

Bruce Mines Lagoons

Annual Operating Report

ECA 3-0019-90-006
Issued November 22, 1990

January 1, 2018 – December 31, 2018

Prepared by the Ontario Clean Water Agency
For Corporation of The Town of Bruce Mines



Ontario Clean Water Agency
Agence Ontarienne Des Eaux



SECTION 1: INTRODUCTION

The Ontario Clean Water Agency (OCWA) acts as the operating authority for the Bruce Mines wastewater treatment. This document is prepared by OCWA in accordance with Environmental Compliance Approval (ECA) #3-0019-90-006. The report is required to include the following information:

- (i) An executive summary;
- (ii) A tabulation of all sample results including how and where the sample was taken;
- (iii) A tabulation of discharge volumes, including average daily flows for periods reported;
- (iv) A comprehensive interpretation of sewage works effluent loadings and concentrations data for the reporting period;
- (v) An overview of the sludge disposal program including tabulation of quantity of sludge and the disposal areas used during the period being reported upon, together with an outline of the proposed sludge handling methods and disposal areas to be utilized over the next reporting period;
- (vi) A description of any emergency or upset which occurred during the period being reported upon.

SECTION 2: Description of Facility

Capacity of Facility: 567 m³ / day (average flow)
Service Area: Town of Bruce Mines
Service Population: 670
Effluent Receiver: Sucker Creek
Major Process: Facultative Lagoons – 2 cells
Facility Classification: Wastewater Class 1
Collection Classification:

SECTION 3: Executive Summary

The spring seasonal discharge was completed between **May 1** and **May 15** and consisted of a total volume of **104,740 m³**. The east cell was discharged from **May 3** to **May 15** and west cell was discharged from **May 1** to **May 14**. Cells do not require treatment prior to being discharged.

Sampling parameters were **not exceeded** during the spring discharge.
Loading limits were **not exceeded** during the spring discharge.

The autumn seasonal discharge was completed between **Nov 1** and **Nov 15** and consisted of a total volume of **66,175 m³**. The east cell was discharged from **Nov 7** to **Nov 15** and west cell was discharged from **Nov 1** to **Nov 7**. Cells do not require treatment prior to being discharged.

Sampling parameters were **not exceeded** during the autumn discharge.
Loading limits were **not exceeded** during the autumn discharge.



The total effluent discharge from the lagoons for the year was 170,915 m³.

The average raw daily sewage flows (507.3 m³/d) were approximately 89.5 % of the rated capacity; therefore, the process flows were maintained below the rated capacity of the facility's ECA. The total raw sewage flow into the lagoons for the year was calculated to be 210,755.9 m³.

There were no spills, upsets, environmental or operating problems encountered during 2016.

Major maintenance performed at the facility includes lift station guide bar replacements and a new lift station sewage pump.

Sludge was not removed from the lagoon in 2018 and it is anticipated that none be removed in 2019.

SECTION 4: Process Data

The facility operator collects grab samples of raw sewage and sends them to an accredited laboratory for analysis. Raw flows are calculated using pump run times and flow rates.

Raw (Influent) Sampling					
Parameter	Frequency	Method	Results		
			Min	Avg	Max
BOD ₅ (mg/L)	Monthly	Grab – External Analysis (Lab)	50	112.5	256
TSS (mg/L)	Monthly	Grab – External Analysis (Lab)	45	95.3	199
TP (mg/L)	Monthly	Grab – External Analysis (Lab)	0.89	1.54	3.28
Flow (m ³ /d)	Daily	Engineered Calculation	272.29	507.3	1,341.96

The facility operator collects effluent samples and sends them to an accredited laboratory for analysis for every 0.5m of drawdown. Effluent volumes are estimated by measuring drawdown levels and total volume of cell.

Treated (Effluent) Sampling		
Parameter	Frequency	Method
BOD ₅	Every 0.5 m during discharge	Grab – External Analysis (Lab)
TSS	Every 0.5 m during discharge	Grab – External Analysis (Lab)
TP	Every 0.5 m during discharge	Grab – External Analysis (Lab)
H ₂ S	Every 0.5 m during discharge	Grab – External Analysis (Lab)
TAN	Every 0.5 m during discharge	Grab – External Analysis (Lab)
Flow	Daily during discharge	Estimate based on level measurements

Compliance limits are based on seasonal discharges for effluent concentrations and effluent loadings. Values are calculated by combining east and west cell results for each discharge period. In addition, the discharge shall not contain oil or other substance in amounts sufficient to create a visible film and shall be essentially free of floating and settleable solids.

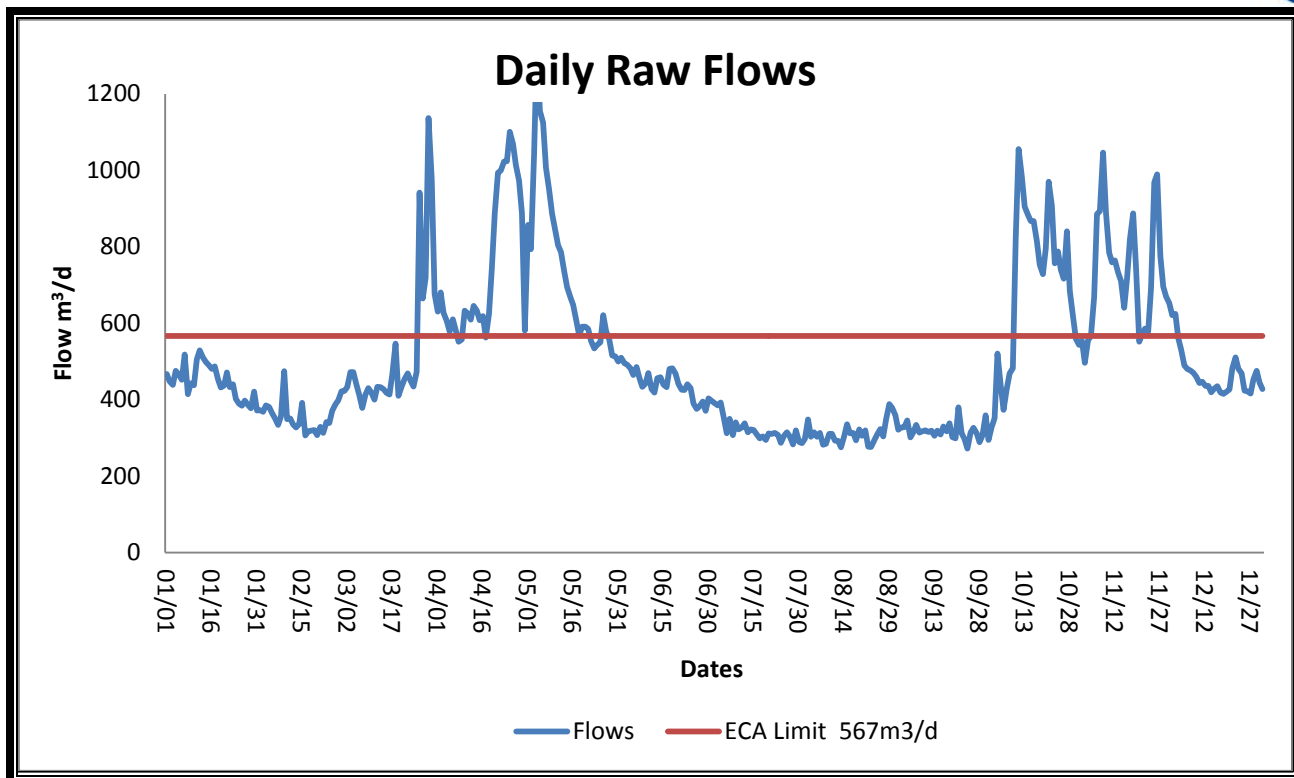


Treated (Effluent Discharge) Sampling - Concentration							
Parameter	Spring Discharge			Autumn Discharge			Concentration Compliance
	Min	Avg	Max	Min	Avg	Max	
BOD ₅ (mg/L)	5.0	8.6	13.0	6.0	11.9	16.0	25 mg/L
TSS (mg/L)	10.0	14.6	18.0	6.0	10.5	16.0	25 mg/L
TP (mg/L)	0.21	0.55	1.08	0.14	0.46	0.78	N/A
H ₂ S (mg/L)	<0.02	0.05	0.06	<0.02	0.03	0.03	N/A
TAN (mg/L)	<0.1	2.17	3.40	<0.1	0.53	1.10	N/A

Treated (Effluent Discharge) Sampling - Loading			
Parameter	Spring Discharge	Autumn Discharge	Loading Compliance
BOD ₅ (kg/d)	60.23	52.39	259 kg/day
TSS (kg/d)	102.12	46.32	259 kg/day

The raw and effluent parameters specified in the above table 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	13,868.34	447.37	529.36	
February	9,959.34	355.69	475.36	
March	16,080.6	518.73	1,137.55	
April	22,291.66	743.06	1,101.12	
May	22,765.23	734.36	1,341.96	104,740
June	13,286.98	442.9	510.58	
July	10,026.35	323.43	396.88	
August	9,702.31	312.98	388.76	
September	9,556.37	318.55	380.05	
October	21,301.54	687.15	1,056.35	
November	21,864.62	728.82	1,046.99	66,175
December	14,459.45	466.43	625.21	
Total	185,162.8			170,915
Average		507.3		
Maximum			1,341.96	



Year	Total Raw Flow (m ³ /d)	Avg Raw Day Flow (m ³ /d)	Max Raw Day Flow (m ³ /d)	Avg Day % of Rated Capacity (567 m ³ /d)
2018	170,195	507.3	1,341.96	89.5%
2017	210,755.9	557.41	1,602.1	101.8 %
2016	179,070	489	1,185	86 %
2015	178,807	484	1,980	85 %

Although max day flows exceeded the average day rated capacity; the ECA stipulates that the average day flow can't be exceeded for more than 180 consecutive days. Upon reviewing the data, it was determined that the flows did not exceed for more than 180 consecutive days.

The average raw daily sewage flows (507.3 m³/d) were approximately 89.5 % of the rated capacity. The highest recorded peak flow occurred in May with a peak rate of 1,341.96 m³/d and was approximately 236.7 % of the rated capacity.

The total raw sewage flow into the lagoons for the year was calculated to be 185,162.8 m³.

Peak flows observed throughout winter months are attributed to residents who run their water taps to ensure their pipes do not freeze during cold weather. In March April and May, it is believed the spring freshet is responsible for the higher than normal flows.

Seasonal discharges took place during spring and autumn.



The spring seasonal discharge was completed between **May 1** and **May 15** over a 15 day period and consisted of a total volume of **101,481 m³**. The east cell was discharged from **May 3** to **May 15** and west cell was discharged from **May 1** to **May 14**.

The autumn seasonal discharge was completed between **Nov 1** and **Nov 15** over a 15 day period and consisted of a total volume of **66,175 m³**. The east cell was discharged from **Nov 7** to **Nov 15** and west cell was discharged from **Nov 1** to **Nov 7**.

All seasonal concentration compliance limits as well as seasonal loading limits were met during the spring discharge. The operator did not observe any free of floating and settleable solids nor did he notice any effluent which contained oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.

A total volume of **170,915 m³** was discharged in **2018**.

In an effort to meet the effluent objectives, the lagoon can be treated with Ferric Sulphate prior to discharge. However, this is not required for this facility.

Based on the above monitoring program and sampling records, the sewage works provided adequate treatment within the required average daily flows while providing a quality effluent.

Refer to **Appendix A** for the seasonal lagoon discharge reports.

SECTION 5: Facility Upsets & Non Compliances

There were no spills, upsets, environmental or operating problems encountered during **2018**.

SECTION 6: Maintenance

Plant maintenance is monitored using a Work Management System (WMS). Maintenance reports are attached as Appendix B. Major maintenance is listed in the table below.

Work Order	Completion Date	Comment
820980	03-Jul-18	<i>Pump Replacement</i> Replaced a pump at the Prout St lift station
981092	31-Oct-18	<i>Pump Rebuild</i> Brought sewage pump to Xylum for a rebuild. After rebuild, pump was picked up and stored at the facility

SECTION 7: Sludge

There was no sludge removed from the lagoon for this reporting period. It is projected that there will be no sludge removed from the lagoon for the next reporting period



Appendix A

Seasonal Lagoon Discharge Reports

Release Report for the Bruce Mines Lagoons

ORG# 5934

Spring

2018

DWS # 110001756

East Cell	Date of Sample	BOD ₅	TP	TSS	pH	TAN	NO ₂	NO ₃	Sulphide	H ₂ S	CBOD (WSER)
		mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Sample 1	03-May-18	7.0	0.35	16.0	8.40	0.90	0.100	0.080	<0.02	<0.02	6.00
Sample 2	07-May-18	13.0	1.08	10.0	7.51	2.90	<0.03	0.150	0.20	0.06	
Sample 3	10-May-18	5.0	0.43	17.0	8.54	0.90			<0.02	<0.02	
Sample 4	15-May-18	10.0	0.57	18.0	7.96	0.60			<0.02	<0.02	8.00
Sample 5											
Sample 6											

West Cell	Date of Sample	BOD ₅	TP	TSS	pH	TAN	NO ₂	NO ₃	Sulphide	H ₂ S	CBOD (WSER)
		mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Sample 1	01-May-18	5.0	0.64	10.0	7.08	3.30	<0.03	<0.06	0.03	<0.02	10.0
Sample 2	03-May-18	9.0	0.57	15.0	7.50	3.40	<0.03	0.06	0.09	0.03	
Sample 3	07-May-18	9.0	0.55	14.0	7.25	3.20	<0.03	0.160	<0.02	<0.02	
Sample 4	14-May-18	11.0	0.21	17.0	9.1	<0.1			<0.02	<0.02	
Sample 5											
Sample 6											

	BOD ₅	TP	TSS	pH	TAN	NO ₂	NO ₃	Sulphide	H ₂ S	CBOD (WSER)
East cell average concentration	8.8	0.61	15.3	8.10	1.33	0.100	0.115	0.20	0.06	7.0
West cell average concentration	8.5	0.49	14.0	7.73	3.30	#DIV/0!	0.160	0.06	0.03	10.0
Seasonal average concentration	8.6	0.55	14.6	7.92	2.17	0.100	0.130	0.11	0.05	8.0
Compliance limits as per ECA	25 mg/L		25 mg/L							25 mg/L
Seasonal average loadings	60.23		102.12							
Loading limits as per ECA	259 kg/d		259 kg/d							

Notes:

Compliance is based on seasonal average concentrations

Two cell seasonal retention lagoon

East cell: $33,400\text{m}^2 \times 1.5 \text{ m depth} = 50,100 \text{ m}^3$

west cell: $33,800\text{m}^2 \times 1.5 \text{ m depth} = 51,545 \text{ m}^3$

WSER requirements: CBOD₅ is tested at least 1 time per discharge (or bi-weekly is discharge > 30 days)

WSER requirements: CBOD₅ = Annual average of 25 mg/L

East Cell

Date Release Started: 03-May-18
 Date Release Stopped: 15-May-18
 # Discharge Days: 13

Amount of Chemical Used (IMPG): 0
 Volume of Discharge (m³): 55,145

West Cell

Date Release Started: 01-May-18
 Date Release Stopped: 14-May-18
 # Discharge Days: 14

Amount of Chemical Used (IMPG): 0
 Volume of Discharge (m³): 49,595

Total # of Discharge Days: 15

Total Discharge Volume (m³): 104,740

Release Report for the Bruce Mines Lagoons

ORG# 5934

Fall

2018

DWS # 110001756

East Cell	Date of Sample	BOD ₅	TP	TSS	pH	TAN	NO ₂	NO ₃	Sulphide	H ₂ S	CBOD (WSER)
		mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Sample 1	07-Nov-18	10.0	0.78	16.0	8.14	0.10			0.02	<0.02	
Sample 2	09-Nov-18	11.0	0.72	7.0	8.25	<0.1			<0.02	<0.02	6.00
Sample 3	13-Nov-18	12.0	0.64	10.0	8.00	<0.1			<0.02	<0.02	
Sample 4	15-Nov-18	6.0	0.74	6.0	7.46	0.10			0.07	0.03	
Sample 5											
Sample 6											

West Cell	Date of Sample	BOD ₅	TP	TSS	pH	TAN	NO ₂	NO ₃	Sulphide	H ₂ S	CBOD (WSER)
		mg/L	mg/L	mg/L		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Sample 1	01-Nov-18	16.0	0.16	11.0	7.18	0.50			0.02	<0.02	
Sample 2	02-Nov-18	15.0	0.20	11.0	7.61	1.00			<0.02	<0.02	16.0
Sample 3	05-Nov-18	15.0	0.14	15.0	7.41	0.40			0.02	<0.02	
Sample 4	07-Nov-18	10.0	0.3	8.0	7.87	1.10			<0.02	<0.02	
Sample 5											
Sample 6											

	BOD ₅	TP	TSS	pH	TAN	NO ₂	NO ₃	Sulphide	H ₂ S	CBOD (WSER)
East cell average concentration	9.8	0.72	9.8	7.96	0.10	#DIV/0!	#DIV/0!	0.05	0.03	6.0
West cell average concentration	14.0	0.20	11.3	7.52	0.75	#DIV/0!	#DIV/0!	0.02	#DIV/0!	16.0
Seasonal average concentration	11.9	0.46	10.5	7.74	0.53	#DIV/0!	#DIV/0!	0.03	0.03	11.0
Compliance limits as per ECA	25 mg/L		25 mg/L							25 mg/L
Seasonal average loadings	52.39		46.32							
Loading limits as per ECA	259 kg/d		259 kg/d							

Notes:

Compliance is based on seasonal average concentrations

Two cell seasonal retention lagoon

East cell: $33,400\text{m}^2 \times 1.5 \text{ m depth} = 50,100 \text{ m}^3$

west cell: $33,800\text{m}^2 \times 1.5 \text{ m depth} = 51,545 \text{ m}^3$

WSER requirements: CBOD₅ is tested at least 1 time per discharge (or bi-weekly is discharge > 30 days)

WSER requirements: CBOD₅ = Annual average of 25 mg/L

East Cell

Date Release Started:	07-Nov-18
Date Release Stopped:	15-Nov-18
# Discharge Days:	9

Amount of Chemical Used (IMPG):	0
Volume of Discharge (m ³):	39,876

West Cell

Date Release Started:	01-Nov-18
Date Release Stopped:	07-Nov-18
# Discharge Days:	7

Amount of Chemical Used (IMPG):	0
Volume of Discharge (m ³):	26,299

Total # of Discharge Days	15
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Total Discharge Volume (m ³):	66,175
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Appendix B

Plant Maintenance

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
770089			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	5/1/18 12:00 AM	5/1/18 02:43 PM	5/1/18 02:43 PM	- Health And Safety Inspection completed by walking around and looking for anything that maybe a hazard. No hazard could be identified that could affect our own well being or the safety of others. First aid kits on site are in plan site, Fire extinguisher are ready for use, eye wash station is ready for use.
810999			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	6/1/18 12:00 AM	6/6/18 11:39 AM	6/6/18 11:39 AM	-Checked work area and could not see any hazardous condition that would affect a workers safety. No action required but we should be diligent in being watchful for hazards. Lights working normal so no tripping hazards seen and hearing protection signs were noted along with some hearing protection was available for use. Signage in located throughout plant to prevent any injury. Checked that all fire extinguishers were ready for use, Checked eye wash station and it was ready to be used
652830			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	2/1/18 12:00 AM	2/12/18 08:43 AM	2/12/18 08:43 AM	- Checked work area and could not see any hazardous condition that would affect a workers safety. No action required but we should be diligent in being watchful for hazards. Lights working normal so no tripping hazards seen and hearing protection signs were noted along with some hearing protection was available for use

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
690035			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	3/1/18 12:00 AM	3/9/18 02:01 PM	3/9/18 02:01 PM	- Checked work area and could not see any hazardous condition that would affect a workers safety. No action required but we should be diligent in being watchful for hazards. Lights working normal so no tripping hazards seen and hearing protection signs were noted along with some hearing protection was available for use.
730296			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	4/1/18 12:00 AM	4/9/18 12:15 PM	4/9/18 12:15 PM	- Health And Safety Inspection completed by walking around and looking for anything that maybe a hazard. No hazard could be identified that could affect our own well being or the safety of others. Emergency lighting working normal.
1043443			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	COMP	12/1/18 12:00 AM	12/12/18 09:33 AM	12/12/18 09:33 AM	-Checked lift stations and lagoons and found no health and safety issues. filed paper work for manager to ensure compliant.
1043454			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	YEARS	Fire Protection System Inspection (1y) 5934	COMP	12/1/18 12:00 AM	1/8/19 02:19 PM	1/8/19 02:19 PM	-Fire extinguisher to be inspected by service rep technician in January 2019.

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
1006683			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	11/1/18 12:00 AM	11/6/18 09:55 AM	11/6/18 09:55 AM	- Checked work area and could not see any hazardous condition that would affect a workers safety. No action required but we should be diligent in being watchful for hazards. Lights working normal so no tripping hazards seen and hearing protection signs were noted along with some hearing protection was available for use. . Checked that all fire extinguishers were ready for use, Checked eye wash station and it was ready to be used
850148			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	7/1/18 12:00 AM	7/11/18 02:19 PM	7/11/18 02:19 PM	- Health And Safety Inspection completed by walking around and looking for anything that maybe a hazard. No hazard could be identified that could affect our own well being or the safety of others
612818			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	1/1/18 12:00 AM	1/12/18 02:53 PM	1/12/18 02:53 PM	- Health And Safety Inspection completed by walking around and looking for anything that maybe a hazard. No hazard could be identified that could affect our own well being or the safety of others. First aid kits on site are in plan site, Fire extinguisher are ready for use, eye wash station is ready for use. confined space signage in place to warn workers

Workorder Summary Report

Report Start Date: Jan 1, 2018 12:00 AM
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 Location: 5934*
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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
612829			5934, Bruce Mines WWTP & CS	OPER	Health and Safety	1	YEARS	WHMIS/MSDS/NSF Review And Update (1y) 5934	CLOSE	1/1/18 12:00 AM	1/17/18 08:49 AM	1/17/18 08:49 AM	-Records up to date. No Chemicals used for the lagoon system. Diesel fuel is contained in a double wall tank.
970087			5934, Bruce Mines WWTP & CS	OPER	Health and Safety	1	YEARS	JHSC Inspection (1y) 5948	COMP	10/1/18 12:00 AM	1/14/19 01:45 PM	1/14/19 01:45 PM	JHSC Inspection (1y) 5948 -JHSC disbanded, annual inspection performed at a later date.
888414			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	8/1/18 12:00 AM	8/2/18 11:24 AM	8/2/18 11:24 AM	- Health And Safety Inspection completed by walking around and looking for anything that maybe a hazard. No hazard could be identified that could affect our own well being or the safety of others. First aid kits on site are in plan site, Fire extinguisher are ready for use, eye wash station is ready for use.
927063			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	9/1/18 12:00 AM	9/12/18 01:39 PM	9/12/18 01:39 PM	- Health And Safety Inspection completed by walking around and looking for anything that maybe a hazard. No hazard could be identified that could affect our own well being or the safety of others. First aid kits on site are in plan site, Fire extinguisher are ready for use, eye wash station is ready for use

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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
970076			5934, Bruce Mines WWTP & CS	PM	Health and Safety	1	MONTHS	Health And Safety Inspection (1m) 5934	CLOSE	10/1/18 12:00 AM	10/3/18 10:36 AM	10/3/18 10:36 AM	- Checked work area and could not see any hazardous condition that would affect a workers safety. No action required but we should be diligent in being watchful for hazards. Lights working normal so no tripping hazards seen and hearing protection signs were noted along with some hearing protection was available for use. Signage showing slippery when wet are located throughout plant to prevent any injury. Checked that all fire extinguishers were ready for use, Checked eye wash station and it was ready to be used.
968078			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	10/1/18 12:00 AM	10/2/18 09:59 AM	10/2/18 09:59 AM	-Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk
924882			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	9/1/18 12:00 AM	9/11/18 08:27 AM	9/11/18 08:27 AM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruptions.

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
886341			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	8/1/18 12:00 AM	8/1/18 09:21 AM	8/1/18 09:21 AM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruptions.
689643			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	3/1/18 12:00 AM	3/9/18 02:00 PM	3/9/18 02:00 PM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruptions. When it does the service help desk is notified and it is repaired.
1005196			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	11/1/18 12:00 AM	11/5/18 10:07 AM	11/5/18 10:07 AM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruption
1041671			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	COMP	12/1/18 12:00 AM	12/10/18 12:09 PM	12/10/18 12:09 PM	-Worked with help desk and got all data corrected and looks good for PDM.

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
848766			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	7/1/18 12:00 AM	7/5/18 10:08 AM	7/5/18 10:08 AM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk..
808611			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	6/1/18 12:00 AM	6/4/18 01:07 PM	6/4/18 01:07 PM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruptions.
768897			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	5/1/18 12:00 AM	5/1/18 02:44 PM	5/1/18 02:44 PM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected
729887			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	4/1/18 12:00 AM	4/9/18 12:16 PM	4/9/18 12:16 PM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruptions

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
652448			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	2/1/18 12:00 AM	2/12/18 08:42 AM	2/12/18 08:42 AM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. Wonderware is checked for data loss from server disruptions.
612339			5934, Bruce Mines WWTP & CS	OPER	Compliance	1	MONTHS	WISKI Review (1m) 5934	CLOSE	1/1/18 12:00 AM	1/25/18 03:34 PM	1/25/18 03:34 PM	- Reviewed WHISKI data. Looked for any discrepancies for the previous month. Data that was seen to be incorrect was corrected by operator and or reported to PCT and helpdesk.. looked clean
970105			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	10/1/18 12:00 AM	10/5/18 09:31 AM	10/5/18 09:31 AM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.

Workorder Summary Report

Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
850175			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	7/1/18 12:00 AM	7/11/18 02:22 PM	7/11/18 02:22 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.

Workorder Summary Report

Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
612813			5934, Bruce Mines WWTP & CS	OPER	Inspection	1	YEARS	Daily O&M Activities (1y) 5934	COMP	1/1/18 12:00 AM	12/19/18 11:16 AM	12/19/18 11:16 AM	<p>-</p> <p>Checked Main lift station. Noted pump hours and checked generator. Heat was on in building and diesel fuel level normal. Checked Taylor street and Prout street lift station. Pump hours were checked and general area was inspected for unusual abnormalities, Lagoon checked and levels normal and berms holding well. Gate closed and no trespassing sign in place. When discharging the lagoon is inspected daily and samples are taken as per lagoon C of C.</p> <p>-</p> <p>MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Wonderware utilized for checking trends for lift stations. Sampling raw waste water monthly according to the C of A. Lagoon Effluent monitored and sampled during discharge. Alarm floats checked and generator tested monthly</p>

Workorder Summary Report

Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
1006710			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	11/1/18 12:00 AM	11/7/18 12:49 PM	11/7/18 12:49 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.
1043473			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	COMP	12/1/18 12:00 AM	12/19/18 10:35 AM	12/19/18 10:35 AM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
730323			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	4/1/18 12:00 AM	4/17/18 02:56 PM	4/17/18 02:56 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.
612852			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	1/1/18 12:00 AM	1/17/18 08:52 AM	1/17/18 08:52 AM	- Exhaust fans are working and louvers were repaired to cool building and generator. All motor and pumps are working normal at present. Greased bearings and checked auto greaser. Replaced battery if required and fill grease tank. Checked Generator oil level and battery level and filled if required. Listened for unusual noises from pumps and motors. Checked new data logger and values are being recorded and are ok. Lagoon inspected and records Kept in log book up to date.

Workorder Summary Report

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 Location: 5934*
 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
690072			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	3/1/18 12:00 AM	3/12/18 02:47 PM	3/12/18 02:47 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.
652857			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	2/1/18 12:00 AM	2/20/18 02:20 PM	2/20/18 02:20 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal.

Workorder Summary Report

Report Start Date: Jan 1, 2018 12:00 AM
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 Location: 5934*
 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
811026			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	6/1/18 12:00 AM	6/7/18 09:17 AM	6/7/18 09:17 AM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.
770116			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	5/1/18 12:00 AM	5/2/18 02:02 PM	5/2/18 02:02 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Wonderware utilized for checking trends for lift stations. Sampling raw waste water monthly according to the C of A. Lagoon Effluent monitored and sampled during discharge.

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
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 Location: 5934*
 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
888410	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	8/1/18 12:00 AM	8/24/18 10:38 AM	8/24/18 10:38 AM	- Checked Float alarm at Main lift station and at lift station.? Both worked normal.? AtS alarm working at door and telephone line active
927052	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	9/1/18 12:00 AM	9/27/18 11:43 AM	9/27/18 11:43 AM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well.
970072	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	10/1/18 12:00 AM	10/16/18 08:26 AM	10/16/18 08:26 AM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well. Found an issue with bell line on Prout street, Bell came and repaired.
850144	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	7/1/18 12:00 AM	7/13/18 09:29 AM	7/13/18 09:29 AM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well

Workorder Summary Report

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 Location: 5934*
 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
612809	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	1/1/18 12:00 AM	1/18/18 11:16 AM	1/18/18 11:16 AM	-Critical alarm dialer test complete. Tested High Level alarm at HWY 17 Lift station, monitoring company called quickly as required, panel re- set.
810995	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	6/1/18 12:00 AM	6/25/18 03:46 PM	6/25/18 03:46 PM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well.
1043439	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	COMP	12/1/18 12:00 AM	12/19/18 10:38 AM	12/19/18 10:38 AM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well.
1006679	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	11/1/18 12:00 AM	11/28/18 03:48 PM	11/28/18 03:48 PM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms.
652826	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	2/1/18 12:00 AM	2/22/18 09:28 PM	2/22/18 09:28 PM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well

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 Location: 5934*
 Work Order Type: CALL,CAP,CORR,EMER,OPER,PM
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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
690031	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	3/1/18 12:00 AM	3/22/18 09:02 AM	3/22/18 09:02 AM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well.
730292	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	4/1/18 12:00 AM	4/18/18 02:18 PM	4/18/18 02:18 PM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well.
770085	0000142206	PANEL ALARM/ DIALER MAIN PS	5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	PM	Inspection	1	MONTHS	Critical Alarm/Dialer Testing (1m) 5934	CLOSE	5/1/18 12:00 AM	5/31/18 08:51 AM	5/31/18 08:51 AM	- Tested Float alarms at various lift stations and they checked out ok. ATS called out for high level alarms. Tributary lift stations checked and working normal as well.

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 Location: 5934*
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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
927432			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	9/1/18 12:00 AM	9/12/18 01:41 PM	9/12/18 01:41 PM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.
888441			5934, Bruce Mines WWTP & CS	PM	Inspection	1	MONTHS	TPM Inspection/Maintenance (1m) 5934	CLOSE	8/1/18 12:00 AM	8/15/18 08:28 AM	8/15/18 08:28 AM	- MCC panel looks normal and hour meters working correctly and the Milltronics functioning normal levels are normal. Heat on in building. All submersible Pumps are working normal and building hardware all operational. Lagoon was checked and birms were holding good and all looked normal. Check pump trending for Taylor street lift station and other stations as well on wonder ware.
1053221	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	YEARS	Diesel Generator Inspection/ Functional Test (1y) 5934	COMP	12/10/18 12:00 AM	1/8/19 02:21 PM	1/8/19 02:21 PM	-Vals equipment into complete Oil and fuel filter changes and oil changed. unit battery inspected..

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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
888425	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	8/1/18 12:00 AM	8/29/18 10:19 AM	8/29/18 10:19 AM	- Tested Generator under load conditions and it ran normal, Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Louvers worked normally as they were repaired and or replaced.
927215	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	9/1/18 12:00 AM	9/27/18 11:42 AM	9/27/18 11:42 AM	- Tested Generator under load conditions and it ran normal, oil level good.
970089	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	10/1/18 12:00 AM	10/4/18 11:45 AM	10/4/18 11:45 AM	- checked after it ran under normal power interruption. Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Louvers worked normally as they were repaired and or replaced.
850159	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	7/1/18 12:00 AM	7/13/18 09:28 AM	7/13/18 09:28 AM	- Tested Generator under load conditions and it ran normal,

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612836	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	1/1/18 12:00 AM	1/18/18 12:37 PM	1/18/18 12:37 PM	-Diesel Generator test and inspection complete. Ran generator to ensure switch over to and from emergency power went off with no issues. All systems worked well, new block heater functioned well and held up. All fluids, gauges, belts and hoses in good repair.
811010	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	6/1/18 12:00 AM	6/28/18 09:34 AM	6/28/18 09:34 AM	- Tested Generator under load conditions and it ran normal, Or checked after it ran under normal power interruption. Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required
1043457	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	COMP	12/1/18 12:00 AM	12/19/18 10:36 AM	12/19/18 10:36 AM	- Tested Generator under load conditions and it ran normal, Or checked after it ran under normal power interruption. Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Louvers worked normally as they were repaired and or replaced.

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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
1006694	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	11/1/18 12:00 AM	11/27/18 09:35 AM	11/27/18 09:35 AM	- Tested Generator under load conditions and it ran normal, Or checked after it ran under normal power interruption. Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Louvers worked normally as they were repaired and or replaced. Vals Equipment into inspect and change oil and filters.
652841	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	2/1/18 12:00 AM	2/21/18 03:14 PM	2/21/18 03:14 PM	- Tested Generator under load conditions and it ran normal, Or checked after it ran under normal power interruption. Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Batteries will be 4 years old in Sept this yea and should be considered for replacement. Added two quarts of oil to crank case.

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
690056	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	3/1/18 12:00 AM	3/21/18 03:16 PM	3/21/18 03:16 PM	- Tested Generator under load conditions and it ran normal, Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Louvers worked normally as they were repaired and or replaced
730307	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	4/1/18 12:00 AM	4/18/18 02:16 PM	4/18/18 02:16 PM	- Tested Generator under load conditions and it ran normal... . Oil level ok and diesel fuel level is sufficient for up to 16 hours run time
770100	0000127635	GENERATOR DIESEL MAIN PS	5934, Bruce Mines WWTP & CS, Facility, Power Generation	PM	Refurbish/ Replace/Repair	1	MONTHS	Diesel Generator Inspection/ Functional Test (1m) 5934	CLOSE	5/1/18 12:00 AM	5/16/18 02:29 PM	5/16/18 02:29 PM	- Tested Generator under load conditions and it ran normal, Or checked after it ran under normal power interruption. Unit transferred power normal and all gauges read correct values. Oil level ok and diesel fuel level is sufficient for up to 8 hours run time or more Battery liquid level checked and filled if required. Louvers worked normally as they were repaired and or replaced.

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
664268			5934, Bruce Mines WWTP & CS, Process, Process Control & Monitoring	CALL	Refurbish/ Replace/Repair	0		5934 Bruce Mines WWTP CALL BACK FOR HWY 17 STN PUMP FAULT	CLOSE		2/9/18 08:00 PM	2/9/18 09:30 PM	5934 Bruce Mines stp Hwy 17 stn pump fault -ORO for R. Harmar, called to trouble shoot pump fault at Hwy 17 lift station, checked wonderware to pinpoint which pump failed possibly by power bump, had Ryan check and reset breaker and observe both pump complete a pumping cycle, pump 1 breaker reset. Levels and pumps back to normal.
627790			Bruce Mines Wastewater Treatment Plant & Collection System	CORR	Refurbish/ Replace/Repair	0		5934 bruce mines Hwy 17 lift stn generator in lline heater	CLOSE		1/16/18 02:01 PM	1/18/18 01:39 PM	-Purchase in-line block heater for generator and including installation on generator at hwy 17 lift station as per Tom Phillips directive.
859964			Bruce Mines Wastewater Treatment Plant & Collection System	CAP	Refurbish/ Replace/Repair	0		5934 Bruce mines waste water main lift stn new batteries for generator	CLOSE		7/4/18 03:23 PM	7/4/18 03:25 PM	-Purchased two new batteries for the emergency generator at the main lift station on HWY 17.. Picked up and installed on the unit tested OK.
820980			Bruce Mines Wastewater Treatment Plant & Collection System	CORR	Refurbish/ Replace/Repair	0		5934 Bruce Mines OCIF Prout St pump replacement	CLOSE		7/3/18 09:10 AM	7/3/18 09:10 AM	5934 Bruce Mines Prout St pump replacement -New pump ordered as per Patti Ohandley 5934 Bruce Mines Prout St pump replacement -New pump onsite at Bruce Mines WTP

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
981186			Bruce Mines Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5934 Bruce Mines WWTP CALL BACK FOR A HIGH LEVEL ALARM	CLOSE		10/11/18 12:00 AM	10/11/18 03:00 AM	-Call out to Bruce Mines Taylor St. Lift Station for high level alarm. Arrived at station to find levels normal, tested both pumps on hand, returned to auto and watched to ensure pumps would alternate through 3 cycles. Checked Hwy 17 Main lift station and found both pumps had run and after checking report, found high level issue had existed at the Main station and not Taylor St. By the time I arrived levels had returned to normal. Extremely heavy rain in area at time of call out.
662524			Bruce Mines Wastewater Treatment Plant & Collection System	CALL	Refurbish/ Replace/Repair	0		5934 Bruce Mines WWTP CALL BACK FOR A HIGH SEWAGE LEVEL ALARM	CLOSE		2/9/18 08:30 PM	2/9/18 10:30 PM	5934 Bruce Mines WWTP CALL BACK FOR A HIGH SEWAGE LEVEL ALARM -High level sewage alarm received for Main lift station in Bruce Mines. Arrived at station to find level high in wet well, spoke with ORO and found Pump #1 was tripped out on breaker panel. acknowledged alarm and reset pump breaker. remained on site to watch pumps cycle normally.
981092			Bruce Mines Wastewater Treatment Plant & Collection System	CAP	Refurbish/ Replace/Repair	0		Repair of Spare Sewage Pump - Bruce Mines 5934	CLOSE		10/10/18 02:13 PM	10/31/18 02:47 PM	-Spare Sewage pump rebuild approved for Bruce Mines lift stations. Repair of Spare Sewage Pump - Bruce Mines 5934 -Picked up Rebuilt pump at Xylem. Left at Espanola STP for pickup

Workorder Summary Report

 Report Start Date: Jan 1, 2018 12:00 AM
 Report End Date: Dec 31, 2018 11:59 PM
 Location: 5934*
 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
1018426			5934, Bruce Mines WWTP & CS, Prout SPS	CAP	Refurbish/ Replace/Repair	0		5934 Prout street electrical changes from MTO work at Hwy 17	COMP		11/28/18 09:44 AM	1/8/19 02:22 PM	<p>-Discussed Prout street Power issues from MTO work at Hwy 17 lift station with Tom Phillips. Enquired information form Xylum Dan Adams for various options. Went to Bruce mines WWTP to gather information requested by Tom from council request. Sent information to Town via email.</p> <p>-Town to look after the work involved or will notify OCWA to assist.</p>
664850	0000127617	METER LEVEL TAYLOR ST	5934, Bruce Mines WWTP & CS, Taylor SPS, Process, Process Control & Monitoring	CALL	Refurbish/ Replace/Repair	0		5934 Bruce Mines WWTP CALL BACK FOR A HIGH LEVEL ALARM AT TAYLOR SPS	CLOSE		2/25/18 12:45 PM	2/25/18 04:30 PM	<p>5934 Bruce Mines sewage Taylor stn high level</p> <p>-Taylor stn milltronics level transducer failed, started reading abnormally low after pump down cycle, pumped down to normal level and transducer started reading normal. Tested relay one (pump 1 start at 37 inches) and relay 2 (pump 2 start at 38 inches) , relay 3 tested also at high level alarm of 42 inches and ATS page rec'd. Transducer reading steady and both pumps auto. Very windy during alarm so possible power flickers at stn.</p> <p>5934 Bruce Mines sewage Taylor stn high level</p> <p>-Printed out manual, looked for ways to reprogram pumps one and two to have a pump start on loss of echo as a failsafe, also to alarm on loss of echo. To ensure pump starts to keep well level low during milltronics or transducer level sensor failure</p>