095	0.271	< 0.068	0.242	0.055	0.053	0.192	0.469		0.71	0.84	2.760
Disinfection																
Eff: GMD E. Coli - Effluent cfu/100mL	18.60	20.35	19.50	48.90	53.93	18.88	184.60	11.54	25.77	39.13	20.63	8.99			184.60	100.00
Eff: # of samples of E. Coli - Effluent	5.00	4.00	4.00	4.00	5.00	4.00	6.00	4.00	4.00	5.00	6.00	21.00	72.00			0.00
Temperature																
Effluent Temperature °C - Maximum	11.60	12.00	12.50	13.50	16.80	18.90	21.80	20.00	20.20	18.10	17.20	21.60			21.80	0.00
Effluent Temperature °C - Minimum	7.80	10.10	10.10	11.60	14.70	17.10	18.80	18.50	19.00	17.10	15.30	6.10				0.00
Effluent Temperature °C - Average	10.40	11.15	11.23	12.53	15.35	18.05	20.02	19.23	19.65	19.20	20.10	13.440		15.86		0.00
pH																
Effluent pH - Maximum	7.81	8.13	7.86	7.93	7.77	7.64	7.67	7.58	7.81	7.86	7.68	7.99			8.13	0.00
Effluent pH - Minimum	7.02	7.10	7.10	6.97	7.33	7.02	7.21	7.23	7.39	7.29	7.01	7.00				0.00
Effluent pH - Average	7.43	7.47	7.47	7.47	7.52	7.50	7.40	7.40	7.62	7.62	7.45	7.570		7.49		0.00

APPENDIX C



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 1 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

January 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 STAT	2	3 IH Reduced	4
5	6 IH Full Monthly Raw & Effluent Samples, Sludge Sample	7	8	9	10 IH Reduced	11
12	13 IH Full Effluent Samples	14	15	16	17 IH Reduced	18
19	20 IH Full Effluent Samples	21	22	23	24 IH Reduced	25
26	27 IH Full Effluent Samples	28	29	30	31 IH Reduced	

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 2 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

February 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 IH Full Monthly Raw & Effluent Samples, Sludge Sample	4	5	6	7 IH Reduced	8
9	10 IH Full Effluent Samples	11	12	13	14 IH Reduced	15
16	17 STAT	18 IH Full Effluent Samples	19	20	21 IH Reduced	22
23	24 IH Full Effluent Samples	25	26	27	28 IH Reduced	

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 3 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

March 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 IH Full Monthly Raw & Effluent Samples, Sludge Sample	4	5	6	7 IH Reduced	8
9	10 IH Full Effluent Samples	11	12	13	14 IH Reduced	15
16	17 IH Full Effluent Samples	18	19	20	21 IH Reduced	22
23	24 IH Full Effluent Samples	25	26	27	28 IH Reduced	29
30	31 IH Full Effluent Samples					

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)
Grab (E. coli)

Sludge Samples:

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 4 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

April 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4 IH Reduced	5
6	7 IH Full Monthly Raw & Effluent Samples, Sludge Sample	8	9	10	11 IH Reduced	12
13	14 IH Full Effluent Samples	15	16	17 IH Reduced	18 STAT	19
20	21 STAT	22 IH Full Effluent Samples	23	24	25 IH Reduced	26
27	28 IH Full Effluent Samples	29	30			

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 5 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

May 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2 IH Reduced	3
4	5 IH Full Monthly Raw & Effluent Samples, Sludge Sample	6	7	8	9 IH Reduced	10
11	12 IH Full Effluent Samples	13	14	15	16 IH Reduced	17
18	19 STAT	20 IH Full Effluent Samples	21	22	23 IH Reduced	24
25	26 IH Full Effluent Samples	27	28	29	30 IH Reduced	31

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)
Grab (E. coli)

Sludge Samples:

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 6 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

June 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 IH Full Monthly Raw & Effluent Samples, Sludge Sample	3	4	5	6 IH Reduced	7
8	9 IH Full Effluent Samples	10	11	12	13 IH Reduced	14
15	16 IH Full Effluent Samples	17	18	19	20 IH Reduced	21
22	23 IH Full Effluent Samples	24	25	26	27 IH Reduced	28
29	30 IH Full Effluent Samples					

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 7 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

July 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 STAT	2	3	4 IH Reduced	5
6	7 IH Full Monthly Raw & Effluent Samples, Sludge Sample	8	9	10	11 IH Reduced	12
13	14 IH Full Effluent Samples	15	16	17	18 IH Reduced	19
20	21 IH Full Effluent Samples	22	23	24	25 IH Reduced	26
27	28 IH Full Effluent Samples	29	30	31		

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 8 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

August 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 IH Reduced	2
3	4 STAT	5 IH Full Monthly Raw & Effluent Samples, Sludge Sample	6	7	8 IH Reduced	9
10	11 IH Full Effluent Samples	12	13	14	15 IH Reduced	16
17	18 IH Full Effluent Samples	19	20	21	22 IH Reduced	23
24	25 IH Full Effluent Samples	26	27	28	29 IH Reduced	30
31						

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)
Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)
Grab (E. coli)

Sludge Samples:

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 9 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

September 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 STAT	2 IH Full Monthly Raw & Effluent Samples, Sludge Sample	3	4	5 IH Reduced	6
7	8 IH Full Effluent Samples	9	10	11	12 IH Reduced	13
14	15 IH Full Effluent Samples	16	17	18	19 IH Reduced	20
21	22 IH Full Effluent Samples	23	24	25	26 IH Reduced	27
28	29 IH Full Effluent Samples	30 STAT				

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)

Raw Samples:

Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)
Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 10 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

October 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3 IH Reduced	4
5	6 IH Full Monthly Raw & Effluent Samples, Sludge Sample	7	8	9	10 IH Reduced	11
12	13 STAT	14 IH Full Effluent Samples	15	16	17 IH Reduced	18
19	20 IH Full Effluent Samples	21	22	23	24 IH Reduced	25
26	27 IH Full Effluent Samples	28	29	30	31 IH Reduced	

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)
Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)
Grab (E. coli)

Sludge Samples:

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 11 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

November 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 IH Full Monthly Raw & Effluent, Sludge Samples	4	5	6	7 IH Reduced	8
9	10 IH Full Effluent Samples	11 STAT	12	13	14 IH Reduced	15
16	17 IH Full Effluent Samples	18	19	20	21 IH Reduced	22
23	24 IH Full Effluent Samples	25	26	27	28 IH Reduced	29
30						

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)
Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)
Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)
Grab (E. coli)

Sludge Samples:

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding



Sample Schedule 2025 1248 Thorndale WWTP

Issued: 2024-11-01
Rev.#: 0
Pages: 12 of 12

Reviewed by: QEMS Representative

Approved by: Operations Management

December 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 IH Full Monthly Raw & Effluent Samples	2	3	4	5 IH Reduced	6
7	8 IH Full Effluent Samples	9	10	11	12 IH Reduced	13
14	15 IH Full Effluent Samples	16	17	18	19 IH Reduced	20
21	22 IH Full Effluent Samples	23	24 IH Reduced	25 STAT	26 STAT	27
28	29 IH Full Effluent Samples	30	31			

IH (In House) Full:

Raw (Temp., pH--Monthly)
Aeration (Set Test, MLSS, MLVSS DO, pH, Temp.)
WAS (MLSS)
Effluent Composite (TP, NH3+NH4, SS); Grab (DO, pH, Temp.)

IH (In House) Reduced:

Aeration (Set Test, DO, pH, Temp.)

Raw Samples:

Effluent (DO, pH, Temp., TSS, TP, NH3+NH4)
Composite Monthly-required by ECA (BOD5, TSS, TP, TKN)

Effluent Samples:

Composite Weekly (cBOD5, TSS, TAN, TP, TKN, Nitrate, Nitrite)

Sludge Samples:

Grab (E. coli)

Grab Monthly (Total Metals, TP, TKN, TAN, TS, E.coli, NO2, NO3) Field Application (Apr 1st – Nov 30th)

Notes: Initial on date when sample was taken. Add any additional sampling completed for the facility. At the end of the month hand in to the PCT with folder.

Revision History

Date	Revision #	Reason for Revision	Revision By
2024-11-01	0	Create Schedule	Matt Belding

APPENDIX D

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3725599	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	1/1/24 12:00 AM	2/5/24 09:52 AM	2/5/24 09:52 AM	
3725966	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	1/1/24 12:00 AM	1/29/24 07:58 AM	1/29/24 07:58 AM	Completed January testing. -
3726600			1248, Thorndale WWTP	OPER	Inspection	1	YEARS	Daily O&M Activities Thorndale WWTP (1y) - 1248	CLOSE	1/1/24 12:00 AM	5/21/24 10:56 AM	5/21/24 10:56 AM	
3726827			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	1/1/24 12:00 AM	1/29/24 08:29 AM	1/29/24 08:29 AM	Completed January inspection. -
3740796			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	1/1/24 12:00 AM	2/5/24 09:50 AM	2/5/24 09:50 AM	Bulbs/Channel inspected 01/29. -
3748232			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	1/1/24 12:00 AM	1/23/24 03:04 PM	1/23/24 03:04 PM	Client Report Completed -Thorndale client report completed. Emailed to Cara.
3748234			1248, Thorndale WWTP	PM	Compliance	3	MONTHS	RP05 WSER Monitoring ORG	CLOSE	1/1/24 12:00 AM	1/23/24 03:08 PM	1/23/24 03:08 PM	WSER Reporting -WSER reporting completed.
3748237			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	1/1/24 12:00 AM	1/23/24 03:11 PM	1/23/24 03:11 PM	Wiski Data Reviewed -WISKI data reviewed. All good.
3762934			1248, Thorndale WWTP	PM	Compliance	1	YEARS	RP03 Annual Report ECA	CLOSE	1/17/24 12:00 AM	3/19/24 10:52 AM	3/19/24 10:52 AM	Annual Report -Thorndale's annual report was completed and submitted to the ministry, clients, and the ECA submission email on Friday March 15th, 2024.
3778418	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	2/1/24 12:00 AM	3/11/24 08:24 AM	3/11/24 08:24 AM	Completed during generator test 02/23. -
3778718	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	2/1/24 12:00 AM	2/23/24 04:11 PM	2/23/24 04:11 PM	Completed February testing - no issues observed, see operating record for details. -
3779395			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	2/1/24 12:00 AM	2/12/24 10:16 AM	2/12/24 10:16 AM	Completed February inspection 02/05. -
3789108			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	2/1/24 12:00 AM	3/4/24 03:56 PM	3/4/24 03:56 PM	UV wiper troubleshooting 02/14 -

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3792198	0000334594	SAFETY SPILL KIT 20 GALLONS UNIVERSAL BLOWER RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	6	MONTHS	Semi-Annual Spill Kit Inspect (6m) 1248	CLOSE	2/1/24 12:00 AM	3/5/24 11:56 AM	3/5/24 11:56 AM	Checked during OHSA inspection 02/05. -
3794374			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	2/1/24 12:00 AM	2/16/24 08:18 AM	2/16/24 08:18 AM	Client Report Completed - Client report completed for Thorndale.
3794376			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	2/1/24 12:00 AM	2/16/24 08:17 AM	2/16/24 08:17 AM	Wiski Data Reviewed - Wiski Data reviewed for Thorndale
3821793	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	3/1/24 12:00 AM	4/19/24 08:08 AM	4/19/24 08:08 AM	- completed March 2024 - completed
3822076	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	3/1/24 12:00 AM	3/11/24 09:09 AM	3/11/24 09:09 AM	Completed March testing. No issues observed. See operating record for details. -
3822780			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	3/1/24 12:00 AM	3/11/24 08:38 AM	3/11/24 08:38 AM	Completed March inspection. - Completed March inspection - Lights, shower & eye wash all in working order. Some fire extinguishers still with Classic Fire & Life Safety, loaners currently on site.
3825653			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Diaphragm Insp/Service Route (1y) - 1248	CLOSE	3/1/24 12:00 AM	4/9/24 01:34 PM	4/9/24 01:34 PM	Disassembled wet ends, inspected valves/diaphragms. All appear to be in good condition. -
3826865			1248, Thorndale WWTP	OPER	Inspection	0		1248-WWTH 1248, Thorndale WWTP	CLOSE	3/1/24 12:00 AM	5/2/24 10:01 AM	5/2/24 10:01 AM	- completed
3832530			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	3/1/24 12:00 AM	4/4/24 07:47 AM	4/4/24 07:47 AM	replaced burnt out bulb & cleaned trough 03/12 - -

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3835283	0000063178	BLOWER POSITIVE DISPLACEMENT ABL310 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 1 Service (3m) -1248	CLOSE	3/1/24 12:00 AM	3/11/24 09:16 AM	3/11/24 09:16 AM	
3835286	0000063182	BLOWER POSITIVE DISPLACEMENT ABL330 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 2 Service (3m) -1248	CLOSE	3/1/24 12:00 AM	3/11/24 09:18 AM	3/11/24 09:18 AM	Checked belts/oil, greased fittings, cleaned screen. -
3835289	0000063180	BLOWER POSITIVE DISPLACEMENT ABL320 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 3 Service (3m) -1248	CLOSE	3/1/24 12:00 AM	3/11/24 09:20 AM	3/11/24 09:20 AM	Checked belts/oil, greased fittings, cleaned screen. -
3835637	0000063228	LIFTING DEVICE JIB ARM VARIABLE RADIUS UV CHANNEL AREA	1248, Thorndale WWTP	PM	Inspection	1	YEARS	Lifting Equipment Inspection (1y) 1248	CLOSE	3/1/24 12:00 AM	3/28/24 04:06 PM	3/28/24 04:06 PM	Lifting devices inspected by Hamisco/HB Material Handling 03/26. -
3835641	0000334600	LIFTING DEVICE WINCH STORAGE RM	1248, Thorndale WWTP	PM	Inspection	1	YEARS	Lifting Equipment Inspection (1y) 1248	CLOSE	3/1/24 12:00 AM	3/28/24 04:07 PM	3/28/24 04:07 PM	Lifting devices inspected by Hamisco/HB Material Handling 03/26. -
3835647	0000334606	LIFTING DEVICE DAVIT SOCKET 01 INFLUENT WET WELL	1248, Thorndale WWTP	PM	Inspection	1	YEARS	Lifting Equipment Inspection (1y) 1248	CLOSE	3/1/24 12:00 AM	3/28/24 04:08 PM	3/28/24 04:08 PM	Lifting devices inspected by Hamisco & HB Material Handling 03/26. -
3835651	0000334607	LIFTING DEVICE DAVIT SOCKET 02 INFLUENT WET WELL	1248, Thorndale WWTP	PM	Inspection	1	YEARS	Lifting Equipment Inspection (1y) 1248	CLOSE	3/1/24 12:00 AM	3/28/24 04:09 PM	3/28/24 04:09 PM	Lifting devices inspected by Hamisco & HB Material Handling 03/26. -
3835655	0000334608	LIFTING DEVICE DAVIT BASE 03 INFLUENT WET WELL	1248, Thorndale WWTP	PM	Inspection	1	YEARS	Lifting Equipment Inspection (1y) 1248	CLOSE	3/1/24 12:00 AM	3/28/24 04:10 PM	3/28/24 04:10 PM	Lifting devices inspected by Hamisco & HB Material Handling 03/26. -
3837854			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	3/1/24 12:00 AM	3/14/24 12:22 PM	3/14/24 12:22 PM	Client Report Completed - Thorndale's client report completed.
3837856			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	3/1/24 12:00 AM	3/14/24 12:18 PM	3/14/24 12:18 PM	Wiski Data Reviewed - Thorndale wiski data reviewed. No issues.

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3867922	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	4/1/24 12:00 AM	4/23/24 03:33 PM	4/23/24 03:33 PM	Completed April testing. No issues observed - see operating record for details. -
3868237	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	4/1/24 12:00 AM	4/23/24 03:30 PM	4/23/24 03:30 PM	Completed April testing. No issues observed - see operating record for details. -
3868896			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	4/1/24 12:00 AM	4/23/24 03:32 PM	4/23/24 03:32 PM	Inspection completed 04/04. See logbook/checklist for details. -
3881802			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	4/1/24 12:00 AM	5/1/24 09:44 AM	5/1/24 09:44 AM	Cleaned bulbs & trough. All lamps functional. - - assisted with UV cleaning
3885469	0000334586	PANEL PLC CPP2 UV LIGHT CONTROL UV CHANNEL AREA	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	3	YEARS	Panel Control UV System PLC Insp/ Service (3y) - 1248	CLOSE	4/1/24 12:00 AM	4/30/24 12:24 PM	4/30/24 12:24 PM	Cleaned & inspected panel interior - all components appear in good condition. -
3888785			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	4/1/24 12:00 AM	4/15/24 11:57 AM	4/15/24 11:57 AM	Client Report -Thorndale's PCT portion of the client report completed 04/10/2024. Emailed Cara to finish.
3888787			1248, Thorndale WWTP	PM	Compliance	3	MONTHS	RP05 WSER Monitoring ORG	CLOSE	4/1/24 12:00 AM	4/15/24 12:48 PM	4/15/24 12:48 PM	WSER Reporting - Thorndale's WSER reporting completed. No issues.
3888790			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	4/1/24 12:00 AM	4/15/24 12:49 PM	4/15/24 12:49 PM	WISKI Data Reviewed - Thorndale's WISKI data reviewed. No issues.
3920563	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	5/1/24 12:00 AM	5/21/24 10:49 AM	5/21/24 10:49 AM	Completed May alarm testing. -
3920840	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	5/1/24 12:00 AM	5/21/24 10:51 AM	5/21/24 10:51 AM	Completed May testing - no issues observed. See operating record for details. -

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3921506			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	5/1/24 12:00 AM	5/2/24 03:40 PM	5/2/24 03:40 PM	Completed May inspection. Lights, shower, eyewash and extinguishers all in good condition. -
3931585			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	5/1/24 12:00 AM	5/31/24 03:55 PM	5/31/24 03:55 PM	Annual service completed by Trojan. - Trojan completed annual service of UV system - tested all hydraulic components without issue. Replaced all wiper seals in Bank B. Topped up ActiClean & grease for all bank B racks. Topped up ActiClean & grease in bank A as well - 2 sets of ActiClean fittings on back A (Racks 1 & 3) were plugged. flushed system with warm water to clear blockage before refilling with ActiClean gel. Confirmed normal flow through ActiClean system before returning to normal service.
3937255			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	5/1/24 12:00 AM	5/16/24 09:38 AM	5/16/24 09:38 AM	Client Report -Client report completed
3937257			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	5/1/24 12:00 AM	5/16/24 09:39 AM	5/16/24 09:39 AM	WISKI Data Reviewed -Wiski data reviewed
3952125			1248, Thorndale WWTP	OPER	Inspection	0		Daily O&M Activities Thorndale WWTP (1y) - 1248	COMP		1/2/25 07:40 AM	1/2/25 07:40 AM	
3968380	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	6/1/24 12:00 AM	6/28/24 11:13 AM	6/28/24 11:13 AM	Completed during generator testing 06/10, forgot to close WO at time. -
3968657	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	6/1/24 12:00 AM	6/11/24 02:56 PM	6/11/24 02:56 PM	Completed June testing. No issues observed - see operating record for details. -
3969415			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	6/1/24 12:00 AM	6/5/24 10:46 PM	6/5/24 10:46 PM	

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3973664			1248, Thorndale WWTP	OPER	Inspection	0		1248-WWTH 1248, Thorndale WWTP	CLOSE	6/1/24 12:00 AM	7/19/24 08:21 AM	7/19/24 08:21 AM	- Completed
3973948	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Engine Diesel Generator Insp/ Service (1y) - 1248	CLOSE	6/1/24 12:00 AM	7/2/24 11:09 AM	7/2/24 11:09 AM	- Completed in Month of June 2024
3981400			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	6/1/24 12:00 AM	6/28/24 11:11 AM	6/28/24 11:11 AM	
3984175	0000063178	BLOWER POSITIVE DISPLACEMENT ABL310 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 1 Service (3m) -1248	CLOSE	6/1/24 12:00 AM	6/25/24 07:35 AM	6/25/24 07:35 AM	Started monthly service - unable to remove oil bolt for top-up. - Cleaned blower body screens & greased fittings. Checked belt condition. noted appearance of oil leak & low oil levels on both sides of drive. Topped up oil on left side (when facing blower), but was unable to remove oil plug on right side. Will return at later date to attempt further maintenance. Blower currently in backup rotation. Continued service - Attempted to bleed oil from left side of drive (apparent source of oil leak) and apply thread tape to fittings. Unable to remove bleed bolt, will return tomorrow once unit has cooled and pressure has equalized.
3984178	0000063182	BLOWER POSITIVE DISPLACEMENT ABL330 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 2 Service (3m) -1248	CLOSE	6/1/24 12:00 AM	6/18/24 03:24 PM	6/18/24 03:24 PM	Completed regular service. - Cleaned blower body screens. Oil levels are good. Belts in good condition. Greased fittings.
3984181	0000063180	BLOWER POSITIVE DISPLACEMENT ABL320 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 3 Service (3m) -1248	CLOSE	6/1/24 12:00 AM	7/9/24 02:56 PM	7/9/24 02:56 PM	Completed blower service. - Greased fittings, bled and replaced oil on both sides of drive. Cleaned blower body screens and returned to service. Confirmed normal airflow to SBRs.
3987203			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	6/1/24 12:00 AM	6/6/24 01:39 PM	6/6/24 01:39 PM	Client Report -Completed Client report for Thorndale. Cara to finish and send to client.

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
3987205			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	6/1/24 12:00 AM	6/10/24 11:36 AM	6/10/24 11:36 AM	WISKI Data Reviewed - Wiski data reviewed
4016759	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	7/1/24 12:00 AM	8/22/24 08:56 AM	8/22/24 08:56 AM	Completed during generator testing 07/30. Forgot to close out work order day of. -
4017078	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	7/1/24 12:00 AM	8/8/24 01:29 PM	8/8/24 01:29 PM	Completed August testing - no issues observed. See operating record for details. -
4017749			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	7/1/24 12:00 AM	7/3/24 02:22 PM	7/3/24 02:22 PM	Completed July inspection. -Lights, shower and eyewash all in good condition. Some fire extinguishers remain off site with Classic Fire & Life Safety - checked all others. Filled out Thames Centre safety checklist.
4028927			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	7/1/24 12:00 AM	8/8/24 09:37 AM	8/8/24 09:37 AM	Replaced burnt out bulb (B-3-1), sleeve was damaged during bulb replacement and was also replaced. - Pulled and cleaned all UV bubs in wake of rain event/high flows. -
4032615	0000063201	PUMP SUBMERSIBLE 02 RSP112 RAW SEWAGE INFLUENT WETWELL	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm 02 Raw Sewage Insp/ Service (1y) 1248	COMP	7/1/24 12:00 AM	11/28/24 07:36 AM	11/28/24 07:36 AM	- Pulled and inspected raw pump 2 shadowed Lucas Brown. -Pulled and inspected raw pump 2. Impeller showing some signs of wear but still in good condition. Tested impeller while pulled and observed normal function. Attempted to re-seat pump at 13:51 - no flow observed at influent flow meter. Lifted pump slightly and re-seated again before testing in hand - confirmed normal flow. Returned pump 2 to auto.

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4032624	0000315256	PUMP SUBMERSIBLE 01 RSP111 RAW SEWAGE INFLUENT WETWELL	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm 01 Raw Sewage Insp/ Service (1y) 1248	COMP	7/1/24 12:00 AM	11/28/24 07:38 AM	11/28/24 07:38 AM	- Pulled and inspected raw pump 1 shadowed Lucas Brown. -Pulled and inspected raw pump 1. Impeller appears in good condition, observed normal function while pump was pulled. Returned pump 1 to place and tested in hand to confirm re-seating - flows appear normal (30 L/s). Returned pump to auto.
4032633	0000315255	PUMP SUBMERSIBLE 03 RSP113 RAW SEWAGE INFLUENT WETWELL	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Pump Subm 03 Raw Sewage Insp/ Service (1y) 1248	COMP	7/1/24 12:00 AM	11/28/24 07:41 AM	11/28/24 07:41 AM	- Pulled and inspected raw pump 3 shadowed Lucas Brown. - Pulled and inspected raw pump 3. Impeller appears in good condition, observed normal function while pump was pulled. Testing triggered "pump 3 low flow alarm" @ 11:17. Unable to clear fault from SCADA computer. Returned pump to place and tested in auto - confirmed normal function. Low flow alarm still showing as active despite pump functioning normally in auto. Acknowledged alarm, will attempt to reset after pulling raw pump 2.
4035524			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	7/1/24 12:00 AM	7/9/24 03:11 PM	7/9/24 03:11 PM	Client Report - Client report completed.
4035526			1248, Thorndale WWTP	PM	Compliance	3	MONTHS	RP05 WSER Monitoring ORG	CLOSE	7/1/24 12:00 AM	7/16/24 12:16 PM	7/16/24 12:16 PM	WSER Reporting - Thorndale's WSER report Completed.
4035529			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	7/1/24 12:00 AM	7/16/24 01:54 PM	7/16/24 01:54 PM	WISKI Data Reviewed - Thorndale's WISKI data was reviewed. All good.

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4049794	0000387381	TANK STORAGE RAW SEWAGE INFLUENT WET WELL	1248, Thorndale WWTP	CORR	Refurbish/ Replace/Repair	0		Thorndale Rain Event 07/16	CLOSE		7/16/24 04:00 PM	7/16/24 11:00 PM	Thorndale Rain event 07/16 - Massive rain event caused large influent spike - approx. 7000 m3 across 07/16 and 07/17. Wet well unable to keep up with increased flows running in auto, rotated 3rd raw pump into service in hand to keep pace with inflow. Required operator to remain on site for duration of rain event to turn off 3rd raw pump in case of flows tapering off. Stayed on site monitoring wet well from 16:00 until 23:00, when M. O'Rourke arrived to monitor wet well until morning. No significant change in wet well level - keeping pace with inflow but unable to bring down water level in wet well. Departed site.
4049892			1248, Thorndale WWTP	CORR	Refurbish/ Replace/Repair	0		Thorndale WWTP Storm Mode monitoring	CLOSE		7/19/24 01:47 PM	7/19/24 01:47 PM	- completed
4065498	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	8/1/24 12:00 AM	8/8/24 01:32 PM	8/8/24 01:32 PM	Confirmed function during generator testing, also tested front door alarm. -
4065775	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	8/1/24 12:00 AM	8/6/24 08:47 AM	8/6/24 08:47 AM	- completed

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4066444			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	8/1/24 12:00 AM	8/8/24 09:34 AM	8/8/24 09:34 AM	Completed August inspection 08/06. - Lights, shower and eyewash all in good condition. Filter building process room extinguishers remain off-site with Classic FLS. Checked loaners and all other extinguishers. Verified contents of spill & first aid kits. Filled out Thames Centre safety checklist.
4071124	0000063178	BLOWER POSITIVE DISPLACEMENT ABL310 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Blower 01 Air Sludge Tank Insp/ Service (1y) - 1248	CLOSE	8/1/24 12:00 AM	8/14/24 03:33 PM	8/14/24 03:33 PM	Completed August service. - greased fittings, checked belt/oil condition, cleaned blower body screens.
4071132	0000063180	BLOWER POSITIVE DISPLACEMENT ABL320 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Blower 02 Aeration Insp/Service (1y) - 1248	CLOSE	8/1/24 12:00 AM	8/14/24 03:34 PM	8/14/24 03:34 PM	Completed August service. - greased fittings, checked belt/oil condition, cleaned blower body screens.
4071140	0000063182	BLOWER POSITIVE DISPLACEMENT ABL330 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Blower 03 Air Aeration Insp/ Service (1y) - 1248	CLOSE	8/1/24 12:00 AM	8/14/24 03:35 PM	8/14/24 03:35 PM	Completed August service. - greased fittings, checked belt/oil condition, cleaned blower body screens.
4071148	0000063188	PANEL TRANSFER SWITCH ATS ELECTRICAL RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Transfer Switch Insp/Service (1y) - 1248	CLOSE	8/1/24 12:00 AM	8/15/24 09:01 AM	8/15/24 09:01 AM	Inspected panel - operated during genrator test 08/08. -
4075991			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	8/1/24 12:00 AM	8/23/24 07:52 AM	8/23/24 07:52 AM	Changed faulted lamp/damaged sleeve (A-3-2). -
4079075	0000334594	SAFETY SPILL KIT 20 GALLONS UNIVERSAL BLOWER RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	6	MONTHS	Semi-Annual Spill Kit Inspect (6m) 1248	CLOSE	8/1/24 12:00 AM	8/8/24 09:32 AM	8/8/24 09:32 AM	Verified contents during OHSA inspection 08/06. -
4081545			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	8/1/24 12:00 AM	8/27/24 09:11 AM	8/27/24 09:11 AM	Client Report -PCT portion of the client report completed. Emailed Cara and Vitaliy.

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4081547			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	8/1/24 12:00 AM	8/27/24 09:16 AM	8/27/24 09:16 AM	WISKI Data Reviewed -Wiski data reviewed. Exceedances reported. SPC, SOM, and RHM informed. Client CC'd on letters to MECP.
4082022			1248, Thorndale WWTP	CORR	Refurbish/ Replace/Repair	0		Thorndale WWTP Barscreen auger over load alarm	CLOSE		8/1/24 08:54 AM	8/1/24 08:54 AM	- 1502- Arrived on site do to receiving a barscreen overload alarm 1536- Completed inspection of auger screening system.Still power supplied to unit and loud high pitch noise upon arrival. -pressed the emergency stop button which cut off the power supply. - removed gravel causing the auger to jam and returned back to normal operation.
4111905	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	9/1/24 12:00 AM	9/23/24 10:11 AM	9/23/24 10:11 AM	Completed during generator testing on 09/10 - Completed monthly alarm testing alongside generator test on 09/10. See related logbook entry. Failed to put time into WO on day of testing.
4112187	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	9/1/24 12:00 AM	9/23/24 10:02 AM	9/23/24 10:02 AM	Testing completed 09/10 - Completed monthly generator testing 09/10 - did not allocate hours at the time. No issues observed, see operating record for details. - Completed monthly generator test on 09/10 shadowed with Lucas Brown.

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4112932			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	9/1/24 12:00 AM	9/10/24 09:06 AM	9/10/24 09:06 AM	Completed September inspection. -Completed Monthly OHSA/ Thames Centre safety inspection - lights, shower and eyewash all in good condition. Some extinguishers remain off-site with Classic FLS. Checked loaners and all other extinguishers. Verified contents of spill & first aid kits. Filled out Thames Centre safety checklist.
4116614			1248, Thorndale WWTP	OPER	Inspection	0		1248-WWTH 1248, Thorndale WWTP	CLOSE	9/1/24 12:00 AM	10/1/24 09:08 AM	10/1/24 09:08 AM	
4118233	0000063184	TANK HOT WATER EDWH02 STORAGE RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Tank Process 01 Hot Water Insp/ Service (1y) - 1248	CLOSE	9/1/24 12:00 AM	9/28/24 01:47 PM	9/28/24 01:47 PM	inspected tank/attachcd piping for corrosion & damage - no issues observed. -
4118236	0000063185	TANK HOT WATER EDWH01 ADMIN RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Tank Storage 02 Hot Water Insp/ Service (1y) - 1248	CLOSE	9/1/24 12:00 AM	9/28/24 01:48 PM	9/28/24 01:48 PM	inspected tank & attached piping for damage/corrosion - no issues observed. -
4124099			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	9/1/24 12:00 AM	9/28/24 01:45 PM	9/28/24 01:45 PM	Bank A rack 1 ballast fault - Noted "Multiple Ballast Fault" alarm showing for bank A rack 1. All bulbs still functioning. Reset fault from HMI and issue did not recur. Will continue to monitor.
4126824	0000063178	BLOWER POSITIVE DISPLACEMENT ABL310 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 1 Service (3m) -1248	CLOSE	9/1/24 12:00 AM	9/13/24 03:34 PM	9/13/24 03:34 PM	Completed monthly blower service. -
4126827	0000063182	BLOWER POSITIVE DISPLACEMENT ABL330 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 2 Service (3m) -1248	CLOSE	9/1/24 12:00 AM	9/13/24 03:35 PM	9/13/24 03:35 PM	Completed monthly blower service. -
4126830	0000063180	BLOWER POSITIVE DISPLACEMENT ABL320 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 3 Service (3m) -1248	CLOSE	9/1/24 12:00 AM	9/13/24 03:36 PM	9/13/24 03:36 PM	

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4127214	0000334605	HEATER ELECTRIC HVAC SYS TANK AREA	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Heater Unit Insp. (1y) - 1248	CLOSE	9/1/24 12:00 AM	9/28/24 01:53 PM	9/28/24 01:53 PM	Tested heater in auto and confirmed normal function. - No unusual noises/vibration observed. Confirmed unit started properly and ramped up to temperature. Returned unit to off as weather does not necessitate use yet.
4127219	0000334597	VALVE BUTTERFLY W/ ELEC ACTUATOR BLOWER DISCH BLOWER RM	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	Actuator Electric Inspec/Service (1y) 1248 AIR TO SBR	CLOSE	9/1/24 12:00 AM	9/16/24 03:17 PM	9/16/24 03:17 PM	Inspected blower isolation valve actuators. - Inspected valves & actuators for damage/corrosion - no issues observed. All cables & seals appear to be in good condition. Confirmed normal function of both valves.
4129886			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	9/1/24 12:00 AM	9/19/24 02:15 PM	9/19/24 02:15 PM	Client Report -PCT's portion of the client report completed. Emailed Vitaliy and Meaghen Puff to finish.
4129888			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	9/1/24 12:00 AM	9/19/24 02:47 PM	9/19/24 02:47 PM	WISKI Data Reviewed - Wiski data reviewed.
4161422	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	CLOSE	10/1/24 12:00 AM	10/17/24 02:55 PM	10/17/24 02:55 PM	Assisted R. Patel with monthly generator/alarm testing - no issues observed. -
4161743	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	CLOSE	10/1/24 12:00 AM	10/17/24 02:53 PM	10/17/24 02:53 PM	Assisted R. Patel with monthly generator/alarm testing. No issues observed, see operating record. - Performed monthly generator/alarm testing. no issues observed -

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4162414			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	CLOSE	10/1/24 12:00 AM	10/4/24 04:35 PM	10/4/24 04:35 PM	Completed october inspection. -Completed monthly OHSA/ Thames Centre safety inspection. Lights, shower, and eyewash all in good condition. Entryway fire extinguisher remains with Classic FLS, checked loaner & signed off on all others. Verified contents of spill & first-aid kits. Filled out Thames Centre safety checklist.
4169232	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	5	YEARS	Engine Diesel Battery Replacement Service (5y) - 1248	CLOSE	10/1/24 12:00 AM	10/31/24 03:44 PM	10/31/24 03:44 PM	Municipality replaced generator batteries 06/25. -
4174402			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	CLOSE	10/1/24 12:00 AM	11/1/24 11:39 AM	11/1/24 11:39 AM	Pulled & cleaned all UV bulbs, scraped trough. - Pulled & cleaned UV bulbs 10/21. - UV bulb/sleeve replacemenets 10/22. -Replaced 2 UV bulbs (A-2-1, B-1-4) that were showing signs of wear noted during cleaning yesterday. Additionally replaced sleeve on A-2-1 as it was chipped during bulb replacement. Further replaced 2 sleeves (B-2-1, B-3-1) That were showing signs of water scaling. - work order completed in month of October
4180534			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	10/1/24 12:00 AM	10/7/24 02:26 PM	10/7/24 02:26 PM	Client Report -Finished the PCT portion of the client report. Emailed to Management.
4180536			1248, Thorndale WWTP	PM	Compliance	3	MONTHS	RP05 WSER Monitoring ORG	CLOSE	10/1/24 12:00 AM	10/7/24 02:30 PM	10/7/24 02:30 PM	WSER Reporting - WSER Reporting completed
4180539			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	10/1/24 12:00 AM	10/7/24 03:17 PM	10/7/24 03:17 PM	WISKI Data Reviewed - Wiski Data Reviewed

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4182203	0000063204	PUMP SUBMERSIBLE WSP221 WASTE SLUDGE SBR 02	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	PUMP SUBMERSIBLE 02 WASTE SBR 1 Inspection/Service (1y) 1248	COMP	10/1/24 12:00 AM	12/20/24 02:42 PM	12/20/24 02:42 PM	- Pump working as intended between 10-20l/sec. tested in hand and wasting as intended
4182212	0000063205	PUMP SUBMERSIBLE WSP231 WASTE SLUDGE MINI SBR	1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	YEARS	PUMP SUBMERSIBLE 03 WASTE SBR 2 Inspection/Service (1y) 1248	BUSCOMP	10/1/24 12:00 AM	12/20/24 02:44 PM	12/20/24 02:44 PM	- Pump working as intended, checked every week. running between 10-20L second.
4210250	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	COMP	11/1/24 12:00 AM	12/4/24 12:56 PM	12/4/24 12:56 PM	Completed November testing. -
4210527	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	COMP	11/1/24 12:00 AM	11/29/24 12:56 PM	11/29/24 12:56 PM	Assisted R. Patel with November testing - No issues observed. See operating record for details. - Performed monthly generator/alarm testing. no issues observed -
4211202			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	COMP	11/1/24 12:00 AM	11/28/24 07:47 AM	11/28/24 07:47 AM	Inspection completed 11/06. Did not input time into maximo correctly upon completion of inspection. - Completed monthly OHSA/Thames Centre safety inspection. Lights, shower, and eyewash all in good condition. Checked & signed off on all fire extinguishers. Alum room and blower room emergency lighting units showing service alarm but still functional. Verified contents of spill & first-aid kits. Filled out Thames Centre safety checklist.
4214406	0000063191	METER FLOW FIT-423 EFFLUENT UV CHANNEL AREA	1248, Thorndale WWTP	PM	Calibration	1	YEARS	Meter Flow Insp/Service (1y) - 1248	COMP	11/1/24 12:00 AM	11/19/24 07:57 AM	11/19/24 07:57 AM	- Flowmetrix completed flow meter calibration on 11/14

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4220079			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	COMP	11/1/24 12:00 AM	12/4/24 01:02 PM	12/4/24 01:02 PM	Pulled & cleaned all UV bulbs 11/05 - Pulled & cleaned UV bulbs 11/12 - Pulled & cleaned UV bulbs 11/26 -
4224009	0000334595	METER FLOW FIT-335 SBR AIR BLOWER RM	1248, Thorndale WWTP	PM	Calibration	1	YEARS	Annual Flowmeter Calibrations - 1248 (1y)	CLOSE	11/1/24 12:00 AM	11/15/24 08:32 AM	11/15/24 08:32 AM	Flowmetrix completed annual flow meter calibrations 11/13. - Flowmetrix Completed calibration of air flow meters for SBRs & ASHT. Also calibrated wasting pump flow meters for both SBRs. See technician's report for details.
4224021	0000063197	METER FLOW FIT-120 RAW SEWAGE INFLUENT TANK AREA	1248, Thorndale WWTP	PM	Calibration	1	YEARS	Meter Flow Insp/Service (1y) - 1248	CLOSE	11/1/24 12:00 AM	11/15/24 08:28 AM	11/15/24 08:28 AM	Flowmetrix completed annual calibration 11/13. -
4225238			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	CLOSE	11/1/24 12:00 AM	11/15/24 07:58 AM	11/15/24 07:58 AM	Client Report - PCT portion of the client report completed.
4225240			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	CLOSE	11/1/24 12:00 AM	11/15/24 08:01 AM	11/15/24 08:01 AM	WISKI Data Reviewed - Wiski data reviewed.
4252265	0000063165	PANEL ALARM/ DIALER PANEL ADMIN AREA	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Alarm Dialer Test/Insp (1m) - 1248	COMP	12/1/24 12:00 AM	12/31/24 01:56 PM	12/31/24 01:56 PM	- Tested Alarm Dialer while testing the generator on dec 13
4252630	0000063194	GENERATOR W/ DIESEL ENGINE STANDBY POWER	1248, Thorndale WWTP	PM	Inspection	1	MONTHS	Engine Diesel Test/Insp (1m) - 1248	COMP	12/1/24 12:00 AM	12/31/24 01:53 PM	12/31/24 01:53 PM	- Completed Monthly Generator Test on Dec 13.
4253512			1248, Thorndale WWTP	PM	HEALTH AND SAFETY	1	MONTHS	OHSA Inspection Thorndale (1m) - 1248	COMP	12/1/24 12:00 AM	12/13/24 08:21 AM	12/13/24 08:21 AM	- Completed monthly health and safety checks- shower and eyewash in good condition. Checked and signed off in fire extinguisher. Checked spill and first aid kit. Blower room and Alum room emergency lights showing battery faults but still functional. - Dec 10

Workorder Summary Report

Report Start Date: Jan 1, 2024 12:00 AM

Report End Date: Dec 31, 2024 11:59 PM

Location: 1248,1248-WWTH

Work Order Type: CORR,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
4261872			1248, Thorndale WWTP	PM	Refurbish/ Replace/Repair	1	MONTHS	UV Bank Insp (1m) - 1248	COMP	12/1/24 12:00 AM	12/31/24 01:47 PM	12/31/24 01:47 PM	Assisted R. Patel with bulb cleaning 12/13 -
4264428	0000063178	BLOWER POSITIVE DISPLACEMENT ABL310 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 1 Service (3m) -1248	COMP	12/1/24 12:00 AM	12/31/24 01:55 PM	12/31/24 01:55 PM	-Completed regular blower service - greased fittings, checked belt/oil condition, cleaned blower body screens.
4264431	0000063182	BLOWER POSITIVE DISPLACEMENT ABL330 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 2 Service (3m) -1248	COMP	12/1/24 12:00 AM	12/31/24 01:56 PM	12/31/24 01:56 PM	- Completed regular blower service - greased fittings, checked belt/oil condition, cleaned blower body screens.
4264434	0000063180	BLOWER POSITIVE DISPLACEMENT ABL320 AERATION BLOWER RM	1248, Thorndale WWTP	PM	Inspection	3	MONTHS	Blower 3 Service (3m) -1248	COMP	12/1/24 12:00 AM	12/31/24 02:00 PM	12/31/24 02:00 PM	-Completed regular blower service - greased fittings, checked belt/oil condition, cleaned blower body screens.
4266807			1248, Thorndale WWTP	PM	Compliance	1	MONTHS	CL01 Client Performance Report ORG	COMP	12/1/24 12:00 AM	12/13/24 08:25 AM	12/13/24 08:25 AM	Client Report -PCT portion of the client report completed. Emailed for review.
4266809			1248, Thorndale WWTP	OPER	Compliance	1	MONTHS	WISKI Data Review (1m) 1248	COMP	12/1/24 12:00 AM	12/13/24 08:27 AM	12/13/24 08:27 AM	WISKI Data Reviewed - Wiski data reviewed.
4277247	0000334596	METER FLOW FIT-315 SBR AIR BLOWER RM	1248, Thorndale WWTP	PM	Calibration	1	YEARS	Annual Flowmeter Calibrations - 1248 (1y)	COMP	12/8/24 12:00 AM	12/13/24 08:26 AM	12/13/24 08:26 AM	-Flowmetrix completed calibration Nov 13