

Echo Bay Water Pollution Control Plant

Annual Operating Report

CofA 3-1119-95-006 Issued December 20, 1995

January 1, 2023 – December 31, 2023

Prepared by the Ontario Clean Water Agency
For The Corporation of the Township of Macdonald, Meredith and Aberdeen Additional



Ontario Clean Water Agency
Agence Ontarienne Des Eaux



SECTION 1: INTRODUCTION

The Ontario Clean Water Agency (OCWA) acts as the operating authority for the Echo Bay wastewater treatment. This document is prepared by OCWA in accordance with Certificate of Approval (CofA) #3-1044-95-006. The report is required to include the following information:

- (i) A summary of all monitoring data including an overview of the success and adequacy of the sewage treatment program;
- (ii) A comprehensive interpretation of all monitoring data and analytical data collected relative to the works during the reporting period and a comparison to the effluent quality and quantity criteria described in condition 1;
- (iii) A summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (iv) A summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming a part of the works;
- (v) A description of any operating problems encountered and corrective action taken during the reporting period;
- (vi) A summary of any proposed alteration, extension or replacement in the process or operation of the works to be completed over the next reporting period which may require approval under the *Ontario Water Resources Act*;
- (vii) A tabulation of the volume of sludge generated in the reporting period, and an outline of anticipated volumes to be generated in the next reporting period;
- (viii) An outline of the proposed sludge handling methods and disposal areas to be utilized over the next reporting period; and
- (ix) A summary of the calibration and maintenance procedures conducted on all monitoring equipment

SECTION 2: Description of Facility

Capacity of Facility: 734 m³ / day (average flow)
Service Area: Town of Echo Bay
Service Population: 530
Effluent Receiver:
Major Process: Rotating Biological Contactor
Facility Classification: Wastewater Class 2
Collection Classification: Collection Class 2

SECTION 3: Executive Summary

Sampling parameters were **exceeded** during the 2023 reporting period.

The total effluent discharge from the Sewage Treatment Plant for the year was 94,913.7m³.

The total raw sewage flow into the Sewage Treatment Plant for the year was calculated to be 94,913.7m³.



SECTION 4: Process Data

The facility operator collects samples of raw sewage and sends them to an accredited laboratory for analysis. Raw flows are calculated using flow meter values.

Raw (Influent) Sampling					
Parameter	Frequency	Method	Results		
			Min	Avg	Max
BOD ₅ (mg/L)	Monthly	24hr Composite – External Analysis (Lab)	45	98.1	208
TSS (mg/L)	Monthly	24hr Composite – External Analysis (Lab)	27	86.6	225
TP (mg/L)	Monthly	24hr Composite – External Analysis (Lab)	1.1	2.37	3.87
Flow (m ³ /d)	Daily	V-Notch Flow Meter	0.50	260.04	846.3

The facility operator collects effluent samples and sends them to an accredited laboratory for analysis. Depending on the parameter samples are collected on a weekly or monthly basis. Depending on the parameter samples are collected by a composite sampler or by taking a grab sample.

Treated (Effluent) Sampling		
Parameter	Frequency	Method
CBOD ₅ (mg/L)	Monthly	24hr Composite – External Analysis (Lab)
BOD ₅ (mg/L)	Monthly	24hr Composite – External Analysis (Lab)
TSS (mg/L)	Monthly	24hr Composite – External Analysis (Lab)
TP (mg/L)	Weekly	24hr Composite – External Analysis (Lab)
E.Coli	Weekly	24hr Composite – External Analysis (Lab)
pH	Weekly	Grab – Internal Analysis
Temperature	Weekly	Grab – Internal Analysis
Alkalinity	Monthly	24hr Composite – External Analysis (Lab)
TKN	Monthly	24hr Composite – External Analysis (Lab)
Nitrite	Monthly	24hr Composite – External Analysis (Lab)
Nitrate	Monthly	24hr Composite – External Analysis (Lab)
Unionized Ammonia	Monthly	24hr Composite – External Analysis (Lab)
TAN	Monthly	24hr Composite – External Analysis (Lab)
Flow	Daily	Equal to Raw Flow Rate

Compliance limits are based on monthly discharges for effluent concentrations and effluent loadings. In addition, the effluent is essentially free of floating and settleable solids and does not contain oil or other substance in amounts sufficient to create a visible film or sheen or foam or discoloration on the receiving waters.



Treated (Effluent Discharge) Sampling									
Month	CBOD ₅		BOD		Suspended Solids		Total Phosphorus		E.Coli
	Avg. Eff	Avg. Load	Avg. Eff	Avg. Load	Avg. Eff	Avg. Eff	Avg. Eff	Avg. Load	Avg. Eff
	mg/L	kg/d	mg/L	kg/d	mg/L	mg/L	kg/d	mg/L	CFU/100mL
January	6	1.87	7	2.19	10	3.12	0.78	0.24	175.9
February	15	5.05	17	5.72	116	39.04	1.63	0.55	35.3
March	2	0.67	3	1.0	10	3.35	0.74	0.25	24.9
April	4	1.88	5	2.35	11	5.18	0.575	0.27	55.1
May	2	0.57	3	0.85	8	2.27	0.698	0.20	4.32
June	2	0.32	2	0.32	9	1.46	0.395	0.06	3.13
July	2	0.29	2	0.29	6	0.88	0.824	0.12	5.29
August	4	0.62	4	0.62	15	2.32	0.425	0.07	2.83
September	5	0.86	6.5	1.12	13.5	2.32	0.585	0.10	3.46
October	2	0.37	2	0.37	10	1.87	0.516	0.10	4.18
November	4	1.09	4	1.09	12	3.28	0.41	0.11	245.7
December	4	1.18	7	2.06	6	1.76	0.428	0.13	9.73
Max	15		17	5.72	116	39.04	1.63	0.55	245.7
Average	4.39		5.37	1.5	18.5	5.57	0.67	0.18	
ECA Limit			25	18.4	25	18.4	1.0	0.7	200
ECA Objective			15	11	15	11	0.8	0.56	200

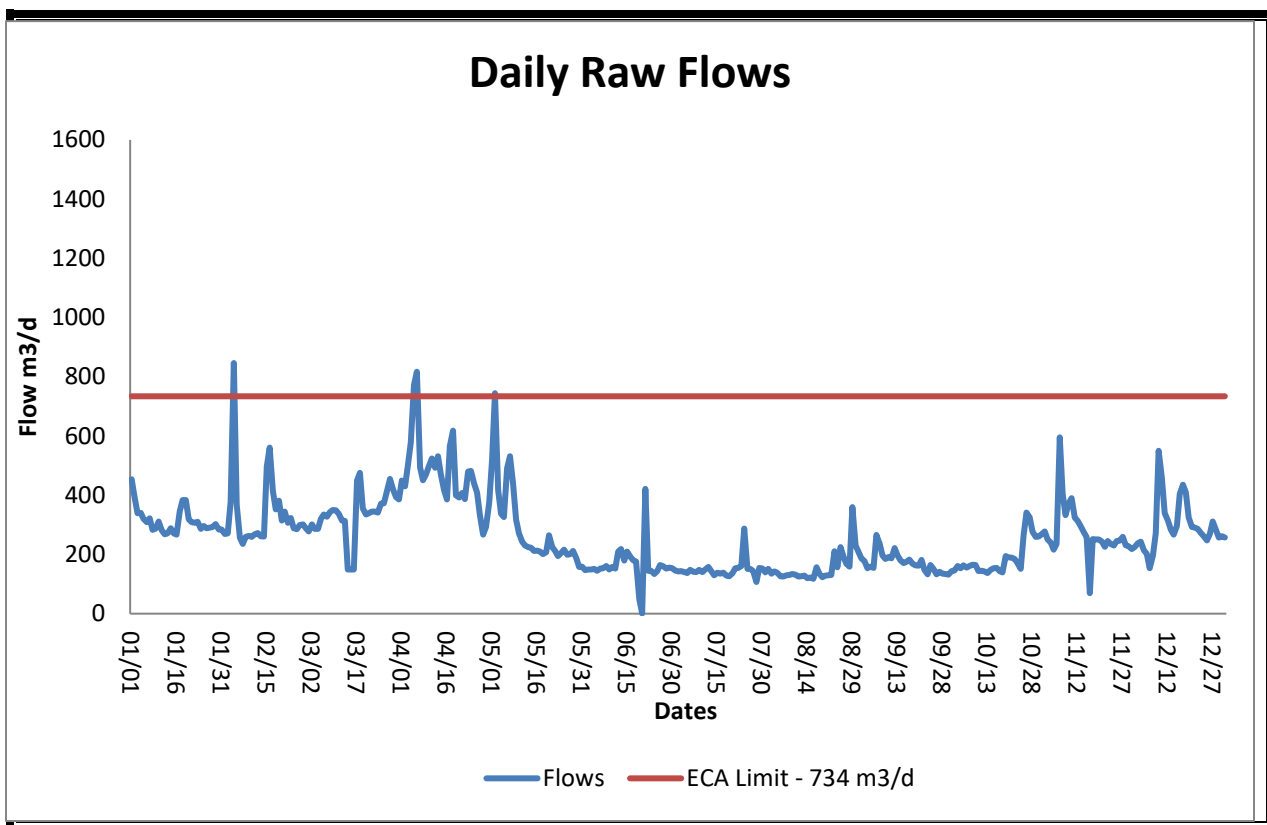
* E.coli average is calculated as a geometric mean

Additional Effluent Monitoring Samples						
Month	pH			Temperature		
	Min	Avg	Max	Min	Avg	Max
January	6.83	6.93	7.05	6.7	8.8	10.9
February	6.95	7.01	7.19	4.8	7.9	10.4
March	6.94	7.04	7.14	6.9	8.9	12.7
April	6.93	7.09	7.21	7.7	9.9	12.9
May	6.87	7.09	7.47	8.9	10.7	12
June	6.83	6.97	7.14	12.3	14.8	18.5
July	6.87	6.95	7.03	16	17.5	20.6
August	6.82	7.01	7.59	17.2	18.4	20.5
September	1.02	7.12	7.24	17.2	18	19.2
October	6.98	7.15	7.33	14.7	15.8	18.4
November	6.55	6.83	7.34	10.8	13.1	14.3
December	6.63	6.89	7.11	10.1	11.5	12.9



The raw and effluent parameters specified in the above tables are analyzed by SGS Lakefield Research, an accredited laboratory located in Lakefield, Ontario.

Flow Volumes				
Month	Total Volume (m ³)	Avg Daily Flow (m ³ /d)	Peak Daily Flow (m ³ /d)	Discharge Volumes (m ³)
January	9,687.3	312.49	454	9,687.3
February	9,424	336.57	846.3	9,424
March	10,380.31	334.85	475.2	10,380.31
April	14,127.7	470.92	817.2	14,127.7
May	8,788.3	283.49	744	8,788.3
June	4,853.9	161.8	421	4,853.9
July	4,566.2	147.3	287.6	4,566.2
August	4,797.8	154.77	359.4	4,797.8
September	5,165.2	172.17	265.7	5,165.2
October	5,797	187	341.7	5,797
November	8,210.7	273.69	595	8,210.7
December	9,115.3	294.04	550.1	9,115.3
Total	94,913.7			94,913.7
Average		260.04		
Maximum			846.3	





Year	Total Raw Sewage Flow m ³ /d	Avg Day Sewage Flow m ³ /d	Max Day Sewage Flow m ³ /d	Avg Day % of Rated Capacity 734 m ³ /d
2023	94,913.7	260	846.3	35%
2022	98,402.6	269.6	1,152.6	37%
2021	83,048.6	227.5	830.7	31%
2020	106,262.1	290.33	1,119.7	40%

The average flows measured into the sewage treatment plant did not exceed the specified average daily flow of 734 m³/day in 2023.

The average daily flow for 2023 is 260 m³/d which is approximately 35% of the rated capacity. The highest recorded peak flow occurred in February (846.3 m³/d) and was approximately 115% of the average rated capacity, however the peak flow rate specified in the ECA is 1,418 m³/d. The highest recorded flow was 60% of the peak flow rating.

The total raw sewage flow into the Sewage Treatment Plant for the year was calculated to be 94,913.7 m³.

The total effluent discharge from the Sewage Treatment Plant for the year was 94,913.7 m³.

The average concentrations for CBOD and BOD were all within the compliance and objective limits specified in the facility ECA. Average concentrations were exceeded for TP, TSS and E.coli. The average TP results were above the objective limit in July (0.824mg/L) and the average for February (1.628mg/L) exceeded the compliance and objective limits. The average TSS results were above the objective and compliance limits in February with a result of 116mg/L. In February, the TSS loading objective and compliance limits were exceeded with a result of 39.04kg/d. The monthly geometric mean density for E.coli exceeded the limit of 200 organisms/100mL in November (245.7 organisms/100mL).

The operator did not observe a visible film, sheen, foam or discoloration on the receiving waters nor did he notice floating or settleable solids.

To ensure objective and compliance limits are met, in-house tests are conducted by licensed Operators using Standard Methods. The data generated from these tests are used to determine the treatment efficiency while maintaining process control. All in-house monitoring equipment is calibrated based on the manufactures recommendations. Alum is also used to help lower TSS and TP values.

The monitoring data and analytical test show that the facility is capable of producing high quality effluent. Throughout the reporting period, the flow of sewage into the sewage treatment plant did not exceed the maximum flow of 1,418m³/day at any period of time. Nor did it exceed the annual



average flow of 734 m³/day. All average loadings for the above parameters were well within compliance limits. All pH values remained within the range of 6.0 to 9.5 at all times.

SECTION 5: Facility Upsets & Non Compliances

In February, heavy rains and melting snow caused a process upset early in the month causing a single high TSS result of 116mg/L on February 15th. Due to low flows and a high TSS results, loadings also failed the prescribed limit with a result of 39.04kg/d.

In February, heavy rains and melting snow caused a process upset early in the month causing total phosphorus results to come in above the limit giving a monthly average of 1.63mg/L.

The E.coli geometric mean density for the month of November exceeded the limit prescribed in the facility's ECA with an average of 245.7CFU/100mL.

SECTION 6: Maintenance

Plant maintenance is monitored using a Work Management System (WMS). All monitoring equipment maintenance and calibrations are performed on a monthly basis or as per manufacturer requirements. Flow meter verifications are completed annually; records are maintained on site and electronically on the OCWA Hub server. Maintenance and verification reports are attached as [Appendix A](#). Major maintenance can be found in the table below.

Work Order	Completion Date	Comment
3106826	30-Apr-23	Church St lift station pump repair
3340939	31-Dec-23	Church St lift station electrical panel relocation
3622365	31-Dec-23	Primary clarifier pump replacement

For the next reporting period, there are no proposed alterations, extensions or replacements in the process or operation of the works.

SECTION 7: Sludge

Volume of Sludge Hauled

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Volume (m ³)	0	2.8	0	0	0	0	0	0	0	280	0	0	282.8



Lab Results for Sludge Hauled

Parameter	2023 Average Concentration	2022 Average Concentration	2021 Average Concentration
Total Solids	34,800	6,010	33,500
Total Phosphorus	1,100	100	1,000
Total Ammonia	117	18.7	145
Nitrite	<3	0.5	<0.2
Nitrate	<3	<0.3	<0.3
Arsenic	0.4	<0.1	0.5
Cadmium	0.032	0.006	0.03
Cobalt	0.17	0.03	0.18
Chromium	0.68	0.11	0.76
Copper	15	2.1	14
Mercury	0.004	0.001	0.005
Potassium	29	13	32
Molybdenum	0.17	0.84	0.18
Nickel	0.52	0.10	0.52
Lead	0.5	<0.1	0.5
Selenium	0.1	<0.1	<0.1
Zinc	55	40	82

A total volume of 282.8m³ was removed from the Echo Bay WPCP in 2023 and was disposed of at the Hilton Beach Landfill. It is expected that the volume of sludge generated over the next reporting period will be equivalent to the volume generated in 2024.

SECTION 9: Additional Information

There is no additional information to provide for 2023.



Appendix A

Plant Maintenance

Workorder Summary Report

 Report Start Date: Jan 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3159155			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	1/1/23 12:00 AM	1/18/23 11:08 AM	1/18/23 11:08 AM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3159160			5058, Echo Bay WWTP	PM	Refurbish/Replace/Repair	1	YEARS	Pump Submersible Inspection (1y) 5058	CLOSE	1/1/23 12:00 AM	7/18/23 11:49 AM	7/18/23 11:49 AM	- Annual pump inspection complete, west primary clarifier sludge pump appears to be plugged, will pull inspect/repair. No issues found with other submersible pumps.
3159169			5058, Echo Bay WWTP	PM	Refurbish/Replace/Repair	1	YEARS	Tank Inspection (1y) 5058	CLOSE	1/1/23 12:00 AM	2/23/23 11:07 AM	2/23/23 11:07 AM	- Tank Inspection complete, no cracks, deterioration or expiries on any of the tanks or vessels in the STP
3159173			5058, Echo Bay WWTP	PM	Inspection	6	MONTHS	UV Reactors Clean/Inspect/Bulb Replacements (6m) 5058	CLOSE	4/28/23 08:00 AM	4/28/23 08:00 AM	4/28/23 02:30 PM	- Bulbs and effluent channel cleaned and washed down by Yueqian Ma on Tuesday March 21st - Cleaned effluent UV trough as per OIC. Cleaned composite sampler head. Wiped down each bulb with glass wiper to remove any frosting. Replaced 3 burnt out bulbs. UV intensity now showing higher than before values.
3165907			5058, Echo Bay WWTP	OPER	Inspection	1	YEARS	Daily O & M Activities (1y) Echo Bay WW 5058	COMP	1/1/23 12:00 AM	1/3/24 07:53 AM	1/3/24 07:53 AM	
3172498	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	1/1/23 12:00 AM	2/23/23 08:13 AM	2/23/23 08:13 AM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required
3177940			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	1/1/23 12:00 AM	1/6/23 12:03 PM	1/6/23 12:03 PM	

Workorder Summary Report

 Report Start Date: Jan 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finish	WorkLog Detail
3178747			5058, Echo Bay WWTP	OPER	Health and Safety	1	YEARS	Workplace Inspection (1y) 5058 - SEE ATTACHED DOC	CLOSE	1/1/23 12:00 AM	1/11/23 02:21 PM	1/11/23 02:21 PM	- Workplace inspections/ Supervisors Reports for 2023 completed and submitted to manager.
3188055			5058, Echo Bay WWTP	PM	Inspection	3	MONTHS	Gear Drive/Blower Motor Ultrasonic Inspection (3m) 5058	CLOSE	1/1/23 12:00 AM	2/23/23 10:56 AM	2/23/23 10:56 AM	
3201212		Echo Bay Wastewater Treatment Plant & Collection System		CORR	Refurbish/ Replace/Repair	0		5058 - Echo Bay STP - Milltronics Panel repair Lake St Station	CLOSE		1/3/23 10:19 AM	2/2/23 01:51 PM	- Replace broken latch on Milltronics panel door.
3213350			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	2/1/23 12:00 AM	2/16/23 01:08 PM	2/16/23 01:08 PM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3222390	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	2/1/23 12:00 AM	2/23/23 08:19 AM	2/23/23 08:19 AM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required
3226742			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	2/1/23 12:00 AM	2/16/23 01:06 PM	2/16/23 01:06 PM	- WISKI reviewed for month, all data entered and correct. No issues found
3244014		Echo Bay Wastewater Treatment Plant & Collection System		CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay WWT. Church St. main pump station high level alarm	CLOSE		2/3/23 04:45 AM	2/3/23 07:15 AM	
3246729		Echo Bay Wastewater Treatment Plant & Collection System		CALL	Refurbish/ Replace/Repair	0		5058 - Echo Bay STP low Equilization tank Alarm	CLOSE		2/20/23 10:30 AM	2/20/23 12:00 PM	
3254839			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	3/1/23 12:00 AM	3/10/23 01:46 PM	3/10/23 01:46 PM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3264818	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	3/1/23 12:00 AM	3/22/23 11:31 AM	3/22/23 11:31 AM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called as required

Workorder Summary Report

 Report Start Date: Jan 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3269674			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	3/1/23 12:00 AM	3/1/23 02:30 PM	3/1/23 02:30 PM	- WISKI reviewed for month, all data entered and correct. No issues found.
3289168			5058, Echo Bay WWTP	CAP	Inspection	0		Asset Inventory	CLOSE		3/10/23 02:22 PM	3/10/23 02:22 PM	Asset Inventory - Asset inventory of various equipment
3299848			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	4/1/23 12:00 AM	4/28/23 12:00 PM	4/28/23 01:00 PM	- - Completed.
3310407	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	4/1/23 12:00 AM	4/19/23 04:00 AM	4/19/23 05:00 AM	- Performed high turbidity alarm test regarding Filter 1 while calibrating turbidity analyzers which caused filter turbidity to spike above 0.3 NTUs. Received call from ATS alarm company shortly afterwards. - Accidentally entered wrong critical alarm dialer testing for water in the previous section. Please disregard. Tank pump SP-10 left on manual causing equalization tank to pump to reach below set point. Received call from ATS alarms. Changed tank pump back into auto and cleared alarms.
3315979			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	4/1/23 12:00 AM	4/5/23 01:51 PM	4/5/23 01:51 PM	- WISKI reviewed for month, all data entered and correct. No issues found.
3324838			5058, Echo Bay WWTP	PM	Inspection	3	MONTHS	Gear Drive/Blower Motor Ultrasonic Inspection (3m) 5058	CLOSE	4/1/23 12:00 AM	5/30/23 01:10 PM	5/30/23 01:10 PM	Gear Drive/Blower Motor Ultrasonic Inspection (3m) 5058 - Completed by Ryan Hamar

Workorder Summary Report

 Report Start Date: Jan 1, 2023 12:00 AM
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 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3338232		Echo Bay Wastewater Treatment Plant & Collection System	Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay STP - High Equalization tank	CLOSE		4/3/23 08:15 PM	4/3/23 10:00 PM	- High Equalization tank, high flows from Church st station from warm temps and melting snow. Will leave SP-11 on, in hand to regulate level. Heavy rain expected tomorrow into Wednesday as well. Will monitor levels throughout the day.
3338832		Echo Bay Wastewater Treatment Plant & Collection System	Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay WWTP.. Low equalization tank alarm	CLOSE		4/6/23 09:30 PM	4/6/23 11:45 PM	- Low equalization tank alarm. Low set point was 1.0 m. Level was 0.85 m. Set the low level alarm point to 0.5 m. Cleared alarm. Stop setting for equalization pump is 0.75 m. Alarm system was rearmed and ready.

Workorder Summary Report

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 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3339358			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5057-5058 Echo Bay WTP/WWTP.. Communication alarm	CLOSE		4/10/23 09:30 PM	4/10/23 11:00 PM	- Water plant or waste water plant general alarm. Checked SCADA. Nothing indicates a process problem. No active alarms. Water filter plant running normal. Filter turbidity normal. Waste water system running normal and all levels normal. Called Alarm monitoring system ATS asked if they had the right address for the alarm and they confirmed it was but it was not active now. Re-armed the alarm system as it cleared out.
3339363			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5057 Echo Bay WTP.. Ghost alarm or communication alarm	CLOSE		4/11/23 02:30 AM	4/11/23 04:15 AM	- Water plant or waste water plant general alarm No alarm condition found. Checked SCADA. Nothing indicates a process problem. Filter plant off line. Possible communication alarms from pump or lift stations. Instructed ATS to hold alarms until 7:30am.

Workorder Summary Report

 Report Start Date: Jan 1, 2023 12:00 AM
 Report End Date: Dec 31, 2023 11:59 PM
 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3341500			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay Echo Bay Low Equalization Tank	CLOSE		4/19/23 04:04 AM	4/19/23 07:30 AM	- Received call from ATS regarding to low equalization tank alarm at 4:18 am. Tank pump SP-10 was left on manual which caused equalization tank to pump too low. Changed tank pump SP-10 to auto. Cleared all alarms.
3340833			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay WWTP.. Equalization tank low alarm	CLOSE		4/19/23 04:15 AM	4/19/23 07:30 AM	- Training Yueqian Ma on callout. Call from ATS regarding to low equalization tank alarm at 4:18 am. Tank pump SP-10 was left on manual which caused equalization tank to pump too low. Changed tank pump SP-10 to auto. Cleared all alarms. Stayed at plant to work on getting water plant running.
3340939			Echo Bay Wastewater Treatment Plant & Collection System	CAP	Refurbish/ Replace/Repair	0		5058 Echo Bay Church St Electrical Panel relocation (OCWA assistance to Contractor)	COMP		4/21/23 10:13 AM	12/11/23 01:52 PM	
3348968			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	5/1/23 12:00 AM	5/25/23 01:51 PM	5/25/23 01:51 PM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3359293	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	5/1/23 12:00 AM	5/30/23 01:14 PM	5/30/23 01:14 PM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required

Workorder Summary Report

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 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3364070			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	5/1/23 12:00 AM	5/5/23 07:47 AM	5/5/23 07:47 AM	- WISKI reviewed for month, all data entered and correct. No issues found.
3384298		Echo Bay Wastewater Treatment Plant & Collection System		EMER	Refurbish/Replace/Repair	0		5058 - Echo Bay STP - Maple Sl. Sewer Blockage	CLOSE		5/8/23 04:58 PM	5/30/23 01:10 PM	
3394826			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	6/1/23 12:00 AM	6/6/23 08:10 AM	6/6/23 09:10 AM	-Observed lift stations as they pumped down for any unusual sounds. No unusual sounds, heat, or vibrations were observed at wastewater treatment plant.
3404793	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	6/1/23 12:00 AM	6/19/23 12:30 PM	6/19/23 01:30 PM	
3404809			5058, Echo Bay WWTP	PM	Compliance	2	YEARS	Operations Manual Review And Update (2y) 5058	CLOSE	6/1/23 12:00 AM	6/6/23 08:00 AM	6/6/23 09:00 AM	
3410917			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	6/1/23 12:00 AM	7/11/23 01:01 PM	7/11/23 01:01 PM	
3433271		Echo Bay Wastewater Treatment Plant & Collection System		CALL	Refurbish/Replace/Repair	0		5058 Echo Bay WWTP.. Lake street tamper door alarm	CLOSE		6/10/23 12:30 PM	6/10/23 02:15 PM	

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 Location: 5058*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3435438		Echo Bay Wastewater Treatment Plant & Collection System	Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay Church Street High Level Alarm	CLOSE		6/23/23 04:35 PM	6/23/23 06:49 PM	<p>- Received alarm for church street high level. Church street Wet well level was 2.25 m. Pump 3 was not locked out on SCADA. Reset and acknowledged alarm for pump 3 on MCC at church street. Turned pump 3 from auto to off as per OIC instructions. Turned generator on to pump down wet well. Fuel level 86%. Acknowledged alarms on SCADA. In communication with OIC Ryan Harmar: Temporarily changed SPS1 low set point from 0.6 to 0.3 m see where generator pump reduces wet well level. Temporarily changed SPS1 low reset set point from 0.6 to 0.3 m see where generator pump reduces wet well level. Generator pump determined to stop at 0.8 m. Changed SPS1 low setpoint from 0.3 to 0.7 m. Changed SPS1 low reset point from 0.3 to 0.7 m. Generator pump determined to start at 1.30 m. Changed SPS1 high set</p>

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				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
													point from 2.10 to 1.5 m. Changed SPS1 high reset point from 2.05 to 1.45m. Cleared alarms from dialer and rearmed. Observed another cycle at church street lift station to confirm that generator pump starts at 1.30 m. Checked generator fuel levels. Generator determined to use approximately 2% of fuel per hour. Generator is now at 84%
3435477		Echo Bay Wastewater Treatment Plant & Collection System		CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay Church Street Generator Refueling	CLOSE		6/24/23 09:00 PM	6/24/23 10:35 PM	- Arrived at church street lift station at 21:20 with OIC Ryan Harmar to check generator fuel levels. Generator was at 27%. Filled generator with OIC Ryan Harmar with four 20 L jerry cans to 60%. Received church street high level alarm while filling generator due to shutting off generator. Cleared all alarms on SCADA. Locked and armed

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 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3443641			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	7/1/23 12:00 AM	7/6/23 10:00 AM	7/6/23 11:00 AM	- Checked blowers for any unusual sounds. None detected. Checked RBCs for operation. All are spinning without any unusual sounds. Pump stations are working and pumping down. Equalization tank is pumping down and operational. Stuck rags cleaned out.
3443646			5058, Echo Bay WWTP	PM	Inspection	6	MONTHS	UV Reactors Clean/Inspect/Bulb Replacements (6m) 5058	CLOSE	7/1/23 12:00 AM	7/13/23 08:30 AM	7/13/23 11:30 AM	- Cleaned out UV trough. Cleaned fouling from quartz sleeves. Removed accumulated debris throughout trough. Tested each UV light for operation. Replaced 2 burnt out UV bulbs. Sensor showed a 0.2 increase for both UV banks.
3453586	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	7/1/23 12:00 AM	7/26/23 01:51 PM	7/26/23 01:51 PM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required
3458485			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	7/1/23 12:00 AM	7/11/23 01:02 PM	7/11/23 01:02 PM	
3466695			5058, Echo Bay WWTP	PM	Inspection	3	MONTHS	Gear Drive/Blower Motor Ultrasonic Inspection (3m) 5058	CLOSE	7/1/23 12:00 AM	7/18/23 11:47 AM	7/18/23 11:47 AM	- Blower inspection and service completed. Lubricated where applicable and ensured proper alignment and function.
3482791			Echo Bay Wastewater Treatment Plant & Collection System	CORR	Refurbish/ Replace/Repair	0		5058 Echo Bay STP - SP-9 pull/ repair	CLOSE		7/20/23 01:15 PM	8/2/23 12:15 PM	

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 Work Order Class:

				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3483228			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo bay High equalization tank alarm	CLOSE		7/23/23 10:30 PM	7/24/23 12:15 AM	- Equalization tank high level alarm. Check the gate valve that flows go through into primary and rags were built up. Cleaned rags out. One primary tank out of service and isolated. Level started dropping in equalization tank. Reset high level alarm set point to 3.4 m to clear alarms.
3490855			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	8/1/23 12:00 AM	8/11/23 12:15 PM	8/11/23 12:15 PM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3499806	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	8/1/23 12:00 AM	8/31/23 01:56 PM	8/31/23 01:56 PM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required
3504646			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	CLOSE	8/1/23 12:00 AM	8/11/23 12:19 PM	8/11/23 12:19 PM	- WISKI reviewed for month, all data entered and correct. No issues found.
3524736			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo bay Lake street level alarm	CLOSE		8/8/23 05:15 AM	8/8/23 08:00 AM	-ATS called about Lake street alarm. High level alarm. Level normal and pumping down. Possible communication error from radio signal. David to check status of pumps later this morning.

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				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3524862	0000296581	METER FLOW SECONDARY EFFLUENT	5058, Echo Bay WWTP	PM	Calibration	1	YEARS	Meter Flow Sec. Effluent Calibration (1y) 5058 Echo bay	COMP	10/12/23 12:00 AM	12/20/23 12:35 PM	12/20/23 12:35 PM	Meter Flow Sec. Effluent Calibration (1y) 5058 Echo bay - Parshall Flume verified Oct 11 2023 by Mark Witty. Record in PCT folder
3535309			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	9/1/23 12:00 AM	9/29/23 11:30 AM	9/29/23 12:30 PM	- Inspected RBCs for operation, inspected RBC bacterial mat formation. All RBCs have earthy smell with good mat formation. Cleaned out bar screens. Inspected final clarifier 1 and 2 pump operation. Final clarifier 2 pump needs to be pulled and inspected for clogging. Inspected UV trough for material build up. Material build up is minimal.
3544605	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	CLOSE	9/1/23 12:00 AM	9/21/23 07:30 AM	9/21/23 08:30 AM	- OIC Ryan Harmar tested out high wet well level alarm for main lift station. Received call from ATS alarms.
3549377			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	COMP	9/1/23 12:00 AM	10/24/23 03:14 PM	10/24/23 03:14 PM	- WISKI reviewed for month, all data entered and correct. No issues found.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3575845			5058, Echo Bay WWTP	CAP	Refurbish/ Replace/Repair	0		5058 Echo Bay WWT Lake St SPS pump purchase	COMP		11/6/23 11:55 AM	12/20/23 12:39 PM	5058 Echo Bay WWT Lake St SPS pump purchase - Purchase of new Grinder pump for the Lake St SPS from Crane pumps Canada 5058 Echo Bay WWT Lake St SPS pump purchase - Purchase of one Grinder pump for the Lake St SPS 5058 Echo Bay WWT Lake St SPS pump purchase - Pump was delivered. Need to modify Breakaway flange before install
3584022			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	CLOSE	10/1/23 12:00 AM	10/5/23 12:15 PM	10/5/23 01:15 PM	
3593167	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	COMP	10/1/23 12:00 AM	10/24/23 03:20 PM	10/24/23 03:20 PM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required
3598592			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	COMP	10/1/23 12:00 AM	10/24/23 02:09 PM	10/24/23 02:09 PM	
3606992			5058, Echo Bay WWTP	PM	Inspection	3	MONTHS	Gear Drive/Blower Motor Ultrasonic Inspection (3m) 5058	COMP	10/1/23 12:00 AM	11/14/23 02:26 PM	11/14/23 02:26 PM	- Ultrasonic inspection of gear drives on RBC 1/2 and all blowers completed. No issues found.
3622365	0000296592	PUMP SUBMERSIBLE SP-9 PRIMARY SLUDGE	5058, Echo Bay WWTP	CORR	Refurbish/ Replace/Repair	0		5058 Echo Bay Primary Clarifier Pump Replacement	COMP		12/11/23 02:03 PM	12/11/23 02:03 PM	5058 Echo Bay Primary Clarifier Pump Replacement - Quote to replace failed Primary Clarifier Pump SP-9. Electrical included 5058 Echo Bay Primary Clarifier Pump Replacement - Client Approved. Pump ordered from Crane Pumps Canada Oct 2023 - Coppertown Electrical was onsite for wiring primary clarifier pump, primary clarifier pump was tested and installed.

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				WorkOrder		PM Schedule		Workorder Details					
WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3624225			Echo Bay Wastewater Treatment Plant & Collection System	CAP	Refurbish/ Replace/Repair	0		5058 Echo Bay STP Sludge Hualing	COMP		10/23/23 01:05 PM	11/2/23 12:55 PM	- Hauling sludge from Echo Bay Sewage Treatment Plant to Hilton Beach landfill.
3631913			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	COMP	11/1/23 12:00 AM	11/6/23 12:26 PM	11/6/23 12:26 PM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3640576	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	COMP	11/1/23 12:00 AM	11/6/23 12:52 PM	11/6/23 12:52 PM	- Critical Alarm dialer test complete and logged. Tested multiple alarms at Plant. Alarm monitoring service called quickly as required
3644297			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	COMP	11/1/23 12:00 AM	11/6/23 12:26 PM	11/6/23 12:26 PM	- WISKI reviewed for month, all data entered and correct. No issues found.
3662219			5058, Echo Bay WWTP	PM	Inspection	1	YEARS	Facility Asset Review - 5058	COMP	11/4/23 12:00 AM	12/20/23 12:23 PM	12/20/23 12:23 PM	Facility Asset Review - 5058 - Completed by Victor Robinson
3673107			5058, Echo Bay WWTP	OPER	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5058	COMP	12/1/23 12:00 AM	12/14/23 01:23 PM	12/14/23 01:23 PM	- TPM inspection complete at STP. All equipment functioning as required, preventative maintenance performed regularly
3682529	0000296601	PANEL CONTROL ALLEN BRADLEY PANELVIEW 600	5058, Echo Bay WWTP	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5058	COMP	12/1/23 12:00 AM	12/12/23 11:09 AM	12/12/23 11:09 AM	
3686207			5058, Echo Bay WWTP	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5058	COMP	12/1/23 12:00 AM	12/4/23 08:18 AM	12/4/23 08:18 AM	-WISKI reviewed for month, all data entered and correct. No issues found.

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3704082			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo Bay WWT. Church St. main pump station SP3 fault alarm	COMP		12/8/23 01:30 AM	12/8/23 03:30 AM	- Main pump station SP3 lock out alarm. Checked church street main pump station SP3 pump and overload was activated. Tried clearing it but would not reset. Level was normal. Set SP2 as lag pump and SP3 as lag 2. Disabled SP3 alarm.
3705187			Echo Bay Wastewater Treatment Plant & Collection System	EMER	Refurbish/ Replace/Repair	0		5058 Echo Bay STP SP-3 at Church Street Lift Station	COMP		12/11/23 02:11 PM	12/12/23 10:46 AM	- Pulled pump with Echo Bay public works backhoe and operator. Dislodged rags from impeller and returned to service. - Pulled pump with Echo Bay public works backhoe and operator. Dislodged rags from impeller and returned to service

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WO #	Asset ID	Asset Description	Location Description	Type	Class	FEQ	Units	Work Order Description	Status	Schedule Start	Actual Start	Actual Finsh	WorkLog Detail
3707395			Echo Bay Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5058 Echo bay WWTP Primary #2 sludge SP9 pump issues.	COMP		12/30/23 01:30 AM	12/30/23 04:00 AM	- Primary primary clarifier sludge pump SP9 faulted. Locked out. Reset lockout but pump failed again. Disabled SP9 pump from alarm Dialer. SP8 pump had main breaker tripped. Reset main breaker and pump ran normally. Put SP9 off auto and reset lock out to clear alarms. SP9 Pump will need to be pulled and checked Alarm system is rearmed and ready.