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ORTECH
a Kontrol Technologies Company

Report:

Mercury Emission Testing
at the Clean Harbors Sarnia Facility (March 2023)

Date: April 4, 2023

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EXECUTIVE SUMMARY

ORTECH Consulting Inc. (ORTECH) was requested by Clean Harbors Canada Inc. (Clean Harbors) to conduct a mercury emission testing program at the incineration facility located in Corunna, Ontario.

Mercury emission tests were performed at the Incinerator Exhaust Stack following the procedures outlined in US EPA Method 30B, "*Determination of Total Vapour Phase Mercury Emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps*" to determine the amount of total vapour phase mercury present in the gas stream.

The test method states that the recovery spike must be within 50 to 150 percent of the expected mass collected in the traps during sampling. Six pairs of tube samples were collected during one day of testing on March 7, 2023. To try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method one tube from each of the six pairs of adsorbent tubes were spiked with increasing amounts of mercury, ranging from 150 ng to 2200 ng, by the analytical laboratory prior to commencing the test program.

The results of three of the pairs of tubes, including the spikes that best represented the mercury concentration in the stack gas at the time of testing, are reported.

The average combustion gas values for each test period were obtained from the plant continuous emission monitoring (CEM) system. The average oxygen concentration for each test was used to determine the dry reference concentration adjusted to 11% oxygen.

The average mercury emission data from the triplicate total vapour phase mercury tests reported is provided below:

Mercury Parameter	Average
Dry Reference Concentration (µg/Rm^3)*	1.15
Dry Adjusted Concentration (µg/Rm^3)**	1.00

* reference conditions are 25°C and 1 atmosphere

** at 25°C and 1 atmosphere, adjusted to 11% oxygen

During the emission testing program, the powdered activated carbon (PAC) injection rate was 26.7 lb/hr.

1. INTRODUCTION

ORTECH Consulting Inc. (ORTECH) was requested by Clean Harbors Canada Inc. (Clean Harbors) to conduct a mercury emission testing program at the incineration facility located in Corunna, Ontario.

Mercury emission tests were performed at the Incinerator Exhaust Stack following the procedures outlined in US EPA Method 30B to determine the amount of total vapour phase mercury present in the gas stream.

The average combustion gas values for each test period were obtained from the plant continuous emission monitoring (CEM) system. The average oxygen concentration for each test was used to determine the dry reference concentration adjusted to 11% oxygen.

Six pairs of adsorbent tubes were collected during one day of sampling on March 7, 2023. The spike tubes from each test pair were spiked with increasing amounts of mercury, ranging from 150 ng to 2200 ng, prior to commencing the test program to try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method. The test method states that the recovery spike should be within 50 to 150 percent of the expected mass collected in the traps during sampling. The results of three of the pairs of tubes, including the spikes that best represented the mercury concentration in the stack gas at the time of testing, are reported.

All tables referenced herein are included in Appendix 1.

2. SAMPLING LOCATION

The Incinerator Exhaust Stack has an inside diameter of 1.47 meters at the sampling platform and 1.22 meters at the stack exit. The stack height above grade is 68.6 meters.

Mercury sampling was conducted at the breeching connecting the induced draft fan to the stack. Sampling was conducted at a single point in the center of the duct.

Previous testing programs conducted by ORTECH at the Clean Harbors Incinerator Exhaust Stack have shown that there is no stack gas stratification between the breeching connecting the induced draft fan to the stack and the stack sampling platform location.

3. SAMPLING METHODOLOGY

Mercury emission tests were performed following the procedures outlined in US EPA Method 30B, "Determination of Total Vapour Phase Mercury Emissions from Coal-Fired Combustion Sources Using Carbon Sorbent Traps".

ORTECH used a dual probe assembly so that the mercury traps are positioned 1 to 2 inches apart. Each probe was heated to approximately 135°C to prevent condensation of the stack gas on the sampling media. The mercury traps used for sampling are specially designed for use at wet sources; each tube had an extended section of glass to allow for the heating of the stack gas before it comes into contact with the sampling media.

The sampling methodology is briefly described as follows. Each sorbent trap was removed from the clean sorbent trap storage container, the end caps were removed from the traps and the traps were attached to the end of the sampling probe and leak checked. The probe was inserted into the stack and the sample pumps were started. Stack gas was drawn through the traps and into the sampling probe and the sampled gas stream then passed through a series of empty impingers followed by a silica gel trap to remove any remaining traces of moisture prior to the pump and dry gas meter.

A run consisted of paired mercury traps, identified as either A or B, sampled simultaneously. In each tube pair one of either the A or B tube was spiked with a known quantity of mercury. Due to the variability in the mercury concentration in the stack gas and the necessity to have the spiked tubes prepared at least two weeks in advance of the testing program, six pairs of tubes were used for the sampling program to try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method.

Each test run was sixty minutes in duration at an approximate sampling rate of approximately one liter per minute.

Throughout each test, the following information was measured and recorded for each sampling train:

- Elapsed sampling time
- Dry gas meter volume
- Dry gas meter temperatures
- Control module orifice pressure
- Sampling pump vacuum

At the start and finish of each sampling run the sampling trains were leak-checked. The leakage rate for each train must not exceed 4% of the average sampling rate for the collection period. If a trap pair did not have an acceptable initial leak check, the leak was found and repaired and/or the traps were replaced with a new pair until no leak was discernible. All the leak checks performed for the traps used showed no discernible leak through the test train.

Field testing data sheets for the mercury tests are provided in Appendix 2.

All of the sampling equipment used during the emission testing program was calibrated following the applicable reference method. Equipment calibration data is provided in Appendix 3.

4. ANALYSIS METHODOLOGY

At the end of each successful sampling run, the mercury traps were removed from the test train, capped and placed in their appropriate sample container. Each trap was labeled prior to being shipped to Ohio Lumex for analysis.

The traps were analyzed by thermal decomposition with atomic absorption following the procedures detailed in US EPA Method 7473 (direct thermal desorption with atomic absorption and no gold amalgamation). The method is applicable for total mercury "direct" testing of 40 CFR Part 75 Appendix K and EPA Method 30B sorbent traps.

The analysis is briefly described as follows. The sorbent trap tube end cap is removed; the glass wool plug closest to the appropriate carbon bed is carefully removed and separated from the carbon fraction. The sorbent is transferred into a quartz ladle and then covered with anhydrous sodium carbonate. The ladle is inserted into the heated analyzer thermo catalytic conversion chamber. Mercury is converted from a bound state to the atomic state by thermal decomposition in the furnace and is then detected by atomic absorption. The mercury concentration is measured and recorded using an automated data acquisition system. Both the glass wool plug and the sorbent of each bed are analyzed for the trap and the final mercury mass is the sum of the measurements.

The Ohio Lumex analytical report for total vapour phase mercury is provided in Appendix 4.

5. QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

The analysis of samples for mercury was performed by thermal decomposition with atomic absorption. Specific analytical QC procedures for the mercury analysis are summarized below:

- Calibrations are performed on the day of the analysis.
- Three or more calibration points are used for the calibration curve.
- The field samples analyzed must fall within a calibrated range.
- For each calibration curve, $R^2 \geq 0.99$, and the analyzer response must be within ± 10% for each standard used in the calibration.
- Following calibration, a second source standard is analyzed. The measured value of the independently prepared standard must be within ± 10% of the expected value.
- A blank analysis is conducted prior to analyzing the samples and must be less than the method detection limit.
- At the end of each set of analysis, a calibration standard is tested which must be within ±10% of the expected value.

Six unspiked mercury traps and six pre-spiked mercury traps were ordered approximately two weeks before the field testing program from Ohio Lumex. The pre-spiked mercury traps were spiked with known quantities of mercury ranging from 150 ng to 2200 ng in order to try to ensure that at least one of the traps met the spiking criterion stated in the test method. The recovery spike should be within 50 to 150 percent of the expected mass collected in the traps during sampling according to the test method. The spiking levels for the field recovery traps was estimated using mercury emission data from previous testing programs conducted between 2014 and 2022. The average mercury collected for Test No. 1, Test No. 2 and Test No. 3 was 69.0 ng.

The field spike recovery provides specific verification of the performance of the combined sampling and analytical approach for the test program. The spike recovery for Test No. 1, Test No. 2 and Test No. 3 was 95.3%, 98.9% and 99.7%, respectively. US EPA Method 30B requires the spike recovery to be between 85% and 115%.

US EPA Method 30B requires the paired sorbent trap agreement to be ≤10% relative deviation for mercury concentrations greater than 1 µg/Rm^3 or ≤20% relative deviation for mercury concentrations less than 1 µg/Rm^3. If the paired trap agreement is greater than the above stated limits the run is not valid. All of the traps collected during the test program had concentrations greater than 1 µg/Rm^3, except for Test No. 2 Trap B (0.98 µg/Rm^3). The average dry adjusted mercury concentration ranged from a low of 0.88 µg/Rm^3 (Tube Pair No. 2) to a high of 1.13 µg/Rm^3 (Tube Pair No. 1) for the three tests reported. The paired trap agreement was 4.5% for Test No. 1, 2.5% for Test No. 2, and 1.0% for Test No. 3.

6. RESULTS

Six mercury test runs were collected during one day of sampling on March 7, 2023. A run consisted of paired mercury traps, identified as either A or B, sampled simultaneously. The spike tubes from each test pair were spiked with increasing amounts of mercury, ranging from 150 ng to 2200 ng, prior to commencing the test program to try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method. The results for Test No. 1, Test No. 2 and Test No. 3 are reported.

The sampling schedule is summarized in Table 1. This information includes test dates and times for each of the mercury test runs performed. All test times match plant time.

Mercury emission sample analyses for Test No. 1, Test No. 2 and Test No. 3 are provided in Table 2. Mercury was detected in Section 1 of each trap in quantities greater than the method detection limit (0.6 ng) in all of the traps. Mercury was also collected in Section 2 in three of the six traps in quantities greater than the method detection limit. However, the amount detected in Section 2 was less than 0.8% of the mercury collected in Section 1 in all traps, indicating that there was no breakthrough or potential loss of mercury. US EPA Method 30B recommends that ≤10% of the total mercury collected should be collected in Section 2 for mercury concentrations greater than 1 µg/Rm^3 or ≤20% of the total mercury collected should be collected in Section 2 for mercury concentrations less than 1 µg/Rm^3.

Included in Table 2 are the mercury concentration calculations for Test No. 1, Test No. 2 and Test No. 3. The average oxygen concentration measured by the Clean Harbors CEM system for each test was used to determine the dry reference concentration adjusted to 11% oxygen.

Six unspiked mercury traps and six pre-spiked mercury traps were ordered approximately two weeks before the field testing program from Ohio Lumex. US EPA Method 30B states that it is acceptable to use the field recovery runs as test runs for emission testing as long as they meet the paired trap agreement criteria. The mass of the mercury spike initially present in each of the spiked traps was subtracted from the total mercury collected in Section 1 of the trap. The difference represents the amount of mercury in the stack gas.

The mercury emission data from the total vapour phase mercury tests is provided below:

Mercury Parameter	Test 1	Test 2	Test 3	Average
Dry Reference Conc. (µg/Rm^3)*	1.28	1.01	1.16	1.15
Dry Adjusted Conc. (µg/Rm^3)**	1.13	0.88	1.00	1.00

* reference conditions are 25°C and 1 atmosphere

** at 25°C and 1 atmosphere, adjusted to 11% oxygen

The incinerator exhaust stack mercury concentration limit as stated in Environmental Compliance Approval No. 8-1030-94-006 (formerly Certificate of Approval (Air) No. 8-1030-94-006) is 50 µg/Rm^3 adjusted to 11% oxygen. The mercury concentrations were below this limit during the test program.

The spiked mercury trap recovery calculations are shown in Table 3; the spike recovery for Test No. 1, Test No. 2 and Test No. 3 was 95.3%, 98.9% and 99.7%, respectively. US EPA Method 30B requires the spike recovery to be between 85% and 115%.

7. FACILITY PROCESS DATA

Incinerator process data was supplied by Clean Harbors personnel for the emission test periods. The process data is provided in Appendix 5 as average values for each test for the following process parameters:

- incinerator feed rates (rich, lean, emulsion and alkaline streams)
- volumetric flowrates (secondary air and stack gases)
- temperatures (primary zone, secondary zone, spray dryer inlet and outlet, stack gases)
- pressures (burner, spray dryer outlet, baghouse differential)
- combustion gas stack concentrations (O_2 and SO_2)
- stack gas opacity
- carbon injection rate

During the emission testing program, the average powdered activated carbon (PAC) injection rate was 26.7 lb/hr.

APPENDIX 1

Data Tables
(2 pages)

Table 1: Mercury Test Schedule

Test Number	Test Date	Sampling Period		Sampling Time
		Start	Finish	min
1	March 7, 2023	9:50	10:50	60
2	March 7, 2023	11:03	12:03	60
3	March 7, 2023	12:14	13:14	60
4	March 7, 2023	13:27	14:27	60
5	March 7, 2023	14:40	15:40	60
6	March 7, 2023	15:50	16:50	60

Note: All test times match plant time.

Table 2: Mercury Emission Data

Test/Run No.	Tube ID	Mercury Collected Section 1 ng	Mercury Collected Section 2 ng	Mercury Collected Total ng	Dry Gas Volume Sampled Rm^3*	Mercury Concentration Dry Reference µg/Rm^3*	Mercury Concentration Dry Adjusted µg/Rm^3**	Paired Trap Agreement %
1	A ***	74.0	0.7	74.7	0.0612	1.22	1.08	-
	B	84.3	0.4	84.7	0.0634	1.34	1.18	-
	Average					1.28	1.13	4.5
2	A	64.6	0.2	64.8	0.0627	1.03	0.90	-
	B***	55.3	0.8	56.1	0.0570	0.98	0.86	-
	Average					1.01	0.88	2.5
3	A***	66.7	0.8	67.5	0.0587	1.15	0.99	-
	B	65.4	0.5	65.9	0.0562	1.17	1.01	-
	Average					1.16	1.00	1.0
Average				69.0		1.15	1.00	

Note: Concentration data is only reported for three tests as required by US EPA Method 30B

* At 25°C and 1 atmosphere
** At 25°C and 1 atmosphere, adjusted to 11% oxygen
*** Spiked tube, mercury collected corrected for the original spike (100 ng for Test No. 1, 250 ng for Test No. 2 and 400 ng for Test No. 3).

Table 3: Mercury Spike Tube Recovery

Test No.	Spike Tube Total Collected ng	Spike Tube Volume Sampled Rm^3*	Spike Tube Mercury Concentration ng/Rm^3*	Unspike Tube Total Collected ng	Unspike Tube Volume Sampled Rm^3*	Unspike Tube Mercury Concentration ng/Rm^3*	Spike Concentration ng/Rm^3*	Spike Recovery %
1	225	0.0612	3674	84.7	0.0634	1336	2338	95.3
2	306	0.0570	5372	64.8	0.0627	1034	4338	98.9
3	468	0.0587	7959	65.9	0.0562	1172	6787	99.7
Average								98.0

Note: The spike tubes were spiked with mercury by the analytical laboratory prior to sampling. The original spike concentrations were 100 ng for Test No. 1, 250 ng for Test No. 2 and 400 ng for Test No. 3.
"NA" Not Applicable. Spike recovery was not calculated as spike concentration was outside the range specified in US EPA Method 30B.

APPENDIX 2

Mercury Field Data Sheets
(8 pages)

Clean Harbors, Sarnia
Mercury Tube Sampling Train
Sample Volume Corrections

Incinerator Exhaust Stack

Test # - Tube (tube pair field ID)	DGMCF	Initial DGM Reading (L)	Final DGM Reading (L)	Actual Vol. Sampled (L)	Barometric Pressure (in Hg)	Average DGM Pressure del H (in H_2O)	Average DGM Temperature (°C)	Corrected Volume (L)*	Corrected Volume (Rm^3)*
T1A OL618274 (Spiked)	0.975	33.8	95.5	61.7	29.66	0.8	18.2	61.16	0.0612
T1B OL663166	0.987	59.0	123.4	64.4	29.66	1.8	24.5	63.41	0.0634
T2A OL663110	0.975	96.6	161.3	64.7	29.71	0.8	25.5	62.65	0.0627
T2B OL653667 (Spiked)	0.987	25.4	83.7	58.3	29.71	1.8	27.2	56.98	0.0570
T3A OL569087 (Spiked)	0.975	67.1	127.7	60.6	29.74	0.8	25.5	58.74	0.0587
T3B OL663130	0.987	87.0	144.0	57.0	29.74	1.8	24.7	56.23	0.0562
T4A OL663195	0.975	29.7	85.1	55.4	29.74	0.8	27.9	53.27	0.0533
T4B OL610703 (Spiked)	0.987	45.6	97.1	51.5	29.74	1.8	27.9	50.27	0.0503
T5A OL620190 (Spiked)	0.975	86.6	142.3	55.7	29.75	0.8	28.3	53.51	0.0535
T5B OL632820	0.987	99.4	153.4	54.0	29.75	1.8	25.9	53.08	0.0531
T6A OL632757	0.975	43.6	99.9	56.3	29.77	0.8	26.5	54.46	0.0545
T6B OL610630 (Spiked)	0.987	54.2	108.9	54.7	29.77	1.8	23.1	54.31	0.0543

* dry at 25°C and 1 atmosphere

ORTECH
Mercury Tube Data Sheet

Plant:	Clean Harbors
Plant Location:	Corunna
Test No.:	1

Test location:	Stack Breeching
Date:	MARCH 7, 2023
Project No.:	22224

Train A

Tube Identification:	OL6182Z4	Spiked (Yes) No	
Spike Concentration	150 ng		

Measuring Device	MII
Control Module	A1542
Barometer	ENV. CAN.

Barometric Pressure	29.16

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	33.8	7	.8	3
5	38.3	11	.8	5
10	43.0	14	.8	5
15	48.0	16	.8	5.5
20	53.1	17	.8	5.5
25	58.3	18	.8	5.5
30	63.7	19	.8	5.5
35	69.0	20	.8	5.5
40	74.0	21	.8	5.5
45	79.7	22	.8	5.5
50	85.1	23	.8	5.5
55	90.5	24	.8	5.5
60	95.3	24	.8	5.5

Start Time:	950	Initial Leak Check	<.01 LPM@ 23 "Hg
Finish Time:	1050	Final Leak Check	<.01 LPM@ 20 "Hg

DGMCF:	.975
Sample Volume:	
Average DGM Temp:	
Average DGM Δ H:	0.8

Train B

Tube Identification:	OL6031G6	Spiked Yes (No)	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	M05498

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	59.0	17	1.8	4
5	64.3	20	1.8	7
10	69.0	22	1.8	8
15	74.6	23	1.8	8
20	80.2	25	1.8	8
25	85.0	25	1.8	8
30	90.0	25	1.8	8
35	96.3	26	1.8	8
40	102.0	26	1.8	8
45	108.2	27	1.8	8
50	113.2	28	1.8	8
55	119.2	27	1.8	8
60	123.4	27	1.8	8

Start Time:	950	Initial Leak Check	<.01 LPM@ 22 "Hg
Finish Time:	1050	Final Leak Check	<.01 LPM@ 19 "Hg

DGMCF:	.987
Sample Volume:	
Average DGM Temp:	
Average DGM Δ H:	1.8

Operator:	RM

ORTECH
Mercury Tube Data Sheet

Plant:	Clean Harbors
Plant Location:	Corunna
Test No.:	2

Test location:	Stack Breeching
Date:	
Project No.:	22224

Train A

Tube Identification:	OL 663 110	Spiked Yes (No)	
Spike Concentration	ng		

Measuring Device	MII
Control Module	A11542
Barometer	ENV. CAN.

Barometric Pressure	29.71

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	96.6	18	.8	4
5	102.6	21	.8	6
10	107.9	22	.8	6
15	113.4	23	.8	6
20	118.8	25	.8	6
25	124.7	27	.8	6
30	129.6	28	.8	6
35	134.9	29	.8	6
40	140.3	29	.8	6
45	145.7	28	.8	6
50	151.1	28	.8	6
55	157.1	28	.8	6
60	161.3	28	.8	6

Start Time:	1103	Initial Leak Check <.01 LPM@ 22 "Hg	DGMCF: 0.975
Finish Time:	1203	Final Leak Check <.01 LPM@ 19 "Hg	Sample Volume:
			Average DGM Temp:
			Average DGM Δ H:

Train B

Tube Identification:	OL 653667	Spiked (Yes) No	
Spike Concentration	250 ng		

Measuring Device	MII
Control Module	M05498

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	25.4	23	1.8	4
5	30.7	25	1.8	7
10	35.6	26	1.8	7
15	40.5	27	1.8	7
20	45.3	28	1.8	7
25	50.2	28	1.8	7
30	55.0	28	1.8	7
35	59.9	28	1.8	7
40	64.7	28	1.8	7
45	69.6	28	1.8	7
50	74.5	28	1.8	7
55	79.2	28	1.8	7
60	83.7	28	1.8	7

Start Time:	1103	Initial Leak Check <.01 LPM@ 21 "Hg	DGMCF: 0.957
Finish Time:	1203	Final Leak Check <.01 LPM@ 20 "Hg	Sample Volume:
			Average DGM Temp:
			Average DGM Δ H:

Operator:	DM

ORTECH
Mercury Tube Data Sheet

Plant:	Clean Harbors
Plant Location:	Corunna
Test No.:	3

Test location:	Stack Breeching
Date:	MARCH 7, 2023
Project No.:	22224

Train A

Tube Identification:	~~OL~~ OL569087	Spiked (Yes) / No	
Spike Concentration	400 ng		

Measuring Device	MII
Control Module	A11542
Barometer	ENV. CAN.

Barometric Pressure	29.74

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	67.1	23	0.8	4
5	72.3	24	.8	7
10	77.4	25	.8	7
15	82.5	26	.8	7
20	87.6	26	.8	7
25	92.6	26	.8	7
30	97.7	26	.8	7
35	102.7	26	.8	7
40	107.8	26	.8	7
45	112.8	26	.8	7
50	117.9	26	.8	7
55	122.9	26	.8	7
60	127.7	26	.8	7

Start Time:	1214	Initial Leak Check <.01 LPM@ 22 "Hg	DGMCF: 0.975
Finish Time:	1314	Final Leak Check <.01 LPM@ 17 "Hg	Sample Volume:
			Average DGM Temp:
			Average DGM Δ H:

Train B

Tube Identification:	OL663130	Spiked Yes (No)	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	M05498

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	87.0	24	1.9	4
5	92.0	23	1.8	7
10	96.8	24	1.8	8
15	101.8	25	1.8	8
20	106.3	25	1.8	8
25	111.1	25	1.8	8
30	115.8	25	1.8	8
35	120.6	25	1.8	8
40	125.3	25	1.8	8
45	130.1	25	1.8	8
50	134.8	25	1.8	8
55	139.6	25	1.8	8
60	144.0	25		8

Start Time:	1214	Initial Leak Check <.01 LPM@ 23 "Hg	DGMCF: 0.987
Finish Time:	1314	Final Leak Check <.01 LPM@ 19 "Hg	Sample Volume:
			Average DGM Temp:
			Average DGM Δ H:

Operator:	RM

ORTECH
Mercury Tube Data Sheet

Plant:	Clean Harbors
Plant Location:	Corunna
Test No.:	4

Test location:	Stack Breeching
Date:	MARCH 3, 2023
Project No.:	22224

Measuring Device	MII
Control Module	A11542
Barometer	ENV. CAN.

Train A

Tube Identification:	OL 663195	Spiked Yes (No)
Spike Concentration	— ng	

Barometric Pressure	29.74

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	29.7	23	.8	4
5	35.1	25	.8	6
10	39.7	26	.8	6
15	44.3	27	.8	6
20	48.9	27	.8	6
25	53.5	28	.8	6
30	58.2	29	.8	6
35	62.8	29	.8	6
40	67.4	30	.8	6
45	72.0	30	.8	6
50	76.6	30	.8	6
55	81.2	~~29~~ 30	.8	6
60	85.1	30	.8	6

Start Time:	1327	Initial Leak Check < .01 LPM@ 21 "Hg	DGMCF: .975
Finish Time:	1427	Final Leak Check < .01 LPM@ 19 "Hg	Sample Volume:
			Average DGM Temp:
			Average DGM Δ H:

Train B

Tube Identification:	OL610703	Spiked (Yes) No
Spike Concentration	600 ng	

Measuring Device	MII
Control Module	M05498

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	45.6	23	1.8	4
5	50.9	24	1.8	7
10	55.2	25	1.8	7
15	59.5	26	1.8	7
20	63.8	27	1.8	7
25	68.1	28	1.8	7
30	72.4	29	1.8	7
35	76.6	30	1.8	7
40	80.9	30	1.8	7
45	85.2	30	1.8	7
50	89.5	30	1.8	7
55	93.8	30	1.8	7
60	97.1	30	1.8	7

Start Time:	1327	Initial Leak Check < .01 LPM@ 22 "Hg	DGMCF: .987
Finish Time:	1427	Final Leak Check < .01 LPM@ 22 "Hg	Sample Volume:
			Average DGM Temp:
			Average DGM Δ H:

Operator:	DM

ORTECH
Mercury Tube Data Sheet

Plant:	Clean Harbors
Plant Location:	Corunna
Test No.:	5

Test location:	Stack Breeching
Date:	MARCH 7 2023
Project No.:	22224

Measuring Device	MII
Control Module	A11542
Barometer	ENV. CAN.

Train A

Tube Identification:	OL620190	Spiked (Yes) No	
Spike Concentration	1000 ng		

Barometric Pressure	29.75

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	86.6	25	.8	5
5	91.7	27	.8	7
10	96.6	28	.8	7
15	101.2	28	.8	7
20	105.9	28	.8	7
25	110.5	29	.8	7
30	115.2	29	.8	7
35	119.8	29	.8	7
40	124.4	29	.8	7
45	129.1	29	.8	7
50	133.7	29	.8	7
55	137.9	29	.8	7
60	142.3	29	.8	7

Start Time:	1440	Initial Leak Check	<.01 LPM@	17 "Hg	DGMCF: .975
Finish Time:	1540	Final Leak Check	<.01 LPM@	14 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H:

Train B

Tube Identification:	OL632820	Spiked Yes (No)	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	M05498

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	99.4	25	1.8	5
5	104.6	25	1.8	7
10	110.1	26	1.8	7
15	115.2	26	1.8	7
20	119.7	26	1.8	7
25	124.2	26	1.8	7
30	128.7	26	1.8	7
35	133.2	26	1.8	7
40	137.7	26	1.8	7
45	142.2	26	1.8	7
50	146.7	26	1.8	7
55	149.4	26	1.8	7
60	153.4	26	1.8	7

Start Time:	1440	Initial Leak Check	<.01 LPM@	20 "Hg	DGMCF: .987
Finish Time:	1540	Final Leak Check	<.01 LPM@	21 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H:

Operator:	RM

ORTECH
Mercury Tube Data Sheet

Plant:	Clean Harbors
Plant Location:	Corunna
Test No.:	6

Test location:	Stack Breeching
Date:	MARCH 7, 2023
Project No.:	22224

Measuring Device	MII
Control Module	A1542
Barometer	ENV. CAN.

Train A

Tube Identification:	OL6327S7	Spiked Yes (No)	
Spike Concentration	ng		

Barometric Pressure	29.77

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	43.6	24	.8	4
5	49.0	26	.8	7
10	53.7	26	.8	7
15	58.4	26	.8	7
20	63.1	26	.8	7
25	67.8	27	.8	7
30	72.5	27	.8	7
35	77.1	27	.8	7
40	81.7	27	.8	7
45	86.5	27	.8	7
50	91.3	27	.8	7
55	95.1	27	.8	7
60	99.9	27	.8	7

Start Time:	1550 1530	Initial Leak Check	<.01	LPM@ 20 "Hg	DGMCF: 0.975
Finish Time:	1630	Final Leak Check	<.01	LPM@ 21 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H:

Train B

Tube Identification:	OL610630	Spiked (Yes) No	
Spike Concentration	2200 ng		

Measuring Device	MII
Control Module	M05408

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	54.2	24	1.8	5
5	59.4	23	1.8	7
10	63.9	23	1.8	7
15	68.5	23	1.8	7
20	73.0	23	1.8	7
25	77.5	23	1.8	7
30	82.1	23	1.8	7
35	86.6	23	1.8	7
40	91.1	23	1.8	7
45	95.7	23	1.8	7
50	100.2	23	1.8	7
55	103.6	23	1.8	7
60	108.9	23	1.8	7

Start Time:	1550 1530	Initial Leak Check	<.01	LPM@ 16 "Hg	DGMCF: 0.981
Finish Time:	1630 1650	Final Leak Check	<.01	LPM@ 17 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H:

Operator:	DM

ORTECH Consulting Inc. Sample Log
Mercury Tube Samples
Incinerator Exhaust Stack

Job/Report Number: 22224
Received By: David Utley
Job Assigned To: Ohio Lumex
PO #: 22224 -J2886

Tube ID	Spiked?	Sample Date	Sample Description	Approx. Sample Volume m^3	Sample Analysis
OL618274	Yes	March 7, 2023	Test 1 Tube A	0.06	Hg
OL663166	No	March 7, 2023	Test 1 Tube B	0.06	Hg
OL663110	No	March 7, 2023	Test 2 Tube A	0.06	Hg
OL653667	Yes	March 7, 2023	Test 2 Tube B	0.06	Hg
OL569087	Yes	March 7, 2023	Test 3 Tube A	0.06	Hg
OL663130	No	March 7, 2023	Test 3 Tube B	0.06	Hg
OL663195	No	March 7, 2023	Test 4 Tube A	0.06	Hg
OL610703	Yes	March 7, 2023	Test 4 Tube B	0.06	Hg
OL620190	Yes	March 7, 2023	Test 5 Tube A	0.06	Hg
OL632820	No	March 7, 2023	Test 5 Tube B	0.06	Hg
OL632757	No	March 7, 2023	Test 6 Tube A	0.06	Hg
OL610630	Yes	March 7, 2023	Test 6 Tube B	0.06	Hg

All tubes sampled at approximately 1 litre/minute for 60 minutes.
Expected concentrations are approximatley 100 - 400ng

Relinquished To: _____ Date: _____

Relinquished By: D J U Date: MAR 8/23

APPENDIX 3

ORTECH Equipment Calibration Data
(4 pages)

ORTECH

Dry Gas Meter Calibration Data

Calibration Procedure	**03-J004**
Meter Number	**Vost 4**
Date	**February 15, 2023**
Barometric Pressure	**29.12**
System Leak Check	**0.00 @ 17 "Hg**

MII NUMBERS	
DGM	**A11542**
Gasometer	**A01463**
Barometer	**COE 20028**

Calibrated By	**Brayden Pacheco**
Signature	Brayden Pacheco
Reviewed and Accepted By	

ft^3= cm* 1.332 litres per cm/28.3168 litres per ft^3

DGMCF= $\frac{\text{Vstd } ft^3}{\text{Vdgm } ft^3}$ $\frac{\text{Tdgm } °F+460}{\text{Tstd } °F+460}$ $\frac{\text{Pbar (in. Hg)}}{\text{(Pbar in. Hg+DGMPressure/13.6)}}$

Gasometer Reading cm			Gasometer Volume	Gasometer Temperature	DGM Reading L		DGM Volume	DGM Average Temperature	DGM Pressure	DGM Outlet	DGM Calibration	Time	Flow Rate
Initial	Final	cm	ft^3	°C	Initial	Final	ft^3	°C	in. H_2O	°C	Factor	min.	lpm
61.90	50.00	11.90	0.560	21.0	83.10	99.55	0.581	25.0	0.8	25.0	0.975	15	1.1
62.80	51.00	11.80	0.555	21.0	99.55	116.00	0.581	27.0	0.8	27.0	0.973	15	1.1
62.60	50.90	11.70	0.550	21.0	16.00	32.30	0.576	28.0	0.8	28.0	0.977	15	1.1

Acceptance Criteria:
Individual values of DGM calibration factor must be within ± 1.5% of the average value.
If not the calibration must be repeated. Also, the DGMCF average value must be 1.00 ± 0.05,
otherwise the meter must be repaired and/or adjusted as necessary and recalibrated prior to use.
(Environment Canada Reference Method EPS 1/RM/8, Section 6)

DGMCF AVERAGE

1Lpm *0.975*

Revision June 5, 2007

ORTECH

Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Nutech**
MII	**A11542**
Date	**February 15, 2023**
Calibrated By	**Brayden Pacheco**
Signature	
Reviewed and Accepted By	

Fluke Calibrator Output (COE 20024) (°C)	Tredicator Display Value		Percent Difference
	Before Adjustment (°C)	After Adjustment (°C)	(%)
0	0		0.0
20	20		0.0
50	50		0.0
100	101		-1.0
150	151		-0.7
200	200		0.0
300	300		0.0
400	400		0.0
500	500		0.0
600	600		0.0

$$\% \text{ Difference} = \frac{(\text{micromite} - \text{after adjustment reading})}{\text{micromite}} \times 100$$

Acceptance Criteria:
Trendicator display must read within ± 1.5% of the micromite value at each output. Otherwise, the Trendicator must be repaired and/or adjusted as necessary, and recalibrated prior to use. (MOE Source Testing Code, Version #2, Method 5)

ORTECH Environmental

Dry Gas Meter Calibration Data

Calibration Procedure	**03-J004**
Meter Number	**M05498**
Date	**February 15, 2023**
Barometric Pressure	**29.09**
System Leak Check	**<0.01 @ 15 " Hg**

MII NUMBERS	
DGM	**M05498**
Gasometer	**A01463**
Barometer	**COE 20028**

Calibrated By	**Brayden Pacheco**
Signature	
Reviewed and Accepted By	

ft^3= cm* 1.332 litres per cm/28.3168 litres per ft^3

DGMCF= $\frac{\text{Vstd } ft^3}{\text{Vdgm } ft^3}$ $\frac{\text{Tdgm } °F+460}{\text{Tstd } °F+460}$ $\frac{\text{Pbar ("Hg)}}{\text{(Pbar "Hg+DGMPressure/13.6)}}$

Gasometer Reading cm			Gasometer Volume	Gasometer Temperature	DGM Reading L		DGM Volume	DGM Average Temperature	DGM Pressure	DGM Outlet	DGM Calibration	Time	Flow Rate
Initial	Final	cm	ft^3	°C	Initial	Final	ft^3	°C	in. H_2O	°C	Factor	min.	lpm
62.40	51.20	11.20	0.527	21.0	3.00	18.05	0.531	24.0	1.8	24.0	0.997	15	1.0
65.70	54.00	11.70	0.550	21.0	18.05	34.10	0.567	26.0	1.8	26.0	0.983	15	1.1
61.40	49.60	11.80	0.555	21.0	34.10	50.30	0.572	26.0	1.8	26.0	0.982	15	1.1

Acceptance Criteria:

Individual values of DGM calibration factor must be within ± 1.5% of the average value.
If not the calibration must be repeated. Also, the DGMCF average value must be 1.00 ± 0.05, otherwise the meter must be repaired and/or adjusted as necessary and recalibrated prior to use.
(Environment Canada Reference Method EPS 1/RM/8, Section 6)

DGMCF AVERAGE

1Lpm 0.987

Revision June 5, 2007

ORTECH Environmental

Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Nutech**
MII	**M05498**
Date	**February 15, 2023**
Calibrated By	**Brayden Pacheco**
Signature	Brayden Pacheco
Reviewed and Accepted By	

Fluke Calibrator Output (COE 20024) (°C)	Tredicator Display Value		Percent Difference
	Before Adjustment (°C)	After Adjustment (°C)	(%)
0	0		0.0
20	20		0.0
50	50		0.0
100	101		-1.0
150	151		-0.7
200	200		0.0
300	300		0.0
400	400		0.0
500	500		0.0
600	600		0.0

$$\% \text{ Difference} = \frac{(\text{micromite} - \text{after adjustment reading})}{\text{micromite}} \times 100$$

Acceptance Criteria:
Trendicator display must read within ± 1.5% of the micromite value at each output. Otherwise, the Trendicator must be repaired and/or adjusted as necessary, and recalibrated prior to use. (MOE Source Testing Code, Version #2, Method 5)

APPENDIX 4

Mercury Analytical Report
(1 page)

Sorbent Trap Analysis Report

Date | 3/21/23
Analyst[s] | Alexis Aldhizer
Project | 2031777-HG
Turnaround | Standard

Company | ORTECH
Contact | Chris Belore
Phone | 905-822-4120 ext. 324
Email | cbelore@ortech.ca

Method | EPA 7473
Method Uncertainty | ± 10%
MDL | 0.6 ng
LOQ | 5 ng

Trap ID	Pre-Filter Mass [ng]	AGS Mass [ng]	Section 1 Mass [ng]	Section 2 Mass [ng]	Total Mass [ng][1]	Section 3 Mass [ng]	Spike Level [ng]	Breakthrough [%][2]	Spike Recovery [%][3]	Source	Notes	Affected Section
ol618274			224.0	*0.7*	*224.7*		150	0.3%				
ol663166			84.3	*0.4*	*84.7*			0.5%				
ol663110			64.6	*0.2*	*64.8*			0.4%				
ol653667			305.3	*0.8*	*306.1*		250	0.2%				
ol569087			466.7	*0.8*	*467.5*		400	0.2%				
ol663130			65.4	*0.5*	*65.9*			0.8%				
ol663195			68.4	*0.6*	*69.0*			0.8%				
ol610703			677.8	*0.8*	*678.6*		600	0.1%				
ol620190			1067	*1.9*	*1069*		1000	0.2%				
ol632820			64.4	*0.6*	*65.0*			0.9%				
ol632757			86.0	*0.8*	*86.8*			1.0%				
ol610630			2164	6.9	2171		2200	0.3%				

[1] Total Mass = PF+AGS+S1+S2
[2] Breakthrough = S2 / [PF+AGS+S1]
[3] For PS12B only Spike Recovery = S3 / Spike Level
[R] Data invalidation qualifier - refer to notes

ATTENTION: A response factor was used to calculate certain values on this report. Italicized masses appear on the report as rounded to the nearest tenth nanogram.

OHIO LUMEX

APPENDIX 5

Clean Harbors Process Data
(12 pages)

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	TE-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-03-07	9:50:00	33.71	7.75	148.35	190.67	5.80	348.00	23.18	19075.0	11477.6	25.17	105268.2	1543.4	-26.1	1140.4	501.2	192.5	192.2	-46.1	-70.4	-134.9	297.2	23.96
2023-03-07	9:51:00	34.04	7.97	148.35	191.07	5.71	342.45	23.18	18950.0	11488.8	23.33	97869.0	1539.4	-35.1	1140.4	501.0	192.5	192.2	-28.7	-49.0	-109.3	353.4	23.98
2023-03-07	9:52:00	33.80	7.98	147.60	190.31	5.75	344.85	23.18	18806.3	11264.1	22.26	93349.0	1541.8	-29.5	1140.4	500.6	192.5	192.2	-26.1	-46.0	-107.9	339.9	23.58
2023-03-07	9:53:00	34.13	7.72	147.74	191.84	5.71	342.68	23.18	19131.3	11472.0	22.79	95722.3	1538.0	-32.6	1139.4	501.2	192.5	192.2	-29.3	-50.5	-110.9	328.3	23.56
2023-03-07	9:54:00	34.04	7.71	147.74	191.39	5.66	339.75	23.18	18800.0	11472.0	22.18	93112.5	1540.4	-37.9	1139.4	500.8	192.5	192.2	-24.8	-42.0	-104.9	344.8	23.64
2023-03-07	9:55:00	33.95	7.74	148.02	191.30	5.66	339.38	23.18	18831.3	11494.4	22.88	96049.9	1538.6	-46.0	1138.4	501.2	192.5	192.2	-27.2	-43.9	-106.1	363.0	23.86
2023-03-07	9:56:00	33.84	7.94	148.35	192.47	5.63	337.65	23.18	18881.3	11472.0	22.16	93030.4	1542.4	-46.7	1138.4	501.0	192.5	192.2	-22.8	-40.4	-100.8	374.3	23.06
2023-03-07	9:57:00	33.84	7.74	147.78	191.30	5.62	337.05	23.18	19093.8	11578.7	22.88	96071.3	1539.0	-50.4	1138.4	500.7	192.5	192.2	-29.5	-47.0	-108.9	357.1	23.02
2023-03-07	9:58:00	33.99	7.91	148.02	192.29	5.61	336.30	23.18	18606.3	11573.1	22.13	92927.2	1542.3	-47.2	1138.4	500.9	192.5	192.2	-21.8	-37.1	-98.8	370.6	23.26
2023-03-07	9:59:00	33.69	7.39	148.07	190.58	5.65	339.08	23.18	19262.5	11629.3	23.55	98881.5	1539.0	-51.9	1139.5	501.3	192.0	192.2	-35.7	-54.5	-118.7	344.6	22.96
2023-03-07	10:00:00	33.77	7.91	148.07	193.01	5.66	339.60	23.18	19068.8	11522.5	22.93	96269.2	1539.1	-61.4	1137.4	501.5	192.5	192.2	-27.2	-47.1	-107.1	360.1	23.74
2023-03-07	10:01:00	33.29	7.87	147.03	190.40	5.62	337.13	23.18	19662.5	11427.0	23.65	99386.7	1537.3	-68.7	1137.4	500.7	192.0	192.2	-39.7	-59.5	-127.4	314.8	23.08
2023-03-07	10:02:00	33.81	8.02	147.60	191.66	5.59	335.40	23.18	18987.5	11545.0	23.15	97216.9	1537.8	-71.9	1136.4	500.7	192.5	191.1	-29.9	-50.0	-110.6	335.3	22.92
2023-03-07	10:03:00	33.53	7.84	147.88	190.89	5.61	336.45	23.18	19487.5	11561.8	24.08	101237.9	1536.6	-71.7	1135.4	500.2	192.0	191.1	-49.3	-71.3	-140.6	312.1	23.36
2023-03-07	10:04:00	33.81	7.99	147.88	191.84	5.67	340.05	23.18	18837.5	11488.8	22.46	94385.8	1538.8	-78.0	1135.4	499.9	192.0	191.1	-25.6	-40.9	-103.9	364.3	22.82
2023-03-07	10:05:00	33.65	7.90	147.60	191.57	5.65	339.23	23.18	18818.8	11595.6	24.61	103480.4	1542.5	-78.4	1136.5	499.4	191.5	191.1	-45.5	-68.8	-134.4	300.9	23.02
2023-03-07	10:06:00	33.62	7.77	147.84	191.70	5.68	340.73	23.18	18787.5	11488.8	22.31	93725.4	1539.0	-82.6	1136.5	499.1	191.5	191.1	-26.9	-44.9	-106.0	360.9	23.04
2023-03-07	10:07:00	33.92	8.08	148.31	190.76	5.67	340.43	23.18	18587.5	11606.8	22.27	93613.7	1542.9	-81.1	1136.5	498.5	191.5	191.1	-22.6	-42.4	-99.4	370.9	23.48
2023-03-07	10:08:00	33.74	7.67	148.59	191.88	5.61	336.53	23.18	19212.5	11618.0	23.33	98102.0	1537.4	-88.3	1137.6	499.2	191.0	191.1	-31.5	-51.4	-114.2	352.4	23.00
2023-03-07	10:09:00	33.81	7.99	148.25	191.61	5.61	336.75	23.18	18693.8	11618.0	22.69	95363.4	1539.3	-93.7	1136.5	499.1	191.5	191.1	-26.3	-44.8	-105.9	363.6	22.96
2023-03-07	10:10:00	33.87	8.22	147.97	191.79	5.64	338.33	23.18	19187.5	11545.0	23.17	97447.4	1535.8	-57.6	1136.5	499.0	191.5	191.1	-34.2	-53.9	-118.1	328.5	22.82
2023-03-07	10:11:00	33.54	7.97	148.12	192.06	5.66	339.83	23.18	18906.3	11337.1	23.03	96847.0	1538.0	-76.0	1135.4	498.4	191.5	191.1	-28.7	-49.3	-108.7	342.8	22.82
2023-03-07	10:12:00	33.54	8.13	148.02	190.89	5.65	339.15	23.18	19181.3	11561.8	22.90	96153.4	1535.8	-84.9	1135.4	497.9	191.5	191.1	-30.2	-51.3	-110.7	359.8	23.94
2023-03-07	10:13:00	33.87	7.53	148.31	191.39	5.55	333.23	23.18	18906.3	11297.8	22.69	95495.0	1540.8	-90.9	1134.4	497.6	191.0	191.1	-24.8	-43.3	-102.0	371.1	23.08
2023-03-07	10:14:00	33.60	7.71	147.22	189.09	5.59	335.63	23.18	19193.8	11522.5	22.58	95012.7	1538.0	-98.6	1136.6	497.3	190.5	190.1	-32.9	-50.4	-114.7	350.1	23.00
2023-03-07	10:15:00	33.47	8.00	148.31	191.34	5.64	338.48	23.18	18743.8	11398.9	22.13	92748.8	1540.4	-106.1	1136.6	497.4	190.5	190.1	-26.3	-43.3	-103.3	367.9	23.40
2023-03-07	10:16:00	33.32	7.80	147.74	190.31	5.57	334.35	23.18	19631.3	11606.8	23.30	97941.7	1538.1	-102.9	1136.6	497.0	190.5	190.1	-41.6	-61.6	-128.2	333.8	23.38
2023-03-07	10:17:00	33.53	7.78	148.02	191.52	5.67	340.20	23.18	18975.0	11545.0	23.07	97157.0	1537.1	-113.2	1135.5	497.3	190.5	190.1	-29.9	-48.0	-111.6	356.6	23.08
2023-03-07	10:18:00	33.54	7.82	147.12	190.40	5.66	339.60	23.18	19318.8	11545.0	25.22	106139.7	1537.0	-111.6	1135.5	496.7	190.5	190.1	-50.3	-73.5	-142.2	291.4	23.56
2023-03-07	10:19:00	33.42	7.88	147.88	190.17	5.62	337.05	23.18	19050.0	11528.1	23.10	96940.3	1533.8	-123.5	1134.4	497.1	190.5	190.1	-32.5	-50.0	-114.8	332.5	23.24
2023-03-07	10:20:00	33.30	7.91	147.93	191.30	5.56	333.60	23.18	18825.0	11415.8	25.65	107964.8	1536.6	-128.4	1133.4	497.4	190.5	190.1	-44.3	-68.1	-129.2	310.6	23.00
2023-03-07	10:21:00	33.51	8.29	147.74	191.93	5.57	334.20	23.18	18968.8	11387.7	22.68	95485.8	1536.1	-131.5	1133.4	496.9	190.5	190.1	-26.6	-43.4	-104.1	363.4	23.68
2023-03-07	10:22:00	32.99	7.83	147.45	190.89	5.55	333.23	23.18	18718.8	11387.7	22.27	93795.8	1540.3	-126.4	1134.5	496.1	190.5	190.1	-22.7	-42.3	-100.5	374.4	22.98
2023-03-07	10:23:00	33.72	7.96	148.59	192.02	5.55	332.93	23.18	18937.5	11387.7	22.33	94112.5	1536.6	-128.3	1134.5	496.6	190.0	190.1	-28.6	-44.9	-108.3	358.0	23.10
2023-03-07	10:24:00	33.65	8.07	148.21	192.42	5.56	333.30	23.18	18743.8	11410.2	21.81	91855.7	1541.0	-127.4	1135.6	496.1	190.0	190.1	-24.1	-42.4	-102.0	374.1	23.00
2023-03-07	10:25:00	33.77	8.05	148.35	191.61	5.49	329.40	23.18	19275.0	11545.0	22.84	96175.8	1536.0	-127.7	1136.6	496.9	190.0	190.1	-31.7	-53.1	-114.5	346.6	23.34
2023-03-07	10:26:00	33.54	7.95	148.21	192.02	5.50	330.08	23.18	18768.8	11567.5	23.06	97148.3	1537.6	-132.7	1136.6	496.8	190.0	190.1	-27.7	-46.8	-107.5	361.9	23.58
2023-03-07	10:27:00	33.27	7.69	147.97	189.86	5.42	325.43	23.18	19537.5	11612.4	23.62	99547.7	1532.8	-130.3	1136.6	496.8	190.0	190.1	-35.8	-54.6	-118.3	322.9	23.02
2023-03-07	10:28:00	33.77	7.78	148.40	192.47	5.38	323.03	23.18	19150.0	11556.2	23.57	99415.0	1534.6	-138.2	1134.4	497.1	190.0	190.1	-28.8	-44.4	-107.9	338.9	23.82
2023-03-07	10:29:00	33.51	7.92	147.78	190.71	5.34	320.18	23.18	19600.0	11528.1	22.93	96644.4	1533.6	-135.9	1134.4	497.3	190.0	190.1	-31.5	-51.4	-114.6	354.4	23.36
2023-03-07	10:30:00	33.92	8.06	147.88	191.88	5.26	315.38	23.18	18868.8	11387.7	22.95	96744.6	1538.4	-136.1	1133.4	498.0	190.5	190.1	-24.7	-39.0	-101.0	369.4	22.88
2023-03-07	10:31:00	33.57	7.77	147.22	190.26	5.18	310.73	23.18	19418.8	11612.4	23.63	99646.2	1538.1	-133.1	1136.6	498.4	190.0	190.1	-43.6	-61.4	-132.5	333.6	23.74
2023-03-07	10:32:00	33.93	7.69	148.07	191.79	5.16	309.30	23.18	18812.5	11365.2	22.20	93590.8	1539.6	-137.1	1136.6	498.8	190.5	190.1	-26.6	-44.9	-105.7	366.7	22.80
2023-03-07	10:33:00	33.72	7.76	147.69	190.76	4.72	282.90	23.18	19287.5	11449.5	25.06	105511.1	1541.1	-130.4	1137.6	498.5	190.0	190.1	-49.4	-72.9	-139.9	299.8	23.32
2023-03-07	10:34:00	34.08	7.84	147.84	192.51	4.69	281.48	23.18	19193.8	11533.8	22.87	96345.5	1537.6	-137.9	1137.6	499.0	190.5	190.1	-28.6	-50.6	-110.6	351.3	23.68
2023-03-07	10:35:00	33.87	7.52	148.35	192.20	4.71	282.53	23.18	18900.0	11415.8	22.03	92820.2	1539.6	-133.1	1137.6	498.7	190.5	190.1	-31.0	-54.9	-110.3	339.9	23.08
2023-03-07	10:36:00	33.69	8.00	148.44	192.24	4.67	280.43	23.18	19218.8	11528.1	23.11	97384.7	1535.8	-131.7	1136.4	498.6	190.5	190.1	-33.7	-54.5	-116.6	331.9	23.12
2023-03-07	10:37:00	33.96	7.82	147.84	191.61	4.69	281.48	23.18	18818.8	11320.3	22.93	96634.0	1538.6	-134.4	1135.4	498.7	190.5	190.1	-27.2	-47.1	-106.9	342.6	23.06
2023-03-07	10:38:00	33.74	8.29	147.45	191.03	4.69	281.18	23.18	18962.5	11286.6	23.36	98441.8	1537.6	-138.3	1136.5	499.2	190.5	190.1	-28.4	-48.5	-108.2	361.2	22.96
2023-03-07	10:39:00	34.10	7.98	146.88	191.79	4.68	280.95	23.18	18593.8	11387.7	22.31	94203.4	1541.8	-138.0	1137.6	498.9	190.5	190.1	-23.6	-42.0	-101.3	371.8	23.08
2023-03-07	10:40:00	34.07	7.93	148.25	192.24	4.70	281.93	23.18	18968.8	11455.1	22.99	96801.5	1538.4	-144.9	1138.6	499.7	190.5	190.1	-30.7	-45.1	-112.5	355.1	23.92
2023-03-07	10:41:00	34.01	8.04	147.84	192.15	4.70	281.85	23.18	18868.8	11567.5	22.46	94639.9	1541.4	-147.0	1138.6	499.8	190.5	190.1	-26.1	-43.9	-103.1	371.3	22.72
2023-03-07	10:42:00	33.84	7.69	147.31	190.58	4.68	280.58	23.18	19443.8	11612.4	23.85	100865.2	1537.4	-144.1	1138.6	499.6	190.5	190.1	-37.7	-53.1	-121.3	342.8	23.00
2023-03-07	10:43:00	33.86	7.69	148.40	191.93	4.68	280.58	23.18	18912.5	11472.0	23.16	97581.4	1538.0	-146.3	1137.5	499.7	190.5	190.1	-29.3	-48.5	-109.3	359.4	23.70
2023-03-07	10:44:00	33.86	8.16	147.54	190.53	4.69	281.18	23.18	19625.0	11460.7	23.36	98381.6	1536.0	-139.9	1137.5	499.2	190.5	190.1	-37.3	-54.0	-123.0	311.6	23.36
2023-03-07	10:45:00	34.49	8.09	146.88	192.38	4.71	282.75	23.18	18887.5	11545.0	22.63	95356.1	1539.8	-137.5	1136.4	499.9	191.0	190.1	-26.2	-41.3	-104.4	324.6	23.16
2023-03-07	10:46:00	34.04	7.46	147.31	191.43	4.69	281.48	23.18	19181.3	11550.6	24.59	103613.7	1543.0	-133.0	1139.6	500.4	191.0	190.1	-42.0	-63.5	-129.4	300.6	23.88
2023-03-07	10:47:00	34.10	7.58	147.84	192.11	4.73	283.58	23.18	18537.5	11421.4	22.45	94650.2	1547.0	-126.2	1141.6	501.1	191.0	190.1	-20.3	-37.1	-95.7	355.0	22.78
2023-03-07	10:48:00	33.98	7.72	147.35	191.75	4.70	281.85	23.18	18693.8	11443.9	24.86	104731.9	1551.0	-120.2	1146.0	501.3	191.0	190.1	-40.0	-61.8	-125.5	291.8	22.90
2023-03-07	10:49:00	34.32	8.17	145.65	191.88	4.71	282.38	23.18	18812.5	11427.0	22.37	94183.1	1549.1	-118.7	1147.1	502.3	191.0	190.1	-22.1	-39.1	-98.6	351.3	23.38
2023-03-07	10:50:00	33.66	8.06	146.98	190.26	5.11	306.53	23.18	18562.5	11427.0	21.94	92386.4	1553.1	-103.7	1149.1	502.4	191.0	190.1	-19.1	-35.9	-92.4	362.7	23.98

MARCH 7/2023	Waste Flows							Air Flows		Temperatures								Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PACFlow
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
Max	34.49	8.29	148.59	193.01	5.80	348.00	23.18	19662.5	11629.3	25.65	107964.8	1553.1	-26.1	1149.1	502.4	192.5	192.2	-19.1	-35.9	-92.4	374.4	23.98
Min	32.99	7.39	145.65	189.09	4.67	280.43	23.18	18537.5	11264.1	21.81	91855.7	1532.8	-147.0	1133.4	496.1	190.0	190.1	-50.3	-73.5	-142.2	291.4	22.72
Average	33.76	7.87	147.83	191.41	5.33	319.53	23.18	19012.6	11487.7	23.08	97108.3	1539.3	-102.7	1137.4	499.1	191.1	190.7	-31.1	-50.1	-112.5	345.0	23.28
Variance	0.07	0.04	0.26	0.62	0.17	623.02	0.00	82241.5	8433.2	0.76	13477817.4	14.1	1351.8	8.7	2.8	0.7	0.7	58.5	86.7	136.2	536.2	0.13

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	TE-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-03-07	11:03:00	33.57	7.73	147.07	189.95	5.30	317.93	23.25	18737.5	11511.3	25.02	104955.0	1552.6	-70.7	1152.9	507.4	193.5	191.2	-36.0	-60.4	-119.5	300.8	22.92
2023-03-07	11:04:00	33.68	7.57	147.88	190.67	5.24	314.55	23.25	18656.3	11410.2	22.00	92381.2	1550.9	-72.6	1150.9	507.0	193.5	191.2	-21.4	-39.0	-99.1	353.0	23.82
2023-03-07	11:05:00	33.72	7.42	147.74	191.57	5.24	314.33	23.25	18437.5	11387.7	22.13	92836.8	1554.1	-67.9	1150.9	507.2	193.5	191.2	-17.1	-31.1	-91.9	362.8	23.24
2023-03-07	11:06:00	34.07	7.76	148.78	192.42	5.32	319.43	23.25	18600.0	11393.3	22.82	95761.6	1550.6	-69.5	1152.0	507.4	193.5	191.2	-22.1	-36.1	-98.9	345.4	22.98
2023-03-07	11:07:00	34.46	8.10	148.31	193.64	5.27	315.90	23.25	18456.3	11264.1	22.29	93461.5	1555.6	-65.1	1152.0	507.5	193.5	192.2	-16.2	-34.3	-91.8	358.8	23.60
2023-03-07	11:08:00	33.78	7.63	148.55	191.93	5.33	320.03	23.25	18850.0	11488.8	22.98	96436.2	1550.3	-64.0	1154.1	507.6	193.5	192.2	-26.9	-45.6	-105.5	337.7	23.92
2023-03-07	11:09:00	33.77	7.64	148.07	191.52	5.28	316.88	23.25	18656.3	11376.5	22.59	94789.0	1550.9	-69.9	1153.0	507.9	193.5	192.2	-21.2	-39.0	-98.4	351.4	23.64
2023-03-07	11:10:00	33.74	7.88	147.84	190.35	5.28	316.73	23.25	19037.5	11567.5	23.05	96642.3	1547.6	-86.1	1153.0	508.1	193.5	192.2	-28.7	-48.6	-110.4	312.4	22.92
2023-03-07	11:11:00	33.74	8.07	148.16	191.34	5.25	315.23	23.25	18781.3	11539.4	22.41	93960.0	1549.0	-91.8	1150.9	508.4	194.0	192.2	-22.5	-36.9	-99.2	330.1	31.52
2023-03-07	11:12:00	33.50	7.66	148.25	190.85	5.22	312.98	23.25	18981.3	11522.5	22.70	95160.2	1547.6	-94.2	1150.9	508.5	194.0	192.2	-25.0	-42.1	-105.3	344.1	25.10
2023-03-07	11:13:00	33.96	8.08	148.78	191.03	5.27	316.28	23.25	18600.0	11398.9	22.16	92849.1	1552.5	-97.5	1150.9	508.9	194.5	192.2	-15.9	-34.8	-91.7	356.8	24.82
2023-03-07	11:14:00	33.56	8.07	148.50	190.58	5.25	314.85	23.25	19225.0	11606.8	22.87	95868.7	1552.4	-101.1	1152.0	509.2	194.5	192.2	-37.9	-53.5	-119.7	320.4	25.08
2023-03-07	11:15:00	33.86	8.28	148.12	191.79	5.25	314.85	23.25	18481.3	11578.7	22.13	92735.2	1553.6	-106.9	1152.0	509.2	194.5	192.2	-19.2	-34.6	-94.5	355.1	25.60
2023-03-07	11:16:00	33.60	7.84	147.74	190.80	5.19	311.48	23.25	18750.0	11472.0	25.27	105759.9	1555.3	-105.2	1154.1	508.9	194.0	192.2	-40.4	-61.4	-127.5	287.6	24.82
2023-03-07	11:17:00	33.57	7.53	147.60	191.43	5.29	317.33	23.25	18718.8	11472.0	22.88	95817.9	1550.8	-118.5	1153.0	509.1	194.5	192.2	-24.2	-44.3	-102.2	342.9	24.60
2023-03-07	11:18:00	33.32	7.73	147.03	190.04	5.23	314.03	23.25	18512.5	11472.0	22.37	93686.3	1552.0	-120.5	1153.0	509.1	194.5	193.2	-19.6	-41.8	-98.9	326.6	24.64
2023-03-07	11:19:00	33.84	7.96	148.16	191.75	5.23	313.95	23.25	18681.3	11393.3	22.91	95876.1	1548.9	-136.3	1150.9	508.5	194.5	193.2	-25.9	-42.9	-105.9	320.3	44.28
2023-03-07	11:20:00	33.77	7.76	148.16	190.98	5.23	313.65	23.25	18556.3	11382.1	23.10	96667.2	1552.0	-142.4	1150.9	508.5	195.0	193.2	-22.0	-35.1	-98.5	333.4	43.70
2023-03-07	11:21:00	33.99	8.14	147.93	193.23	5.23	313.80	23.25	18593.8	11404.5	22.91	95876.1	1551.0	-145.9	1150.9	508.2	194.5	193.2	-20.8	-39.4	-98.1	350.5	44.46
2023-03-07	11:22:00	33.84	8.07	148.25	193.14	5.22	313.05	23.25	18668.8	11516.9	22.16	92753.0	1556.1	-143.9	1152.0	508.0	194.5	193.2	-15.8	-30.1	-88.7	360.9	44.14
2023-03-07	11:23:00	33.59	7.68	147.17	189.45	5.20	312.15	23.25	18800.0	11528.1	22.86	95631.5	1552.6	-146.1	1154.1	507.5	194.0	193.2	-22.3	-40.9	-100.3	343.9	57.82
2023-03-07	11:24:00	33.54	7.59	147.88	191.12	5.20	312.23	23.25	18475.0	11404.5	22.33	93511.7	1554.0	-151.7	1153.0	507.0	194.0	193.2	-16.7	-36.0	-90.5	356.8	35.84
2023-03-07	11:25:00	33.50	7.91	147.69	191.43	5.24	314.55	23.25	19187.5	11556.2	23.33	97695.3	1550.8	-161.8	1153.0	507.4	194.0	193.2	-27.5	-48.3	-108.7	329.8	26.24
2023-03-07	11:26:00	33.84	8.04	147.45	192.60	5.21	312.38	23.25	18800.0	11449.5	22.83	95556.0	1552.1	-169.0	1151.9	507.0	194.0	193.2	-21.4	-40.4	-98.5	350.3	26.36
2023-03-07	11:27:00	33.62	8.00	147.54	190.35	5.19	311.55	23.25	19075.0	11618.0	23.24	97429.7	1550.0	-177.3	1151.9	507.2	194.0	193.2	-33.0	-51.4	-116.2	307.1	26.98
2023-03-07	11:28:00	33.72	8.15	147.41	192.74	5.25	315.15	23.25	18681.3	11500.1	22.89	95864.7	1550.1	-180.4	1151.9	507.5	194.0	193.2	-22.1	-41.4	-100.6	326.6	27.10
2023-03-07	11:29:00	33.38	7.74	147.54	190.26	5.24	314.48	23.25	19162.5	11393.3	24.54	102818.9	1550.0	-176.3	1151.9	507.2	194.0	193.2	-39.8	-60.9	-127.0	296.7	24.56
2023-03-07	11:30:00	33.66	7.67	147.88	191.79	5.32	319.13	23.25	18550.0	11443.9	22.98	96262.0	1551.0	-188.1	1150.9	506.2	194.0	193.2	-19.0	-37.8	-93.6	352.4	25.06
2023-03-07	11:31:00	33.06	7.86	147.50	190.35	5.21	312.60	23.25	18587.5	11455.1	25.88	108366.1	1553.4	-185.5	1150.9	506.0	193.5	193.2	-38.4	-57.0	-121.9	292.5	24.76
2023-03-07	11:32:00	33.35	7.79	147.88	190.89	5.21	312.30	23.25	18800.0	11601.2	23.18	97099.4	1550.0	-193.9	1149.9	505.9	193.5	193.2	-19.8	-39.0	-96.5	350.1	25.04
2023-03-07	11:33:00	33.26	7.69	148.12	191.30	5.24	314.33	23.25	18337.5	11387.7	21.79	91234.3	1553.8	-197.6	1149.9	505.6	193.5	193.2	-16.9	-31.9	-90.6	361.5	25.26
2023-03-07	11:34:00	33.57	7.83	148.35	193.01	5.33	319.58	23.25	18900.0	11511.3	23.22	97285.7	1548.9	-206.7	1149.9	506.4	193.5	193.2	-25.7	-40.1	-104.2	338.8	25.08
2023-03-07	11:35:00	33.65	8.11	148.44	193.14	5.21	312.83	23.25	18843.8	11516.9	22.58	94636.1	1551.8	-208.4	1149.9	506.4	193.5	193.2	-19.7	-40.6	-95.3	351.0	25.56
2023-03-07	11:36:00	33.36	8.08	146.51	191.39	5.25	314.70	23.25	19012.5	11415.8	23.63	99035.0	1547.4	-237.2	1149.9	506.3	193.5	193.2	-27.5	-48.5	-109.3	315.3	24.64
2023-03-07	11:37:00	33.74	7.71	147.26	191.52	5.22	312.90	23.25	18600.0	11387.7	22.68	95057.7	1549.4	-240.8	1148.9	505.9	193.5	192.1	-23.0	-40.3	-100.8	330.7	25.34
2023-03-07	11:38:00	32.99	7.87	147.93	190.85	5.21	312.30	23.25	18837.5	11421.4	23.18	97149.8	1547.6	-269.2	1148.9	506.0	193.5	192.1	-24.3	-42.4	-101.4	348.4	24.66
2023-03-07	11:39:00	33.51	8.22	147.22	191.52	5.28	316.50	23.25	18543.8	11387.7	22.48	94243.4	1551.6	-270.0	1147.9	505.8	193.5	192.1	-17.4	-29.8	-91.2	359.2	25.28
2023-03-07	11:40:00	33.41	8.07	147.54	190.67	5.32	319.20	23.25	19031.3	11578.7	23.64	99124.1	1549.8	-270.0	1149.0	505.3	193.0	192.1	-26.8	-43.5	-106.7	339.6	24.56
2023-03-07	11:41:00	34.13	7.83	147.74	193.55	5.25	315.08	23.25	18481.3	11432.6	22.29	93429.5	1552.8	-270.0	1150.1	505.5	193.0	192.1	-18.6	-34.1	-93.4	356.5	25.42
2023-03-07	11:42:00	33.30	7.80	147.26	190.76	5.22	313.28	23.25	19343.8	11606.8	24.06	101083.6	1552.4	-256.0	1153.1	505.7	192.5	192.1	-33.0	-51.4	-118.2	322.3	25.52
2023-03-07	11:43:00	33.44	7.79	147.31	191.52	5.27	316.20	23.25	18768.8	11365.2	23.57	98795.3	1549.4	-270.0	1150.9	506.4	193.0	192.1	-25.6	-43.3	-103.1	346.6	24.80
2023-03-07	11:44:00	33.56	7.66	147.35	190.40	5.20	312.23	23.25	19237.5	11522.5	25.85	108388.2	1546.8	-270.0	1147.8	505.0	192.5	192.1	-43.6	-63.3	-130.1	280.3	25.46
2023-03-07	11:45:00	33.32	7.74	148.02	191.52	5.19	311.63	23.25	18812.5	11528.1	23.59	98942.9	1542.5	-270.0	1142.4	504.4	192.5	192.1	-27.1	-47.3	-104.7	322.3	25.04
2023-03-07	11:46:00	32.72	7.58	147.84	189.90	5.21	312.75	23.25	18581.3	11415.8	25.22	105800.2	1543.4	-270.0	1140.4	503.0	192.0	192.1	-33.2	-57.3	-116.9	301.1	25.48
2023-03-07	11:47:00	34.02	7.61	148.07	193.37	5.14	308.55	23.25	18906.3	11455.1	23.22	97254.3	1542.4	-270.0	1138.4	502.1	191.5	192.1	-22.2	-38.6	-98.9	351.9	24.90
2023-03-07	11:48:00	32.46	7.54	146.08	186.93	5.20	312.00	23.25	18418.8	11354.0	22.86	96071.1	1547.3	-270.0	1139.5	501.2	191.0	191.1	-19.6	-38.5	-92.7	361.9	24.62
2023-03-07	11:49:00	33.50	7.82	148.35	191.21	5.15	309.23	23.25	18862.5	11415.8	23.81	100064.7	1542.6	-270.0	1139.5	501.3	190.5	191.1	-25.1	-40.0	-102.4	345.5	25.60
2023-03-07	11:50:00	33.11	7.70	148.35	190.80	5.29	317.18	23.25	18712.5	11404.5	22.93	96052.0	1544.0	-270.0	1138.4	500.0	190.5	191.1	-21.2	-39.5	-95.3	359.6	25.42
2023-03-07	11:51:00	33.45	7.59	148.74	191.93	5.23	313.88	23.25	19056.3	11511.3	23.47	98566.9	1538.8	-270.0	1136.4	499.8	190.0	191.1	-30.5	-47.0	-109.8	335.0	24.78
2023-03-07	11:52:00	33.36	7.68	147.78	190.04	5.20	311.85	23.25	18737.5	11376.5	23.47	98825.5	1539.4	-270.0	1134.4	499.4	190.0	190.1	-25.2	-45.8	-102.4	349.4	25.40
2023-03-07	11:53:00	33.20	7.96	149.54	191.30	5.26	315.53	23.25	19043.8	11606.8	23.56	99232.9	1536.4	-270.0	1133.4	498.8	189.5	190.1	-34.0	-51.4	-115.3	311.4	24.80
2023-03-07	11:54:00	34.41	8.14	145.89	194.18	5.24	314.25	23.25	18856.3	11500.1	23.57	99300.2	1539.4	-270.0	1133.4	498.5	189.5	190.1	-25.2	-41.1	-102.2	328.9	24.98
2023-03-07	11:55:00	32.76	7.58	146.94	187.47	5.32	319.28	23.25	19218.8	11629.3	23.86	100629.6	1535.0	-270.0	1134.5	498.1	189.0	190.1	-30.2	-47.4	-110.2	342.9	63.94
2023-03-07	11:56:00	32.37	7.58	145.55	187.61	5.23	314.03	23.25	18968.8	11528.1	23.60	99385.3	1535.0	-270.0	1131.4	498.0	189.0	190.1	-22.3	-38.4	-96.6	356.8	64.04
2023-03-07	11:57:00	33.38	7.47	147.88	190.53	5.24	314.55	23.25	19062.5	11702.3	23.75	100182.0	1535.4	-270.0	1131.4	497.1	188.5	189.1	-44.1	-62.1	-127.0	315.5	64.16
2023-03-07	11:58:00	33.24	8.02	147.69	191.97	5.24	314.33	23.25	18675.0	11376.5	23.60	99550.4	1537.5	-270.0	1130.4	497.2	188.5	189.1	-22.6	-38.4	-99.0	354.5	63.34
2023-03-07	11:59:00	32.78	7.47	147.54	190.44	5.26	315.38	23.25	19162.5	11561.8	26.07	109967.4	1539.3	-270.0	1131.5	496.5	188.0	189.1	-46.0	-64.6	-133.2	288.8	64.56
2023-03-07	12:00:00	33.75	7.96	148.64	192.38	5.26	315.38	23.06	18912.5	11359.6	23.70	100016.8	1536.0	-270.0	1131.5	496.6	188.0	189.1	-26.7	-47.1	-105.8	343.1	64.14
2023-03-07	12:01:00	32.15	7.48	146.17	186.80	5.32	318.98	23.06	18662.5	11584.3	23.27	98252.0	1537.4	-270.0	1132.6	496.7	188.0	189.1	-25.4	-41.0	-103.1	343.0	64.32
2023-03-07	12:02:00	33.05	7.39	147.60	188.69	5.19	311.63	23.06	18900.0	11601.2	24.39	103126.6	1530.6	-270.0	1129.2	496.4	188.0	189.1	-31.3	-47.9	-111.0	320.0	64.36
2023-03-07	12:03:00	34.25	7.61	148.21	190.71	5.20	312.23	23.06	18812.5	11500.1	23.35	98645.8	1535.6	-270.0	1128.1	496.7	188.0	189.1	-25.1	-38.3	-101.0	333.8	64.34

MARCH 7/2023	Waste Flows							Air Flows				Temperatures						Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PACFlow
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
Max	34.46	8.28	149.54	194.18	5.33	320.03	23.25	19343.8	11702.3	26.07	109967.4	1556.1	-64.0	1154.1	509.2	195.0	193.2	-15.8	-29.8	-88.7	362.8	64.56
Min	32.15	7.39	145.55	186.80	5.14	308.55	23.06	18337.5	11264.1	21.79	91234.3	1530.6	-270.0	1128.1	496.4	188.0	189.1	-46.0	-64.6	-133.2	280.3	22.92
Average	33.50	7.80	147.75	191.10	5.24	314.51	23.24	18793.4	11476.3	23.30	97767.8	1547.3	-193.4	1146.1	504.7	192.5	191.8	-25.8	-43.7	-104.4	335.6	32.78
Variance	0.20	0.05	0.51	2.28	0.00	6.45	0.00	56452.4	7964.5	0.91	16842184.5	41.7	5946.8	68.2	17.4	4.7	1.8	55.1	74.2	117.8	457.1	213.94

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	TE-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-03-07	12:14:00	34.55	7.68	145.70	191.30	5.26	315.83	23.06	18781.3	11477.6	25.47	107073.8	1555.4	-270.0	1151.1	503.8	192.0	190.2	-37.0	-58.5	-123.7	291.3	25.28
2023-03-07	12:15:00	34.65	7.84	146.08	192.65	5.22	313.13	23.06	18637.5	11438.3	23.08	97092.3	1553.6	-270.0	1153.2	503.9	192.0	190.2	-22.2	-35.3	-98.6	352.1	67.48
2023-03-07	12:16:00	33.96	7.84	146.08	187.92	5.21	312.60	23.06	18450.0	11533.8	23.24	97607.2	1555.6	-270.0	1156.2	504.4	192.0	191.2	-19.0	-32.3	-94.1	363.7	61.18
2023-03-07	12:17:00	34.83	7.91	145.94	191.16	5.20	312.23	23.06	18987.5	11533.8	24.38	102463.9	1552.0	-270.0	1155.1	504.7	192.5	191.2	-23.0	-38.9	-103.1	339.5	61.04
2023-03-07	12:18:00	34.52	7.75	145.42	190.26	5.32	319.20	23.06	18618.8	11556.2	23.80	99976.8	1555.3	-270.0	1154.0	504.8	192.5	191.2	-21.9	-36.6	-97.8	354.8	25.66
2023-03-07	12:19:00	34.58	7.65	145.23	190.71	5.25	314.70	23.06	19318.8	11668.6	24.41	102472.3	1552.3	-270.0	1155.1	505.5	193.0	191.2	-27.1	-42.4	-107.1	317.0	25.10
2023-03-07	12:20:00	34.37	7.85	145.65	191.30	5.25	315.15	23.06	18462.5	11472.0	23.53	98834.3	1555.1	-270.0	1154.0	505.7	193.0	191.2	-22.2	-36.5	-99.2	332.3	24.92
2023-03-07	12:21:00	34.34	7.74	146.08	190.62	5.28	316.73	23.06	18875.0	11528.1	24.36	102296.8	1554.3	-270.0	1155.1	505.5	193.0	191.2	-24.6	-39.3	-101.4	349.4	25.46
2023-03-07	12:22:00	34.77	8.26	146.08	194.18	5.33	319.58	23.06	18656.3	11376.5	23.20	97379.9	1558.8	-270.0	1156.1	505.7	193.5	191.2	-18.2	-34.4	-92.0	358.3	24.70
2023-03-07	12:23:00	33.96	7.73	145.94	190.85	5.17	310.20	23.06	18912.5	11505.7	23.72	99600.8	1556.8	-270.0	1158.1	505.9	193.0	191.2	-27.6	-43.9	-108.0	339.3	24.82
2023-03-07	12:24:00	34.44	7.78	145.94	191.30	5.14	308.40	23.06	18356.3	11472.0	23.38	98051.3	1559.5	-270.0	1158.1	506.7	193.5	192.2	-18.9	-33.0	-94.1	355.2	25.42
2023-03-07	12:25:00	34.07	7.78	146.27	190.71	5.13	307.50	23.06	19337.5	11707.9	23.54	98678.7	1557.1	-270.0	1159.1	506.7	193.0	192.2	-32.7	-52.6	-117.7	321.1	2.52
2023-03-07	12:26:00	34.22	7.59	145.89	191.43	5.21	312.30	23.06	18706.3	11612.4	23.78	99688.9	1555.5	-270.0	1158.0	507.2	193.5	192.2	-23.0	-41.5	-101.2	346.0	25.36
2023-03-07	12:27:00	34.25	7.86	146.08	191.12	5.16	309.83	23.06	18912.5	11601.2	26.28	110214.7	1557.4	-270.0	1158.0	507.5	193.5	192.2	-41.8	-61.5	-129.0	280.1	25.20
2023-03-07	12:28:00	35.00	8.27	146.79	193.05	5.16	309.83	23.06	18743.8	11477.6	23.83	99907.5	1555.5	-270.0	1158.0	508.1	193.5	192.2	-25.0	-43.0	-105.3	322.8	25.42
2023-03-07	12:29:00	33.63	7.56	144.84	188.46	5.13	308.03	23.06	18612.5	11472.0	25.99	108996.5	1555.6	-270.0	1158.0	507.9	194.0	192.2	-36.4	-57.8	-118.0	303.3	24.90
2023-03-07	12:30:00	34.07	7.93	146.17	192.02	5.14	308.55	23.06	18550.0	11438.3	23.77	99661.4	1555.0	-270.0	1155.9	507.9	194.0	192.2	-21.4	-37.9	-97.8	353.5	24.66
2023-03-07	12:31:00	34.19	7.53	146.22	191.39	5.13	308.03	23.06	18456.3	11359.6	22.72	95288.8	1559.1	-270.0	1157.0	507.8	194.0	192.2	-17.7	-34.8	-90.8	363.9	25.06
2023-03-07	12:32:00	34.11	7.76	145.85	191.03	5.13	307.88	23.06	18668.8	11516.9	23.60	99124.1	1555.8	-270.0	1157.0	507.9	194.0	192.2	-22.8	-37.9	-99.8	346.7	25.00
2023-03-07	12:33:00	34.28	7.81	146.27	190.67	5.16	309.75	23.06	18443.8	11404.5	23.29	97569.9	1558.8	-270.0	1157.0	507.4	194.0	192.2	-17.6	-29.8	-92.2	358.8	25.50
2023-03-07	12:34:00	34.29	7.83	146.60	190.94	5.18	310.80	23.06	18850.0	11516.9	24.27	101925.5	1555.5	-270.0	1158.1	507.8	193.5	192.2	-26.8	-42.9	-105.6	334.6	24.56
2023-03-07	12:35:00	34.67	8.15	146.94	194.09	5.15	309.00	23.06	18600.0	11382.1	23.35	97783.0	1557.8	-270.0	1157.0	507.3	194.0	192.2	-21.3	-33.0	-98.1	350.2	24.72
2023-03-07	12:36:00	34.67	7.96	146.45	192.33	5.18	311.03	23.06	18937.5	11539.4	23.85	99973.0	1556.0	-270.0	1158.1	508.1	194.0	192.2	-29.8	-49.0	-112.2	313.6	25.50
2023-03-07	12:37:00	34.62	8.08	146.04	193.19	5.22	313.13	23.06	18662.5	11410.2	23.67	99208.2	1558.5	-270.0	1158.1	507.8	194.0	192.2	-22.7	-39.9	-100.6	328.0	25.48
2023-03-07	12:38:00	34.16	7.79	145.55	191.03	5.15	308.78	23.06	18956.3	11500.1	23.48	98316.3	1556.0	-270.0	1159.1	508.4	194.0	192.2	-27.2	-44.9	-105.6	343.2	24.72
2023-03-07	12:39:00	34.35	7.78	146.13	191.66	5.18	310.80	23.06	18512.5	11432.6	23.28	97509.9	1558.4	-270.0	1158.0	507.8	194.0	192.2	-20.0	-34.4	-93.8	360.4	24.64
2023-03-07	12:40:00	34.11	7.81	145.85	190.58	5.19	311.33	23.06	19200.0	11438.3	24.63	103248.0	1557.4	-270.0	1158.0	508.1	194.0	192.2	-35.3	-51.4	-120.4	315.3	25.42
2023-03-07	12:41:00	34.29	7.95	148.07	192.92	5.18	310.73	23.06	18481.3	11393.3	24.10	100927.7	1558.8	-270.0	1158.0	508.3	194.0	192.2	-17.9	-34.8	-93.6	352.1	24.88
2023-03-07	12:42:00	34.13	7.77	146.55	191.93	5.09	305.63	23.06	18756.3	11393.3	25.46	106583.3	1561.5	-270.0	1159.1	508.5	194.0	192.2	-39.8	-61.8	-126.3	288.3	24.98
2023-03-07	12:43:00	34.47	7.93	147.65	192.20	5.11	306.75	23.06	18543.8	11488.8	24.13	100997.2	1557.8	-270.0	1159.0	509.1	194.0	192.2	-23.3	-40.6	-102.0	344.2	25.62
2023-03-07	12:44:00	34.29	7.94	147.50	191.52	5.16	309.68	24.08	18743.8	11354.0	23.58	98741.5	1560.8	-270.0	1159.0	509.3	194.0	192.2	-18.0	-34.3	-95.0	341.8	24.60
2023-03-07	12:45:00	33.96	7.71	147.41	192.24	5.14	308.63	24.08	18862.5	11398.9	23.79	99646.1	1556.0	-270.0	1159.0	509.4	194.0	192.2	-25.9	-40.5	-105.1	321.6	25.22
2023-03-07	12:46:00	33.99	7.75	147.35	191.25	5.15	308.70	23.03	18725.0	11410.2	23.83	99777.5	1557.4	-270.0	1157.9	508.9	194.5	192.2	-19.2	-37.9	-96.8	334.1	24.66
2023-03-07	12:47:00	34.11	7.94	147.84	192.15	5.17	310.13	23.03	18518.8	11398.9	24.18	101266.1	1555.8	-270.0	1155.9	509.1	194.5	192.2	-20.5	-37.9	-96.6	351.6	25.38
2023-03-07	12:48:00	34.40	7.65	147.97	193.01	5.14	308.48	23.03	18450.0	11410.2	23.47	98217.8	1559.9	-270.0	1155.9	509.0	194.5	193.2	-15.4	-31.6	-90.3	360.8	25.36
2023-03-07	12:49:00	34.20	7.91	148.31	193.23	5.14	308.48	23.03	18937.5	11511.3	23.64	98940.8	1557.8	-270.0	1158.1	509.2	194.5	193.2	-20.8	-38.9	-99.7	342.9	25.42
2023-03-07	12:50:00	34.50	7.65	148.02	193.05	5.16	309.68	23.03	18412.5	11382.1	23.55	98496.4	1561.0	-270.0	1158.1	509.8	194.5	193.2	-16.1	-31.8	-90.2	357.1	24.72
2023-03-07	12:51:00	34.01	7.79	147.41	191.16	5.21	312.38	23.03	18956.3	11516.9	24.23	101351.2	1558.8	-270.0	1159.1	509.7	194.5	193.2	-28.8	-42.9	-109.0	333.7	25.58
2023-03-07	12:52:00	33.99	7.60	148.12	192.33	5.16	309.30	23.03	18437.5	11427.0	23.91	99838.4	1557.4	-270.0	1158.0	509.9	194.5	193.2	-20.9	-37.9	-97.2	347.6	25.22
2023-03-07	12:53:00	34.17	7.67	147.74	191.21	5.17	310.20	22.80	19418.8	11685.4	24.78	103666.8	1552.8	-270.0	1155.9	509.5	194.5	193.2	-32.4	-45.5	-113.5	306.1	24.34
2023-03-07	12:54:00	34.49	7.83	147.88	193.19	5.16	309.75	22.80	18768.8	11314.7	24.14	100975.1	1552.4	-270.0	1152.9	508.9	194.5	193.2	-23.9	-41.4	-101.1	326.3	25.62
2023-03-07	12:55:00	34.23	7.91	147.60	191.79	5.15	308.85	23.81	19025.0	11567.5	25.65	107424.0	1553.1	-270.0	1151.8	507.8	194.5	193.2	-39.2	-62.1	-126.1	297.1	24.56
2023-03-07	12:56:00	34.19	7.86	148.07	193.14	5.16	309.75	23.81	18581.3	11365.2	23.91	100234.5	1555.1	-270.0	1150.8	507.4	194.0	193.2	-19.1	-37.1	-94.0	356.5	25.76
2023-03-07	12:57:00	33.84	7.73	147.60	191.12	5.08	304.65	23.81	18781.3	11387.7	25.33	106126.9	1558.0	-270.0	1151.9	507.4	193.5	193.2	-36.8	-56.1	-121.8	294.7	25.14
2023-03-07	12:58:00	34.14	7.85	147.69	191.16	5.10	306.15	23.81	18693.8	11410.2	23.57	98713.6	1554.4	-270.0	1150.9	506.8	193.5	193.2	-21.2	-38.6	-96.5	352.9	24.68
2023-03-07	12:59:00	34.01	7.65	147.50	190.76	5.23	313.95	23.81	18406.3	11325.9	23.48	98376.2	1556.9	-270.0	1150.9	506.1	193.0	193.2	-17.4	-30.8	-90.1	364.3	25.24
2023-03-07	13:00:00	33.99	7.83	147.74	192.24	5.19	311.18	23.81	18831.3	11500.1	23.76	99612.4	1551.8	-270.0	1148.9	506.0	193.0	193.2	-25.1	-40.4	-104.0	339.9	25.06
2023-03-07	13:01:00	34.44	7.65	148.21	192.11	5.22	312.90	23.81	18575.0	11432.6	23.69	99339.7	1553.8	-270.0	1148.9	505.0	193.0	192.1	-19.8	-37.1	-95.8	351.9	25.52
2023-03-07	13:02:00	34.41	7.81	148.31	191.84	5.11	306.83	23.81	18968.8	11545.0	24.57	103070.5	1550.0	-270.0	1148.9	505.5	193.0	192.1	-27.5	-45.3	-106.8	316.1	25.14
2023-03-07	13:03:00	34.26	7.98	148.21	192.42	5.21	312.60	23.81	18637.5	11421.4	23.91	100293.4	1552.4	-270.0	1148.9	504.8	193.0	192.1	-22.0	-40.3	-98.1	331.6	25.14
2023-03-07	13:04:00	34.41	8.03	147.97	191.52	5.19	311.40	23.81	19018.8	11376.5	24.59	103241.5	1550.5	-270.0	1148.9	505.0	192.5	192.1	-24.2	-42.9	-101.4	348.1	24.44
2023-03-07	13:05:00	33.78	7.71	147.97	191.21	5.22	312.90	23.81	18537.5	11376.5	24.06	100997.7	1552.8	-270.0	1147.9	504.9	192.5	192.1	-18.5	-34.0	-93.3	359.8	25.46
2023-03-07	13:06:00	33.99	7.73	147.78	191.21	5.16	309.38	23.81	19006.3	11505.7	24.24	101761.8	1550.5	-270.0	1147.9	504.2	192.0	192.1	-28.5	-44.1	-107.6	337.6	24.60
2023-03-07	13:07:00	34.13	7.93	148.59	193.23	5.21	312.60	23.81	18606.3	11483.2	23.31	97799.6	1551.4	-270.0	1147.9	504.0	192.0	192.1	-19.1	-34.8	-93.6	355.9	24.72
2023-03-07	13:08:00	34.31	7.65	147.03	191.79	5.15	308.78	23.81	19287.5	11618.0	24.74	103749.3	1551.1	-270.0	1149.0	503.5	192.0	192.1	-35.3	-55.0	-119.2	322.9	25.14
2023-03-07	13:09:00	34.50	8.07	145.61	191.84	5.21	312.83	23.81	18868.8	11500.1	24.18	101466.1	1549.8	-270.0	1147.9	503.5	192.0	192.1	-23.6	-39.1	-100.2	346.4	25.12
2023-03-07	13:10:00	34.05	7.95	146.22	191.84	5.16	309.45	23.81	19212.5	11511.3	26.44	110975.9	1550.0	-270.0	1147.9	503.2	191.5	192.1	-44.1	-64.4	-130.1	282.5	25.52
2023-03-07	13:11:00	33.39	7.63	146.32	191.25	5.17	310.35	23.81	19112.5	11522.5	24.35	102270.5	1545.8	-270.0	1145.9	503.3	192.0	192.1	-26.9	-43.1	-105.4	323.7	25.24
2023-03-07	13:12:00	34.11	7.78	145.89	190.76	5.18	311.03	23.81	18550.0	11415.8	25.31	106622.8	1548.8	-270.0	1144.9	502.5	191.5	191.1	-36.7	-56.0	-117.7	301.6	25.52
2023-03-07	13:13:00	34.41	7.81	146.13	192.47	5.16	309.75	23.81	18775.0	11516.9	23.77	99872.8	1548.1	-270.0	1144.9	502.4	191.5	191.1	-21.7	-38.6	-98.5	352.8	24.88
2023-03-07	13:14:00	34.08	7.69	144.65	190.40	5.16	309.60	23.81	18631.3	11421.4	23.58	99136.6	1551.5	-270.0	1146.0	502.5	191.5	191.1	-18.3	-34.1	-92.7	364.2	24.76

MARCH 7/2023	Waste Flows							Air Flows			Temperatures							Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PACFlow
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
Max	35.00	8.27	148.59	194.18	5.33	319.58	24.08	19418.8	11707.9	26.44	110975.9	1561.5	-270.0	1159.1	509.9	194.5	193.2	-15.4	-29.8	-90.1	364.3	67.48
Min	33.39	7.53	144.65	187.92	5.08	304.65	22.80	18356.3	11314.7	22.72	95288.8	1545.8	-270.0	1144.9	502.4	191.5	190.2	-44.1	-64.4	-130.1	280.1	2.52
Average	34.25	7.82	146.80	191.66	5.18	310.62	23.33	18759.4	11469.8	24.08	100991.1	1555.1	-270.0	1154.2	506.6	193.3	192.1	-25.1	-41.9	-103.5	336.1	26.61
Variance	0.08	0.02	1.04	1.26	0.00	8.47	0.15	66983.9	7457.2	0.62	11054299.4	11.9	0.0	19.8	4.5	0.9	0.5	49.8	76.2	114.5	508.1	79.48

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	TE-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-03-07	13:27:00	33.90	7.47	145.04	190.67	5.18	310.50	23.81	18731.3	11522.5	23.35	98086.3	1556.8	-270.0	1155.1	504.4	191.5	191.1	-22.7	-39.3	-98.3	343.2	25.24
2023-03-07	13:28:00	34.29	7.72	145.94	191.34	5.18	310.50	23.81	19543.8	11640.5	24.88	104547.4	1551.0	-270.0	1154.0	505.2	192.0	191.1	-29.1	-49.0	-111.9	327.6	24.48
2023-03-07	13:29:00	34.44	7.74	146.32	191.97	5.11	306.83	23.81	19325.0	11410.2	24.18	101537.2	1549.9	-270.0	1152.9	505.6	192.5	191.1	-21.5	-41.5	-101.8	339.2	24.44
2023-03-07	13:30:00	34.53	7.60	146.08	191.75	5.19	311.10	23.81	19281.3	11449.5	23.99	100981.6	1547.8	-270.0	1150.9	506.0	193.0	191.1	-21.9	-40.6	-101.0	359.0	25.18
2023-03-07	13:31:00	34.16	7.69	145.32	191.48	5.17	310.28	23.81	19325.0	11342.7	24.00	100662.4	1550.1	-270.0	1150.9	505.6	193.5	191.1	-17.9	-34.3	-94.5	368.4	25.46
2023-03-07	13:32:00	34.17	7.73	146.27	191.52	5.14	308.40	23.81	19537.5	11550.6	24.10	101127.0	1546.1	-270.0	1150.9	505.9	193.5	192.2	-24.8	-42.1	-105.3	351.2	24.92
2023-03-07	13:33:00	34.37	7.94	146.13	192.15	5.17	310.43	23.81	18943.8	11455.1	24.30	101792.1	1549.8	-270.0	1149.9	506.4	194.0	192.2	-17.8	-33.3	-95.8	366.7	24.96
2023-03-07	13:34:00	34.05	7.44	145.61	190.94	5.18	310.73	23.81	19806.3	11561.8	24.51	102674.6	1545.6	-270.0	1149.9	506.5	194.0	192.2	-29.1	-43.3	-111.9	338.3	25.40
2023-03-07	13:35:00	34.56	7.62	145.98	191.57	5.14	308.48	23.81	19250.0	11337.1	24.42	102202.2	1546.5	-270.0	1148.9	506.3	194.5	193.2	-22.4	-39.8	-102.6	355.1	25.56
2023-03-07	13:36:00	34.16	7.69	146.60	190.44	5.21	312.45	23.81	20000.0	11679.8	24.97	104526.8	1544.8	-270.0	1148.9	506.4	195.0	193.2	-32.8	-49.4	-120.0	311.7	25.34
2023-03-07	13:37:00	34.34	7.55	146.04	191.70	5.25	315.15	23.81	19668.8	11545.0	24.42	102195.6	1545.8	-270.0	1147.9	506.9	195.5	193.2	-23.3	-35.9	-105.0	332.3	25.48
2023-03-07	13:38:00	34.28	7.67	145.74	190.26	5.19	311.18	23.81	20031.3	11550.6	26.22	109680.1	1545.5	-270.0	1147.9	506.3	195.5	193.2	-42.2	-65.1	-131.4	303.9	24.54
2023-03-07	13:39:00	34.74	7.89	146.22	191.97	5.21	312.53	23.81	19250.0	11432.6	24.15	101001.9	1546.9	-270.0	1147.9	506.9	196.0	193.2	-18.5	-35.9	-96.3	363.4	25.34
2023-03-07	13:40:00	34.50	7.63	145.98	190.67	5.21	312.45	23.81	19300.0	11511.3	26.61	111263.5	1551.1	-270.0	1149.0	507.8	195.5	193.2	-39.1	-60.3	-126.0	300.9	24.80
2023-03-07	13:41:00	34.55	7.71	145.74	191.52	5.22	313.35	23.81	19275.0	11505.7	24.36	101832.4	1548.5	-270.0	1150.1	509.2	195.5	193.2	-19.9	-38.0	-97.5	357.8	24.72
2023-03-07	13:42:00	34.10	7.75	145.65	191.34	5.21	312.45	23.81	18950.0	11258.5	24.10	100684.0	1552.0	-270.0	1150.1	509.8	195.5	194.2	-17.4	-35.9	-93.4	370.6	24.82
2023-03-07	13:43:00	34.20	7.83	146.08	191.16	5.23	313.80	23.81	19462.5	11488.8	24.56	102568.6	1546.9	-270.0	1151.1	510.7	196.0	194.2	-26.0	-44.9	-106.7	346.5	25.28
2023-03-07	13:44:00	34.35	7.76	145.46	191.48	5.18	310.50	23.81	19156.3	11370.8	24.20	101007.3	1549.5	-270.0	1150.0	511.1	196.0	194.2	-19.6	-38.9	-97.8	359.4	24.84
2023-03-07	13:45:00	34.50	7.50	146.13	191.84	5.11	306.60	23.81	19393.8	11438.3	24.37	101718.8	1544.8	-270.0	1151.1	512.1	196.0	194.2	-27.9	-48.5	-110.8	322.3	25.58
2023-03-07	13:46:00	34.13	7.53	146.08	191.97	5.11	306.75	23.81	19031.3	11472.0	24.66	102986.2	1547.3	-270.0	1150.0	511.9	196.5	194.2	-22.8	-40.9	-101.1	338.1	25.54
2023-03-07	13:47:00	33.54	7.44	146.22	190.71	5.10	306.15	23.81	19318.8	11443.9	24.71	102746.6	1543.5	-270.0	1150.0	511.8	196.5	194.2	-23.0	-40.3	-104.0	353.9	25.20
2023-03-07	13:48:00	34.56	7.65	145.27	191.52	5.19	311.55	23.81	19131.3	11314.7	23.96	99976.2	1546.5	-270.0	1147.9	511.8	196.5	194.2	-18.3	-35.4	-94.2	365.9	25.36
2023-03-07	13:49:00	33.90	7.43	145.89	190.98	5.12	307.43	23.81	19575.0	11528.1	24.32	101435.6	1544.0	-270.0	1150.1	511.9	196.0	194.2	-26.7	-44.0	-108.0	343.3	25.00
2023-03-07	13:50:00	34.14	7.52	145.74	191.93	5.13	307.73	23.81	19137.5	11443.9	23.32	97283.7	1545.5	-270.0	1150.1	512.2	196.0	194.2	-20.6	-34.0	-96.0	364.1	24.74
2023-03-07	13:51:00	34.22	7.44	146.17	191.34	4.69	281.10	23.81	19775.0	11601.2	24.80	103493.7	1543.8	-270.0	1150.1	512.0	196.0	194.2	-34.0	-54.4	-119.1	328.2	25.62
2023-03-07	13:52:00	33.90	7.49	145.80	192.20	4.73	283.73	23.81	19112.5	11370.8	24.59	102610.4	1542.5	-270.0	1149.0	511.8	196.0	194.2	-23.0	-39.1	-103.1	352.3	24.84
2023-03-07	13:53:00	33.90	7.36	146.22	192.33	4.72	283.35	23.81	19868.8	11511.3	26.22	109413.0	1542.3	-270.0	1149.0	511.4	196.0	194.2	-41.5	-62.5	-130.7	287.0	24.68
2023-03-07	13:54:00	34.08	7.51	146.17	191.16	4.68	280.65	23.81	19481.3	11488.8	23.70	98848.9	1539.4	-270.0	1146.9	512.0	196.0	194.2	-24.2	-41.4	-104.8	329.1	25.20
2023-03-07	13:55:00	34.25	7.22	145.80	192.38	4.70	282.08	23.81	19231.3	11460.7	25.82	107770.3	1542.3	-270.0	1145.9	511.6	196.0	194.2	-35.8	-59.5	-118.5	309.6	25.30
2023-03-07	13:56:00	34.13	7.31	145.65	190.94	4.70	282.23	23.81	19518.8	11601.2	24.18	100953.1	1539.5	-270.0	1145.9	511.1	196.0	194.2	-20.1	-36.1	-96.1	361.1	24.56
2023-03-07	13:57:00	33.77	7.44	145.61	190.85	4.71	282.60	23.81	19087.5	11370.8	23.78	99235.4	1543.1	-270.0	1145.9	510.1	195.5	194.2	-18.1	-31.8	-92.1	372.2	24.98
2023-03-07	13:58:00	33.90	7.58	145.89	192.20	4.67	280.20	23.81	19406.3	11427.0	24.39	101825.4	1539.9	-270.0	1145.9	509.8	195.5	194.2	-23.0	-41.4	-102.8	356.6	24.96
2023-03-07	13:59:00	33.54	7.26	145.23	191.61	4.72	283.05	23.81	19093.8	11511.3	22.99	95918.3	1542.5	-270.0	1145.9	509.4	195.0	194.2	-20.5	-34.5	-95.9	367.6	25.46
2023-03-07	14:00:00	33.95	7.50	146.75	192.24	4.67	280.35	23.81	19550.0	11516.9	24.61	102791.3	1537.9	-270.0	1145.9	509.2	195.0	194.2	-27.9	-48.3	-110.4	344.3	25.52
2023-03-07	14:01:00	33.96	7.30	145.80	192.74	4.70	281.70	23.81	19412.5	11297.8	24.24	101248.5	1539.4	-270.0	1144.9	508.4	195.0	194.2	-21.2	-40.3	-98.9	357.1	25.22
2023-03-07	14:02:00	33.74	7.14	145.32	191.48	5.08	305.03	23.81	19731.3	11606.8	25.00	104473.6	1535.5	-270.0	1143.8	508.0	194.5	194.2	-32.8	-53.0	-116.1	319.8	24.64
2023-03-07	14:03:00	33.98	7.33	145.37	191.25	5.08	304.95	23.06	19393.8	11460.7	24.61	102834.6	1535.0	-270.0	1141.8	507.3	195.0	194.2	-24.2	-44.9	-104.8	336.0	24.88
2023-03-07	14:04:00	33.71	7.29	146.08	190.71	5.13	308.03	23.06	19750.0	11584.3	24.06	100544.4	1532.9	-270.0	1141.8	506.8	194.5	194.2	-28.0	-44.0	-110.1	350.6	24.60
2023-03-07	14:05:00	34.32	7.51	145.74	191.88	5.10	305.70	23.06	19137.5	11500.1	23.97	100175.8	1536.5	-270.0	1140.8	506.8	194.5	194.2	-19.7	-36.9	-93.8	364.8	25.50
2023-03-07	14:06:00	34.08	7.43	145.32	191.12	5.17	310.20	23.06	19943.8	11634.9	26.22	109738.3	1536.1	-270.0	1141.9	506.3	194.0	193.1	-40.8	-54.4	-124.4	322.7	25.62
2023-03-07	14:07:00	34.14	7.08	146.13	192.42	5.13	307.80	23.06	19381.3	11438.3	23.59	98699.9	1537.0	-270.0	1140.9	506.4	194.0	193.1	-21.4	-40.6	-97.5	358.6	24.62
2023-03-07	14:08:00	33.90	7.21	146.08	191.43	5.14	308.55	23.06	19575.0	11393.3	26.24	109737.7	1538.9	-270.0	1142.0	506.0	193.5	193.1	-43.3	-66.5	-133.0	294.1	24.98
2023-03-07	14:09:00	34.20	7.28	145.98	192.02	4.87	292.20	23.06	19568.8	11387.7	24.32	101806.9	1534.5	-270.0	1142.0	505.6	193.5	193.1	-24.2	-43.1	-105.2	347.4	24.68
2023-03-07	14:10:00	33.71	7.15	144.84	190.35	5.12	307.43	23.06	19418.8	11505.7	23.66	99039.0	1536.3	-270.0	1140.9	506.0	193.5	193.1	-22.2	-41.6	-100.8	345.3	24.96
2023-03-07	14:11:00	34.28	7.51	145.94	192.20	5.09	305.40	23.06	19537.5	11466.3	24.56	102870.9	1531.1	-270.0	1139.9	506.6	193.5	193.1	-28.7	-47.0	-110.0	327.3	25.08
2023-03-07	14:12:00	34.10	7.30	145.70	191.34	5.08	304.65	23.06	19293.8	11466.3	23.89	99958.2	1534.8	-270.0	1138.9	506.7	193.5	193.1	-22.2	-38.6	-100.5	337.9	24.74
2023-03-07	14:13:00	33.75	7.21	146.27	191.84	5.17	310.13	23.06	19300.0	11337.1	24.17	101148.1	1533.3	-270.0	1138.9	506.8	193.5	193.1	-22.3	-43.9	-100.2	356.9	25.50
2023-03-07	14:14:00	34.28	7.45	146.41	192.56	5.10	305.78	24.11	19037.5	11342.7	24.17	101228.5	1538.5	-270.0	1140.0	506.5	193.5	193.1	-18.0	-37.9	-93.8	369.2	24.56
2023-03-07	14:15:00	33.92	7.28	146.04	191.43	5.10	306.15	24.11	19537.5	11589.9	24.54	102738.5	1535.1	-270.0	1142.1	506.7	193.5	193.1	-25.0	-43.6	-104.9	350.5	25.04
2023-03-07	14:16:00	34.04	7.35	146.04	191.61	5.08	304.58	23.10	19106.3	11567.5	24.09	100652.3	1537.6	-270.0	1142.1	506.9	193.5	193.1	-19.2	-33.8	-94.3	366.8	24.94
2023-03-07	14:17:00	33.65	7.01	146.41	190.71	5.13	307.50	23.10	19700.0	11550.6	25.21	105564.3	1533.9	-270.0	1143.1	506.7	193.0	193.1	-32.1	-51.4	-113.8	339.5	25.72
2023-03-07	14:18:00	33.65	7.50	145.74	191.03	5.11	306.38	23.10	19300.0	11415.8	24.29	101705.6	1533.9	-270.0	1142.0	506.7	193.5	193.1	-24.1	-42.4	-101.7	354.8	25.32
2023-03-07	14:19:00	34.23	7.03	144.84	190.22	5.07	304.13	23.10	19993.8	11528.1	24.86	104123.1	1532.8	-270.0	1142.0	506.5	193.0	193.1	-34.0	-54.3	-117.7	307.7	25.34
2023-03-07	14:20:00	34.14	7.32	146.70	191.88	5.10	306.08	23.10	19493.8	11449.5	24.75	103634.5	1533.6	-270.0	1140.9	506.6	193.5	193.1	-25.4	-44.4	-105.4	331.2	25.16
2023-03-07	14:21:00	33.62	7.35	145.65	191.30	4.74	284.18	23.10	19712.5	11483.2	26.41	110568.8	1533.3	-270.0	1140.9	506.2	193.5	193.1	-44.9	-64.6	-134.4	302.3	25.62
2023-03-07	14:22:00	34.02	7.24	146.13	191.93	4.70	281.93	23.10	19118.8	11348.4	23.68	99175.6	1535.1	-270.0	1140.9	506.3	193.5	193.1	-20.6	-37.3	-97.4	360.0	25.08
2023-03-07	14:23:00	33.84	7.21	145.74	191.48	4.68	280.88	23.10	19187.5	11561.8	26.70	111813.9	1537.3	-270.0	1142.0	506.0	193.0	193.1	-43.5	-63.4	-129.1	300.6	25.04
2023-03-07	14:24:00	34.05	7.32	145.51	191.21	4.97	297.98	23.10	19293.8	11533.8	24.62	103163.0	1534.5	-270.0	1142.0	506.1	193.0	193.1	-22.3	-40.9	-99.4	356.7	25.58
2023-03-07	14:25:00	33.68	7.25	146.45	192.24	5.12	307.43	23.10	19187.5	11415.8	23.89	100044.4	1537.1	-270.0	1142.0	505.6	193.0	193.1	-18.3	-35.8	-92.8	370.3	25.34
2023-03-07	14:26:00	34.01	7.19	146.51	191.88	5.10	305.85	23.10	19468.8	11573.1	25.15	105392.9	1532.0	-270.0	1140.9	505.7	193.0	193.1	-27.9	-44.3	-108.8	347.0	24.62
2023-03-07	14:27:00	34.29	7.15	146.22	191.25	5.10	306.23	23.10	19381.3	11331.5	23.86	99940.8	1534.3	-270.0	1140.9	505.9	193.0	193.1	-23.3	-38.9	-100.1	361.3	25.46

MARCH 7/2023	Waste Flows							Air Flows				Temperatures							Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PACFlow
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
Max	34.74	7.94	146.75	192.74	5.25	315.15	24.11	20031.3	11679.8	26.70	111813.9	1556.8	-270.0	1155.1	512.2	196.5	194.2	-17.4	-31.8	-92.1	372.2	25.72
Min	33.54	7.01	144.84	190.22	4.67	280.20	23.06	18731.3	11258.5	22.99	95918.3	1531.1	-270.0	1138.9	504.4	191.5	191.1	-44.9	-66.5	-134.4	287.0	24.44
Average	34.09	7.44	145.90	191.50	5.03	302.02	23.55	19401.8	11473.5	24.53	102613.1	1541.1	-270.0	1145.8	507.9	194.5	193.3	-25.9	-44.0	-106.1	343.1	25.10
Variance	0.08	0.05	0.18	0.35	0.04	133.81	0.14	79186.6	8786.0	0.68	11890546.3	39.5	0.0	18.8	5.5	1.7	0.8	54.6	77.3	124.4	483.4	0.13

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	TE-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-03-07	14:40:00	33.87	7.21	145.18	190.13	4.74	284.40	23.10	19206.3	11393.3	23.91	100251.1	1534.5	-270.0	1136.9	504.0	192.5	192.0	-21.1	-36.6	-95.2	370.7	25.18
2023-03-07	14:41:00	33.93	7.24	146.41	192.42	5.12	307.35	23.10	19450.0	11556.2	23.69	99295.7	1530.6	-270.0	1138.0	504.1	192.5	192.0	-24.0	-40.8	-100.6	355.6	66.88
2023-03-07	14:42:00	34.07	7.30	145.94	192.38	4.70	281.85	23.10	19237.5	11455.1	24.08	101002.9	1534.9	-270.0	1136.9	503.6	192.5	192.0	-19.5	-36.1	-94.1	369.4	67.64
2023-03-07	14:43:00	33.96	7.18	145.85	191.52	4.71	282.38	23.10	19587.5	11589.9	25.08	105184.6	1531.5	-270.0	1139.1	504.1	192.0	192.0	-27.2	-45.1	-108.9	345.2	67.06
2023-03-07	14:44:00	34.02	7.53	146.36	192.42	4.69	281.48	23.10	19468.8	11488.8	24.23	101573.5	1533.5	-270.0	1138.0	504.5	192.5	192.0	-23.4	-42.4	-99.9	359.6	26.58
2023-03-07	14:45:00	33.74	7.00	145.61	191.21	5.10	305.93	23.10	19800.0	11606.8	25.16	105547.5	1530.3	-270.0	1138.0	504.8	192.5	192.0	-31.7	-48.4	-115.2	319.6	24.66
2023-03-07	14:46:00	33.99	7.13	145.98	190.89	4.68	280.80	23.10	19581.3	11561.8	24.01	100689.4	1531.3	-270.0	1136.9	504.8	192.5	192.0	-24.4	-41.3	-103.5	334.9	25.62
2023-03-07	14:47:00	34.13	7.46	145.89	190.58	4.69	281.40	23.10	19725.0	11730.4	24.90	104398.5	1529.9	-270.0	1136.9	504.5	192.5	192.0	-28.4	-44.5	-110.0	350.9	24.50
2023-03-07	14:48:00	33.90	7.38	145.80	192.06	4.73	283.73	23.10	19331.3	11612.4	23.90	100244.6	1532.5	-270.0	1136.9	504.3	192.5	192.0	-21.8	-39.4	-96.6	363.0	24.76
2023-03-07	14:49:00	33.53	7.11	145.74	190.44	4.99	299.63	23.10	19975.0	11612.4	23.76	99693.6	1531.9	-270.0	1136.9	503.7	192.0	192.0	-43.3	-62.1	-127.7	321.7	25.64
2023-03-07	14:50:00	34.28	7.24	146.13	192.33	4.66	279.60	23.10	19318.8	11432.6	24.11	101106.0	1532.5	-270.0	1136.9	503.8	192.5	192.0	-21.8	-39.1	-98.0	361.0	25.36
2023-03-07	14:51:00	33.75	7.25	145.04	191.12	4.70	281.70	23.10	19568.8	11432.6	26.25	110041.5	1535.1	-270.0	1138.0	503.3	192.0	192.0	-43.4	-66.3	-132.2	294.1	25.48
2023-03-07	14:52:00	34.10	7.14	145.98	192.11	4.72	283.20	23.10	19456.3	11533.8	24.66	103488.9	1531.3	-270.0	1138.0	503.6	192.0	192.0	-25.2	-42.9	-106.5	349.4	24.84
2023-03-07	14:53:00	34.07	7.30	146.13	191.48	4.72	283.35	23.10	19500.0	11410.2	24.06	100997.7	1533.3	-270.0	1138.0	503.4	192.0	192.0	-21.6	-38.0	-100.2	347.7	25.52
2023-03-07	14:54:00	34.20	7.34	146.08	191.34	5.10	305.85	23.29	19443.8	11511.3	24.08	101132.8	1530.3	-270.0	1136.9	503.9	192.5	192.0	-28.5	-49.4	-109.8	326.3	25.34
2023-03-07	14:55:00	33.77	7.09	146.17	191.03	5.09	305.48	23.29	19331.3	11528.1	24.01	100738.9	1532.9	-270.0	1136.9	504.4	192.5	192.0	-25.0	-42.8	-101.4	340.5	25.60
2023-03-07	14:56:00	34.10	7.08	146.45	191.57	5.11	306.30	23.29	19437.5	11511.3	24.39	102316.4	1531.9	-270.0	1136.9	504.6	192.5	192.0	-23.2	-41.5	-101.6	356.1	25.18
2023-03-07	14:57:00	34.55	7.10	145.98	193.37	5.08	304.80	23.29	19318.8	11393.3	23.71	99442.9	1538.3	-270.0	1138.0	504.5	192.5	192.0	-20.3	-38.9	-97.1	370.1	25.62
2023-03-07	14:58:00	34.17	7.08	146.36	192.11	5.10	305.85	23.29	19506.3	11539.4	24.16	101041.4	1536.1	-270.0	1140.2	504.4	192.5	192.0	-27.9	-44.0	-106.5	353.9	25.52
2023-03-07	14:59:00	34.43	7.03	146.98	191.75	5.13	307.88	23.29	19043.8	11539.4	23.41	98197.0	1539.1	-270.0	1140.2	505.0	192.5	192.0	-18.2	-34.0	-93.3	365.1	25.52
2023-03-07	15:00:00	33.92	7.17	145.94	190.98	4.71	282.83	23.29	20025.0	11612.4	24.71	103591.0	1534.8	-270.0	1141.2	505.4	192.5	192.0	-31.5	-50.0	-114.7	340.6	24.92
2023-03-07	15:01:00	34.16	7.16	145.61	192.33	5.17	309.98	23.29	19450.0	11398.9	24.58	103097.2	1535.0	-270.0	1139.0	504.9	192.5	192.0	-24.7	-40.1	-101.7	357.2	24.74
2023-03-07	15:02:00	34.32	7.25	145.65	190.85	5.18	310.50	23.29	19850.0	11640.5	24.68	103281.3	1533.6	-270.0	1139.0	505.0	192.5	192.0	-34.3	-53.0	-119.3	311.5	24.50
2023-03-07	15:03:00	34.43	7.03	145.51	190.71	5.19	311.48	23.29	19300.0	11398.9	24.62	103341.2	1534.4	-270.0	1137.9	505.6	193.0	192.0	-26.1	-45.1	-105.6	330.1	25.22
2023-03-07	15:04:00	33.89	7.03	147.45	191.52	5.14	308.33	23.29	19712.5	11545.0	25.89	108553.1	1535.4	-270.0	1137.9	504.9	193.0	192.0	-43.3	-63.3	-132.3	303.7	25.08
2023-03-07	15:05:00	34.22	7.01	146.88	192.29	4.72	283.13	23.29	19187.5	11455.1	23.55	98809.1	1537.4	-270.0	1137.9	505.3	193.0	192.0	-22.0	-38.9	-99.0	361.8	25.58
2023-03-07	15:06:00	34.25	6.94	145.74	190.98	5.19	311.18	23.29	19243.8	11438.3	26.35	110744.2	1539.5	-270.0	1139.0	505.2	193.0	192.0	-42.2	-61.1	-129.0	301.1	24.72
2023-03-07	15:07:00	34.14	7.17	146.32	192.15	5.12	307.43	23.29	19406.3	11567.5	23.63	99124.9	1536.3	-270.0	1139.0	505.6	193.0	192.0	-23.0	-35.4	-100.6	357.8	25.40
2023-03-07	15:08:00	33.96	6.67	145.55	190.76	4.75	284.93	23.29	19068.8	11438.3	23.53	98619.6	1542.3	-270.0	1139.0	506.1	193.0	192.0	-18.1	-35.8	-94.1	370.4	25.42
2023-03-07	15:09:00	34.16	7.18	146.55	191.12	5.06	303.30	23.29	19512.5	11561.8	24.00	100581.2	1538.5	-270.0	1141.2	507.7	193.0	192.0	-26.5	-43.5	-106.9	347.6	24.64
2023-03-07	15:10:00	34.52	7.05	146.84	191.70	4.72	283.13	23.29	19318.8	11556.2	24.05	100759.7	1542.5	-270.0	1144.2	508.1	193.5	192.0	-22.3	-40.0	-100.1	361.1	25.30
2023-03-07	15:11:00	33.81	7.36	146.41	190.71	4.76	285.68	23.29	19618.8	11646.1	24.49	102633.4	1539.9	-270.0	1145.2	508.9	194.0	192.0	-29.4	-47.4	-111.7	323.8	24.60
2023-03-07	15:12:00	34.65	7.15	146.94	193.37	4.74	284.10	23.29	19425.0	11528.1	23.35	97712.6	1543.3	-270.0	1145.2	509.3	194.5	193.1	-23.0	-39.5	-100.5	337.5	25.14
2023-03-07	15:13:00	34.01	7.11	146.17	190.35	5.14	308.48	23.29	19350.0	11528.1	24.18	101077.8	1541.9	-270.0	1146.2	509.5	194.5	193.1	-22.4	-38.3	-102.2	355.9	25.12
2023-03-07	15:14:00	33.68	7.07	145.23	191.12	5.11	306.53	23.29	18968.8	11427.0	22.97	96200.1	1546.6	-270.0	1148.2	509.4	195.0	193.1	-18.8	-33.8	-95.1	367.2	24.78
2023-03-07	15:15:00	33.54	6.92	145.65	190.22	4.72	283.13	23.29	19662.5	11545.0	24.33	101742.2	1543.6	-270.0	1149.2	509.7	195.0	193.1	-29.9	-48.6	-110.2	345.9	25.68
2023-03-07	15:16:00	34.22	7.22	139.83	190.49	4.71	282.60	23.29	19306.3	11691.1	23.65	98898.4	1545.9	-270.0	1148.1	509.9	195.0	193.1	-21.4	-34.8	-97.3	364.4	25.24
2023-03-07	15:17:00	33.87	6.97	144.37	190.53	4.70	281.93	23.29	19837.5	11589.9	24.50	102438.9	1545.9	-270.0	1150.1	510.0	195.0	193.1	-35.7	-52.9	-121.2	329.2	25.34
2023-03-07	15:18:00	34.59	7.29	144.65	192.24	4.71	282.45	23.29	19418.8	11573.1	23.78	99365.8	1545.9	-270.0	1150.1	510.4	195.5	193.1	-23.0	-39.8	-101.9	354.2	24.74
2023-03-07	15:19:00	34.20	6.80	144.95	192.69	5.12	307.28	23.29	19968.8	11657.4	25.54	106683.0	1547.9	-270.0	1150.1	510.7	195.5	194.2	-43.5	-65.6	-132.9	288.9	24.70
2023-03-07	15:20:00	34.28	7.00	145.46	192.65	4.73	283.65	23.29	19512.5	11567.5	24.02	100333.8	1545.1	-270.0	1150.0	511.4	196.0	194.2	-24.3	-40.5	-105.0	330.5	25.48
2023-03-07	15:21:00	33.87	6.75	144.61	190.04	4.69	281.40	23.29	19237.5	11500.1	26.41	110335.9	1547.0	-270.0	1150.0	511.4	196.0	194.2	-39.3	-63.0	-121.5	310.9	25.34
2023-03-07	15:22:00	34.20	6.95	145.08	191.79	4.73	283.88	23.29	19081.3	11472.0	23.84	99562.3	1545.5	-270.0	1150.0	512.0	196.5	194.2	-20.7	-36.9	-98.6	360.5	24.54
2023-03-07	15:23:00	34.10	7.01	145.14	191.12	4.70	281.93	23.29	19012.5	11348.4	23.10	96382.4	1550.3	-270.0	1150.0	512.1	196.5	194.2	-17.8	-35.4	-92.2	371.8	24.50
2023-03-07	15:24:00	34.25	7.08	146.36	192.29	4.74	284.25	23.29	19237.5	11438.3	23.96	99966.2	1547.6	-270.0	1151.1	512.1	196.5	194.2	-22.0	-38.9	-99.5	355.2	25.24
2023-03-07	15:25:00	33.89	7.13	145.89	192.11	5.14	308.18	23.29	19131.3	11539.4	23.22	96882.5	1550.8	-270.0	1151.1	512.1	196.5	194.2	-17.4	-32.8	-93.0	368.4	25.52
2023-03-07	15:26:00	34.13	7.25	145.85	192.06	4.68	280.80	23.29	19587.5	11685.4	23.53	98116.4	1548.4	-270.0	1151.1	511.9	196.5	194.2	-26.5	-42.6	-106.7	343.8	25.38
2023-03-07	15:27:00	34.46	7.04	145.23	192.33	4.86	291.83	23.29	19137.5	11522.5	23.59	98243.5	1549.9	-270.0	1151.1	512.3	196.5	194.2	-20.6	-40.5	-97.3	361.4	25.14
2023-03-07	15:28:00	33.89	6.95	145.74	190.98	5.12	307.05	23.29	19537.5	11516.9	24.50	102228.2	1545.9	-270.0	1152.1	512.7	196.5	194.2	-29.4	-49.0	-111.9	319.4	25.58
2023-03-07	15:29:00	34.04	7.01	146.41	191.66	5.11	306.75	23.29	19318.8	11387.7	23.96	99885.5	1545.9	-270.0	1151.0	512.2	197.0	194.2	-22.0	-34.1	-100.5	336.8	25.42
2023-03-07	15:30:00	33.83	6.82	145.94	190.58	4.78	286.65	23.29	19431.3	11516.9	23.61	98586.8	1544.6	-270.0	1149.9	511.7	197.0	194.2	-25.3	-42.0	-105.8	350.8	24.76
2023-03-07	15:31:00	33.62	7.09	146.51	191.66	5.14	308.10	23.29	19093.8	11494.4	23.13	96408.9	1546.9	-270.0	1148.9	511.9	197.0	194.2	-16.5	-33.3	-94.5	365.2	24.58
2023-03-07	15:32:00	33.86	6.85	146.27	191.57	5.17	310.35	23.29	19825.0	11500.1	24.17	100786.2	1547.6	-270.0	1150.0	511.9	197.0	195.2	-36.6	-49.3	-125.5	325.3	25.32
2023-03-07	15:33:00	34.02	7.31	146.98	192.69	5.07	304.43	23.29	19162.5	11466.3	23.06	96084.2	1548.9	-270.0	1150.0	511.8	197.0	195.2	-19.1	-36.4	-95.5	360.7	25.16
2023-03-07	15:34:00	34.43	7.18	159.58	192.65	5.14	308.25	23.29	19293.8	11516.9	25.92	107958.6	1552.5	-270.0	1152.1	511.6	196.5	195.2	-35.1	-54.1	-125.2	295.2	24.58
2023-03-07	15:35:00	33.86	7.08	149.77	191.61	5.10	305.93	23.29	19187.5	11511.3	23.56	98141.9	1548.6	-270.0	1152.1	512.9	197.0	195.2	-23.3	-41.4	-101.7	349.9	24.72
2023-03-07	15:36:00	33.15	7.04	149.73	190.49	5.11	306.45	23.29	19068.8	11432.6	23.19	96493.9	1548.9	-270.0	1149.9	512.9	197.5	195.2	-17.2	-37.1	-96.2	351.2	24.88
2023-03-07	15:37:00	33.81	7.16	147.93	192.02	5.13	307.50	23.29	19575.0	11421.4	23.99	99821.6	1543.6	-270.0	1147.9	513.1	197.5	195.2	-25.5	-44.4	-106.2	328.1	24.72
2023-03-07	15:38:00	33.77	6.82	149.02	190.80	5.15	308.93	23.29	19062.5	11522.5	23.67	98453.7	1545.9	-270.0	1146.9	512.7	198.0	195.2	-21.3	-36.1	-99.1	341.9	25.08
2023-03-07	15:39:00	34.11	7.27	146.98	191.93	4.77	286.28	23.29	19243.8	11398.9	23.43	97498.0	1544.9	-270.0	1145.8	512.5	198.0	195.2	-19.5	-34.8	-96.9	358.5	25.30
2023-03-07	15:40:00	34.05	7.20	150.01	194.00	5.26	315.45	23.29	19162.5	11443.9	23.17	96485.5	1551.9	-270.0	1146.9	511.9	198.0	195.2	-14.2	-30.1	-87.7	368.6	24.70

MARCH 7/2023	Waste Flows							Air Flows		Temperatures								Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PACFlow
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
Max	34.65	7.53	159.58	194.00	5.26	315.45	23.29	20025.0	11730.4	26.41	110744.2	1552.5	-270.0	1152.1	513.1	198.0	195.2	-14.2	-30.1	-87.7	371.8	67.64
Min	33.15	6.67	139.83	190.04	4.66	279.60	23.10	18968.8	11348.4	22.97	96084.2	1529.9	-270.0	1136.9	503.3	192.0	192.0	-43.5	-66.3	-132.9	288.9	24.50
Average	34.04	7.11	146.34	191.58	4.93	295.56	23.24	19406.9	11515.4	24.15	101021.2	1540.5	-270.0	1143.8	508.0	194.4	193.1	-25.8	-43.2	-105.5	344.6	27.20
Variance	0.08	0.03	4.92	0.75	0.04	154.87	0.01	65207.9	7109.8	0.66	12311332.0	47.3	0.0	33.9	12.7	4.2	1.6	53.7	74.9	124.6	463.5	84.27

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	TE-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-03-07	15:50:00	33.56	7.06	146.94	190.94	5.28	317.03	23.29	19206.3	11354.0	23.29	97096.3	1550.9	-270.0	1151.1	512.3	198.5	196.2	-20.2	-37.3	-97.2	360.9	24.52
2023-03-07	15:51:00	33.33	7.18	145.70	191.16	5.28	316.65	23.29	19131.3	11516.9	22.53	93548.4	1552.6	-270.0	1151.1	512.4	198.5	196.2	-16.1	-35.1	-91.7	371.5	25.14
2023-03-07	15:52:00	34.10	7.04	146.36	190.71	5.29	317.40	23.03	19481.3	11545.0	23.45	97446.0	1547.1	-270.0	1150.0	512.4	198.5	196.2	-21.6	-38.1	-103.4	347.1	24.72
2023-03-07	15:53:00	33.27	6.77	146.13	190.94	5.29	317.48	23.03	18981.3	11528.1	23.27	96615.6	1550.6	-270.0	1148.9	512.1	199.0	196.2	-19.7	-36.8	-96.4	361.3	24.82
2023-03-07	15:54:00	33.74	6.96	145.46	191.30	5.33	319.95	23.03	19431.3	11449.5	23.67	98616.6	1546.3	-270.0	1147.9	512.1	199.0	196.2	-25.0	-44.4	-106.3	322.3	24.66
2023-03-07	15:55:00	34.14	7.30	146.98	193.14	5.21	312.75	23.03	19118.8	11472.0	23.57	97868.7	1549.1	-270.0	1146.9	511.9	199.0	196.2	-19.6	-34.8	-97.7	337.6	25.16
2023-03-07	15:56:00	33.54	7.11	145.55	192.38	5.12	307.05	23.03	19443.8	11421.4	23.34	96888.8	1548.5	-270.0	1148.0	511.6	199.0	196.2	-21.7	-39.3	-99.7	356.8	24.58
2023-03-07	15:57:00	33.51	7.01	145.94	191.88	5.17	310.43	23.03	19075.0	11443.9	22.86	94920.7	1552.1	-270.0	1149.1	511.8	199.0	196.2	-16.0	-32.4	-90.0	368.3	24.70
2023-03-07	15:58:00	33.56	6.70	146.60	190.53	5.21	312.38	23.03	19587.5	11561.8	23.54	97936.1	1547.5	-270.0	1150.1	511.5	198.5	196.2	-25.6	-43.1	-104.4	347.1	25.26
2023-03-07	15:59:00	33.47	6.98	145.85	191.61	5.17	310.43	24.11	19200.0	11404.5	22.90	95009.7	1549.1	-270.0	1149.0	511.5	198.5	196.2	-16.1	-32.4	-91.2	365.0	25.42
2023-03-07	16:00:00	33.32	6.74	145.85	191.34	5.15	309.00	23.06	20075.0	11500.1	23.32	96741.0	1546.6	-270.0	1149.0	511.3	198.5	197.2	-32.9	-49.8	-117.3	332.1	25.68
2023-03-07	16:01:00	33.50	7.16	146.88	191.07	5.14	308.48	23.06	19493.8	11460.7	23.41	97190.4	1545.9	-270.0	1147.9	511.6	198.5	197.2	-20.6	-38.1	-99.0	356.4	25.58
2023-03-07	16:02:00	33.98	6.80	146.04	191.75	5.12	307.35	23.06	19425.0	11483.2	25.34	105152.8	1548.0	-270.0	1149.0	511.0	198.5	197.2	-40.2	-62.1	-129.8	289.1	25.62
2023-03-07	16:03:00	34.55	7.23	144.65	193.46	5.09	305.18	23.06	19387.5	11488.8	23.81	98877.6	1548.1	-270.0	1149.0	511.7	198.5	197.2	-25.4	-43.5	-104.8	332.1	25.68
2023-03-07	16:04:00	33.90	7.29	142.76	191.52	5.11	306.38	23.06	19112.5	11325.9	25.41	105530.8	1550.9	-270.0	1151.1	512.0	198.5	197.2	-32.7	-58.6	-117.6	310.8	25.02
2023-03-07	16:05:00	34.10	7.10	144.95	191.21	4.73	283.50	23.06	19156.3	11567.5	22.95	95287.6	1548.8	-270.0	1152.1	512.4	199.0	197.2	-18.3	-34.8	-94.4	361.1	25.24
2023-03-07	16:06:00	33.89	6.87	143.28	190.26	4.70	281.78	23.06	19056.3	11342.7	22.25	92370.6	1551.3	-270.0	1152.1	512.2	198.5	197.2	-17.5	-34.1	-93.1	373.4	25.32
2023-03-07	16:07:00	34.20	7.08	145.74	191.12	4.74	284.25	23.06	19362.5	11432.6	22.67	94121.7	1548.6	-270.0	1151.0	512.3	198.5	197.2	-20.8	-35.4	-98.0	357.8	24.96
2023-03-07	16:08:00	33.80	6.92	145.89	191.57	4.73	283.95	24.08	19250.0	11359.6	22.54	93458.3	1552.1	-270.0	1151.0	511.9	199.0	197.2	-17.2	-33.8	-91.3	370.3	25.38
2023-03-07	16:09:00	34.47	7.10	145.89	191.84	4.73	283.88	23.03	19443.8	11443.9	23.38	97003.3	1549.3	-270.0	1151.0	511.5	198.5	197.2	-23.7	-43.0	-104.7	345.2	24.80
2023-03-07	16:10:00	34.70	7.12	146.84	191.25	4.69	281.40	23.03	19100.0	11449.5	23.17	96094.4	1553.1	-270.0	1151.0	511.2	198.5	197.2	-20.0	-35.9	-95.3	360.3	25.26
2023-03-07	16:11:00	33.38	6.88	147.03	189.45	4.74	284.40	23.03	19825.0	11556.2	23.32	96790.3	1546.6	-270.0	1151.0	511.6	198.5	197.2	-27.7	-47.9	-110.3	322.3	24.94
2023-03-07	16:12:00	34.08	6.93	147.60	191.21	4.74	284.48	23.03	19206.3	11561.8	23.33	96829.2	1546.9	-270.0	1147.9	511.1	199.0	197.2	-20.7	-37.8	-98.4	339.1	25.66
2023-03-07	16:13:00	33.86	6.89	146.55	190.26	4.77	286.28	23.03	19525.0	11522.5	22.71	94201.3	1545.5	-270.0	1146.9	510.5	199.0	197.2	-25.3	-43.1	-104.9	352.4	25.02
2023-03-07	16:14:00	33.74	7.15	148.64	190.62	5.14	308.55	23.03	18981.3	11309.0	22.48	93285.5	1549.1	-270.0	1145.8	510.0	199.0	197.2	-14.4	-33.0	-88.8	364.2	24.70
2023-03-07	16:15:00	33.59	6.73	147.31	190.31	5.14	308.10	23.03	19900.0	11556.2	23.67	98272.0	1547.9	-270.0	1146.9	509.8	198.5	197.2	-41.5	-56.1	-124.5	328.9	25.42
2023-03-07	16:16:00	33.84	6.67	145.94	191.70	5.12	307.35	23.03	19150.0	11472.0	22.72	94221.9	1547.9	-270.0	1145.9	509.7	198.5	197.2	-17.9	-35.5	-93.7	362.9	25.56
2023-03-07	16:17:00	34.10	7.24	147.41	191.52	5.16	309.30	23.03	19331.3	11601.2	24.99	103579.5	1551.8	-270.0	1147.0	509.3	198.5	197.2	-39.5	-59.0	-126.2	295.4	25.32
2023-03-07	16:18:00	33.90	7.02	148.83	192.56	5.13	308.03	23.03	19218.8	11488.8	23.03	95661.6	1549.5	-270.0	1147.0	509.7	198.5	197.2	-23.2	-40.9	-101.4	352.4	25.70
2023-03-07	16:19:00	33.57	7.07	147.17	190.98	5.13	307.95	23.03	19012.5	11258.5	22.96	95237.6	1552.8	-270.0	1149.1	509.2	198.0	197.2	-17.7	-35.1	-94.0	350.8	25.48
2023-03-07	16:20:00	33.83	7.09	147.41	190.53	5.16	309.68	23.03	19375.0	11488.8	23.23	96409.7	1545.5	-270.0	1148.0	509.5	198.5	197.2	-23.2	-40.9	-102.9	327.2	25.50
2023-03-07	16:21:00	33.45	6.97	147.26	190.80	5.25	314.93	23.03	19031.3	11472.0	23.15	96086.3	1548.6	-270.0	1148.0	509.0	198.5	197.2	-19.6	-35.9	-98.3	342.5	24.98
2023-03-07	16:22:00	33.84	7.01	147.93	190.49	5.22	313.05	23.03	19250.0	11494.4	22.68	94161.2	1547.4	-270.0	1146.9	509.5	198.5	197.2	-18.4	-35.9	-94.7	357.5	24.70
2023-03-07	16:23:00	33.89	6.96	146.98	191.88	5.16	309.53	23.03	19150.0	11309.0	22.13	91908.2	1551.1	-270.0	1146.9	509.2	198.5	197.2	-16.3	-32.1	-91.0	369.6	24.76
2023-03-07	16:24:00	34.16	7.10	148.12	191.39	5.20	311.70	23.03	19256.3	11432.6	22.44	93153.3	1549.1	-270.0	1149.1	509.6	198.0	197.2	-22.3	-36.4	-100.9	353.0	25.40
2023-03-07	16:25:00	34.56	7.27	148.21	193.82	5.23	313.50	23.03	19025.0	11443.9	23.02	95524.6	1554.8	-270.0	1149.1	509.6	198.0	197.2	-13.6	-30.1	-86.9	367.1	24.78
2023-03-07	16:26:00	33.74	7.06	148.07	190.76	5.20	312.15	23.03	19631.3	11438.3	23.60	97953.8	1549.9	-270.0	1151.1	510.0	198.0	197.2	-26.3	-44.9	-108.4	342.1	24.48
2023-03-07	16:27:00	33.96	6.81	145.42	191.34	5.25	314.93	23.03	19318.8	11505.7	23.16	96125.0	1550.9	-270.0	1151.1	510.0	198.0	197.2	-19.0	-35.9	-98.0	357.1	25.00
2023-03-07	16:28:00	33.84	6.63	146.88	189.86	5.33	319.50	23.03	19775.0	11612.4	23.23	96459.8	1548.3	-270.0	1150.0	510.5	198.5	197.2	-31.3	-48.4	-115.7	313.4	25.16
2023-03-07	16:29:00	33.95	6.99	147.03	189.90	5.27	316.13	23.03	19131.3	11410.2	23.29	96624.5	1549.0	-270.0	1148.9	510.9	198.5	197.2	-20.2	-37.9	-100.1	334.6	25.00
2023-03-07	16:30:00	33.78	6.88	147.26	189.09	5.31	318.83	23.03	19681.3	11511.3	24.51	101659.4	1549.0	-270.0	1150.0	510.4	198.5	197.2	-38.2	-59.5	-125.9	302.9	25.62
2023-03-07	16:31:00	34.58	7.05	148.44	192.29	5.33	320.03	23.03	19012.5	11516.9	22.88	95009.8	1552.0	-270.0	1150.0	510.9	199.0	197.2	-16.7	-35.1	-93.6	363.9	25.60
2023-03-07	16:32:00	34.07	7.19	147.50	192.38	5.23	313.50	23.03	19112.5	11584.3	25.24	104662.3	1557.3	-270.0	1153.1	510.7	199.0	197.2	-36.9	-58.1	-121.4	300.3	25.24
2023-03-07	16:33:00	34.10	6.71	147.54	191.79	5.29	317.63	23.03	19156.3	11472.0	22.40	92688.4	1553.1	-270.0	1153.1	511.3	199.0	197.2	-17.1	-33.6	-95.2	358.8	25.50
2023-03-07	16:34:00	33.44	6.74	147.84	190.31	5.33	319.80	23.03	18931.3	11230.4	21.35	88507.3	1556.8	-270.0	1153.1	511.5	199.0	197.2	-14.7	-29.5	-89.5	370.6	24.56
2023-03-07	16:35:00	33.71	7.01	147.35	191.66	5.31	318.30	23.03	19406.3	11472.0	23.38	96954.7	1551.5	-270.0	1153.1	511.9	199.0	197.2	-24.4	-37.4	-104.0	349.4	25.50
2023-03-07	16:36:00	33.90	7.24	147.74	191.21	5.33	319.50	23.03	19206.3	11443.9	22.36	92891.7	1553.1	-270.0	1152.0	512.0	199.0	197.2	-18.7	-35.4	-95.0	362.5	24.92
2023-03-07	16:37:00	34.16	7.09	148.40	191.30	5.33	319.88	23.03	19575.0	11488.8	23.17	96034.7	1549.1	-270.0	1150.9	511.8	199.5	197.2	-27.1	-43.8	-107.1	325.4	24.76
2023-03-07	16:38:00	34.22	7.17	147.78	191.66	5.34	320.63	23.03	19162.5	11449.5	22.67	93941.5	1551.3	-270.0	1150.9	511.9	199.5	197.2	-20.5	-37.8	-97.7	339.8	24.84
2023-03-07	16:39:00	33.98	6.84	147.60	191.03	5.31	318.53	23.03	19231.3	11539.4	22.42	92740.2	1549.9	-270.0	1150.9	512.1	199.5	197.2	-20.3	-37.3	-98.3	357.1	24.66
2023-03-07	16:40:00	33.96	7.14	147.60	191.93	5.25	314.78	23.03	18887.5	11314.7	21.97	91007.1	1553.1	-270.0	1152.0	512.0	199.5	197.2	-14.5	-33.1	-89.6	367.3	25.50
2023-03-07	16:41:00	33.42	7.00	147.45	189.32	5.34	320.25	23.03	19468.8	11477.6	22.77	94371.7	1549.5	-270.0	1153.1	512.4	199.5	197.2	-25.5	-41.8	-104.3	347.4	24.60
2023-03-07	16:42:00	33.42	7.15	147.26	190.49	5.30	318.00	23.03	19218.8	11348.4	22.04	91338.3	1550.6	-270.0	1153.1	512.3	199.5	197.2	-16.2	-33.3	-91.9	365.3	25.22
2023-03-07	16:43:00	32.78	6.93	147.65	188.46	5.33	319.73	23.03	19781.3	11781.0	22.41	92832.5	1547.3	-270.0	1152.0	511.5	199.5	198.2	-31.2	-47.0	-115.4	331.4	25.14
2023-03-07	16:44:00	33.15	7.00	147.78	189.50	5.20	311.93	23.03	19243.8	11404.5	22.62	93680.1	1544.6	-270.0	1148.8	511.7	199.5	198.2	-22.0	-39.0	-99.8	356.1	25.28
2023-03-07	16:45:00	33.23	6.95	148.16	189.14	5.15	309.15	23.03	19756.3	11606.8	25.12	104032.5	1545.3	-270.0	1147.8	510.6	199.5	198.2	-41.6	-62.6	-130.6	291.1	24.86

MARCH 7/2023	Waste Flows							Air Flows			Temperatures							Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PACFlow
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
Max	34.70	7.30	148.83	193.82	5.34	320.63	24.11	20075.0	11781.0	25.41	105530.8	1557.3	-270.0	1153.1	512.4	199.5	198.2	-13.6	-29.5	-86.9	373.4	25.70
Min	32.78	6.63	142.76	188.46	4.69	281.40	23.03	18887.5	11230.4	21.35	88507.3	1544.6	-270.0	1145.8	509.0	198.0	196.2	-41.6	-62.6	-130.6	289.1	24.48
Average	33.82	7.00	146.85	191.10	5.15	308.87	23.08	19311.5	11466.5	23.16	96118.1	1549.7	-270.0	1149.8	511.1	198.8	197.1	-23.1	-40.6	-102.2	345.5	25.12
Variance	0.15	0.03	1.49	1.10	0.04	142.11	0.04	70242.6	9301.1	0.71	12304539.2	7.5	0.0	4.2	1.1	0.2	0.2	54.3	72.8	123.9	485.7	0.13

		CO	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM
$Date	$Time	AT-205-2NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-2NEW
2023-03-07	9:50:00	85.93	12.50	9.32	1.20	1.00
2023-03-07	9:51:00	76.00	8.00	9.95	0.73	1.00
2023-03-07	9:52:00	87.53	10.00	9.74	0.86	1.00
2023-03-07	9:53:00	75.28	7.70	9.75	0.87	1.00
2023-03-07	9:54:00	77.90	10.20	9.77	0.85	1.00
2023-03-07	9:55:00	74.97	7.60	9.57	0.82	1.00
2023-03-07	9:56:00	73.90	9.90	9.80	0.81	1.00
2023-03-07	9:57:00	79.78	8.60	9.40	0.73	1.00
2023-03-07	9:58:00	76.36	11.20	9.82	0.82	1.00
2023-03-07	9:59:00	92.10	10.40	9.19	0.82	1.00
2023-03-07	10:00:00	58.35	8.80	9.97	0.90	1.00
2023-03-07	10:01:00	72.78	10.20	9.77	0.90	1.00
2023-03-07	10:02:00	55.46	8.90	10.21	0.88	1.00
2023-03-07	10:03:00	85.79	9.90	9.81	1.32	1.00
2023-03-07	10:04:00	56.04	9.10	10.02	0.93	1.00
2023-03-07	10:05:00	90.48	11.60	9.60	0.97	1.00
2023-03-07	10:06:00	99.77	8.50	9.60	0.78	1.00
2023-03-07	10:07:00	93.14	11.30	9.59	0.82	1.00
2023-03-07	10:08:00	93.61	7.50	10.02	0.62	1.00
2023-03-07	10:09:00	66.91	9.50	10.02	0.88	1.00
2023-03-07	10:10:00	82.48	7.90	9.60	0.88	1.00
2023-03-07	10:11:00	77.54	9.10	10.03	0.98	1.00
2023-03-07	10:12:00	88.74	8.80	9.82	0.90	1.00
2023-03-07	10:13:00	88.64	12.10	10.02	1.01	1.00
2023-03-07	10:14:00	99.29	11.90	9.40	0.93	1.00
2023-03-07	10:15:00	72.68	9.80	9.83	0.98	1.00
2023-03-07	10:16:00	102.79	11.50	9.40	0.90	1.00
2023-03-07	10:17:00	58.84	8.30	9.96	0.93	1.00
2023-03-07	10:18:00	79.26	10.30	9.76	1.16	1.00
2023-03-07	10:19:00	61.22	7.80	9.97	0.93	1.00
2023-03-07	10:20:00	83.18	10.10	9.99	1.01	1.00
2023-03-07	10:21:00	87.12	8.10	9.78	0.90	1.00
2023-03-07	10:22:00	93.61	12.40	9.77	0.88	1.00
2023-03-07	10:23:00	99.61	7.90	9.57	0.86	1.00
2023-03-07	10:24:00	88.09	11.10	9.77	0.93	1.00
2023-03-07	10:25:00	114.47	9.80	9.36	0.81	1.00
2023-03-07	10:26:00	75.94	10.10	10.03	0.90	1.00
2023-03-07	10:27:00	87.48	9.90	9.61	0.86	1.00
2023-03-07	10:28:00	65.31	9.20	10.25	0.85	1.00
2023-03-07	10:29:00	82.00	10.30	9.83	0.78	1.00
2023-03-07	10:30:00	69.03	10.90	10.03	0.88	1.00
2023-03-07	10:31:00	117.95	13.20	9.60	0.86	1.00
2023-03-07	10:32:00	64.18	9.90	9.83	0.90	1.00
2023-03-07	10:33:00	104.63	12.30	9.41	1.32	1.00
2023-03-07	10:34:00	81.69	8.10	10.06	0.82	1.00
2023-03-07	10:35:00	86.16	11.40	9.86	0.78	1.00
2023-03-07	10:36:00	91.79	7.70	9.86	0.85	1.00
2023-03-07	10:37:00	92.35	10.20	9.89	0.93	1.00
2023-03-07	10:38:00	87.16	8.00	9.69	0.78	1.00
2023-03-07	10:39:00	89.34	12.20	9.69	0.81	1.00
2023-03-07	10:40:00	102.28	10.60	9.48	0.70	1.00
2023-03-07	10:41:00	91.26	12.70	9.94	0.98	1.00
2023-03-07	10:42:00	124.01	12.10	9.32	0.82	1.00
2023-03-07	10:43:00	74.17	9.80	10.13	0.95	1.00
2023-03-07	10:44:00	101.19	11.70	9.70	1.13	1.00
2023-03-07	10:45:00	67.96	10.80	9.91	0.86	1.00
2023-03-07	10:46:00	99.42	13.70	9.69	1.28	1.00
2023-03-07	10:47:00	74.07	11.40	9.49	0.90	1.00
2023-03-07	10:48:00	119.05	16.70	9.06	1.01	1.00
2023-03-07	10:49:00	94.22	9.70	9.07	0.88	1.00
2023-03-07	10:50:00	92.83	13.10	9.07	0.93	1.00

MARCH 7/2023	**Analyzers**				
	CO	THC	O2	Opacity	SO2
Test 1	AT-205-1NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-1NEW
Units	PPM	PPM	%	%	PPM
Max	124.01	16.70	10.25	1.32	1.00
Min	55.46	7.50	9.06	0.62	1.00
Average	85.00	10.23	9.73	0.91	1.00
Variance	234.29	3.35	0.08	0.02	0.00

		CO	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM
$Date	$Time	AT-205-2NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-2NEW
2023-03-07	11:03:00	81.25	10.80	9.54	1.08	1.00
2023-03-07	11:04:00	66.55	8.50	9.33	0.82	1.00
2023-03-07	11:05:00	84.64	12.20	9.35	1.01	1.00
2023-03-07	11:06:00	95.55	8.60	9.17	0.86	1.00
2023-03-07	11:07:00	87.71	13.00	9.16	1.01	1.00
2023-03-07	11:08:00	87.75	9.50	8.74	0.86	1.00
2023-03-07	11:09:00	67.39	11.00	9.47	0.86	1.00
2023-03-07	11:10:00	78.94	10.30	9.07	0.75	1.00
2023-03-07	11:11:00	68.00	11.00	9.72	0.78	1.00
2023-03-07	11:12:00	73.68	10.70	9.31	0.85	1.00
2023-03-07	11:13:00	62.75	12.10	9.53	0.86	1.00
2023-03-07	11:14:00	95.05	13.40	8.90	0.90	1.00
2023-03-07	11:15:00	69.81	10.80	9.32	0.72	1.00
2023-03-07	11:16:00	109.95	14.50	8.90	1.31	1.00
2023-03-07	11:17:00	75.59	8.70	9.51	0.77	1.00
2023-03-07	11:18:00	81.95	11.40	9.30	0.78	1.00
2023-03-07	11:19:00	76.70	8.00	9.32	0.78	1.00
2023-03-07	11:20:00				1.11	1.00
2023-03-07	11:21:00				0.95	1.00
2023-03-07	11:22:00				0.82	1.00
2023-03-07	11:23:00				0.78	1.00
2023-03-07	11:24:00	70.21	11.60	9.82	0.85	1.00
2023-03-07	11:25:00	104.60	13.40	9.19	0.77	1.00
2023-03-07	11:26:00	77.26	11.00	9.77	0.77	1.00
2023-03-07	11:27:00	76.89	11.30	9.36	0.82	1.00
2023-03-07	11:28:00	58.56	9.70	9.79	0.97	1.00
2023-03-07	11:29:00	84.98	11.10	9.58	1.38	1.00
2023-03-07	11:30:00	63.12	10.60	9.58	0.86	1.00
2023-03-07	11:31:00	98.13	13.80	9.15	1.01	1.00
2023-03-07	11:32:00	94.21	9.40	9.15	0.77	1.00
2023-03-07	11:33:00	89.07	13.60	9.15	0.90	1.00
2023-03-07	11:34:00	90.06	8.40	9.61	0.78	1.00
2023-03-07	11:35:00	86.97	12.30	9.61	0.82	1.00
2023-03-07	11:36:00	83.56	9.40	9.19	0.90	1.00
2023-03-07	11:37:00	54.47	10.70	9.82	1.10	1.00
2023-03-07	11:38:00	75.44	10.00	9.37	0.93	1.00
2023-03-07	11:39:00	69.18	11.80	9.58	1.05	1.00
2023-03-07	11:40:00	92.73	12.30	9.16	1.25	1.00
2023-03-07	11:41:00	66.07	11.00	9.57	1.12	1.00
2023-03-07	11:42:00	97.11	13.10	8.94	1.13	1.00
2023-03-07	11:43:00	53.86	9.20	9.60	1.13	1.00
2023-03-07	11:44:00	80.05	9.70	9.60	1.20	1.00
2023-03-07	11:45:00	74.07	8.30	9.84	0.87	1.00
2023-03-07	11:46:00	104.49	10.80	9.85	0.97	1.00
2023-03-07	11:47:00	101.96	9.70	9.65	0.66	1.00
2023-03-07	11:48:00	120.86	15.50	9.43	0.71	1.00
2023-03-07	11:49:00	105.05	9.00	9.45	0.62	1.00
2023-03-07	11:50:00	110.24	12.80	9.68	0.73	1.00
2023-03-07	11:51:00	117.25	9.70	9.27	0.77	1.00
2023-03-07	11:52:00	107.46	10.90	10.05	0.85	1.00
2023-03-07	11:53:00	117.65	10.70	9.65	0.93	1.00
2023-03-07	11:54:00	95.36	10.70	10.07	0.82	1.00
2023-03-07	11:55:00	109.68	9.90	9.65	0.73	1.00
2023-03-07	11:56:00	73.75	10.50	10.28	0.82	1.00
2023-03-07	11:57:00	115.11	13.10	9.85	0.90	1.00
2023-03-07	11:58:00	93.78	10.40	9.85	0.82	1.00
2023-03-07	11:59:00	111.87	12.80	9.43	1.35	1.00
2023-03-07	12:00:00	109.40	9.00	10.15	0.81	1.00
2023-03-07	12:01:00	113.56	12.20	9.72	0.92	1.00
2023-03-07	12:02:00	105.07	7.50	10.03	0.82	1.00
2023-03-07	12:03:00	104.94	10.10	10.27	0.86	1.00

MARCH 7/2023	**Analyzers**				
	CO	THC	O2	Opacity	SO2
Test 1	AT-205-1NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-1NEW
Units	PPM	PPM	%	%	PPM
Max	120.86	15.50	10.28	1.38	1.00
Min	53.86	7.50	8.74	0.62	1.00
Average	88.09	10.90	9.52	0.90	1.00
Variance	318.61	3.02	0.12	0.03	0.00

		CO	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM
$Date	$Time	AT-205-2NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-2NEW
2023-03-07	12:14:00	110.78	15.10	9.31	1.06	1.00
2023-03-07	12:15:00	96.08	9.60	9.11	0.86	1.00
2023-03-07	12:16:00	88.68	14.70	9.14	0.90	1.00
2023-03-07	12:17:00	96.82	8.20	9.70	0.81	1.00
2023-03-07	12:18:00	68.35	10.40	9.48	0.93	1.00
2023-03-07	12:19:00	89.15	8.50	9.26	0.86	1.00
2023-03-07	12:20:00	68.83	10.30	9.71	1.05	1.00
2023-03-07	12:21:00	81.69	9.90	9.31	0.90	1.00
2023-03-07	12:22:00	68.08	11.80	9.52	0.93	1.00
2023-03-07	12:23:00	90.23	11.30	8.90	1.02	1.00
2023-03-07	12:24:00	61.45	10.30	9.39	1.12	1.00
2023-03-07	12:25:00	90.00	11.10	8.98	0.93	1.00
2023-03-07	12:26:00	52.71	9.70	9.69	0.75	1.00
2023-03-07	12:27:00	90.19	10.60	9.27	1.23	1.00
2023-03-07	12:28:00	59.68	8.00	9.50	0.95	1.00
2023-03-07	12:29:00	82.41	9.30	9.50	1.13	1.00
2023-03-07	12:30:00	62.76	9.10	9.49	0.98	1.00
2023-03-07	12:31:00	98.11	13.40	9.27	1.12	1.00
2023-03-07	12:32:00	94.33	8.00	9.07	1.12	1.00
2023-03-07	12:33:00	82.46	10.80	9.27	1.17	1.00
2023-03-07	12:34:00	85.35	9.20	8.86	1.01	1.00
2023-03-07	12:35:00	66.46	9.90	9.68	1.20	1.00
2023-03-07	12:36:00	89.76	11.50	9.07	1.25	1.00
2023-03-07	12:37:00	56.44	9.40	9.49	1.31	1.00
2023-03-07	12:38:00	89.77	10.90	9.28	1.12	1.00
2023-03-07	12:39:00	59.39	10.20	9.50	1.02	1.00
2023-03-07	12:40:00	96.66	11.60	9.08	0.90	1.00
2023-03-07	12:41:00	64.74	10.40	9.52	0.75	1.00
2023-03-07	12:42:00	109.58	14.00	8.89	1.47	1.00
2023-03-07	12:43:00	76.72	9.00	9.40	0.92	1.00
2023-03-07	12:44:00	93.17	12.40	9.19	1.06	1.00
2023-03-07	12:45:00	86.61	8.70	9.21	0.90	1.00
2023-03-07	12:46:00	94.30	11.00	9.66	1.23	1.00
2023-03-07	12:47:00	103.79	9.20	9.24	1.13	1.00
2023-03-07	12:48:00	102.10	14.90	9.44	1.06	1.00
2023-03-07	12:49:00	117.41	11.70	8.81	0.86	1.00
2023-03-07	12:50:00	82.61	14.40	9.25	0.93	1.00
2023-03-07	12:51:00	136.43	15.30	8.83	0.92	1.00
2023-03-07	12:52:00	79.82	10.80	9.52	1.01	1.00
2023-03-07	12:53:00	128.58	12.50	9.32	0.97	1.00
2023-03-07	12:54:00	75.65	11.70	9.79	0.97	1.00
2023-03-07	12:55:00	109.58	13.10	9.58	1.21	1.00
2023-03-07	12:56:00	98.02	11.70	9.61	0.73	1.00
2023-03-07	12:57:00	126.06	16.00	9.15	0.77	1.00
2023-03-07	12:58:00	95.67	10.20	9.15	0.75	1.00
2023-03-07	12:59:00	121.43	13.90	9.19	1.08	1.00
2023-03-07	13:00:00	129.47	9.50	9.67	0.93	1.00
2023-03-07	13:01:00	102.19	12.40	9.67	1.08	1.00
2023-03-07	13:02:00	125.93	10.50	9.26	1.01	1.00
2023-03-07	13:03:00	93.23	12.80	9.69	0.93	1.00
2023-03-07	13:04:00	132.66	11.90	9.48	0.67	1.00
2023-03-07	13:05:00	104.58	13.30	9.69	0.75	1.00
2023-03-07	13:06:00	131.79	15.50	9.27	0.86	1.00
2023-03-07	13:07:00	90.33	12.60	9.70	0.71	1.00
2023-03-07	13:08:00	129.56	15.40	9.27	0.67	1.00
2023-03-07	13:09:00	85.34	10.70	9.79	0.63	1.00
2023-03-07	13:10:00	101.65	11.80	9.58	0.97	1.00
2023-03-07	13:11:00	84.54	8.10	9.80	0.62	1.00
2023-03-07	13:12:00	96.26	10.80	9.82	0.90	1.00
2023-03-07	13:13:00	102.01	9.40	9.61	0.86	1.00
2023-03-07	13:14:00	108.36	13.90	9.61	1.08	1.00

MARCH 7/2023	**Analyzers**				
	CO	THC	O2	Opacity	SO2
Test 1	AT-205-1NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-1NEW
Units	PPM	PPM	%	%	PPM
Max	136.43	16.00	9.82	1.47	1.00
Min	52.71	8.00	8.81	0.62	1.00
Average	93.39	11.35	9.39	0.97	1.00
Variance	436.57	4.50	0.07	0.03	0.00

		CO	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM
$Date	$Time	AT-205-2NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-2NEW
2023-03-07	13:27:00	76.11	11.30	9.56	0.98	1.00
2023-03-07	13:28:00	79.69	7.20	9.59	1.02	1.00
2023-03-07	13:29:00	62.72	7.80	9.81	1.16	1.00
2023-03-07	13:30:00	57.12	6.50	9.61	1.01	1.00
2023-03-07	13:31:00	59.98	8.50	9.62	0.95	1.00
2023-03-07	13:32:00	73.77	8.10	9.41	0.75	1.00
2023-03-07	13:33:00	62.34	8.40	9.62	0.82	1.00
2023-03-07	13:34:00	78.26	9.60	9.19	0.62	1.00
2023-03-07	13:35:00	48.13	7.50	9.93	0.75	1.00
2023-03-07	13:36:00	58.92	8.90	9.52	0.78	1.00
2023-03-07	13:37:00	46.62	8.00	10.00	0.86	1.00
2023-03-07	13:38:00	66.87	9.30	9.58	1.33	1.00
2023-03-07	13:39:00	51.51	8.00	9.79	0.86	1.00
2023-03-07	13:40:00	81.93	10.90	9.36	1.01	1.00
2023-03-07	13:41:00	68.16	7.50	9.35	0.77	1.00
2023-03-07	13:42:00	67.15	9.40	9.37	1.05	1.00
2023-03-07	13:43:00	83.08	7.30	9.85	0.97	1.00
2023-03-07	13:44:00	59.85	9.30	9.64	1.12	1.00
2023-03-07	13:45:00	70.07	7.30	9.44	1.06	1.00
2023-03-07	13:46:00	60.54	9.20	9.86	1.01	1.00
2023-03-07	13:47:00	70.17	7.50	9.65	1.02	1.00
2023-03-07	13:48:00	56.47	8.70	9.86	1.08	1.00
2023-03-07	13:49:00	79.89	9.30	9.23	1.05	1.00
2023-03-07	13:50:00	63.20	9.00	9.64	0.98	1.00
2023-03-07	13:51:00	73.10	9.70	9.23	0.81	1.00
2023-03-07	13:52:00	50.83	7.90	9.90	0.67	1.00
2023-03-07	13:53:00	78.77	9.50	9.69	0.88	1.00
2023-03-07	13:54:00	50.82	7.10	9.69	0.78	1.00
2023-03-07	13:55:00	80.64	9.60	9.69	0.81	1.00
2023-03-07	13:56:00	80.16	7.40	9.48	0.73	1.00
2023-03-07	13:57:00	83.11	10.80	9.67	1.08	1.00
2023-03-07	13:58:00	86.77	7.40	9.48	1.02	1.00
2023-03-07	13:59:00	83.50	10.20	9.69	1.08	1.00
2023-03-07	14:00:00	87.03	7.80	9.27	1.05	1.00
2023-03-07	14:01:00	67.04	8.70	9.87	1.06	1.00
2023-03-07	14:02:00	76.78	8.80	9.66	0.95	1.00
2023-03-07	14:03:00	60.53	7.60	10.08	1.16	1.00
2023-03-07	14:04:00	74.25	8.80	9.87	1.05	1.00
2023-03-07	14:05:00	62.10	9.60	10.07	0.78	1.00
2023-03-07	14:06:00	95.27	10.70	9.44	0.86	1.00
2023-03-07	14:07:00	61.88	8.70	9.90	0.62	1.00
2023-03-07	14:08:00	111.28	11.30	9.48	1.32	1.00
2023-03-07	14:09:00	71.46	7.30	10.03	0.70	1.00
2023-03-07	14:10:00	84.48	9.80	9.82	0.66	1.00
2023-03-07	14:11:00	85.05	7.20	9.82	0.58	1.00
2023-03-07	14:12:00	74.09	9.10	10.05	0.85	1.00
2023-03-07	14:13:00	88.25	7.90	9.65	0.71	1.00
2023-03-07	14:14:00	100.64	11.50	9.86	0.75	1.00
2023-03-07	14:15:00	106.15	9.80	9.44	0.62	1.00
2023-03-07	14:16:00	79.62	10.40	9.86	0.75	1.00
2023-03-07	14:17:00	94.88	10.40	9.44	0.75	1.00
2023-03-07	14:18:00	67.08	9.10	10.07	0.63	1.00
2023-03-07	14:19:00	83.55	9.60	9.65	0.77	1.00
2023-03-07	14:20:00	56.28	8.60	10.09	0.90	1.00
2023-03-07	14:21:00	79.24	9.80	9.69	1.31	1.00
2023-03-07	14:22:00	69.02	8.50	10.10	0.97	1.00
2023-03-07	14:23:00	102.31	11.00	9.47	1.16	1.00
2023-03-07	14:24:00	81.94	8.00	9.69	0.97	1.00
2023-03-07	14:25:00	86.76	9.90	9.47	0.82	1.00
2023-03-07	14:26:00	91.16	7.30	10.14	0.82	1.00
2023-03-07	14:27:00	72.24	9.50	9.92	0.85	1.00

MARCH 7/2023	**Analyzers**				
	CO	THC	O2	Opacity	SO2
Test 1	AT-205-1NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-1NEW
Units	PPM	PPM	%	%	PPM
Max	111.28	11.50	10.14	1.33	1.00
Min	46.62	6.50	9.19	0.58	1.00
Average	74.11	8.87	9.69	0.91	1.00
Variance	210.59	1.54	0.06	0.03	0.00

		CO	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM
$Date	$Time	AT-205-2NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-2NEW
2023-03-07	14:40:00	125.71	12.40	9.81	0.97	1.00
2023-03-07	14:41:00	130.01	8.30	9.60	0.75	1.00
2023-03-07	14:42:00	125.17	13.10	9.61	0.75	1.00
2023-03-07	14:43:00	122.59	10.30	9.62	0.60	1.00
2023-03-07	14:44:00	82.65	11.00	9.89	0.78	1.00
2023-03-07	14:45:00	128.00	12.60	9.48	0.68	1.00
2023-03-07	14:46:00	77.26	9.40	10.14	0.75	1.00
2023-03-07	14:47:00	114.80	11.50	9.73	0.68	1.00
2023-03-07	14:48:00	86.72	12.40	9.96	0.75	1.00
2023-03-07	14:49:00	131.14	12.90	9.54	0.88	1.00
2023-03-07	14:50:00	82.10	9.80	9.95	0.78	1.00
2023-03-07	14:51:00	121.67	13.50	9.50	1.20	1.00
2023-03-07	14:52:00	81.89	8.30	10.01	0.70	1.00
2023-03-07	14:53:00	118.15	10.70	9.81	0.86	1.00
2023-03-07	14:54:00	99.77	8.10	9.82	0.90	1.00
2023-03-07	14:55:00	101.28	11.00	10.03	0.95	1.00
2023-03-07	14:56:00	115.18	8.10	9.82	0.85	1.00
2023-03-07	14:57:00	112.35	13.80	9.61	0.93	1.00
2023-03-07	14:58:00	136.79	11.50	9.40	0.82	1.00
2023-03-07	14:59:00	96.23	11.70	9.61	0.85	1.00
2023-03-07	15:00:00	124.12	11.50	9.40	0.75	1.00
2023-03-07	15:01:00	74.12	9.40	9.93	0.72	1.00
2023-03-07	15:02:00	91.13	10.70	9.73	0.82	1.00
2023-03-07	15:03:00	72.95	9.00	10.15	0.78	1.00
2023-03-07	15:04:00	110.41	11.30	9.73	1.12	1.00
2023-03-07	15:05:00	81.32	11.40	9.95	0.93	1.00
2023-03-07	15:06:00	134.24	12.40	9.53	1.08	1.00
2023-03-07	15:07:00	88.55	8.80	9.73	0.78	1.00
2023-03-07	15:08:00	118.81	12.00	9.52	0.93	1.00
2023-03-07	15:09:00	100.31	7.70	9.93	0.82	1.00
2023-03-07	15:10:00	85.11	10.40	9.72	0.85	1.00
2023-03-07	15:11:00	98.32	8.60	9.54	0.82	1.00
2023-03-07	15:12:00	61.06	9.60	9.77	0.90	1.00
2023-03-07	15:13:00	73.44	9.00	9.36	0.86	1.00
2023-03-07	15:14:00	75.45	10.30	9.60	1.05	1.00
2023-03-07	15:15:00	79.62	9.10	9.18	0.90	1.00
2023-03-07	15:16:00	52.53	9.30	9.62	1.05	1.00
2023-03-07	15:17:00	59.91	8.00	9.19	0.97	1.00
2023-03-07	15:18:00	42.66	7.00	9.90	0.90	1.00
2023-03-07	15:19:00	47.58	8.40	9.48	1.12	1.00
2023-03-07	15:20:00	33.74	6.40	9.69	0.85	1.00
2023-03-07	15:21:00	48.07	8.30	9.69	1.02	1.00
2023-03-07	15:22:00	51.77	7.10	9.70	0.81	1.00
2023-03-07	15:23:00	70.95	9.60	9.44	0.88	1.00
2023-03-07	15:24:00	60.90	6.70	9.23	0.93	1.00
2023-03-07	15:25:00	52.72	9.20	9.23	0.88	1.00
2023-03-07	15:26:00	51.86	7.70	9.51	0.75	1.00
2023-03-07	15:27:00	51.75	8.30	9.55	0.82	1.00
2023-03-07	15:28:00	61.81	8.70	9.35	0.72	1.00
2023-03-07	15:29:00	51.71	8.10	9.98	0.85	1.00
2023-03-07	15:30:00	51.68	7.90	9.57	1.10	1.00
2023-03-07	15:31:00	43.57	8.20	9.78	0.77	1.00
2023-03-07	15:32:00	61.40	10.30	9.36	0.98	1.00
2023-03-07	15:33:00	46.01	8.40	9.56	0.97	1.00
2023-03-07	15:34:00	71.31	10.60	9.15	1.46	1.00
2023-03-07	15:35:00	80.90	12.60	9.44	0.81	1.00
2023-03-07	15:36:00	89.25	11.70	9.44	0.81	1.00
2023-03-07	15:37:00	77.35	7.60	9.44	0.83	1.00
2023-03-07	15:38:00	57.60	9.30	9.64	0.88	1.00
2023-03-07	15:39:00	73.03	7.60	9.44	0.68	1.00
2023-03-07	15:40:00	85.74	16.10	9.45	0.80	1.00

MARCH 7/2023	**Analyzers**				
	CO	THC	O2	Opacity	SO2
Test 1	AT-205-1NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-1NEW
Units	PPM	PPM	%	%	PPM
Max	136.79	16.10	10.15	1.46	1.00
Min	33.74	6.40	9.15	0.60	1.00
Average	84.17	9.91	9.63	0.87	1.00
Variance	800.76	4.16	0.06	0.02	0.00

		CO	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM
$Date	$Time	AT-205-2NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-2NEW
2023-03-07	15:50:00	38.15	7.10	9.26	0.85	1.00
2023-03-07	15:51:00	42.91	9.00	9.27	0.82	1.00
2023-03-07	15:52:00	47.57	6.60	9.72	0.71	1.00
2023-03-07	15:53:00	47.51	8.20	9.51	0.77	1.00
2023-03-07	15:54:00	45.80	6.90	9.52	0.78	1.00
2023-03-07	15:55:00	45.74	7.50	9.75	0.85	1.00
2023-03-07	15:56:00	45.66	7.50	9.33	0.81	1.00
2023-03-07	15:57:00	41.10	8.80	9.52	0.90	1.00
2023-03-07	15:58:00	59.56	8.90	9.11	0.85	1.00
2023-03-07	15:59:00	45.47	8.00	9.74	0.85	1.00
2023-03-07	16:00:00	57.12	9.50	9.11	0.93	1.00
2023-03-07	16:01:00	45.94	7.80	9.73	0.93	1.00
2023-03-07	16:02:00	65.39	9.90	9.52	1.55	1.00
2023-03-07	16:03:00	53.12	7.80	9.76	1.16	1.00
2023-03-07	16:04:00	50.16	8.40	9.56	1.28	1.00
2023-03-07	16:05:00	34.10	6.40	9.57	0.93	1.00
2023-03-07	16:06:00	46.42	8.30	9.36	1.02	1.00
2023-03-07	16:07:00	52.12	6.70	9.36	0.90	1.00
2023-03-07	16:08:00	42.84	8.40	9.34	1.08	1.00
2023-03-07	16:09:00	50.00	8.20	9.44	0.93	1.00
2023-03-07	16:10:00	49.18	9.00	9.61	0.97	1.00
2023-03-07	16:11:00	53.49	8.40	9.19	0.86	1.00
2023-03-07	16:12:00	50.60	8.40	9.82	1.01	1.00
2023-03-07	16:13:00	65.09	9.30	9.61	1.01	1.00
2023-03-07	16:14:00	51.71	9.70	9.82	0.93	1.00
2023-03-07	16:15:00	78.70	11.50	9.19	0.90	1.00
2023-03-07	16:16:00	57.24	9.10	9.65	0.81	1.00
2023-03-07	16:17:00	66.74	9.90	9.23	1.28	1.00
2023-03-07	16:18:00	57.07	8.40	9.53	0.90	1.00
2023-03-07	16:19:00	57.81	10.90	9.32	0.81	1.00
2023-03-07	16:20:00	57.74	7.00	9.31	0.73	1.00
2023-03-07	16:21:00	63.61	10.20	9.73	1.01	1.00
2023-03-07	16:22:00	72.32	8.10	9.32	0.86	1.00
2023-03-07	16:23:00	68.12	10.80	9.31	0.81	1.00
2023-03-07	16:24:00	73.03	9.90	9.11	0.75	1.00
2023-03-07	16:25:00	52.56	10.60	9.31	0.82	1.00
2023-03-07	16:26:00	70.53	9.60	8.90	0.82	1.00
2023-03-07	16:27:00	49.86	9.50	9.57	0.96	1.00
2023-03-07	16:28:00	62.58	8.40	9.36	0.95	1.00
2023-03-07	16:29:00	44.73	8.40	9.77	1.01	1.00
2023-03-07	16:30:00	62.88	9.80	9.36	1.38	1.00
2023-03-07	16:31:00	46.73	9.50	9.58	1.01	1.00
2023-03-07	16:32:00	59.60	11.40	8.95	1.20	1.00
2023-03-07	16:33:00	49.98	7.60	9.15	0.86	1.00
2023-03-07	16:34:00	56.01	10.80	9.15	1.12	1.00
2023-03-07	16:35:00	55.20	7.60	9.51	1.01	1.00
2023-03-07	16:36:00	58.47	9.20	9.51	1.07	1.00
2023-03-07	16:37:00	61.15	7.80	9.31	1.05	1.00
2023-03-07	16:38:00	60.04	9.40	9.60	1.08	1.00
2023-03-07	16:39:00	58.32	8.60	9.40	1.02	1.00
2023-03-07	16:40:00	65.57	11.00	9.40	1.02	1.00
2023-03-07	16:41:00	63.56	10.40	8.98	0.88	1.00
2023-03-07	16:42:00	41.42	8.90	9.39	1.01	1.00
2023-03-07	16:43:00	56.70	9.10	8.98	0.97	1.00
2023-03-07	16:44:00	46.80	7.90	9.75	0.93	1.00
2023-03-07	16:45:00	72.87	10.30	9.54	1.08	1.00

MARCH 7/2023	**Analyzers**				
	CO	THC	O2	Opacity	SO2
Test 1	AT-205-1NEW	AT-259-1NEW	AT-261A-2NEW	AT-263	AT-264-1NEW
Units	PPM	PPM	%	%	PPM
Max	78.70	11.50	9.82	1.55	1.00
Min	34.10	6.40	8.90	0.71	1.00
Average	54.91	8.86	9.42	0.96	1.00
Variance	95.27	1.60	0.06	0.03	0.00