Report No. 22031-1

ORTECH
a Kontrol Energy Company

Report:

Mercury Emission Testing
at the Clean Harbors Sarnia Facility (June 2020)

Date: July 14, 2020



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Submitted to: Erica Carabott
Facility Compliance Manager
Clean Harbors Canada Inc.
4090 Telfer Road, Corunna, Ontario N0N 1G0
Tel: (519) 864-3890
Cell: (519) 328-3394
E-mail: carabott.erica@cleanharbors.com

Prepared by: Tina Sanderson, B.Sc.
Senior Project Manager, Emission Testing
ORTECH Consulting Inc.
804 Southdown Rd., Mississauga, Ontario L5J 2Y4
Tel: (905) 822-4120, Ext. 522
Email: tsanderson@ortech.ca

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Revision History

Version	Date	Summary Changes/Purpose of Revision
1	July 14, 2020	None

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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 June 23, 2020. 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 100 ng to 2000 ng, by the analytical laboratory prior to commencing the test program.

The results of three of the pairs of tubes, including the spike 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 ($\mu g/Rm^3$)*	2.45
Dry Adjusted Concentration ($\mu g/Rm^3$)**	2.17

* 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 26.6 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 June 23, 2020. The spike tubes from each test pair were spiked with increasing amounts of mercury, ranging from 100 ng to 2000 ng, prior to commencing the test program 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 must 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 spike 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 1.52 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 ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method.

Each test run was approximately sixty minutes in duration at an approximate sampling rate of 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 100 ng to 2000 ng in order to ensure that at least one of the traps met the spiking criterion stated in the test method. The recovery spike must 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 2019. The pre-spiked mercury trap for Test No. 1 (100 ng) was used for spike recovery determination as the concentration best fit the requirements of the QA/QC criteria. The average mercury collected for Test No. 1, Test No. 2 and Test No. 3 (145 ng) was within ±50% of the Test No. 1 spike concentration.

The field spike recovery provides specific verification of the performance of the combined sampling and analytical approach for the test program. Six sets of paired samples, one of each pair which is spiked with a known quantity of mercury, were collected. The samples were analyzed and the spike concentration for Test No. 1 fell within the spike range criterion stated in the test method. The spike recovery for Test No. 1 was 107.7%. 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. The average dry adjusted mercury concentration ranged from a low of 2.36 µg/Rm^3 (Tube Pair No. 1) to a high of 2.01 µg/Rm^3 (Tube Pair No. 3) for the three tests reported. The paired trap agreement was 2.5% for Test No. 1, 5.6% for Test No. 2, and 2.8% for Test No. 3.

6. RESULTS

Six mercury test runs were collected during one day of sampling on June 23, 2020. 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 100 ng to 2000 ng, prior to commencing the test program 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 (0.74 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 0.7% 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. The pre-spiked mercury traps were spiked with known quantities of mercury ranging from 100 ng to 2000 ng in order to ensure that at least one of the traps met the spiking criterion stated in the test method. The pre-spiked mercury trap for Test No. 1 (100 ng) was used for spike recovery determination as the concentration best fit the requirements of the QA/QC criteria.

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 paired trap agreement was 2.5% for Test No. 1, 5.6% for Test No. 2, and 2.8% for Test No. 3. 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)*	2.65	2.44	2.26	2.45
Dry Adjusted Conc. (µg/Rm^3)**	2.36	2.15	2.01	2.17

* 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 was 107.7%. 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 26.6 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	June 23, 2020	13:20	14:20	60
2	June 23, 2020	14:30	15:30	60
3	June 23, 2020	18:30	19:30	66
4	June 23, 2020	19:39	20:39	60
5	June 23, 2020	20:48	21:48	60
6	June 23, 2020	21:55	22:55	60

Note: All test times match plant time.

Table 2: Mercury Emission Data

Test/Run No.	Tube ID	Mercury Collected Section 1	Mercury Collected Section 2	Mercury Collected Total	Dry Gas Volume Sampled	Mercury Concentration Dry Reference	Mercury Concentration Dry Adjusted	Paired Trap Agreement
		ng	ng	ng	Rm^3*	µg/Rm^3*	µg/Rm^3**	%
1	A ***	159.6	<0.74	160	0.0590	2.72	2.42	-
	B	150.4	<0.74	151	0.0584	2.59	2.30	-
	Average					2.65	2.36	2.5
2	A	152.4	<0.74	153	0.0594	2.58	2.27	-
	B***	125.4	0.9	126	0.0548	2.30	2.03	-
	Average					2.44	2.15	5.6
3	A***	142.0	2.2	144	0.0657	2.20	1.95	-
	B	134.7	1.0	136	0.0584	2.32	2.07	-
	Average					2.26	2.01	2.8
Average				145		2.45	2.17	

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	Spike Tube Volume Sampled	Spike Tube Mercury Concentration	Unspike Tube Total Collected	Unspike Tube Volume Sampled	Unspike Tube Mercury Concentration	Spike Concentration	Spike Recovery
	ng	Rm^3*	ng/Rm^3*	ng	Rm^3*	ng/Rm^3*	ng/Rm^3*	%
1	260	0.0590	4413	151	0.0584	2587	1826	107.7
2	376	0.0548	6863	153	0.0594	2578	4284	NA
3	394	0.0657	6005	136	0.0584	2322	3683	NA

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
(7 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 OL542316 (Spiked)	1.012	4.3	64.6	60.3	28.9	2.4	26.5	59.00	0.0590
T1B OL544410	1.026	87.6	147.5	59.9	28.9	0.9	30.5	58.43	0.0584
T2A OL544438	1.012	67.5	128.6	61.1	28.9	2.4	28.4	59.40	0.0594
T2B OL528949 (Spiked)	1.026	49.0	106.0	57.0	28.9	0.9	34.6	54.83	0.0548
T3A OL544442 (Spiked)	1.012	30.3	96.0	65.7	29.0	2.4	21.0	65.65	0.0657
T3B OL544384	1.026	7.8	66.5	58.7	29.0	0.9	25.0	58.45	0.0584
T4A OL544403	1.012	0.1	61.0	60.9	29.0	2.4	20.2	61.06	0.0611
T4B OL535371 (Spiked)	1.026	72.8	122.4	49.6	29.0	0.9	25.2	49.40	0.0494
T5A OL528820 (Spiked)	1.012	91.7	147.7	56.0	29.0	2.4	21.0	56.02	0.0560
T5B OL544378	1.026	24.7	82.3	57.6	29.0	0.9	25.2	57.37	0.0574
T6A OL544441	1.012	52.9	110.0	57.1	29.0	2.4	20.8	57.20	0.0572
T6B OL544270 (Spiked)	1.026	83.4	143.0	59.6	29.0	0.9	24.9	59.46	0.0595

* dry at 25°C and 1 atmosphere

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 23, 2020
Project No.:	22031

Measuring Device	MII
Control Module	VOST 2
Barometer	ENV. CAN.

Train A

Tube Identification:	OLS42316	Spiked (Yes) No	
Spike Concentration	100 ng		

Barometric Pressure

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	4.3	24	2.4	3
5	9.3	26	2.4	3
10	14.3	27	2.4	4
15	19.3	28	2.4	4
20	24.4	27	2.4	5
25	29.4	27	2.4	5
30	34.5	27	2.4	6
35	39.6	27	2.4	6
40	44.5	27	2.4	6
45	49.5	27	2.4	6
50	54.5	26	2.4	6
55	59.5	26	2.4	6
60	64.6	26	2.4	7

Start Time:	1320	Initial Leak Check	<0.01	LPM@ 20 "Hg	DGMCF: 1.017
Finish Time:	1420	Final Leak Check	<0.01	LPM@ 19 "Hg	Sample Volume: 60.3
					Average DGM Temp: 26.5
					Average DGM Δ H: 2.4

Train B

Tube Identification:	OLS41410	Spiked Yes (No)	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	VOST 3

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	87.6	24	0.9	3
5	92.6	27	0.9	3
10	96.3	28	0.9	4
15	101.3	28	0.9	4
20	106.5	29	0.9	5
25	111.5	29	0.9	5
30	116.5	29	0.9	5
35	121.7	29	0.9	5
40	126.6	34	0.9	5
45	131.4	34	0.9	5
50	136.9	34	0.9	5
55	142.0	35	0.9	5
60	147.3	35	0.9	5

Start Time:	1320	Initial Leak Check	<0.01	LPM@ 20 "Hg	DGMCF: 1.076
Finish Time:	1420	Final Leak Check	<0.01	LPM@ 17 "Hg	Sample Volume: 59.1
					Average DGM Temp: 30.5
					Average DGM Δ H: 0.9

Operator:

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 23, 2020
Project No.:	22031

Measuring Device	MII
Control Module	VOST 2
Barometer	ENV. CAN.

Train A

Tube Identification:	OLS44438	Spiked Yes (No)	
Spike Concentration	— ng		

Barometric Pressure

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	67.5	25	2.4	4
5	72.9	27	2.4	4
10	77.5	28	2.4	5
15	82.8	28	2.4	5
20	87.8	29	2.4	5
25	92.0	29	2.4	5
30	97.8	29	2.4	5
35	102.80	29	2.4	5
40	107.5	29	2.4	5
45	102.9	29	2.4	5
50	118.0	29	2.4	5
55	123.6	29	2.4	5
60	128.60	29	2.4	5

Start Time:	1430	Initial Leak Check	<.01	LPM@ 16 "Hg	DGMCF: 1.017
Finish Time:	1530	Final Leak Check	<.01	LPM@ 20 "Hg	Sample Volume: 61
					Average DGM Temp: 28.3
					Average DGM Δ H: 2.4

Train B

Tube Identification:	OLS28445	Spiked (Yes) No	
Spike Concentration	250 ng		

Measuring Device	MII
Control Module	VOST 3

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	46.4	32	0.9	5
5	53.5	33	0.9	5
10	58.2	35	0.9	5
15	63.1	35	0.9	5
20	68.1	35	0.9	5
25	73.0	35	0.9	5
30	77.9	35	0.9	5
35	83.0	35	0.9	5
40	88.0	35	0.9	5
45	93.0	35	0.9	5
50	96.1	35	0.9	5
55	101.0	35	0.9	5
60	106.0	35	0.9	5

Start Time:	1430	Initial Leak Check	<.01	LPM@ 15 "Hg	DGMCF: 1.026
Finish Time:	1530	Final Leak Check	<.01	LPM@ 20 "Hg	Sample Volume: 57.0
					Average DGM Temp: 34.6
					Average DGM Δ H: 0.9

Operator:	[illegible]

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 23, 2020
Project No.:	22031

Measuring Device	MII
Control Module	V057 2
Barometer	ENV. CAN.

Train A

Tube Identification:	OL544442	Spiked (Yes) No	
Spike Concentration	400 ng		

Barometric Pressure

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	30.3	~~20~~ 21	2.4	4
5	35.3	21	↓	8
10	40.6	21		8
15	45.9	21		8
20	51.3	21		8
25	56.7	21		8
30	62.0	21		8
35	67.5	21		8
40	72.8	21		8
45	78.5	21		8
50	84.0	21		8
55	90.0	21		8
60	96.0	21		8

Start Time:	~~1830~~ 1830	Initial Leak Check	0.01	LPM@ 20 "Hg	DGMCF: 1.012
Finish Time:	1931	Final Leak Check	0.01	LPM@ 20 "Hg	Sample Volume: 57
					Average DGM Temp: 21
					Average DGM Δ H: 2.4

3 HR DELAY

Train B

Tube Identification:	OL543984	Spiked Yes (No)	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	V057 3

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	7.9	~~25~~ 25	0.9	4
5	12.5	25	↓	7
10	17.4	25		7
15	22.3	25		7
20	27.1	25		7
25	32.0	25		7
30	36.8	25		7
35	41.9	25		7
40	46.9	25		7
45	51.7	25		7
50	56.6	25		7
55	61.5	25		7
60	66.5	25		7

Start Time:	~~1830~~ 1830	Initial Leak Check	0.01	LPM@ 20 "Hg	DGMCF: 1.026
Finish Time:	1930	Final Leak Check	0.01	LPM@ 20 "Hg	Sample Volume: 58.7
					Average DGM Temp: 25
					Average DGM Δ H: 0.9

Operator: R. J. Mc

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 23, 2020
Project No.:	22031

Measuring Device	MII
Control Module	V0572
Barometer	ENV. CAN.

Train A

Tube Identification:	OLSH403	Spiked Yes / (No)	
Spike Concentration	— ng		

Barometric Pressure

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	0.1	20	2.4	4
5	5.1	20	↓	4
10	10.2	20		4
15	15.2	20		4
20	20.2	20		4
25	25.3	20		4
30	30.3	20		4
35	35.2	20		4
40	40.2	20		4
45	45.3	20		4
50	50.3	20		4
55	55.8	21		4
60	61.0	22		4

Start Time:	1939	Initial Leak Check	4.4	LPM@ 20 "Hg	DGMCF: 1.012
Finish Time:	2039	Final Leak Check	<.01	LPM@ 20 "Hg	Sample Volume: 60.9
					Average DGM Temp: 70.7
					Average DGM Δ H: 2.4

Train B

Tube Identification:	OLS5537	Spiked (Yes) / No	
Spike Concentration	600 ng		

Measuring Device	MII
Control Module	V0573

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	72.4	24	0.9	5
5	77.0	24	↓	5
10	81.2	24		5
15	85.4	25		5
20	89.6	25		5
25	93.8	25		5
30	98.0	25		5
35	102.2	25		5
40	106.4	26		5
45	110.6	26		5
50	114.8	26		5
55	119.0	26		5
60	122.4	26	V	5

Start Time:	1939	Initial Leak Check	<.01	LPM@ 20 "Hg	DGMCF: 1.026
Finish Time:	2039	Final Leak Check	<.01	LPM@ 20 "Hg	Sample Volume: 49.6
					Average DGM Temp: 25.2
					Average DGM Δ H: 0.9

Operator: [signature]

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 23, 2020
Project No.:	22031

Train A

Tube Identification:	OLS28820	Spiked (Yes) No	
Spike Concentration	800 ng		

Measuring Device	MII
Control Module	V0517
Barometer	ENV. CAN.

Barometric Pressure

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	91.7	21	2.4	4
5	96.4	21	↓	6
10	101.	21		6
15	105.6	21		6
20	110.3	21		6
25	115.2	21		6
30	120.0	21		6
35	124.7	21		6
40	129.4	21		6
45	133.4	21		6
50	137.1	21		6
55	142.7	21	V	6
60	147.1	21		6

Start Time:	2048	Initial Leak Check	<.01	LPM@ 20 "Hg	DGMCF: 1.012
Finish Time:	2148	Final Leak Check	<.01	LPM@ 20 "Hg	Sample Volume: 56.0
					Average DGM Temp: 21
					Average DGM Δ H: 2.4

Train B

Tube Identification:	OLS44378	Spiked Yes No	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	V0513

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	24.7	24	0.9	4
5	29.0	26	↓	4
10	33.6	26		4
15	38.0	25		4
20	43.4	25		4
25	48.2	25		4
30	52.0	25		4
35	57.7	25		4
40	62.7	25		4
45	67.5	25		4
50	72.3	25		4
55	77.0	25		4
60	81.5	25	V	4

Start Time:	1948	Initial Leak Check	<.01	LPM@ 20 "Hg	DGMCF: 1.078
Finish Time:		Final Leak Check	<.01	LPM@ 20 "Hg	Sample Volume: 57.6
					Average DGM Temp: 25.2
					Average DGM Δ H: 0.9

Operator:	

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 23, 2020
Project No.:	22031

Measuring Device	MII
Control Module	VOST 2
Barometer	ENV. CAN.

Train A

Tube Identification:	OL544441	Spiked Yes / No	
Spike Concentration	~~OL544270~~ ng		

Barometric Pressure

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	52.9	19	2.4	5
5	57.7	20		6
10	62.5	21		6
15	67.3	21		6
20	72.1	21		6
25	76.9	21		6
30	81.8	21		6
35	86.6	21		6
40	91.4	21		6
45	96.1	21		6
50	100.9	21		6
55	105.5	21		6
60	110.0	21		6

Start Time:	2155	Initial Leak Check	0.01 LPM@ 20 "Hg
Finish Time:	2255	Final Leak Check	0.0 LPM@ 20 "Hg

DGMCF:	1.012
Sample Volume:	57.1
Average DGM Temp:	20.5
Average DGM Δ H:	2.4

Train B

Tube Identification:	OL544270	Spiked Yes / No	
Spike Concentration	ng		

Measuring Device	MII
Control Module	VOST 3

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	83.4	24	0.9	4
5	88.4	25		5
10	93.4	25		5
15	98.5	25		5
20	103.5	25		5
25	108.4	25		5
30	113.4	25		5
35	118.3	25		5
40	123.2	25		5
45	128.1	25		5
50	133.2	25		5
55	138.1	25		5
60	143.0	25		5

Start Time:	2155	Initial Leak Check	0.01 LPM@ 19 "Hg
Finish Time:	2255	Final Leak Check	0.01 LPM@ 19 "Hg

DGMCF:	1.026
Sample Volume:	59.6
Average DGM Temp:	25.0
Average DGM Δ H:	0.9

Operator:	

APPENDIX 3

ORTECH Equipment Calibration Data
(4 pages)

ORTECH Environmental

Dry Gas Meter Calibration Data

Calibration Procedure	03-J004
Meter Number	Vost 2
Date	June 19, 2020
Barometric Pressure	29.74
System Leak Check	<0.01 Lpm @ 22"Hg

MII NUMBERS	
DGM	A10117
Gasometer	A01463
Barometer	COE20028

Calibrated By	David Utley
Signature	
Reviewed and Accepted By	

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

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

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
69.40	54.80	14.60	0.687	23.0	96.250	115.740	0.688	28.0	2.4	28.0	1.009	22.5	0.9
54.80	39.60	15.20	0.715	23.5	15.740	35.980	0.715	30.0	2.4	30.0	1.016	21	1.0
39.60	23.30	16.30	0.767	24.0	35.980	57.840	0.772	31.0	2.4	31.0	1.011	22.3	1.0

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	
1 Lpm	1.012

ORTECH Environmental
Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Nutech**
MII	**A10117**
Date	**June 19, 2020**
Calibrated By	**David Utley**
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
10	10		0.0
20	20		0.0
50	50		0.0
75	75		0.0
100	99		1.0
125	124		0.8
150	149		0.7
200	199		0.5
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	Vost 3
Date	June 22, 2020
Barometric Pressure	29.62
System Leak Check	0.01 lpm @ 20 "Hg

MII NUMBERS	
DGM	A12010
Gasometer	A01463
Barometer	COE 20028

Calibrated By	JB
Signature	
Reviewed and Accepted By	

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

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

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
52.90	37.30	15.60	0.734	23.5	698.47	718.97	0.724	30.0	0.9	30.0	1.034	20	1.0
37.30	21.60	15.70	0.739	23.5	718.97	739.95	0.741	31.0	0.9	31.0	1.020	20	1.0
21.60	5.80	15.80	0.743	23.5	739.95	761.07	0.746	33.0	0.9	33.0	1.026	20	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	1.026

Revision June 5, 2007

ORTECH Environmental

Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Nutech**
MII	**A12010**
Date	**June 22, 2020**
Calibrated By	**JB**
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
10	10		0.0
20	20		0.0
50	50		0.0
75	75		0.0
100	100		0.0
125	125		0.0
150	150		0.0
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	7/6/20	Company	ORTECH	Method	EPA 7473
Analyst[s]	Joe Simon	Contact	Jay Grollman	Method Uncertainty	± 10%
Project	2022030	Phone	Not Provided	MDL	0.74ng
Turnaround	standard	Email	jgrollman@ortech.ca	LOQ	5ng

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
OL542316			259.6	0.0	259.6		100	0.0%		Test 1 Tube A		
OL544410			150.4	0.5	150.9			0.4%		Test 1 Tube B		
OL544438			152.4	0.0	152.4			0.0%		Test 2 Tube A		
OL528949			375.4	0.9	376.3		250	0.2%		Test 2 Tube B		
OL544442			542.0	2.2	544.2		400	0.4%		Test 3 Tube A		
OL544384			134.7	1.0	135.7			0.7%		Test 3 Tube B		
OL544403			103.0	0.0	103.0			0.0%		Test 4 Tube A		
OL535371			771.9	2.3	774.2		600	0.3%		Test 4 Tube B		
OL528820			934.8	0.9	935.7		800	0.1%		Test 5 Tube A		
OL544378			143.4	1.3	144.7			0.9%		Test 5 Tube B		
OL544441			141.6	0.5	142.1			0.3%		Test 6 Tube A		
OL544270			1967	5.1	1972		2000	0.3%		Test 6 Tube B		

[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

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	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	m3/s Ref Dry	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-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2020-06-23	13:20:00	32.505	9.96	173.2163	215.46	3.04875	182.925	18.1125	16343.75	14241.63	30.008	17.1288	1412.063	1106.4	539.4	196.5	187.7	-21.5	-34.75	-95.175	312.6875	26.53875
2020-06-23	13:21:00	32.58	10	175.8713	216.36	3.0175	181.05	20.55	15875	14140.51	29.69511	16.87635	1417.063	1104.9	539.4	196.5	187.7	-15.45	-25.75	-83.85	319.125	27.3
2020-06-23	13:22:00	32.73	10.135	172.845	216.27	2.98125	178.875	20.4375	16368.75	14236.01	31.00664	17.51997	1422.813	1106	541.2	196.5	187.7	-35.2	-50.65	-117.825	278.0625	27.27375
2020-06-23	13:23:00	33.045	10.125	173.4075	216.135	2.99125	179.475	19.7625	16231.25	14089.94	31.04306	17.51515	1415.938	1104.7	542.2	196.5	187.7	-25.4	-40.1	-99.375	292.875	25.90875
2020-06-23	13:24:00	32.655	9.935	169.5263	215.955	3.075	184.5	19.6125	16250	13977.58	31.89207	18.15079	1416.938	1106.4	542.9	197	188.7	-35.55	-53.7	-115.5375	265.875	26.53875
2020-06-23	13:25:00	32.61	10.11	173.6437	215.37	3.07375	184.425	19.8	15850	14084.33	30.8156	17.5814	1413.313	1106.7	542.4	197	188.7	-21.5	-35.35	-96.0375	307.3125	27.01125
2020-06-23	13:26:00	32.925	10.085	171	215.955	3.03375	182.025	19.35	16012.5	14045	31.08926	17.8136	1418.063	1107.6	542.2	197	188.7	-27.6	-45.2	-104.5125	264.5625	26.1975
2020-06-23	13:27:00	32.85	10.255	171.5625	216.045	2.99625	179.775	18.9375	16181.25	14162.98	30.41346	17.40237	1415.563	1107.7	542.8	197	188.7	-22.75	-36.1	-96.075	286.3125	25.935
2020-06-23	13:28:00	32.43	10.04	169.7625	215.73	2.94875	176.925	18.525	15700	14061.85	31.14626	17.87377	1419.938	1109	542	197	188.7	-20.6	-31.4	-92.4	294.625	26.69625
2020-06-23	13:29:00	33.105	10.52	171.8438	216.945	2.98125	178.875	20.2875	15918.75	14168.6	30.86035	17.61074	1418.938	1109.6	541.2	197	188.7	-18.7	-30.9	-90	317.25	26.85375
2020-06-23	13:30:00	32.595	10.04	171.09	216.27	2.9775	178.65	20.25	15787.5	14067.47	30.24732	17.18735	1426.188	1110.9	541	197	188.7	-16.65	-27.05	-86.775	326.9375	27.2475
2020-06-23	13:31:00	32.655	10.05	171.3713	217.08	3.05375	183.225	19.65	16218.75	14213.54	30.9104	17.49719	1419.563	1110.4	542.5	197	188.7	-28.45	-43.75	-104.7375	289.75	26.04
2020-06-23	13:32:00	32.955	10.25	171.99	216.36	3.06	183.6	19.2375	15962.5	14112.42	30.62293	17.35196	1417.438	1109.4	542.6	197	188.7	-23.95	-38.7	-99.075	300.625	25.935
2020-06-23	13:33:00	32.715	10.07	171.2813	216.315	2.92125	175.275	20.6625	16187.5	14252.87	31.16871	17.81156	1415.813	1108.9	542.6	197.5	189.7	-23.65	-39	-97.6125	306.875	26.46
2020-06-23	13:34:00	32.685	10.325	173.1263	216.45	3.03625	182.175	20.7	15900	14140.51	30.47714	17.48034	1418.938	1108.8	542.4	197.5	189.7	-20.4	-32.45	-93.375	311.125	26.0925
2020-06-23	13:35:00	32.73	9.93	173.7	216.315	3.035	182.1	18.7125	16118.75	14129.27	30.48703	17.41032	1418.438	1109.7	544	197.5	188.6	-24.8	-38.2	-101.3625	282.375	26.355
2020-06-23	13:36:00	33.075	10.12	171.4162	217.215	3.025	181.5	19.3125	15875	14123.65	29.72596	16.93108	1420.813	1108.6	544.5	198	188.6	-20.45	-33.8	-95.625	291.5625	25.85625
2020-06-23	13:37:00	32.91	9.855	172.6087	216.225	2.98	178.8	19.8375	16443.75	14252.87	30.74471	17.57385	1421.188	1109.4	546	198	188.6	-23.8	-37	-98.7	316.1875	25.90875
2020-06-23	13:38:00	33.435	10.13	172.935	216.855	2.875	172.5	18.6	15806.25	14022.53	29.8201	16.9417	1425.563	1110	545.2	198	188.6	-16.35	-28.05	-86.175	321.125	27.1425
2020-06-23	13:39:00	33.06	10.045	171.2362	216.855	2.87375	172.425	19.3875	16425	14269.72	31.88003	18.04865	1431.313	1112.3	546.3	198	189.7	-39.7	-58.9	-125.4375	255.9375	25.96125
2020-06-23	13:40:00	32.835	10.38	171.8438	217.125	2.89375	173.625	19.0875	16143.75	14185.45	31.05829	17.57266	1422.688	1111	547.3	198.5	189.7	-25.95	-39.8	-100.3875	294.6875	27.32625
2020-06-23	13:41:00	32.76	9.905	173.88	216.315	2.9575	177.45	19.575	15862.5	14084.33	31.31459	17.77837	1422.688	1110.4	547.7	199	189.7	-30.7	-48.05	-106.725	271.125	26.06625
2020-06-23	13:42:00	33.105	10.015	149.3438	216.765	2.88625	173.175	18.4875	16031.25	14084.33	30.00989	17.18519	1420.563	1109.1	547.1	199	189.7	-32.05	-43.75	-104.1	313.375	26.85375
2020-06-23	13:43:00	32.985	10.12	164.6437	217.17	2.8425	170.55	21.0375	15937.5	14151.74	31.08766	17.80718	1422.688	1111.7	544.6	199	190.7	-21.6	-33.4	-92.9625	316.25	26.775
2020-06-23	13:44:00	32.73	10.03	165.2175	216.945	2.8775	172.65	19.3125	16137.5	14146.12	30.84014	17.65816	1417.438	1111.1	543.5	199	189.6	-25.5	-37.95	-97.5	285.0625	26.1975
2020-06-23	13:45:00	32.625	10.04	161.145	216.405	2.93625	176.175	18.8625	16037.5	14157.36	30.40585	17.53397	1418.063	1110.8	541.5	198.5	189.6	-24.6	-37.8	-95.5875	295.375	25.8825
2020-06-23	13:46:00	33.165	10.355	164.3175	217.215	2.97125	178.275	20.1	15937.5	14061.85	30.05028	17.33027	1414.688	1110	539.4	198	189.6	-21.9	-34.95	-92.5125	319.0625	27.195
2020-06-23	13:47:00	33.225	9.98	167.6362	218.295	2.94875	176.925	19.1625	15706.25	14056.24	30.56962	17.61925	1420.563	1110.7	537.8	197	188.6	-17.7	-29.2	-86.925	324.6875	25.9875
2020-06-23	13:48:00	32.76	10.08	163.89	217.44	2.9275	175.65	18.7125	16562.5	14292.19	30.63343	17.63668	1414.938	1108.4	539.6	196.5	188.6	-32.3	-46	-107.9625	289.6875	25.96125
2020-06-23	13:49:00	33.09	10.35	162.945	217.26	3.0125	180.75	20.4375	16193.75	14061.85	31.47901	18.10277	1410.813	1107.2	538.9	196.5	188.6	-28.35	-42.25	-103.275	300.3125	26.775
2020-06-23	13:50:00	33.255	10.365	166.8713	217.485	2.92375	175.425	20.4	16287.5	14185.45	31.3146	18.08217	1408.688	1107.3	539.2	196.5	188.6	-27.8	-39.55	-104.0625	306.3125	25.935
2020-06-23	13:51:00	32.985	10.24	165.735	217.305	2.94625	176.775	18.45	15862.5	14078.71	31.34608	18.20519	1411.438	1107.8	538.8	196.5	188.6	-24.7	-36.6	-98.55	313.625	27.0375
2020-06-23	13:52:00	32.925	10.235	166.1175	216.405	2.92	175.2	18.7875	16450	14134.89	31.39118	18.17503	1411.188	1108.9	538.9	196.5	188.6	-29.25	-42.45	-106.3125	284.25	26.01375
2020-06-23	13:53:00	32.79	10.015	164.88	218.115	2.93125	175.875	18.825	16081.25	13910.17	30.74138	17.76004	1411.063	1108.6	537.9	196.5	188.6	-25.55	-37.55	-98.7375	290.5625	27.11625
2020-06-23	13:54:00	33	10.005	166.3088	217.35	2.88875	173.325	18.9375	16662.5	14264.1	30.49572	17.69131	1412.813	1109.9	539.1	196	188.6	-29.3	-42.95	-108.075	311.5	26.11875
2020-06-23	13:55:00	32.97	10.2	164.6437	216.945	2.88375	173.025	19.95	16056.25	14162.98	30.35635	17.6171	1415.438	1111.6	539.3	196	187.6	-20.25	-32.75	-89.5875	320.8125	25.8825
2020-06-23	13:56:00	32.76	10.29	165.0263	216.855	2.8675	172.05	18.7875	16456.25	14275.34	32.38889	18.65013	1422.688	1114.7	539.5	196	187.6	-42.9	-61.8	-125.325	260.25	26.27625
2020-06-23	13:57:00	32.625	9.69	166.9162	218.025	2.885	173.1	20.4375	16362.5	14157.36	31.37525	18.0384	1412.063	1113.1	539.8	196	187.6	-29.45	-44.2	-104.1	296	25.8825
2020-06-23	13:58:00	32.91	10.11	162.5175	216.495	2.8825	172.95	18.4875	16325	14258.48	30.87767	17.86055	1409.563	1113.4	539.9	196	188.7	-26.15	-40.2	-97.5375	299.9375	25.90875
2020-06-23	13:59:00	32.94	9.87	156.9713	211.95	2.88875	173.325	20.5125	16068.75	14106.8	31.31005	18.13984	1406.438	1113	539.3	196.5	188.7	-27.9	-41.35	-101.025	311.75	26.90625
2020-06-23	14:00:00	32.655	9.855	159.8175	211.77	2.80125	168.075	19.8	15925	14005.67	31.02256	18.17103	1409.438	1114.8	537.2	196	188.7	-24.7	-37.5	-96	317.0625	27.11625
2020-06-23	14:01:00	32.685	9.88	164.835	213.21	2.83125	169.875	18.9375	16037.5	14129.27	31.23557	18.19607	1406.188	1114.3	536	196	188.7	-25.8	-38.8	-99.525	286.75	27.01125
2020-06-23	14:02:00	32.955	10.035	126.7087	213.705	2.76625	165.975	20.925	16750	14297.81	30.46186	17.80685	1404.563	1112.7	534.4	196	187.6	-36.55	-48.5	-106.4625	302.6875	25.96125
2020-06-23	14:03:00	32.85	10.17	167.6813	217.98	2.85125	171.075	20.3625	16012.5	13943.88	31.10779	18.30602	1398.938	1108.5	528.2	195	187.6	-22.75	-34.9	-95.475	319.4375	26.46
2020-06-23	14:04:00	32.625	10.335	167.3438	216.9	2.8425	170.55	18.675	15800	14039.38	29.95899	17.88313	1408.563	1110.9	530.6	194.5	187.6	-19.7	-31.45	-90.975	326.625	26.43375
2020-06-23	14:05:00	32.34	9.98	166.635	217.44	2.79375	167.625	20.2875	16787.5	14168.6	31.38832	18.52913	1403.938	1112.1	533.9	194	186.6	-33.7	-47.9	-112.725	292.75	26.43375
2020-06-23	14:06:00	32.55	10.335	167.8725	216.585	2.82875	169.725	19.0875	16187.5	14061.85	31.63752	18.39973	1398.688	1109	534.2	194.5	186.6	-28.3	-43.35	-104.2875	300.3125	25.90875
2020-06-23	14:07:00	32.745	9.93	166.635	217.035	2.8025	168.15	19.725	16325	14146.12	30.45343	17.85044	1397.438	1108.1	535.6	194.5	186.6	-28.8	-42.4	-105.8625	309.375	26.48625
2020-06-23	14:08:00	32.61	10.51	167.445	217.485	2.81375	168.825	20.6625	16087.5	14045	30.54852	17.94306	1400.563	1108.2	535.9	194.5	186.6	-25.05	-38.6	-98.5125	314.625	26.74875
2020-06-23	14:09:00	32.715	9.6	166.635	217.26	2.7925	167.55	19.0125	16525	14151.74	30.80216	17.96889	1402.063	1109.2	535	194.5	186.6	-30.9	-44.95	-109.8	284.625	27.32625
2020-06-23	14:10:00	32.85	9.845	169.0087	217.71	2.79875	167.925	18.75	16043.75	13943.88	30.90843	17.90801	1401.438	1108.1	535.1	194.5	186.6	-24.85	-38.55	-98.1375	290.4375	27.1425
2020-06-23	14:11:00	32.64	9.985	167.3438	216.9	2.8	168	20.8125	16525	14157.36	31.48963	18.33846	1403.688	1108.9	535.4	194.5	186.6	-40.25	-58.95	-124.65	276.6875	25.90875
2020-06-23	14:12:00	33.06	9.99	168.1538	218.34	2.74375	164.625	19.7625	15812.5	14168.6	30.10497	17.46325	1405.813	1109.3	536.2	194.5	186.6	-19.9	-32.85	-91.3125	323.1875	26.74875
2020-06-23	14:13:00	32.985	10.095	167.9175	217.44	2.75375	165.225	20.175	15975	14050.62	32.18421	18.55011	1413.688	1110.6	535.3	194	186.6	-40.25	-59.35	-122.2125	258.3125	26.88
2020-06-23	14:14:00	32.415	10.13	167.2087	217.35	2.82	169.2	18.45	16212.5	14129.27	30.93107	17.76168	1402.063	1108.9	535.4	194	186.6	-30.2	-44.65	-107.0625	295.25	26.80125
2020-06-23	14:15:00	32.235	9.805	167.1075	217.125	2.7525	165.15	19.6125	16206.25	14028.15	30.90258	17.933	1400.188	1107.5	536	194	186.6	-27.8	-43.5	-102.3375	304.25	27.195
2020-06-23	14:16:00	32.415	9.93	168.0075	216.585	2.80125	168.075	19.125	15881.25	14045	31.22419	18.17883	1397.313	1106.3	535.9	194.5	186.6	-27.75	-41.4	-101.925	310.5	27.27375
2020-06-23	14:17:00	32.565	9.92	167.49	217.26	2.79375	167.625	18.675	15868.75	14151.74	30.24709	17.66921	1401.438	1106.9	536	194.5	186.6	-23.75	-36.95	-94.725	316.4375	27.195
2020-06-23	14:18:00	32.49	10.015	167.535	217.755	2.825	169.5	19.425	16025	13994.44	30.68062	17.70946	1398.688	1106.9	535.9	194.5	186.6	-25.85	-40.65	-100.3125	285.625	26.11875
2020-06-23	14:19:00	32.73	9.975	167.8725	218.835	2.86625	171.975	20.175	16043.75	14140.51	29.97047	17.3351	1401.688	1107.8	536.3	194.5	186.6	-24.4	-37	-95.7	294.75	25.90875
2020-06-23	14:20:00	32.67	10.165	168.1987	217.89	2.8675	172.05	19.575	15931.25	13994.44	30.15727	17.55055	1401.438	1107.4	536.7	194.5	186.6	-23.1	-35	-96.9	322.1875	26.53875

Max		33.4	10.5	175.9	218.8	3.1	184.5	21.0	16787.5	14297.8	32.4	18.7	1431.3	1114.8	547.7	199.0	190.7	-15.5	-25.8	-83.9	326.9	27.3
Min		32.2	9.6	126.7	211.8	2.7	164.6	18.1	15700.0	13910.2	29.7	16.9	1397.3	1104.7	528.2	194.0	186.6	-42.9	-61.8	-125.4	255.9	25.9
Average		32.8	10.1	167.2	216.7	2.9	174.3	19.5	16124.3	14121.4	30.8	17.8	1412.3	1109.4	539.5	196.3	188.1	-26.4	-40.2	-100.9	299.6	26.5
Variance		0.057672	0.033809	47.6922	1.684943	0.008397	30.22987	0.587179	66418.1	8228.558	0.349161357	0.157470785	72.4037	5.298279	16.83243	2.143989	1.243847	36.38706	59.80696	86.93142	329.5383	0.261311327

		CO	HCl	CO2	H2O	THC	Main O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1	AT-213CB	AT-259-1N	AT-261A-1NEW	AT-263	AT-264-1NI
2020-06-23	13:20:00	80.97	41.14	9.82	51.58	13.6	9.62	0.33	653.3
2020-06-23	13:21:00	82.62	41.14	9.81	51.65	19.2	9.62	0.17	655.2
2020-06-23	13:22:00	114.98	41.14	9.92	51.95	31	9.62	0.4	672.5
2020-06-23	13:23:00	156.08	41.14	10.04	52.03	10.7	9.34	0.48	681.4
2020-06-23	13:24:00	119.03	40.07	9.91	51.56	11.6	9.34	0.55	660.3
2020-06-23	13:25:00	79.51	40.07	9.86	51.43	8.4	9.34	0.58	652.8
2020-06-23	13:26:00	63.24	40.07	9.72	51.19	11.5	9.63	0.66	637.3
2020-06-23	13:27:00	62.67	40.07	9.75	51.31	9.5	9.63	0.55	642.1
2020-06-23	13:28:00	59.81	40.07	9.74	51.22	11.3	9.63	0.58	642.1
2020-06-23	13:29:00	60.09	40.07	9.79	51.43	9.2	9.63	0.18	650.1
2020-06-23	13:30:00	62.57	40.07	9.81	51.65	16.1	9.63	0.18	654.5
2020-06-23	13:31:00	85.01	40.07	9.93	51.79	9.4	9.43	0.4	667.5
2020-06-23	13:32:00	72.42	40.07	9.85	51.45	9.7	9.43	0.48	650.3
2020-06-23	13:33:00	57.25	40.07	9.81	51.32	11.2	9.43	0.61	642.7
2020-06-23	13:34:00	58.03	40.07	9.73	51.12	11.2	9.43	0.61	639.9
2020-06-23	13:35:00	63.85	40.07	9.74	51.3	13.5	9.43	0.55	646.4
2020-06-23	13:36:00	74.49	40.07	9.81	51.46	19.8	9.43	0.58	658.8
2020-06-23	13:37:00	114.74	40.07	9.81	51.36	20.4	9.43	0.55	667.1
2020-06-23	13:38:00	133.8	40.07	9.91	51.53	21.3	9.43	0.11	672.6
2020-06-23	13:39:00	145.16	40.07	9.97	51.7	32.3	9.43	0.42	687.6
2020-06-23	13:40:00	176.6	40.07	10.03	51.76	10.7	9.43	0.46	695.2
2020-06-23	13:41:00	129.21	40.07	9.86	51.36	13.7	9.21	0.52	673.4
2020-06-23	13:42:00	90.31	40.07	9.82	51.21	12.2	9.44	0.61	665.1
2020-06-23	13:43:00	92.91	38.89	9.76	51.11	8.7	9.44	0.65	654.1
2020-06-23	13:44:00	60.12	38.89	9.63	51	7.2	9.65	0.56	632
2020-06-23	13:45:00	43.45	38.89	9.26	50.77	9.1	9.65	0.56	618.2
2020-06-23	13:46:00	38.38	40.17	9.22	50.83	7.3	9.94	0.18	616.7
2020-06-23	13:47:00	38.82	40.17	9.2	50.87	9	9.94	0.23	617.9
2020-06-23	13:48:00	46.98	40.17	9.28	51.03	9.6	9.94	0.42	627.7
2020-06-23	13:49:00	52.97	40.17	9.26	50.97	7.5	9.94	0.52	621.5
2020-06-23	13:50:00	44.58	40.17	9.23	50.8	8.8	9.94	0.55	613.3
2020-06-23	13:51:00	38.25	40.17	9.46	50.59	9.7	9.94	0.56	609.6
2020-06-23	13:52:00	45.42	40.17	9.48	50.7	8.6	9.94	0.56	616.4
2020-06-23	13:53:00	49.92	40.17	9.55	50.85	9.4	9.94	0.58	628.3
2020-06-23	13:54:00	48.36	40.17	9.52	50.64	10.8	9.94	0.5	618
2020-06-23	13:55:00	54.56	40.17	9.55	50.67	9.5	9.94	0.18	619.3
2020-06-23	13:56:00	58.94	40.17	9.65	51.09	11.4	9.94	0.36	645.7
2020-06-23	13:57:00	61.68	40.17	9.72	51.12	7.1	9.73	0.5	653.2
2020-06-23	13:58:00	50.93	40.17	9.61	50.79	7.3	9.73	0.56	639.4
2020-06-23	13:59:00	36.23	39.04	9.22	50.7	6.9	9.73	0.53	633.1
2020-06-23	14:00:00	32.63	39.04	8.52	50.19	7.4	9.94	0.58	609.1
2020-06-23	14:01:00	32.02	40.81	8.84	50.45	6.7	10.15	0.52	614.6
2020-06-23	14:02:00	31.79	40.81	8.82	50.49	7.4	10.15	0.48	619.8
2020-06-23	14:03:00	33.44	40.81	8.37	49.99	5	10.15	0.08	586.4
2020-06-23	14:04:00	33.59	40.81	8.14	49.36	10.6	10.4	0.18	542.3
2020-06-23	14:05:00	55.78	40.81	8.65	49.92	9	10.68	0.36	577.1
2020-06-23	14:06:00	52.24	41.82	8.88	50.55	7.7	9.99	0.45	625.7
2020-06-23	14:07:00	42.66	40.55	8.5	50.23	8.5	9.99	0.47	615.9
2020-06-23	14:08:00	44.06	40.55	8.53	50.16	8.8	10.2	0.52	615.8
2020-06-23	14:09:00	48.07	40.55	8.87	50.51	10	10.2	0.5	628.4
2020-06-23	14:10:00	53.89	40.55	9.53	50.89	9.2	9.99	0.52	641.8
2020-06-23	14:11:00	54.45	40.55	9.48	50.67	11.3	9.99	0.5	641.9
2020-06-23	14:12:00	58.26	40.55	9.57	51.02	10.4	9.99	0.07	646.9
2020-06-23	14:13:00	63.25	40.55	9.7	51.15	13.9	9.99	0.2	656
2020-06-23	14:14:00	70.83	41.57	9.69	51.16	7.2	9.78	0.36	662.1
2020-06-23	14:15:00	55.9	41.57	9.22	50.84	8.1	9.78	0.43	641
2020-06-23	14:16:00	42.76	40.21	9.2	50.63	7.4	9.78	0.47	632.8
2020-06-23	14:17:00	41.86	40.21	8.86	50.41	8.8	10.02	0.52	626.8
2020-06-23	14:18:00	47.56	41.79	9.22	51	7.5	10.02	0.46	641.2
2020-06-23	14:19:00	47.56	41.79	9.55	50.92	8.7	10.02	0.42	639.6
2020-06-23	14:20:00	48.48	41.79	9.51	50.65	8.2	10.02	0.05	639.7

Max	176.6	41.8	10.0	52.0	32.3	10.7	0.7	695.2
Min	31.8	38.9	8.1	49.4	5.0	9.2	0.1	542.3
Average	65.5	40.4	9.5	51.0	10.9	9.78	0.4	638.3
Variance	1023.0479	0.449492186	0.210344	0.272749	26.02872	0.089207268	0.025895	678.4429

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	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	m3/s Ref Dry	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-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2020-06-23	14:30:00	32.685	10.19	170.3363	218.115	2.97125	178.275	20.175	15681.25	14011.29	31.81532	18.304	1419.313	1112.4	541.5	195.5	187.7	-33.05	-54.2	-109.875	266.5	26.4075
2020-06-23	14:31:00	32.745	10.09	169.9088	217.89	3.08375	185.025	18.75	16200	14112.42	30.84159	17.6306	1410.563	1111.3	542.1	196	187.7	-26.9	-41.5	-102.4125	292.5	26.355
2020-06-23	14:32:00	32.355	10.05	169.9988	217.665	3.02625	181.575	19.1625	16125	14168.6	30.65003	17.57313	1410.563	1111.2	542.2	196	188.7	-24.9	-40.3	-97.3875	304.8125	27.01125
2020-06-23	14:33:00	32.685	10.03	169.9988	217.8	3	180	19.9875	16275	14073.09	30.76078	17.70073	1408.813	1111.7	542.3	196.5	188.7	-23.8	-37.6	-97.0875	308.25	27.2475
2020-06-23	14:34:00	32.37	9.8	169.2	218.07	2.96125	177.675	18.3	15918.75	13966.35	30.12939	17.32417	1413.063	1113	542.3	196.5	188.7	-22.8	-36.25	-94.6875	317.4375	26.985
2020-06-23	14:35:00	32.28	10.035	170.5162	217.98	3	180	20.85	16106.25	14185.45	31.61435	18.10725	1410.563	1113.5	543.3	196.5	188.7	-26.1	-40.45	-100.7625	286.3125	27.22125
2020-06-23	14:36:00	31.92	10.1	170.19	218.16	3.03	181.8	19.725	15856.25	13949.49	30.5045	17.47895	1410.813	1113.1	542.7	197	188.7	-22.65	-36.8	-94.05	292.4375	26.38125
2020-06-23	14:37:00	32.19	10.385	169.7175	218.7	3.02	181.2	19.0875	16075	14067.47	30.83498	17.70453	1408.063	1112.3	541.2	197	188.7	-21.6	-34	-92.775	318.375	26.145
2020-06-23	14:38:00	32.13	10.215	170.5725	217.935	3.02	181.2	20.1375	15693.75	13988.82	30.33697	17.39762	1414.563	1112.2	540.9	196.5	188.7	-17.8	-31.4	-86.6625	322.875	26.985
2020-06-23	14:39:00	32.19	9.935	171.5625	217.89	2.8225	169.35	20.55	16468.75	14236.01	31.39118	17.88748	1412.688	1112.3	542.3	196.5	188.7	-32.55	-48.95	-112.575	288.8125	26.32875
2020-06-23	14:40:00	31.845	9.79	171.6075	217.62	2.86625	171.975	20.6625	16162.5	14106.8	31.33151	17.84593	1406.438	1110	542.6	197	188.7	-27.4	-40.85	-100.575	295.375	25.935
2020-06-23	14:41:00	31.8	9.73	172.8	217.665	2.98375	179.025	20.1	16343.75	14213.54	30.6571	17.56856	1403.563	1109.1	543	197	188.7	-28.3	-43.15	-105.8625	305.25	26.11875
2020-06-23	14:42:00	32.415	9.99	172.89	217.935	2.9975	179.85	18.3	16018.75	14011.29	31.15838	17.92912	1404.563	1107.7	542.2	197	188.7	-23.2	-39.55	-95.025	311.4375	26.74875
2020-06-23	14:43:00	32.19	9.96	173.3625	218.52	3.0625	183.75	20.325	16350	14219.16	31.68466	18.32121	1408.688	1108.1	543.1	197.5	188.7	-36.4	-53.75	-114	262	26.8275
2020-06-23	14:44:00	32.385	10.075	173.7	218.79	3.00625	180.375	18.1875	15862.5	14005.67	30.95372	17.57606	1407.438	1107.5	543.8	197.5	188.7	-21.25	-34.25	-92.925	287.9375	26.4075
2020-06-23	14:45:00	32.415	9.505	173.5537	218.16	3.01	180.6	18.3375	15893.75	14123.65	31.62902	18.05584	1411.563	1109	544.5	197.5	188.7	-35.95	-54.95	-114.6	269.9375	25.85625
2020-06-23	14:46:00	32.325	10.015	173.2163	218.205	2.9875	179.25	18.6375	15768.75	14022.53	29.97929	16.97909	1412.438	1109	543.9	198	188.7	-18.85	-32.3	-87.2625	320.5	26.85375
2020-06-23	14:47:00	32.04	9.675	173.5988	218.88	3.04125	182.475	20.5125	15537.5	14028.15	30.02405	17.03039	1421.563	1110.2	544.6	197.5	188.7	-16.55	-29.55	-84.2625	328.5	26.04
2020-06-23	14:48:00	32.475	10.4	174.5437	218.25	2.9925	179.55	18.9375	15906.25	13921.4	30.81683	17.39961	1412.063	1108.6	545	198	188.7	-27.2	-40.65	-103.95	295	26.3025
2020-06-23	14:49:00	32.31	9.875	170.28	217.35	2.97375	178.425	19.725	16018.75	13921.4	31.10571	17.6603	1410.313	1108.8	544.3	198	189.7	-25.8	-39.85	-99.5625	304.4375	26.25
2020-06-23	14:50:00	32.325	9.95	132.9525	218.61	3.00875	180.525	18.675	16293.75	14168.6	30.8376	17.7431	1408.063	1109.9	543.7	198	189.7	-41.25	-53.95	-111.45	318.4375	25.96125
2020-06-23	14:51:00	33.36	9.99	165.1163	218.34	3.00875	180.525	20.7	15806.25	13949.49	31.43304	18.11942	1411.063	1112.2	540.2	197.5	189.7	-23.05	-36.3	-95.2125	315.8125	26.80125
2020-06-23	14:52:00	33.09	9.86	158.7712	218.97	3.0425	182.55	19.3875	16143.75	14056.24	30.10307	17.51357	1410.813	1115.8	539.7	197	189.7	-30.35	-42.65	-103.0125	286.9375	26.80125
2020-06-23	14:53:00	33.27	10.41	157.7813	218.16	3.0675	184.05	20.475	16075	13949.49	30.74999	17.9913	1415.188	1118.9	538	197	188.6	-26.85	-39.95	-97.3125	295.9375	26.95875
2020-06-23	14:54:00	33.225	9.84	157.2075	217.125	2.97875	178.725	20.4	16175	13921.4	30.36468	17.78483	1413.438	1120.9	536.2	196	188.6	-27.2	-39.5	-98.775	321.6875	26.355
2020-06-23	14:55:00	33.45	10.11	157.2525	217.215	3	180	19.425	15806.25	14039.38	29.73012	17.3516	1419.313	1122.8	534.4	195.5	188.6	-22.75	-34.3	-92.775	327.3125	27.0375
2020-06-23	14:56:00	33.09	10.15	156.2175	218.115	2.86125	171.675	19.0125	16818.75	14179.83	31.57588	18.35059	1418.938	1124.9	534.4	195	187.6	-38.85	-55.45	-117.6	291.5	27.06375
2020-06-23	14:57:00	33.27	9.955	165.4988	218.115	2.81375	168.825	19.8375	16168.75	14028.15	30.90358	18.07762	1412.813	1122.2	535.1	195	187.6	-30.85	-45.6	-105.975	296.9375	27.195
2020-06-23	14:58:00	32.73	9.635	165.8363	217.35	2.90375	174.225	20.775	16425	14134.89	30.56545	17.94401	1411.813	1121.4	537.8	195	187.6	-36.9	-49.3	-116.1375	298.3125	26.775
2020-06-23	14:59:00	33.54	10.33	167.1525	218.52	2.89625	173.775	18.7125	15931.25	13921.4	31.17458	18.28237	1412.438	1120	538.1	195.5	187.6	-26.05	-38.15	-98.85	312.4375	26.95875
2020-06-23	15:00:00	33.06	9.98	166.7362	217.215	2.93625	176.175	20.1375	16143.75	14033.76	31.32903	18.34026	1417.813	1121.2	539.5	195.5	187.6	-37.6	-56.55	-120	262.6875	26.985
2020-06-23	15:01:00	33.3	9.745	167.1525	217.8	2.9225	175.35	18.9	16031.25	14056.24	31.04237	17.98471	1416.813	1120.8	540.6	196	187.6	-25.45	-40.25	-99.1875	288.75	26.64375
2020-06-23	15:02:00	32.73	10.05	166.545	217.17	2.8825	172.95	18.7875	15918.75	14000.06	31.9084	18.54786	1420.313	1121.6	541.5	196	187.6	-33.55	-53.25	-109.8375	271.125	27.195
2020-06-23	15:03:00	33.12	10.38	168.6263	218.925	2.91125	174.675	18.4875	15618.75	14033.76	30.44181	17.52093	1418.688	1120.9	541.1	196	187.6	-20.65	-32.5	-91.3875	322.0625	26.48625
2020-06-23	15:04:00	33.435	10.1	168.1538	217.665	2.8475	170.85	19.6875	15612.5	13820.28	30.41132	17.51194	1428.438	1121.7	542.2	196	188.7	-17.95	-29.75	-88.0125	328.625	26.25
2020-06-23	15:05:00	33.405	9.965	167.0625	218.16	2.94125	176.475	20.6625	16125	14033.76	30.58724	17.55171	1421.563	1121.9	542.6	196	188.7	-29.95	-45.5	-107.4375	292.0625	26.11875
2020-06-23	15:06:00	33.48	10.31	167.6362	218.295	2.88875	173.325	19.275	16006.25	14050.62	30.35491	17.52199	1420.313	1121.8	543.6	196.5	188.7	-25.65	-40.2	-100.0875	302.3125	27.3525
2020-06-23	15:07:00	33.36	10.15	167.7262	218.475	2.8475	170.85	20.8875	16000	14045	30.5621	17.65412	1418.438	1121.4	544.1	197	189.7	-25.45	-39.05	-101.3625	308.125	26.38125
2020-06-23	15:08:00	33.54	9.895	168.2438	218.07	2.78625	167.175	20.475	15868.75	13943.88	30.72011	17.73005	1422.438	1122.1	544.2	197.5	189.7	-23.15	-36.6	-94.4625	314.5625	27.09
2020-06-23	15:09:00	33.51	10.12	168.39	218.295	2.78375	167.025	20.475	16018.75	14067.47	31.21148	17.90099	1421.188	1122.3	544.2	197.5	189.7	-25.6	-38.35	-100.5	283.125	25.9875
2020-06-23	15:10:00	33.735	9.965	169.9988	218.655	2.7775	166.65	20.5125	15712.5	13960.73	30.94528	17.80968	1424.688	1122.3	543.6	197.5	189.7	-21.9	-35.3	-93	290.375	26.01375
2020-06-23	15:11:00	33.42	9.64	169.8525	217.8	2.85	171	20.5125	16193.75	13977.58	30.42655	17.47169	1425.938	1122.5	545.2	197.5	189.7	-22.2	-36	-95.775	317.0625	25.935
2020-06-23	15:12:00	33.765	10.04	170.4262	217.44	2.8325	169.95	19.125	15537.5	14016.91	29.76959	17.02079	1432.188	1123	545.1	198	189.7	-18	-30.25	-87.15	321.6875	26.01375
2020-06-23	15:13:00	33.42	10.03	169.6162	217.98	2.77375	166.425	18.5625	16475	14269.72	30.77759	17.53998	1435.313	1124.7	546.4	198	189.7	-34.35	-51.3	-115.8375	285.375	25.8825
2020-06-23	15:14:00	33.525	9.995	169.38	218.295	2.78375	167.025	20.9625	16025	13927.02	30.57092	17.41358	1428.438	1123.8	546.5	198	189.7	-25.55	-38.2	-99	295.6875	26.9325
2020-06-23	15:15:00	33.555	10.06	170.1	218.835	2.89	173.4	20.25	16156.25	13983.2	31.65248	18.03149	1429.313	1123.8	547.4	198.5	190.7	-37.15	-55.5	-114.975	268.8125	25.935
2020-06-23	15:16:00	33.87	10.17	170.3812	218.565	2.8825	172.95	18.6	15818.75	13831.52	30.8909	17.71473	1428.438	1124	547.9	199	190.7	-22.5	-32.25	-94.725	311	26.06625
2020-06-23	15:17:00	33.675	9.93	170.145	217.935	2.90125	174.075	19.6875	15818.75	13955.11	31.57571	18.15782	1433.563	1124.3	548.1	199	190.7	-34.35	-53.7	-112.9125	259.5625	27.27375
2020-06-23	15:18:00	33.555	10.09	169.9988	218.655	2.89375	173.625	19.8	15806.25	13814.66	30.84289	17.58978	1431.938	1123.3	548.3	199.5	190.7	-22.5	-36.4	-93.1125	285.8125	27.27375
2020-06-23	15:19:00	33.735	10.08	171.2362	219.96	2.85125	171.075	20.2125	15687.5	14011.29	30.66334	17.46155	1435.938	1123.9	549	199.5	190.7	-18.5	-29.8	-89.1	291.625	26.7225
2020-06-23	15:20:00	33.42	9.91	171.945	218.295	2.86125	171.675	20.1	15743.75	14016.91	30.62631	17.38302	1435.563	1124.2	550.1	200	190.7	-16.65	-27.7	-86.0625	314.25	27.06375
2020-06-23	15:21:00	33.54	10.015	171.2362	218.97	3.0075	180.45	18.6	15500	14011.29	29.43033	16.59428	1444.313	1125.5	551	200	190.7	-14.9	-27	-82.725	323.25	26.0925
2020-06-23	15:22:00	33.435	10.025	171.4725	218.79	3.01625	180.975	20.475	16000	14095.56	31.09381	17.50652	1438.813	1125.1	552	200	191.7	-27	-40.7	-102.6375	288.8125	27.195
2020-06-23	15:23:00	33.51	10.02	171.5625	217.71	3.00125	180.075	20.775	15787.5	14067.47	30.32895	17.15293	1435.938	1124.5	553.1	200.5	191.7	-23.65	-36.75	-96.975	298.75	25.9875
2020-06-23	15:24:00	33.645	10.165	171.7087	217.53	2.98375	179.025	20.6625	15831.25	13943.88	31.09265	17.54721	1435.313	1124.5	554.5	201	191.7	-21.9	-36.1	-94.65	302.625	27.0375
2020-06-23	15:25:00	33.36	10.035	169.8525	216.855	2.96	177.6	20.7	15581.25	13943.88	30.33368	17.17543	1437.813	1125.8	553.4	201	192.7	-20.4	-31.9	-92.0625	311.75	27.2475
2020-06-23	15:26:00	33.48	9.685	168.8625	217.665	2.96875	178.125	18.975	15906.25	14073.09	30.5936	17.38368	1436.563	1126.6	553.3	201	192.7	-25.6	-39.55	-98.475	281.9375	27.195
2020-06-23	15:27:00	33.495	10.04	168.5812	218.295	2.97875	178.725	19.35	15650	14084.33	30.4843	17.33693	1439.063	1127.3	552.3	201	191.6	-21.4	-34.5	-91.6875	289.8125	26.17125
2020-06-23	15:28:00	33.675	10.455	168.435	218.43	2.9225	175.35	19.7625	15887.5	13966.35	31.05458	17.6722	1438.063	1128.1	552.2	201	191.6	-23.65	-36.45	-97.425	315.125	27.32625
2020-06-23	15:29:00	33.735	10.225	169.1437	218.43	2.895	173.7	20.4	15487.5	13949.49	29.66793	16.82094	1443.188	1128.4	551.6	201	191.6	-17.15	-28.9	-85.2	318.0625	27.0375
2020-06-23	15:30:00	33.615	10.18	168.5363	218.07	2.90875	174.525	19.875	16075	14151.74	31.16643	17.61218	1447.813	1130.6	552.2	200.5	191.6	-39.3	-52.1	-121.5375	277.5	25.96125
Max		33.9	10.5	174.5	220.0	3.1	185.0	21.0	16818.8	14269.7	31.9	18.5	1447.8	1130.6	554.5	201.0	192.7	-14.9	-27.0	-82.7	328.6	27.4
Min		31.8	9.5	133.0	216.9	2.8	166.4	18.2	15487.5	13814.7	29.4	16.6	1403.6	1107.5	534.4	195.0	187.6	-41.3	-56.6	-121.5	259.6	25.9
Average		33.0	10.0	168.3	218.1	2.9	176.2	19.7	15966.1	14029.8	30.8	17.7	1421.2	1118.7	544.3	197.6	189.4	-26.1	-40.1	-99.7	299.4	26.6
Variance		0.360303	0.039773	37.3163	0.310304	0.006745	24.28097	0.688475	71942	9719.438	0.303971708	0.153506911	134.8601	43.88327	24.07383	3.084426	1.888825	41.18679	65.11654	92.90322	330.8666	0.236636488

		CO	HCl	CO2	H2O	THC	Main O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205-1NEV	AT-213A-1NEW	AT-213B-1	AT-213CB	AT-259-1N	AT-261A-1NEW	AT-263	AT-264-1NI
2020-06-23	14:30:00	87.71	42.92	9.8	51.15	16.3	9.74	0.11	670
2020-06-23	14:31:00	97.03	42.92	9.86	51.43	8.5	9.74	0.36	679.5
2020-06-23	14:32:00	84.91	42.92	9.77	51.18	10.2	9.47	0.46	664.6
2020-06-23	14:33:00	67.14	42.92	9.71	50.95	9.4	9.47	0.5	657.2
2020-06-23	14:34:00	65.73	42.92	9.69	51.04	11.1	9.72	0.53	653
2020-06-23	14:35:00	68.64	42.92	9.75	51.22	9.6	9.72	0.51	662.8
2020-06-23	14:36:00	68.91	42.92	9.72	51.22	10	9.72	0.46	662.8
2020-06-23	14:37:00	64.67	42.92	9.66	51.11	9.8	9.72	0.15	660.8
2020-06-23	14:38:00	63.84	42.92	9.66	51.19	15.7	9.72	0.12	661.9
2020-06-23	14:39:00	85.94	42.92	9.78	51.48	18.8	9.72	0.31	675.6
2020-06-23	14:40:00	97.29	41.88	9.75	51.13	9.5	9.44	0.46	670.2
2020-06-23	14:41:00	78.57	41.88	9.65	51.13	10.3	9.44	0.46	662.3
2020-06-23	14:42:00	60.49	41.88	9.61	50.94	12.7	9.74	0.52	655
2020-06-23	14:43:00	70.81	41.88	9.61	50.99	16.1	9.74	0.46	657.5
2020-06-23	14:44:00	107.62	43.07	9.81	51.63	13.5	9.74	0.48	680.5
2020-06-23	14:45:00	108.52	43.07	9.79	51.36	15.7	9.74	0.52	679.6
2020-06-23	14:46:00	106.82	43.07	9.85	51.42	15.5	9.74	0.08	683.8
2020-06-23	14:47:00	128.01	43.07	10	51.67	32.8	9.52	0.18	694.5
2020-06-23	14:48:00	170.9	43.07	10.07	51.83	10	9.52	0.43	703.9
2020-06-23	14:49:00	149.18	41.88	9.89	51.51	9.7	9.28	0.46	683.8
2020-06-23	14:50:00	72.98	41.88	9.71	51.15	9.1	9.5	0.5	657.6
2020-06-23	14:51:00	62.71	41.88	9.3	50.81	7.9	9.75	0.48	643.7
2020-06-23	14:52:00	46.52	41.88	9.17	50.44	6.7	9.96	0.46	621.7
2020-06-23	14:53:00	37.32	41.88	9.13	50.17	6.8	9.96	0.5	612.7
2020-06-23	14:54:00	26.16	41.88	9.13	50.16	6.3	9.96	0.22	613.2
2020-06-23	14:55:00	24.69	41.88	9.45	50.39	7	9.96	0.1	615.3
2020-06-23	14:56:00	24.9	41.88	9.51	50.59	6.6	9.96	0.36	620.3
2020-06-23	14:57:00	24.67	41.88	8.89	50.32	6.7	9.96	0.4	610.1
2020-06-23	14:58:00	26.01	40.77	8.52	50.12	6.9	9.96	0.46	604.8
2020-06-23	14:59:00	29.49	40.77	8.85	50.14	8.1	10.2	0.52	618.7
2020-06-23	15:00:00	30.14	40.77	9.17	50.25	9	10.2	0.56	625.6
2020-06-23	15:01:00	40.47	41.81	9.58	50.51	7.8	9.92	0.5	643.4
2020-06-23	15:02:00	43.48	41.81	9.61	50.59	9.6	9.92	0.52	651.7
2020-06-23	15:03:00	47.05	41.81	9.68	50.91	8.3	9.92	0.08	659.2
2020-06-23	15:04:00	52.17	41.81	9.75	51	14.3	9.92	0.12	663.3
2020-06-23	15:05:00	65.31	41.81	9.83	51.15	7.5	9.65	0.4	673.8
2020-06-23	15:06:00	65.38	41.81	9.76	50.94	7.7	9.65	0.45	664.9
2020-06-23	15:07:00	47.93	40.62	9.67	50.75	7.2	9.65	0.52	654.7
2020-06-23	15:08:00	40.75	40.62	9.67	50.75	8.5	9.85	0.56	647.4
2020-06-23	15:09:00	46.5	41.79	9.74	50.94	8.8	9.85	0.53	659.8
2020-06-23	15:10:00	48.3	41.79	9.74	50.91	8.5	9.85	0.56	659.8
2020-06-23	15:11:00	52.35	41.79	9.75	51.01	10.9	9.85	0.28	665
2020-06-23	15:12:00	58.18	41.79	9.81	51.2	14	9.85	0.11	673
2020-06-23	15:13:00	83.02	41.79	9.91	51.39	17.3	9.55	0.43	690
2020-06-23	15:14:00	101.64	41.79	9.92	51.33	8.7	9.28	0.4	688.9
2020-06-23	15:15:00	82.39	41.79	9.85	51.28	10	9.28	0.5	679
2020-06-23	15:16:00	59.37	41.79	9.8	50.98	9.7	9.52	0.5	668.9
2020-06-23	15:17:00	59.65	41.79	9.79	50.78	15.6	9.52	0.53	666.9
2020-06-23	15:18:00	86.35	41.79	9.86	51.25	10.2	9.52	0.5	682.9
2020-06-23	15:19:00	93.7	41.79	9.9	51.28	16.3	9.52	0.5	680.5
2020-06-23	15:20:00	95.53	41.79	9.95	51.43	13.1	9.52	0.16	684.3
2020-06-23	15:21:00	109.11	42.96	10.06	51.76	28.4	9.52	0.1	699.9
2020-06-23	15:22:00	134.5	42.96	10.15	51.81	10.7	9.28	0.36	715.1
2020-06-23	15:23:00	137.02	42.96	9.98	51.53	12.5	9.28	0.51	707.9
2020-06-23	15:24:00	88.38	41.89	9.84	51.36	11.9	9.28	0.5	695.6
2020-06-23	15:25:00	95.53	41.89	9.94	51.38	11.7	9.28	0.52	693.8
2020-06-23	15:26:00	93.35	41.89	9.95	51.24	10.8	9.28	0.52	691.1
2020-06-23	15:27:00	83.19	42.9	9.88	51.33	13.7	9.28	0.52	689.7
2020-06-23	15:28:00	79.32	42.9	9.84	51.24	11.8	9.49	0.3	686.9
2020-06-23	15:29:00	82.97	42.9	9.93	51.43	15	9.49	0.11	691.2
2020-06-23	15:30:00	95.06	42.9	10.04	51.58	17.4	9.49	0.35	698.9

Max	170.9	43.1	10.2	51.8	32.8	10.2	0.6	715.1
Min	24.7	40.6	8.5	50.1	6.3	9.3	0.1	604.8
Average	73.9	42.1	9.7	51.1	11.5	9.66	0.4	665.4
Variance	1027.8275	0.469556066	0.095295	0.186448	23.11817	0.058144973	0.023925	691.5615

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	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	m3/s Ref Dry	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-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2020-06-23	18:30:00	33.87	10.17	167.58	198.99	3.99625	239.775	15.525	15518.75	14011.29	29.5823	17.20943	1469.063	1140	535.4	195.5	182.7	-22.8	-36.35	-93.4875	277.6875	26.74875
2020-06-23	18:31:00	33.93	10.575	168.3	199.755	4.00375	240.225	15.525	15406.25	14185.45	29.78989	17.40032	1470.063	1140.6	536	196.5	183.7	-19.35	-32.2	-90.3375	287.3125	26.90625
2020-06-23	18:32:00	33.9	10.725	167.2987	200.07	4.025	241.5	15.525	15093.75	14275.34	30.27754	17.69285	1468.813	1140.8	536.6	197	183.7	-21	-32.65	-89.85	293.875	27.22125
2020-06-23	18:33:00	33.735	10.79	166.8713	200.205	3.97	238.2	15.525	16212.5	14174.21	30.50373	17.79887	1468.688	1141.1	537.2	197.5	183.7	-18.3	-31.05	-94.9875	313.6875	26.17125
2020-06-23	18:34:00	32.565	10.375	165.1725	199.665	3.97875	238.725	15.525	16250	14196.69	30.86754	18.10424	1455.188	1138.2	537.2	198	184.7	-19.65	-36	-94.05	284.5	26.53875
2020-06-23	18:35:00	32.49	10.605	164.6437	199.26	3.96625	237.975	15.4125	15850	14196.69	30.25098	17.86831	1449.313	1135.9	535.4	199	184.7	-19.1	-33.5	-89.4	290.75	26.17125
2020-06-23	18:36:00	32.625	10.745	164.79	199.62	3.985	239.1	15.4125	16250	14297.81	29.79788	17.74969	1442.063	1134.1	534.8	199	185.7	-21.2	-35.1	-90.7875	319.25	26.88
2020-06-23	18:37:00	32.97	10.865	164.79	198.945	4.00375	240.225	15.4125	16037.5	14045	29.47319	17.45203	1444.563	1133.8	534.3	199.5	185.7	-14.25	-26.2	-84.5625	325.75	26.6175
2020-06-23	18:38:00	32.55	10.38	164.6437	199.62	3.98375	239.025	15.5625	16925	14359.61	30.98241	18.29976	1439.313	1133.2	533.2	199.5	185.7	-27.2	-45.1	-104.325	283.25	27.27375
2020-06-23	18:39:00	32.82	10.69	167.0625	200.88	4.0125	240.75	15.5625	16206.25	14258.48	30.75923	18.05744	1432.938	1130.1	532.4	199.5	186.7	-22.85	-39.25	-98.4	295.625	25.935
2020-06-23	18:40:00	32.94	10.7	166.2525	199.89	4.0225	241.35	15.825	16643.75	14230.39	30.29754	17.88975	1430.813	1129.4	531.6	200	186.7	-23.9	-39.9	-99.675	302	25.8825
2020-06-23	18:41:00	33.135	10.43	167.3438	200.565	3.98	238.8	14.6625	16350	14207.92	30.59367	18.05314	1431.438	1128.5	531.4	200	186.7	-17.6	-31.6	-90.6375	308.8125	25.8825
2020-06-23	18:42:00	32.955	10.435	166.9162	199.665	4.01125	240.675	15.4125	16787.5	14427.02	30.96979	18.22303	1431.813	1128.4	531.8	200	186.7	-28.5	-48.45	-108.3375	278.3125	27.11625
2020-06-23	18:43:00	33.135	10.73	159.1538	200.655	3.99125	239.475	15.4125	16468.75	14348.37	30.64166	17.99836	1428.938	1127.2	531.8	200.5	186.7	-22.75	-37.15	-94.0875	290.1875	26.9325
2020-06-23	18:44:00	32.58	10.27	166.68	201.735	3.99625	239.775	15.4125	16656.25	14219.16	31.28809	18.40264	1431.813	1127.4	532	200.5	186.7	-32.7	-52.85	-115.5	266	25.9875
2020-06-23	18:45:00	32.745	10.34	167.7712	200.565	4.02625	241.575	15.4125	16181.25	14224.78	30.28014	17.77027	1430.813	1127.1	531.9	200.5	186.7	-14.75	-29.35	-84.075	318.125	26.04
2020-06-23	18:46:00	33.135	10.785	169.1437	200.25	4.0025	240.15	17.1	16037.5	14224.78	31.28469	18.3346	1437.938	1129.5	532.3	200.5	187.7	-26.15	-49.45	-101.5125	266.6875	27.06375
2020-06-23	18:47:00	32.865	10.055	168.9525	200.61	4.03625	242.175	17.55	16637.5	14252.87	31.13892	18.09298	1427.438	1126.4	533.1	200.5	187.7	-22.8	-39.4	-98.475	288	25.8825
2020-06-23	18:48:00	33.285	10.56	169.1437	200.97	4.07625	244.575	17.3625	16375	14252.87	30.35173	17.68235	1426.188	1124.5	533.4	201	188.7	-19.1	-36.65	-94.3125	298.625	27.195
2020-06-23	18:49:00	32.88	10.86	169.335	200.835	4.04875	242.925	17.3625	16293.75	14264.1	30.73691	17.98364	1423.938	1123	533.6	201.5	188.7	-19.2	-34.8	-90.8625	301.75	27.2475
2020-06-23	18:50:00	32.925	10.615	169.7175	200.115	4.07	244.2	17.9625	16181.25	14028.15	30.0115	17.59769	1427.938	1124.4	533.7	201.5	188.7	-19.75	-34.2	-93.6375	315.0625	25.85625
2020-06-23	18:51:00	32.73	10.825	169.8525	200.61	4.04625	242.775	17.7	16325	14258.48	30.05412	17.59149	1424.563	1123.6	534	201.5	188.7	-18.65	-34.85	-91.6875	280.5	27.11625
2020-06-23	18:52:00	32.865	10.62	169.245	200.43	4.0275	241.65	17.8125	16212.5	14140.51	30.76423	17.96078	1428.938	1125.1	533.1	202	188.7	-15.4	-29.8	-87.75	289.75	26.06625
2020-06-23	18:53:00	32.625	10.365	169.8525	194.76	3.995	239.7	17.7375	16256.25	14134.89	30.98392	18.04982	1426.438	1125	533.8	202	188.7	-17.45	-33.35	-90.3375	319.6875	26.85375
2020-06-23	18:54:00	32.94	10.355	169.9988	199.98	4.00625	240.375	17.1375	15887.5	14129.27	30.28886	17.60337	1432.313	1125	533.1	202	188.7	-14.65	-25.9	-82.95	323.4375	25.90875
2020-06-23	18:55:00	33	10.48	168.9525	204.255	3.99375	239.625	17.6625	16781.25	14376.46	31.12192	18.04786	1431.438	1125.5	533.7	202	188.7	-26.25	-44.95	-102.75	286.875	26.90625
2020-06-23	18:56:00	32.82	10.74	169.5263	204.93	3.685	221.1	17.25	16406.25	14269.72	30.63986	17.72371	1425.813	1123.6	532.7	202.5	189.7	-19.05	-35.1	-93.375	293.25	25.85625
2020-06-23	18:57:00	32.61	10.22	169.29	202.05	3.68	220.8	17.0625	16637.5	14157.36	30.39624	17.64999	1424.188	1122.9	532.9	202.5	189.7	-22.85	-39.2	-99.675	299.625	26.0925
2020-06-23	18:58:00	33	10.75	169.2	201.105	3.68	220.8	17.475	16325	14236.01	31.49156	18.33425	1423.938	1121.6	532.1	202.5	189.7	-16.75	-32.75	-88.125	307.9375	26.69625
2020-06-23	18:59:00	33	10.555	169.6162	199.8	3.715	222.9	16.3875	16562.5	14219.16	31.72787	18.46053	1427.313	1123.2	531.7	202	189.7	-30.65	-51.3	-110.8875	261.25	27.195
2020-06-23	19:00:00	32.835	10.81	169.6725	200.52	3.66875	220.125	17.8125	16281.25	14224.78	30.91862	17.82602	1425.438	1122.4	531.2	202	189.7	-19.05	-32.55	-92.8125	288.5	27.22125
2020-06-23	19:01:00	32.655	10.535	170.19	200.07	3.67625	220.575	16.5375	15906.25	14331.52	32.01635	18.57302	1427.688	1123.2	531.4	202	189.7	-33.55	-53.9	-112.1625	267.6875	27.16875
2020-06-23	19:02:00	32.985	10.82	170.5725	200.07	3.67125	220.275	17.5125	15812.5	14219.16	30.87467	17.90036	1426.813	1122.7	530.3	201.5	189.7	-16.35	-29.4	-85.2375	319.0625	26.80125
2020-06-23	19:03:00	32.97	10.79	169.7175	200.205	3.6725	220.35	17.325	16075	14174.21	29.95234	17.35507	1433.938	1124.5	531.2	201.5	189.7	-11.7	-26	-80.5125	325.875	27.16875
2020-06-23	19:04:00	32.955	10.54	169.9537	200.925	3.73375	224.025	17.55	16418.75	14280.96	30.9664	17.77311	1423.938	1122.8	531.9	201.5	189.7	-25.4	-42.25	-100.725	290.4375	26.145
2020-06-23	19:05:00	32.97	10.57	171.3262	201.42	3.7175	223.05	17.55	16418.75	14280.96	30.88745	17.82546	1422.313	1121.5	532.2	201.5	189.7	-18.15	-35.05	-91.3875	295	26.565
2020-06-23	19:06:00	32.85	10.48	171	199.98	3.705	222.3	17.85	16418.75	14269.72	30.92864	18.01632	1420.813	1120.5	533	202	189.7	-18.8	-33.95	-90.3	299.5625	26.11875
2020-06-23	19:07:00	32.97	10.475	171.2813	200.565	3.65	219	17.85	16306.25	14269.72	30.30536	17.66772	1425.438	1120.7	532.5	202	189.7	-15.3	-30	-84.975	309.375	25.935
2020-06-23	19:08:00	32.91	10.38	169.9988	199.8	3.65375	219.225	17.25	16381.25	14264.1	30.8375	17.92015	1423.688	1120.9	532.1	202	189.7	-19	-35.1	-91.7625	281.6875	25.8825
2020-06-23	19:09:00	32.67	10.335	170.6175	199.71	3.83	229.8	17.8875	15968.75	14264.1	30.79283	17.90724	1426.938	1121.8	531.7	202	189.7	-16.65	-29.05	-86.85	288.125	27.11625
2020-06-23	19:10:00	32.985	10.475	171.045	198.675	3.99875	239.925	17.3625	16318.75	14264.1	29.71531	17.1838	1425.813	1122.1	532.7	202	189.7	-15.75	-29.85	-87.225	311.8125	25.90875
2020-06-23	19:11:00	32.73	10.57	170.8537	198.765	3.6925	221.55	17.475	16068.75	14162.98	30.38832	17.62211	1432.938	1123.1	532.5	202	189.7	-12.8	-26.3	-80.6625	318.1875	26.11875
2020-06-23	19:12:00	32.91	10.495	169.7175	199.485	3.9775	238.65	17.3625	16712.5	14415.79	31.00155	17.80871	1431.688	1124.8	533.2	201.5	189.7	-27.35	-43.7	-105.4125	285.0625	26.6175
2020-06-23	19:13:00	32.835	10.865	170.5162	200.295	3.69625	221.775	17.625	16268.75	14207.92	31.15657	17.88917	1426.688	1122.7	533.4	202	189.7	-21.4	-38	-95.55	294.1875	26.25
2020-06-23	19:14:00	32.805	10.2	170.8088	200.655	3.99375	239.625	17.775	16637.5	14331.52	31.50548	18.25806	1426.188	1122.7	534.4	202	190.7	-27.3	-44.75	-106.7625	293.0625	26.59125
2020-06-23	19:15:00	32.685	10.67	171.3262	199.035	3.68375	221.025	17.0625	16050	14162.98	30.94403	17.95466	1426.438	1121.7	534.3	202	190.7	-15.65	-31.85	-87.75	306.6875	25.90875
2020-06-23	19:16:00	32.595	10.635	170.6175	197.28	3.675	220.5	17.325	16381.25	14174.21	32.08286	18.6109	1430.813	1123.7	534.7	202	190.7	-27.7	-48.7	-108.9375	256.125	25.935
2020-06-23	19:17:00	32.955	10.49	171.4162	197.64	3.67625	220.575	17.325	16143.75	14162.98	30.28916	17.50573	1429.313	1123.9	533.9	202	190.7	-16.4	-32.05	-88.05	282.875	27.11625
2020-06-23	19:18:00	32.925	10.56	171.4725	197.64	3.65	219	17.925	16125	14134.89	31.95336	18.46207	1433.688	1124.4	534.3	202	190.7	-24.75	-45.8	-100.4625	264.3125	27.1425
2020-06-23	19:19:00	32.97	10.48	171.135	198.36	3.67	220.2	17.4	15993.75	14118.03	30.22879	17.37683	1432.688	1124.2	534.9	202	190.7	-13.8	-27.15	-82.3125	313.875	27.0375
2020-06-23	19:20:00	32.85	10.13	171.045	198.27	3.685	221.1	17.775	16006.25	14123.65	30.68575	17.6332	1440.813	1126.3	535.6	202	190.7	-10.55	-24.8	-78.6	323.5	27.195
2020-06-23	19:21:00	32.715	10.485	170.6175	198.36	3.6625	219.75	17.625	16612.5	14219.16	30.2026	17.25547	1432.063	1125.4	535	202	190.7	-22.9	-40.3	-98.55	287.375	25.8825
2020-06-23	19:22:00	32.475	10.35	170.6175	197.82	3.71875	223.125	17.7	16381.25	14219.16	30.37718	17.4473	1428.688	1124.8	534.9	202	190.7	-17	-33.5	-89.9625	293.6875	26.01375
2020-06-23	19:23:00	32.985	10.64	171.045	197.865	3.70875	223.575	17.2125	16393.75	14320.28	30.79923	17.73582	1426.438	1123.8	534.6	202	190.7	-17.7	-34.75	-91.575	301.875	26.775
2020-06-23	19:24:00	32.88	10.55	170.7075	196.47	3.7025	222.15	17.325	16068.75	14191.07	30.48275	17.63661	1430.688	1124.1	534.8	202	191.7	-15.9	-30.25	-87.6	309.4375	27.0375
2020-06-23	19:25:00	33.06	10.415	171.5625	195.435	3.68625	221.175	17.3625	16318.75	14196.69	30.48778	17.59895	1429.938	1123.3	535.3	202.5	191.7	-19.15	-34.9	-94.125	279.8125	27.2475
2020-06-23	19:26:00	33.105	10.785	170.6175	193.455	3.70375	220.8	17.3625	16118.75	14297.81	30.33486	17.56525	1433.313	1123.9	535.5	202.5	191.7	-15.05	-29.5	-85.2	286.0625	25.90875
2020-06-23	19:27:00	32.595	10.7	170.6175	193.59	3.65375	219.225	17.3625	16412.5	14213.54	30.85479	17.81228	1432.938	1124.2	536	202.5	191.7	-16.75	-31.6	-89.0625	306.625	26.11875
2020-06-23	19:28:00	32.955	10.365	171.6525	193.635	3.65125	219.075	17.4375	15712.5	14213.54	30.43093	17.48088	1438.438	1125.2	535	202.5	191.7	-10.5	-24.4	-79.95	316.875	26.6175
2020-06-23	19:29:00	32.64	10.27	171.2362	194.175	3.67	220.2	17.4375	16743.75	14415.79	31.19714	17.82023	1438.938	1125.8	535.4	202	191.7	-28.65	-46.7	-108.525	280.3125	26.06625
2020-06-23	19:30:00	32.715	10.455	171.18	195.66	3.66375	219.825	17.4	16481.25	14309.05	30.96939	17.70194	1431.188	1123.2	535.7	202.5	191.7	-19.25	-34.2	-93.45	287.125	25.8825

Max	33.9	10.9	171.7	204.9	4.1	244.6	18.0	16925.0	14427.0	32.1	18.6	1470.1	1141.1	537.2	202.5	191.7	-10.5	-24.4	-78.6	325.9	27.3
Min	32.5	10.1	159.2	193.5	3.7	219.0	14.7	15093.8	14011.3	29.5	17.2	1420.8	1120.5	530.3	195.5	182.7	-33.6	-53.9	-115.5	256.1	25.9
Average	32.9	10.5	169.2	199.3	3.8	230.4	16.9	16257.3	14230.1	30.7	17.8	1433.3	1126.3	533.6	201.1	188.8	-20.1	-35.9	-93.5	295.6	26.5
Variance	0.094733	0.039776	5.484328	5.17732	0.027027	97.46146	0.881666	113435.1	7394.343	0.318509968	0.110966537	131.93	28.00061	2.660656	2.530464	5.343169	27.84653	53.20669	73.16888	298.48	0.276299001

		CO	HCl	CO2	H2O	THC	Main O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1	AT-213CB	AT-259-1N	AT-261A-1NEW	AT-263	AT-264-1NI
2020-06-23	18:30:00	149.11	42.93	10.19	51.13	7	9.28	0.33	726.3
2020-06-23	18:31:00	103.63	42.93	9.97	50.77	8.7	9.28	0.46	703.1
2020-06-23	18:32:00	74.27	42.93	9.94	50.76	7.3	9.28	0.48	698.7
2020-06-23	18:33:00	81.38	44.16	9.95	50.8	9.9	9.5	0.51	698.3
2020-06-23	18:34:00	81.11	44.16	9.96	50.7	4.9	9.5	0.46	696.5
2020-06-23	18:35:00	44.47	44.16	9.66	50.13	5.1	9.5	0.52	664.7
2020-06-23	18:36:00	25.31	44.16	9.54	49.93	4.8	9.85	1.55	649.5
2020-06-23	18:37:00	19.18	45.43	9.54	49.94	5.1	10.06	0.06	648.2
2020-06-23	18:38:00	20.75	47.27	9.62	50.25	5.1	10.06	0.3	660.4
2020-06-23	18:39:00	20.53	47.27	9.61	50.24	4.9	10.06	0.4	659.2
2020-06-23	18:40:00	17.17	47.27	9.48	49.94	5	10.06	0.48	644.4
2020-06-23	18:41:00	18.87	48.46	9.46	49.95	5.4	10.06	0.57	640.7
2020-06-23	18:42:00	21.29	48.46	9.52	50.06	5.4	10.06	0.48	644
2020-06-23	18:43:00	21.9	48.46	9.57	50.18	5.2	10.06	0.52	650.6
2020-06-23	18:44:00	21.75	48.46	9.53	50.07	5.7	10.06	0.48	646.5
2020-06-23	18:45:00	21.52	49.65	9.59	50.17	5.2	10.06	0.05	650.6
2020-06-23	18:46:00	21.23	49.65	9.67	50.26	5.8	10.06	0.03	654.3
2020-06-23	18:47:00	24.88	50.71	9.8	50.6	5.4	9.84	0.42	672.1
2020-06-23	18:48:00	24.9	50.71	9.62	50.28	6.1	9.84	0.48	654.7
2020-06-23	18:49:00	25.76	50.71	9.6	50.17	6.1	9.84	0.55	650.8
2020-06-23	18:50:00	29.98	50.71	9.57	50.05	6.1	9.84	0.62	647.8
2020-06-23	18:51:00	30.47	50.71	9.6	50.16	5.7	9.84	0.58	651.2
2020-06-23	18:52:00	29.73	50.71	9.65	50.27	6.5	9.84	0.58	654.9
2020-06-23	18:53:00	29.09	50.71	9.65	50.39	6.2	9.84	0.07	660.8
2020-06-23	18:54:00	29.82	50.71	9.69	50.47	7.8	9.84	0.11	663.1
2020-06-23	18:55:00	38.91	50.71	9.84	50.6	7.7	9.84	0.4	676.6
2020-06-23	18:56:00	41.48	50.71	9.86	50.66	6.1	9.84	0.4	679.6
2020-06-23	18:57:00	30.83	52.06	9.68	50.45	6.6	9.84	0.47	659
2020-06-23	18:58:00	28.61	52.06	9.64	50.33	6.3	9.84	0.57	650.7
2020-06-23	18:59:00	28.3	52.06	9.62	50.21	7.4	9.84	0.58	645.6
2020-06-23	19:00:00	32.31	52.06	9.72	50.54	6.3	9.84	0.51	660
2020-06-23	19:01:00	32.49	52.06	9.7	50.53	6.8	9.84	0.53	660
2020-06-23	19:02:00	32.49	52.06	9.73	50.59	6.8	9.84	0.05	663.4
2020-06-23	19:03:00	33.71	52.06	9.74	50.62	8.4	9.84	0.05	665.6
2020-06-23	19:04:00	43.12	53.33	9.85	50.96	5.8	9.84	0.36	686.5
2020-06-23	19:05:00	34.48	52.11	9.65	50.7	6.8	9.54	0.46	662.9
2020-06-23	19:06:00	30.17	52.11	9.63	50.25	6	9.79	0.52	655.3
2020-06-23	19:07:00	31.25	52.11	9.64	50.23	7.5	9.79	0.57	653.5
2020-06-23	19:08:00	34.44	52.11	9.67	50.39	7	9.79	0.52	659.2
2020-06-23	19:09:00	40.08	52.11	9.74	50.61	7.2	9.79	0.55	669.2
2020-06-23	19:10:00	37.56	52.11	9.8	50.6	7.7	9.79	0.15	670.4
2020-06-23	19:11:00	38.58	52.11	9.85	50.68	9.3	9.79	0.08	673.3
2020-06-23	19:12:00	49.42	52.11	9.93	50.97	8.4	9.79	0.36	692.6
2020-06-23	19:13:00	52.06	52.11	9.91	50.93	7	9.48	0.45	692.6
2020-06-23	19:14:00	38.4	52.11	9.73	50.46	7.2	9.48	0.46	664.8
2020-06-23	19:15:00	39	52.11	9.72	50.38	7.8	9.74	0.55	660.5
2020-06-23	19:16:00	41.31	52.11	9.71	50.36	7.7	9.74	0.51	660.5
2020-06-23	19:17:00	42.83	52.11	9.78	50.58	6.6	9.74	0.57	673
2020-06-23	19:18:00	39.49	52.11	9.78	50.6	8.1	9.74	0.6	671.8
2020-06-23	19:19:00	42.35	52.11	9.88	50.83	7.1	9.74	0.05	679.2
2020-06-23	19:20:00	43.57	52.11	9.94	50.89	10.9	9.74	0.07	682.1
2020-06-23	19:21:00	48.67	52.11	10.06	51.11	6	9.5	0.36	699.4
2020-06-23	19:22:00	33.49	52.11	9.82	50.84	6.1	9.5	0.46	678.2
2020-06-23	19:23:00	24.67	52.11	9.74	50.68	5.9	9.5	0.48	667.2
2020-06-23	19:24:00	24.72	52.11	9.68	50.51	7.2	9.72	0.55	656.9
2020-06-23	19:25:00	27.52	52.11	9.67	50.55	6.9	9.72	0.52	659.3
2020-06-23	19:26:00	31.75	52.11	9.74	50.66	7	9.72	0.56	669.1
2020-06-23	19:27:00	33.29	52.11	9.83	50.55	7.7	9.72	0.2	672
2020-06-23	19:28:00	34.87	53.19	9.9	50.79	7.9	9.72	0.07	676.1
2020-06-23	19:29:00	40.21	53.19	10.02	51.13	8.8	9.72	0.4	693.4
2020-06-23	19:30:00	44.93	53.19	10	51.16	6.9	9.47	0.42	696.3

Max	149.1	53.3	10.2	51.2	10.9	10.1	1.6	726.3
Min	17.2	42.9	9.5	49.9	4.8	9.3	0.0	640.7
Average	37.9	50.3	9.7	50.5	6.7	9.77	0.4	667.7
Variance	458.5081	8.539072186	0.024146	0.103391	1.655153	0.04043541	0.054786	322.5198

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	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	m3/s Ref Dry	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-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2020-06-23	19:39:00	32.76	10.19	170.6625	194.625	3.59	215.4	16.9875	16262.5	14258.48	30.66939	17.59934	1428.938	1121.9	535.1	202	191.7	-20.4	-37.35	-93.525	294.75	27.2475
2020-06-23	19:40:00	32.73	10.71	171.945	192.42	3.64625	218.775	17.0625	16475	14342.75	30.74012	17.76274	1424.563	1120.6	534.6	202.5	191.7	-18	-34.75	-91.6875	299.9375	27.2475
2020-06-23	19:41:00	32.535	10.395	172.2262	196.83	3.60125	216.075	16.35	16187.5	14224.78	30.33814	17.52228	1425.563	1120.7	533.8	202.5	191.7	-17.5	-31.55	-88.575	308.25	25.90875
2020-06-23	19:42:00	33.09	10.44	171.2813	195.885	3.64125	218.475	17.55	16618.75	14213.54	31.19231	18.02337	1425.188	1120.7	534.9	202	191.7	-18.1	-34.5	-93.825	279.4375	27.11625
2020-06-23	19:43:00	32.64	10.725	172.035	196.155	3.65375	219.225	16.3875	16256.25	14191.07	30.53488	17.69559	1428.313	1121.6	534.6	202.5	191.7	-13.45	-29.6	-83.925	283.75	25.96125
2020-06-23	19:44:00	32.565	10.515	171.5175	200.52	3.685	221.1	18	16518.75	14337.14	30.79452	17.70053	1427.438	1122.4	534.6	202	191.7	-17.7	-36.05	-92.175	311.625	26.69625
2020-06-23	19:45:00	32.805	10.555	172.2262	203.445	3.68125	220.875	17.775	16112.5	14168.6	30.09584	17.23485	1432.063	1123.2	534.8	202	191.7	-11.3	-25.05	-79.95	315.9375	25.85625
2020-06-23	19:46:00	32.535	10.2	170.8088	202.545	3.67375	220.425	17.775	16812.5	14421.41	31.84486	18.15184	1434.063	1125.1	535.8	202	191.7	-33.25	-51.85	-115.5	275.125	25.935
2020-06-23	19:47:00	32.775	10.285	171.135	203.49	3.68	220.8	17.4375	16518.75	14213.54	31.26916	17.77518	1423.688	1121.7	535.4	202	191.7	-20.6	-37.8	-96.225	291.0625	26.25
2020-06-23	19:48:00	32.94	10.47	171.7087	203.355	3.66875	220.125	17.55	16287.5	14230.39	31.79006	18.28927	1423.938	1122.5	534.3	202.5	191.7	-27.2	-47.25	-107.4375	264.5	25.96125
2020-06-23	19:49:00	33.135	10.575	170.7075	203.22	3.68125	220.875	16.4625	16231.25	14022.53	30.83569	17.76154	1423.313	1123	534.2	202	192.7	-18.7	-35.9	-91.2375	307.5	26.355
2020-06-23	19:50:00	33.105	10.545	169.4812	204.075	3.70375	222.225	17.4375	16231.25	14174.21	31.76518	18.31314	1428.688	1124.3	534.4	202	192.7	-23.9	-45.55	-96.6	266.375	27.2475
2020-06-23	19:51:00	32.895	11.025	173.79	202.725	3.75	225	17.4375	16218.75	14213.54	30.39194	17.46494	1427.313	1121.1	536.6	202.5	191.6	-16.15	-32.05	-89.0625	281.4375	27.11625
2020-06-23	19:52:00	32.46	10.285	174.8363	201.33	3.72	223.2	17.7375	16093.75	14185.45	31.00071	17.75208	1432.063	1122.4	536.5	202.5	191.6	-14.95	-30.95	-88.3875	293.0625	27.2475
2020-06-23	19:53:00	32.595	10.25	173.4525	200.925	3.675	220.5	17.1	16193.75	14078.71	30.12499	17.16287	1426.813	1120.8	537.3	202.5	191.6	-13.85	-30.8	-86.2125	317.5	25.9875
2020-06-23	19:54:00	32.61	10.52	173.0363	200.925	3.71	222.6	18.075	15950	14196.69	30.16933	17.19498	1432.688	1123	537.1	202.5	191.6	-10.7	-25	-81.5625	323.3125	26.53875
2020-06-23	19:55:00	32.685	10.42	173.1712	202.365	3.71125	222.675	17.4	16562.5	14398.93	31.36964	17.82063	1425.188	1122.2	537.2	202.5	191.6	-23.2	-43.1	-101.3625	286.125	27.16875
2020-06-23	19:56:00	32.355	10.74	172.4175	201.555	3.90875	234.525	17.475	16343.75	14376.46	31.60475	18.0164	1420.438	1120	537.3	203	192.7	-20.6	-36.95	-96.1875	296.9375	27.3
2020-06-23	19:57:00	32.295	10.425	171.99	203.22	3.72625	223.575	17.3625	16500	14230.39	31.17898	17.91295	1416.688	1119.7	537.5	203	192.7	-19	-35.3	-96.2625	302.4375	26.27625
2020-06-23	19:58:00	32.895	10.54	171.8438	202.68	3.725	223.5	17.3625	16362.5	14224.78	30.54181	17.58783	1418.938	1120	536.7	203	192.7	-17.55	-33.8	-89.3625	309.5625	27.01125
2020-06-23	19:59:00	32.25	10.455	171.7987	202.725	3.71875	223.125	17.3625	16525	14432.64	31.24967	17.96926	1418.313	1120.4	536.5	203	192.7	-22.05	-37.15	-97.1625	281.5	27.06375
2020-06-23	20:00:00	32.88	10.715	173.0363	205.2	3.6975	221.85	17.475	16162.5	14101.18	31.3402	17.98945	1418.563	1120.2	535.8	203	192.7	-15.65	-29.8	-88.2	288	26.0925
2020-06-23	20:01:00	32.52	10.645	171.3262	203.625	3.6975	221.85	17.4	16675	14224.78	31.09777	17.89868	1419.563	1120.6	534.5	203	192.7	-17.6	-33.35	-93.15	311.6875	26.355
2020-06-23	20:02:00	32.94	10.475	170.145	204.885	3.705	222.3	17.5875	16018.75	14095.56	30.35283	17.38875	1423.813	1121.7	533.7	202.5	192.7	-14	-28.7	-86.175	320.5	26.48625
2020-06-23	20:03:00	32.49	10.655	171.09	204.03	3.6825	220.95	18	16662.5	14342.75	32.11235	18.2691	1429.813	1124.1	534.8	202	192.7	-36.75	-59.1	-119.625	255.0625	25.85625
2020-06-23	20:04:00	32.535	10.47	170.19	204.12	3.66	219.6	16.9125	16625	14342.75	31.41364	17.83848	1419.938	1121.2	535.2	202	192.7	-20.3	-37.15	-95.7375	290.0625	27.11625
2020-06-23	20:05:00	32.235	10.51	171.3713	203.22	3.6375	218.25	16.4625	16375	14230.39	30.8872	17.64982	1417.688	1121.4	535.5	202.5	192.7	-24.75	-46.7	-101.1375	274.375	26.9325
2020-06-23	20:06:00	32.655	10.48	171.3713	204.975	3.625	217.5	17.2125	16218.75	14224.78	30.96933	17.8196	1415.313	1120.2	534.5	202.5	192.7	-18.4	-35.1	-92.5875	306.9375	26.67
2020-06-23	20:07:00	32.775	10.615	171.945	205.02	3.69125	221.475	17.2125	16212.5	14224.78	30.76801	17.75566	1418.063	1121	534.4	202	192.7	-15.9	-29.2	-88.575	314.0625	27.22125
2020-06-23	20:08:00	32.43	10.515	170.8988	205.515	3.6775	220.65	17.4	16218.75	14348.37	30.97339	17.81604	1413.938	1119.4	535.3	202	192.7	-20.25	-34.15	-91.725	286.75	27.22125
2020-06-23	20:09:00	32.61	10.15	170.8088	204.975	3.6975	221.85	18	16250	14140.51	31.51142	18.1634	1417.063	1119.9	533.3	202	191.6	-16.4	-30	-87.15	293.1875	26.32875
2020-06-23	20:10:00	32.625	10.49	172.035	205.875	3.66875	220.125	17.0625	16250	14241.63	30.53641	17.59495	1413.688	1119.4	532.6	202	191.6	-17.3	-31.85	-87.45	314.3125	26.88
2020-06-23	20:11:00	32.415	10.4	171.6075	205.785	3.6375	218.25	17.2875	15987.5	14134.89	30.88138	17.84675	1421.063	1120.9	531.7	201.5	191.6	-14.4	-29.2	-84.4125	322.625	25.935
2020-06-23	20:12:00	32.565	10.675	172.2262	204.885	3.67625	220.575	17.2875	16731.25	14236.01	31.61642	18.18839	1416.563	1120.6	531.9	201	191.6	-24.35	-44.2	-103.5375	287.125	25.9875
2020-06-23	20:13:00	32.625	10.555	172.2262	207.18	3.69625	221.775	17.2875	16375	14337.14	31.2161	17.96791	1413.563	1119.1	532.2	201	191.6	-19.8	-35.7	-95.8125	296	26.775
2020-06-23	20:14:00	32.535	10.22	170.8537	207.36	3.70875	222.525	17.85	16487.5	14258.48	31.24324	18.12857	1412.938	1119.3	530.6	201	191.6	-21.2	-37.95	-96.4125	301.5	27.0375
2020-06-23	20:15:00	32.565	10.29	171.4725	206.325	3.74	224.4	17.55	16200	14162.98	31.51249	18.23436	1416.188	1119.4	530.3	201	191.6	-14.9	-31	-90.675	307.75	25.935
2020-06-23	20:16:00	32.25	10.18	171.045	205.47	4.0125	240.75	17.5875	16656.25	14325.9	31.42036	18.13065	1414.813	1119.9	530.7	200.5	191.6	-22.85	-40.3	-101.1	282.3125	25.935
2020-06-23	20:17:00	32.415	9.955	171.5625	206.055	3.70875	222.525	17.625	16293.75	14297.81	30.83877	17.80296	1413.563	1119.1	531.3	200.5	191.6	-17.95	-34.55	-89.925	288.1875	25.935
2020-06-23	20:18:00	32.19	10.305	169.7175	207.225	3.73375	224.025	18.225	16712.5	14398.93	30.11094	17.47831	1413.313	1120.5	530.9	200.5	190.6	-24.65	-39.95	-106.4625	300.6875	27.2475
2020-06-23	20:19:00	32.535	10.275	171.5625	207.36	4.0925	245.55	17.8125	16193.75	14022.53	29.89012	17.28652	1414.563	1120.1	530.4	200	190.6	-13.8	-29.85	-86.175	316.75	26.59125
2020-06-23	20:20:00	32.535	10.085	171.2362	208.305	3.65	219	16.3875	16637.5	14258.48	32.67553	18.83753	1421.313	1122.2	530.8	199.5	190.6	-34.3	-55.65	-118.0125	251	25.935
2020-06-23	20:21:00	32.43	10.305	171.8438	207.405	3.7425	224.55	18	16556.25	14207.92	30.86612	17.71391	1409.813	1118.5	531.3	199.5	190.6	-22.5	-42.6	-98.2875	289.125	26.95875
2020-06-23	20:22:00	32.49	10.52	170.9437	206.46	3.755	225.3	16.7625	16437.5	14325.9	30.95404	17.87651	1407.438	1116.9	531.3	199.5	190.6	-19	-34.75	-93	294.4375	25.8825
2020-06-23	20:23:00	32.775	10.305	170.4262	208.53	3.72375	223.425	17.25	16475	14179.83	30.88212	17.87828	1404.188	1115.6	530.8	199.5	190.6	-19.05	-35.45	-94.35	305.625	26.69625
2020-06-23	20:24:00	32.25	10.075	170.8088	207	3.67	220.2	16.9875	16250	14258.48	30.89479	17.91835	1408.813	1115.5	531.1	199.5	190.6	-16.9	-32.95	-90.075	312.4375	26.145
2020-06-23	20:25:00	32.625	10.11	171.5625	208.08	3.69125	221.475	17.1	16443.75	14258.48	31.03042	17.92085	1405.063	1114.9	531.3	199.5	190.6	-19.75	-36.95	-93.225	283.5625	27.27375
2020-06-23	20:26:00	32.22	10.475	171.6075	206.685	3.6775	220.65	16.7625	16262.5	14157.36	30.35256	17.67182	1407.688	1116	531.2	199.5	190.6	-16.75	-33	-88.875	289.8125	26.80125
2020-06-23	20:27:00	32.055	10.285	173.2163	206.64	3.725	223.5	17.8875	16268.75	14297.81	30.00914	17.32119	1405.188	1114.8	530.8	199	190.6	-15.9	-29.3	-87.5625	315.5625	27.27375
2020-06-23	20:28:00	32.37	10.57	172.1362	207.135	3.69625	221.775	18	16175	14174.21	30.31359	17.48319	1411.938	1116.2	530.7	199	190.6	-14.45	-28	-82.7625	324.875	26.74875
2020-06-23	20:29:00	32.445	10.43	171.945	207.63	3.71	222.6	17.475	16768.75	14398.93	31.52661	18.08688	1407.938	1116.5	531.9	199	190.6	-25.65	-45	-104.8125	284.0625	26.06625
2020-06-23	20:30:00	32.355	10.165	171.3713	208.08	4.07375	244.425	17.475	16512.5	14297.81	30.34613	17.48775	1403.188	1114.4	532.1	199	190.6	-20.65	-37.1	-97.05	294.3125	27.3
2020-06-23	20:31:00	32.55	10.23	170.4262	207.135	4.0275	241.65	17.4375	16481.25	14342.75	31.16449	18.03593	1400.313	1113.5	531.5	199	190.6	-22.15	-39.05	-97.875	303.5625	26.6175
2020-06-23	20:32:00	32.565	10.185	172.4175	208.8	3.67125	220.275	17.4375	16300	14320.28	30.37051	17.5942	1401.688	1113.5	531	199	190.6	-16.55	-32.7	-89.7375	307.4375	26.4075
2020-06-23	20:33:00	32.28	10.07	171.2813	207.135	3.9375	236.25	21.9	16818.75	14427.02	31.59697	18.3158	1403.188	1114.6	531.7	199	190.6	-23.55	-43.05	-103.275	279.6875	25.90875
2020-06-23	20:34:00	32.13	10.66	172.2712	204.435	3.745	224.7	20.775	16187.5	14196.69	31.15993	18.02211	1402.813	1113.9	531.2	199	190.6	-17.95	-33.9	-91.65	286.6875	27.11625
2020-06-23	20:35:00	32.445	10.195	172.4625	203.85	3.73	223.8	22.1625	16662.5	14314.66	31.82871	18.39549	1405.688	1114.1	531.6	199	190.6	-34.55	-57.4	-119.9625	266.0625	26.985
2020-06-23	20:36:00	32.565	10.435	171.5625	202.59	4.0675	244.05	20.8875	16118.75	14213.54	31.13401	17.94225	1406.313	1114.1	531.1	199	190.6	-14.2	-28.65	-85.2	320.8125	26.7225
2020-06-23	20:37:00	32.34	10.325	171.945	199.89	4.06375	243.825	20.5125	16250	14297.81	32.91635	18.8955	1414.438	1117	531	198.5	190.6	-34	-57.95	-116.7	255.8125	27.06375
2020-06-23	20:38:00	32.295	10.295	171	192.375	3.60125	216.075	20.8125	16518.75	14331.52	31.4493	17.99877	1402.813	1114.7	530.5	198.5	190.6	-23.65	-40.2	-100.0875	290.875	27.3
2020-06-23	20:39:00	32.415	10.295	173.4525	187.29	3.715	222.9	20.5875	16493.75	14219.16	30.67581	17.69638	1399.813	1114.1	530.3	198.5	190.6	-20.7	-38.55	-96.15	303.25	27.09

Max		33.1	11.0	174.8	208.8	4.1	245.6	22.2	16818.8	14432.6	32.9	18.9	1434.1	1125.1	537.5	203.0	192.7	-10.7	-25.0	-80.0	324.9	27.3
Min		32.1	10.0	169.5	187.3	3.6	215.4	16.4	15950.0	14022.5	29.9	17.2	1399.8	1113.5	530.3	198.5	190.6	-36.8	-59.1	-120.0	251.0	25.9
Average		32.6	10.4	171.7	203.6	3.7	223.9	17.8	16380.1	14250.9	31.0	17.9	1416.7	1119.3	533.3	201.1	191.5	-20.0	-36.9	-94.9	295.2	26.6
Variance		0.057645	0.041958	0.969686	18.83388	0.014755	53.11966	1.652022	45998.06	9030.6	0.379297171	0.121051161	86.06276	9.69206	5.290366	2.353962	0.665301	32.06714	60.93388	84.96542	316.311	0.270603504

		CO	HCl	CO2	H2O	THC	Main O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1	AT-213CB	AT-259-1N	AT-261A-1NEW	AT-263	AT-264-1NI
2020-06-23	19:39:00	42.54	52.78	9.81	50.83	6.8	9.51	0.45	682.6
2020-06-23	19:40:00	34.34	52.78	9.74	50.63	6.5	9.51	0.52	671.6
2020-06-23	19:41:00	29.29	52.78	9.67	50.48	6.8	9.74	0.52	657.7
2020-06-23	19:42:00	27.27	52.78	9.64	50.48	7.1	9.74	0.52	655.9
2020-06-23	19:43:00	28.47	52.78	9.73	50.58	7.3	9.74	0.52	665.8
2020-06-23	19:44:00	32.8	54.17	9.8	50.76	7	9.74	0.3	674.9
2020-06-23	19:45:00	32.8	54.17	9.82	50.87	8	9.74	0.05	676.9
2020-06-23	19:46:00	37.18	54.17	9.93	51.17	8.3	9.74	0.33	689.3
2020-06-23	19:47:00	40.96	54.17	9.97	51.24	6.2	9.48	0.38	694.5
2020-06-23	19:48:00	31.52	54.17	9.69	50.62	6.5	9.48	0.42	663.5
2020-06-23	19:49:00	26.5	52.98	9.63	50.55	6.2	9.74	0.48	655.5
2020-06-23	19:50:00	26.5	52.98	9.67	50.57	7	9.74	0.53	655.5
2020-06-23	19:51:00	30.97	54.27	9.8	50.75	9.4	9.74	0.51	671.5
2020-06-23	19:52:00	42.17	54.27	9.86	50.85	8.6	9.74	0.51	684.1
2020-06-23	19:53:00	56.08	54.27	9.97	51.1	6.8	9.52	0.11	701.2
2020-06-23	19:54:00	49.17	54.27	9.93	51.07	11.4	9.52	0.1	693.6
2020-06-23	19:55:00	56	54.27	9.96	51.23	6.6	9.52	0.32	701.3
2020-06-23	19:56:00	48.28	54.27	9.84	51.04	7.1	9.52	0.42	687.5
2020-06-23	19:57:00	38.03	54.27	9.74	50.85	6.9	9.52	0.51	674.7
2020-06-23	19:58:00	36.17	54.27	9.66	50.52	7.4	9.77	0.57	659.9
2020-06-23	19:59:00	37.34	54.27	9.67	50.5	7.4	9.77	0.52	659.9
2020-06-23	20:00:00	39.62	54.27	9.76	50.68	7.3	9.77	0.52	667.8
2020-06-23	20:01:00	38.68	54.27	9.71	50.61	8.2	9.77	0.4	667.8
2020-06-23	20:02:00	41.51	54.27	9.77	50.86	8.2	9.77	0.07	675.4
2020-06-23	20:03:00	43.28	55.48	9.89	51.18	9.4	9.77	0.3	689.7
2020-06-23	20:04:00	47.06	55.48	9.95	51.26	7.1	9.77	0.4	696.8
2020-06-23	20:05:00	41.42	53.3	9.76	50.75	6.8	9.47	0.45	673
2020-06-23	20:06:00	34.38	53.3	9.68	50.56	6.6	9.68	0.48	663.2
2020-06-23	20:07:00	31.73	53.3	9.63	50.44	8.1	9.68	0.57	655.3
2020-06-23	20:08:00	40.44	53.3	9.71	50.64	6.9	9.68	0.48	663.9
2020-06-23	20:09:00	43.42	53.3	9.68	50.59	7.8	9.68	0.51	660.5
2020-06-23	20:10:00	42.74	53.3	9.7	50.64	6.2	9.68	0.07	659.9
2020-06-23	20:11:00	38.42	53.3	9.74	50.59	8.1	9.68	0.07	660.4
2020-06-23	20:12:00	41.1	53.3	9.8	50.75	7.3	9.68	0.28	668
2020-06-23	20:13:00	43.22	53.3	9.76	50.67	6.4	9.68	0.4	666.6
2020-06-23	20:14:00	37.69	53.3	9.66	50.51	6.7	9.68	0.51	660.7
2020-06-23	20:15:00	33.26	52.28	9.63	50.42	8	9.68	0.51	654.3
2020-06-23	20:16:00	36.91	52.28	9.67	50.6	6.9	9.68	0.48	657.2
2020-06-23	20:17:00	39.03	52.28	9.68	50.61	6.4	9.68	0.42	661.1
2020-06-23	20:18:00	32.22	52.28	9.63	50.37	6.4	9.68	0.48	653.7
2020-06-23	20:19:00	32.34	52.28	9.68	50.51	6.8	9.68	0.08	653.7
2020-06-23	20:20:00	34.58	53.44	9.75	50.72	8.3	9.68	0.27	661.6
2020-06-23	20:21:00	38.86	53.44	9.83	50.89	5.8	9.68	0.35	672.9
2020-06-23	20:22:00	32.33	53.44	9.66	50.58	6.2	9.68	0.42	657.3
2020-06-23	20:23:00	27.52	52.24	9.59	50.46	6.1	9.95	0.42	643.5
2020-06-23	20:24:00	29.08	52.24	9.54	50.38	7.3	9.95	0.55	643.5
2020-06-23	20:25:00	38.71	52.24	9.67	50.59	6.3	9.95	0.42	655.7
2020-06-23	20:26:00	39.48	52.24	9.67	50.52	6.7	9.95	0.48	653.4
2020-06-23	20:27:00	33.97	53.39	9.67	50.65	6.6	9.95	0.03	655.7
2020-06-23	20:28:00	34.87	53.39	9.66	50.72	8.3	9.95	0.05	658.4
2020-06-23	20:29:00	45.53	54.43	9.79	50.96	8	9.95	0.26	674.5
2020-06-23	20:30:00	44.96	54.43	9.69	50.75	6.5	9.66	0.38	666.5
2020-06-23	20:31:00	37.66	53.22	9.57	50.54	6.7	9.66	0.42	655.4
2020-06-23	20:32:00	31.55	53.22	9.57	50.48	7.3	9.89	0.46	646.8
2020-06-23	20:33:00	33.49	53.22	9.58	50.46	8	9.89	0.45	646.8
2020-06-23	20:34:00	39.34	53.22	9.62	50.56	8.5	9.89	0.45	655.2
2020-06-23	20:35:00	44.03	53.22	9.62	50.66	10	9.89	0.45	656.7
2020-06-23	20:36:00	49.41	53.22	9.7	50.77	8.7	9.89	0.07	661.2
2020-06-23	20:37:00	52.93	54.5	9.81	50.93	12.4	9.89	0.17	671
2020-06-23	20:38:00	56.14	54.5	9.86	51.11	7.2	9.66	0.32	680.2
2020-06-23	20:39:00	46.55	54.5	9.64	50.73	8	9.66	0.45	659

Max	56.1	55.5	10.0	51.3	12.4	10.0	0.6	701.3
Min	26.5	52.2	9.5	50.4	5.8	9.5	0.0	643.5
Average	38.6	53.5	9.7	50.7	7.4	9.72	0.4	666.6
Variance	53.576649	0.662018579	0.011543	0.053625	1.49876	0.017875027	0.025331	198.5816

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	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	m3/s Ref Dry	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-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2020-06-23	20:48:00	32.565	10.565	170.6625	176.04	3.6425	218.55	21.225	16743.75	14292.19	31.0003	17.91284	1395.688	1110.7	529	197.5	189.6	-25.3	-42.3	-103.6875	305.75	26.90625
2020-06-23	20:49:00	32.73	10.18	171.2362	175.635	3.65125	219.075	21.15	16287.5	14168.6	30.77817	17.78961	1398.188	1110.8	529.6	197.5	189.6	-19.45	-35.35	-92.4	307.5625	25.90875
2020-06-23	20:50:00	32.04	10.165	170.6625	174.285	3.6175	217.05	21.4875	16868.75	14179.83	31.09464	18.04875	1401.063	1112.3	529.5	197.5	189.6	-29.5	-49.2	-113.175	276.5	27.2475
2020-06-23	20:51:00	32.385	10.105	171.5175	180.135	3.685	221.1	21.4875	16293.75	14067.47	30.87467	17.86413	1398.938	1111.2	529.3	197.5	189.6	-19.1	-34.8	-93	285.1875	25.935
2020-06-23	20:52:00	32.325	10.31	172.1362	185.85	3.66375	219.825	21.2625	16625	14286.57	31.94519	18.44196	1400.938	1112.2	528.8	197.5	189.6	-34.45	-55.75	-116.9625	268.6875	27.2475
2020-06-23	20:53:00	32.535	10.675	171.18	178.65	3.66625	219.975	20.9625	16181.25	14185.45	30.09334	17.3772	1400.438	1111.3	529.2	197	189.6	-13.85	-28.55	-85.35	317.25	25.90875
2020-06-23	20:54:00	32.115	10.285	172.08	174.87	3.64	218.4	20.9625	16075	14185.45	32.57783	18.77002	1407.938	1113.4	528	197	189.6	-23.85	-49.7	-100.4625	263.0625	25.90875
2020-06-23	20:55:00	32.295	10.26	171.9	174.015	3.695	221.7	20.9625	16600	14157.36	31.29977	17.9822	1396.313	1111.2	528.4	197	188.6	-24.5	-43.85	-102.6375	289.1875	26.7225
2020-06-23	20:56:00	32.22	10.275	170.7525	173.97	3.70375	222.225	21	16487.5	14286.57	31.03121	17.9028	1393.813	1109.3	527.8	197	188.6	-21.95	-39.5	-97.875	297.75	27.195
2020-06-23	20:57:00	32.1	10.2	171.6075	172.89	3.69375	221.625	20.775	16400	14168.6	31.53702	18.28437	1390.313	1108	527.3	197	189.7	-21.55	-37.05	-96.1125	304.125	27.22125
2020-06-23	20:58:00	32.355	10.28	170.7525	173.205	3.62	217.2	21.1875	16312.5	14196.69	30.68805	17.90351	1393.188	1108.3	526.9	197	189.7	-18.9	-34.85	-92.25	312.0625	26.355
2020-06-23	20:59:00	32.46	10.495	172.2712	172.89	3.6625	219.75	21.75	16562.5	14196.69	30.99945	17.97533	1391.938	1108.3	527.2	196.5	189.7	-21.6	-37.35	-96.8625	279.5625	26.32875
2020-06-23	21:00:00	32.295	10.4	169.6725	204.525	3.65125	219.075	21.675	16275	14162.98	31.10493	18.09225	1396.063	1109.3	527.9	197	188.6	-19.35	-35.6	-91.125	288.9375	26.06625
2020-06-23	21:01:00	32.25	10.265	171.7538	209.43	3.58	214.8	20.775	16325	14162.98	30.6615	17.81991	1394.188	1110.1	528.8	197	188.6	-17.7	-33	-92.475	313.1875	25.90875
2020-06-23	21:02:00	32.22	10.41	171.18	206.46	3.58	214.8	20.925	16250	14050.62	30.53768	17.65828	1399.563	1111.3	527.5	196.5	188.6	-15.4	-32.2	-88.125	325.5625	27.1425
2020-06-23	21:03:00	31.905	10.33	172.3725	192.735	3.6	216	21.075	16768.75	14309.05	31.75733	18.30172	1397.563	1111.7	527.9	196.5	188.6	-28.3	-46.9	-111.3	282.5625	26.5125
2020-06-23	21:04:00	31.965	10.12	172.2712	180.81	3.57875	214.725	21.5625	16656.25	14185.45	30.47652	17.67767	1390.313	1108.5	527.2	197	188.6	-20.7	-38.65	-98.175	288.8125	26.4075
2020-06-23	21:05:00	32.04	10.245	172.6987	176.04	3.64125	218.475	21.675	16781.25	14269.72	31.38503	18.28047	1388.813	1107.3	527.1	196.5	188.6	-25.55	-42.8	-104.8875	298.8125	25.935
2020-06-23	21:06:00	32.175	10.455	172.6087	174.06	3.6525	219.15	20.8875	16543.75	14157.36	30.60108	17.79149	1388.188	1106.7	525.8	196.5	188.6	-17.95	-34.05	-94.9875	306.0625	25.935
2020-06-23	21:07:00	31.845	10.23	172.98	172.845	3.605	216.3	20.625	16825	14331.52	32.67626	18.97691	1390.688	1107.5	526.6	196.5	188.6	-33.4	-55.55	-117.9	258.5	26.27625
2020-06-23	21:08:00	32.055	10.04	174.3075	173.79	3.565	213.9	20.8875	16287.5	14050.62	30.78982	17.81166	1387.813	1106.1	525.7	196.5	188.6	-17.8	-32.55	-94.05	282.25	27.01125
2020-06-23	21:09:00	32.31	10.63	175.3088	171.99	3.57625	214.575	21.7875	16443.75	14168.6	32.11498	18.65876	1391.063	1107	526.5	196.5	188.6	-32.2	-54.1	-115.35	261.875	26.1975
2020-06-23	21:10:00	32.115	10.385	172.8	172.215	3.4475	206.85	21.6375	16181.25	14134.89	30.46844	17.65966	1390.063	1105.5	527.1	196.5	188.6	-15.3	-30.6	-89.85	314.6875	27.2475
2020-06-23	21:11:00	32.01	10.225	172.5525	172.035	3.32625	199.575	20.8875	16187.5	14134.89	30.0165	17.19644	1397.938	1106.2	526.1	196	188.6	-13.9	-29.8	-84.525	322.25	26.38125
2020-06-23	21:12:00	31.725	10.25	173.9812	171.72	3.2625	195.75	20.9625	16637.5	14258.48	30.79186	17.69197	1385.688	1104.3	525.2	196	188.6	-23.9	-41.8	-103.35	288.0625	27.195
2020-06-23	21:13:00	31.98	10.085	173.1712	170.775	3.26375	195.825	22.0875	16481.25	14028.15	31.59698	18.23577	1382.563	1102.4	525.1	196	188.6	-22.2	-40.25	-99.525	300.0625	26.85375
2020-06-23	21:14:00	32.1	10.065	172.3163	169.785	3.295	197.7	21.5625	16512.5	14134.89	30.44414	17.70999	1379.188	1102.3	525	196	188.6	-20.75	-38.85	-97.0125	303.3125	27.1425
2020-06-23	21:15:00	32.01	10.265	173.1712	169.83	3.42625	205.575	21.525	16318.75	14241.63	30.59105	17.82115	1381.813	1102.7	524.8	196	188.6	-17.1	-33.1	-92.025	312.6875	26.145
2020-06-23	21:16:00	32.085	10.035	173.9363	170.37	3.51625	210.975	21.4125	16550	14089.94	31.35174	18.19451	1378.438	1102.7	525.3	195.5	188.6	-22.5	-38.35	-99.225	282.4375	26.06625
2020-06-23	21:17:00	31.935	10.06	173.88	170.325	3.4975	209.85	21.4125	16425	14196.69	30.75782	17.85034	1379.438	1102.5	525.3	195.5	188.6	-17.15	-34.1	-92.175	289.25	27.16875
2020-06-23	21:18:00	31.965	10.215	173.6437	171.36	3.55375	213.225	21.4125	16400	14084.33	31.01765	18.0087	1377.563	1101.3	524.6	195.5	187.6	-19.35	-34.7	-96.3	315.5	25.83
2020-06-23	21:19:00	32.1	10.06	172.89	170.73	3.52375	211.425	21.9	16287.5	14202.3	30.51181	17.65707	1381.313	1101.4	523.8	195	187.6	-14.7	-28.6	-85.3875	323.75	27.11625
2020-06-23	21:20:00	31.8	10.365	173.7	170.145	3.60125	216.075	21.825	17006.25	14320.28	31.62938	18.33905	1380.688	1101.9	524.3	195	187.6	-31.7	-50.95	-113.8875	282.625	25.9875
2020-06-23	21:21:00	31.965	10.405	174.735	171.225	3.67875	220.725	21.825	16581.25	14219.16	31.36066	18.17806	1374.688	1099.4	525	195	187.6	-23.2	-39.95	-102.3	291.5625	26.7225
2020-06-23	21:22:00	31.77	10.295	173.745	169.965	3.69625	221.775	20.55	16881.25	14213.54	31.86638	18.53815	1374.688	1098.4	525.3	195	187.6	-31.6	-47.6	-116.8875	294.5	25.96125
2020-06-23	21:23:00	31.86	10.03	174.735	170.415	3.66125	219.675	21.4875	16412.5	14213.54	31.31581	18.31333	1374.063	1098.1	524.9	195	187.6	-20.1	-36.55	-96.825	306.625	26.145
2020-06-23	21:24:00	31.635	9.965	171.99	170.64	3.66	219.6	20.85	16793.75	14196.69	32.19858	18.84622	1377.188	1099.9	525.3	195	187.6	-34.05	-55.1	-117.825	258.6875	26.90625
2020-06-23	21:25:00	32.01	10.315	173.79	170.955	3.665	219.9	22.0875	16531.25	14106.8	30.89746	18.04578	1374.438	1098.9	524.6	195	187.6	-22.05	-38.8	-95.7	283.625	26.43375
2020-06-23	21:26:00	31.98	10.17	175.2525	170.505	3.6775	220.65	21.45	16287.5	13977.58	32.19573	18.84167	1377.813	1100	525.4	195	187.6	-29.45	-51.35	-105.375	265.375	26.32875
2020-06-23	21:27:00	31.785	10.235	172.7438	169.56	3.695	221.7	21.45	16425	14174.21	31.31222	18.27667	1376.938	1099.2	525.1	195	187.6	-16.15	-30.6	-91.1625	315.875	26.46
2020-06-23	21:28:00	32.115	10.215	175.1625	170.46	3.72375	223.425	21.45	16231.25	14084.33	30.23586	17.5413	1384.063	1101.2	525.6	194.5	187.6	-13.6	-28.65	-85.8	322.5625	27.27375
2020-06-23	21:29:00	31.755	9.8	172.5525	170.64	3.715	222.9	21.75	16918.75	14353.99	30.9201	17.89457	1376.688	1099.8	525.8	194.5	187.6	-27.65	-47.1	-107.4	287.875	26.53875
2020-06-23	21:30:00	31.755	10.205	173.835	170.82	3.72625	223.575	20.4375	16762.5	14151.74	30.8445	17.93642	1375.438	1098.1	526	195	187.6	-22.35	-40.15	-100.125	295.625	25.96125
2020-06-23	21:31:00	32.085	10.52	172.98	169.83	3.715	222.9	22.05	16606.25	14140.51	31.42446	18.34873	1373.438	1097.9	525.8	195	187.6	-21.8	-38.6	-99	301.3125	26.95875
2020-06-23	21:32:00	32.25	9.93	173.79	169.875	3.69	221.4	21.525	16331.25	14151.74	30.61802	17.91361	1377.813	1099	525.6	195	187.6	-19.6	-37.1	-94.0125	312.375	26.32875
2020-06-23	21:33:00	32.415	10.34	173.79	169.515	3.7125	222.75	20.9625	16593.75	14140.51	31.09358	18.13723	1377.563	1100.3	526.3	195	187.6	-22.75	-39.05	-100.1625	279.625	27.06375
2020-06-23	21:34:00	31.995	10.19	174.0712	169.245	3.74	224.4	21.2625	16406.25	14022.53	30.89621	17.96263	1381.063	1101.6	526	195.5	187.6	-17.95	-31.6	-93.1125	287.3125	27.06375
2020-06-23	21:35:00	32.22	10.185	175.1175	165.195	3.73875	224.325	22.0875	16581.25	14045	30.82442	17.94801	1380.313	1102	526.6	195.5	187.6	-19.95	-34.7	-96.225	315.25	26.01375
2020-06-23	21:36:00	32.145	10.49	174.645	164.61	3.7475	224.85	20.7375	16206.25	13904.55	29.85402	17.33359	1386.938	1103.4	526.3	195.5	187.6	-14	-26.4	-86.2125	324.1875	26.59125
2020-06-23	21:37:00	32.04	10.53	172.3725	164.52	3.73375	224.025	21.1125	16987.5	14370.84	31.80268	18.39559	1388.938	1105.1	526.8	195.5	187.6	-31.55	-51.6	-116.4375	284	26.11875
2020-06-23	21:38:00	32.16	10.855	174.4988	164.205	3.76	225.6	21.675	16531.25	14061.85	30.97421	17.97787	1381.063	1102.2	527.1	196	187.6	-23.55	-41.7	-101.4375	292.75	26.1975
2020-06-23	21:39:00	31.92	10.545	173.5537	164.025	3.74375	224.625	21.7125	16656.25	14162.98	31.88628	18.55296	1380.938	1102.3	526.6	196.5	188.7	-34.45	-54.7	-117.1125	265.625	26.04
2020-06-23	21:40:00	31.875	10.15	173.6437	163.71	3.745	224.7	21.7125	16412.5	14280.96	30.60806	17.87149	1379.438	1102	526.5	196.5	188.7	-20.25	-36.3	-94.9125	307.9375	27.3
2020-06-23	21:41:00	32.01	10.065	174.2625	164.25	3.74375	224.625	20.8125	16425	14118.03	32.88537	19.24901	1384.813	1102.9	527	197	188.7	-32.45	-50.7	-114.4125	259.8125	27.01125
2020-06-23	21:42:00	31.95	10.54	173.5087	164.475	3.72	223.2	21.3375	16425	14252.87	30.74538	17.85789	1380.063	1101.6	527.4	197	188.7	-19.5	-34.9	-95.1375	285	25.90875
2020-06-23	21:43:00	31.845	9.76	174.1725	163.755	3.74375	224.625	21.1875	16206.25	14230.39	30.79401	18.06678	1384.688	1102.2	527.1	197.5	188.7	-19.1	-34.2	-92.325	295.3125	26.64375
2020-06-23	21:44:00	31.965	10.7	172.89	164.07	3.70625	222.375	21.0375	16306.25	14084.33	31.35044	18.28031	1383.688	1101.8	526.8	197.5	188.7	-17.35	-31.5	-91.7625	320.8125	26.85375
2020-06-23	21:45:00	32.1	10.05	173.7	160.155	3.7175	223.05	20.8875	16175	14084.33	30.45837	17.69755	1392.188	1104.4	527.6	197.5	188.7	-14.45	-27.35	-88.0125	328.6875	26.1975
2020-06-23	21:46:00	32.22	10.12	172.6538	159.93	3.74	224.4	21.2625	16756.25	14219.16	32.24463	18.69358	1385.063	1103.6	527.4	198	188.7	-25.85	-43.95	-106.65	290	25.8825
2020-06-23	21:47:00	31.8	10.065	175.4437	158.895	3.7225	223.35	21.2625	16456.25	14191.07	31.08893	18.03975	1382.688	1102.3	526.9	198.5	189.7	-22.75	-40	-99.9375	296.75	26.0925
2020-06-23	21:48:00	32.085	10.36	173.6437	164.115	3.71875	223.125	21.2625	16531.25	14264.1	31.37776	18.33616	1379.688	1101.6	527	199.5	190.7	-20.6	-37.75	-97.0875	302.25	26.69625

Max		32.7	10.9	175.4	209.4	3.8	225.6	22.1	17006.3	14370.8	32.9	19.2	1407.9	1113.4	529.6	199.5	190.7	-13.6	-26.4	-84.5	328.7	27.3
Min		31.6	9.8	169.7	158.9	3.3	195.8	20.4	16075.0	13904.6	29.9	17.2	1373.4	1097.9	523.8	194.5	187.6	-34.5	-55.8	-117.9	258.5	25.8
Average		32.1	10.3	173.0	172.5	3.6	218.1	21.3	16491.8	14171.5	31.1	18.1	1386.1	1104.5	526.6	196.3	188.5	-22.3	-39.4	-99.3	295.4	26.5
Variance		0.04886	0.045273	1.756691	95.07365	0.014348	51.65422	0.167725	50447.32	8621.175	0.429794547	0.162853374	73.26642	19.45929	1.928989	1.146038	0.609902	33.74329	61.8202	87.52546	349.3177	0.239901816

		CO	HCl	CO2	H2O	THC	Main O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205-1NEV	AT-213A-1NEW	AT-213B-1	AT-213CB	AT-259-1N	AT-261A-1NEW	AT-263	AT-264-1NI
2020-06-23	20:48:00	45.34	54.39	9.65	50.67	9.2	9.66	0.48	657.1
2020-06-23	20:49:00	44.22	54.39	9.58	50.53	10.3	9.88	0.48	650
2020-06-23	20:50:00	48.46	54.39	9.57	50.49	9.9	9.88	0.46	650
2020-06-23	20:51:00	53.38	54.39	9.67	50.69	9.2	9.88	0.48	660.9
2020-06-23	20:52:00	48.93	54.39	9.61	50.66	9.5	9.88	0.51	656.1
2020-06-23	20:53:00	48.16	54.39	9.67	50.81	10.1	9.88	0.07	659
2020-06-23	20:54:00	50.13	54.39	9.73	50.93	12.3	9.88	0.07	666
2020-06-23	20:55:00	56.05	54.39	9.77	51.07	7.9	9.88	0.36	676.5
2020-06-23	20:56:00	51.62	54.39	9.61	50.79	8.9	9.64	0.42	661.9
2020-06-23	20:57:00	42.03	53.15	9.52	50.59	8	9.64	0.45	643.4
2020-06-23	20:58:00	42.15	53.15	9.19	50.45	9.2	9.95	0.48	641.9
2020-06-23	20:59:00	45.12	53.15	9.55	50.53	8.1	9.95	0.45	649.3
2020-06-23	21:00:00	45.86	53.15	9.52	50.43	10	9.95	0.47	649.3
2020-06-23	21:01:00	51.81	53.15	9.58	50.5	8.8	9.95	0.05	653.4
2020-06-23	21:02:00	50.51	53.15	9.67	50.83	9.9	9.95	0.05	627.9
2020-06-23	21:03:00	50.98	53.15	9.76	50.95	10.6	9.95	0.31	618.9
2020-06-23	21:04:00	50.46	53.15	9.69	50.61	8.4	9.67	0.4	638.2
2020-06-23	21:05:00	45.8	52.12	9.53	50.37	9.1	9.67	0.5	646.2
2020-06-23	21:06:00	45.57	52.12	9.21	50.43	9.3	9.9	0.5	649.9
2020-06-23	21:07:00	47.77	52.12	9.24	50.56	9.8	9.9	0.48	652.9
2020-06-23	21:08:00	48.49	53.18	9.62	50.71	8.9	9.9	0.52	661.9
2020-06-23	21:09:00	47.2	53.18	9.55	50.55	9.7	9.9	0.5	658
2020-06-23	21:10:00	48.38	53.18	9.63	50.69	10.4	9.9	0.1	663.3
2020-06-23	21:11:00	58.73	54.38	9.75	51	14.3	9.9	0.07	672.7
2020-06-23	21:12:00	67.64	54.38	9.78	51.22	7.8	9.9	0.4	684.3
2020-06-23	21:13:00	58.09	54.38	9.62	50.9	9.3	9.66	0.45	668
2020-06-23	21:14:00	47.7	53.17	9.47	50.51	8.1	9.99	0.45	644.1
2020-06-23	21:15:00	45.64	53.17	9.45	50.46	9.1	9.99	0.51	642.8
2020-06-23	21:16:00	43.54	54.19	9.54	50.66	8.6	9.99	0.41	651.6
2020-06-23	21:17:00	43.54	54.19	9.54	50.68	9.2	9.99	0.48	651.6
2020-06-23	21:18:00	42.28	54.19	9.5	50.67	9.4	9.99	0.18	651.2
2020-06-23	21:19:00	44.05	54.19	9.54	50.81	10	9.99	0.07	654.6
2020-06-23	21:20:00	47.95	55.36	9.6	50.96	10.8	9.99	0.36	664.2
2020-06-23	21:21:00	48.43	55.36	9.34	50.74	8.1	9.99	0.36	661.1
2020-06-23	21:22:00	44.64	54.23	9.26	50.54	9.2	9.99	0.45	651.2
2020-06-23	21:23:00	42.63	54.23	9.17	50.27	8.7	9.99	0.45	641.9
2020-06-23	21:24:00	44.32	53.2	9.17	50.28	9.6	9.99	0.48	641.9
2020-06-23	21:25:00	44.48	53.2	9.51	50.43	8.5	9.99	0.42	649.5
2020-06-23	21:26:00	42.59	53.2	9.18	50.32	9.9	9.99	0.45	645.3
2020-06-23	21:27:00	44.64	53.2	9.25	50.45	8.8	9.99	0.15	649.4
2020-06-23	21:28:00	47.91	54.44	9.63	50.74	11.3	9.99	0.07	658.8
2020-06-23	21:29:00	51.37	54.44	9.69	50.86	8	9.99	0.32	669.3
2020-06-23	21:30:00	51.8	54.44	9.58	50.55	9.6	9.77	0.41	661.9
2020-06-23	21:31:00	46.01	54.44	9.51	50.4	8.3	9.99	0.48	646
2020-06-23	21:32:00	46.97	54.44	9.45	50.29	10	9.99	0.48	643.4
2020-06-23	21:33:00	51.27	54.44	9.55	50.45	9.1	9.99	0.46	651.7
2020-06-23	21:34:00	50.93	54.44	9.58	50.53	10.2	9.99	0.52	654.9
2020-06-23	21:35:00	51.13	54.44	9.61	50.54	9.4	9.99	0.2	658.1
2020-06-23	21:36:00	52.23	54.44	9.65	50.69	10.9	9.99	0.05	664
2020-06-23	21:37:00	53.03	54.44	9.69	50.73	12.4	9.99	0.36	670.7
2020-06-23	21:38:00	56.45	54.44	9.39	50.79	8	9.74	0.4	674.3
2020-06-23	21:39:00	49.96	54.44	9.31	50.6	8.9	9.74	0.45	662.1
2020-06-23	21:40:00	43.75	54.44	9.24	50.24	8.9	9.96	0.55	647.6
2020-06-23	21:41:00	45.32	54.44	9.22	50.17	10.8	9.96	0.57	645.2
2020-06-23	21:42:00	51.6	54.44	9.6	50.39	8.2	9.96	0.51	654.8
2020-06-23	21:43:00	49.99	54.44	9.53	50.26	10.3	9.96	0.55	651.2
2020-06-23	21:44:00	50.53	55.8	9.59	50.35	8.8	9.96	0.2	654.2
2020-06-23	21:45:00	55.6	55.8	9.66	50.45	13	9.96	0.01	659.6
2020-06-23	21:46:00	60.29	55.8	9.72	50.55	7.8	9.96	0.32	670.3
2020-06-23	21:47:00	57.23	55.8	9.68	50.42	9	9.7	0.46	667.6
2020-06-23	21:48:00	45.24	55.8	9.52	50.08	8.1	9.9	0.48	650.5

Max	67.6	55.8	9.8	51.2	14.3	10.0	0.6	684.3
Min	42.0	52.1	9.2	50.1	7.8	9.6	0.0	618.9
Average	49.0	54.1	9.5	50.6	9.5	9.91	0.4	654.6
Variance	25.617681	0.783308306	0.028678	0.052984	1.658634	0.011480328	0.026462	129.8542

		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	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	m3/s Ref Dry	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-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2020-06-23	21:55:00	32.415	10.335	174.735	165.105	3.69125	221.475	21.9	16537.5	14286.57	30.80465	17.85313	1381.063	1101.1	526.4	199	189.6	-23.4	-41.1	-101.325	289.375	27.0375
2020-06-23	21:56:00	32.085	10.195	174.2175	164.07	3.715	222.9	21.9	16637.5	14438.26	32.17499	18.66863	1382.188	1101.4	526	199	190.7	-32.45	-53.75	-114.075	265.875	27.11625
2020-06-23	21:57:00	31.905	10.415	174.2175	164.52	3.6725	220.35	21.6	16462.5	14224.78	31.30244	18.23324	1381.313	1100.6	526.1	199	190.7	-21.55	-37.05	-96.075	306.8125	26.85375
2020-06-23	21:58:00	32.16	9.835	171.5175	163.17	3.65625	219.375	22.05	16306.25	14331.52	32.66806	19.0178	1385.313	1102.5	526.1	199	190.7	-24.9	-44.8	-102.75	268.1875	27.16875
2020-06-23	21:59:00	32.43	10.525	174.645	163.305	3.62625	217.575	21.5625	16337.5	14359.61	30.90589	17.93353	1380.938	1101.4	525.6	199	190.7	-20	-35.35	-95.9625	284.8125	27.01125
2020-06-23	22:00:00	32.085	10.17	172.8	163.17	3.61375	216.825	21.7125	16300	14247.25	30.32891	17.65302	1383.188	1102.4	525.6	199	189.6	-16.85	-30.65	-90.15	290.6875	26.59125
2020-06-23	22:01:00	32.055	10.32	173.2725	163.26	3.65125	219.075	21.825	16325	14146.12	30.68631	17.81356	1381.563	1101.8	526.1	198.5	189.6	-16.4	-29	-91.2375	315.5625	25.8825
2020-06-23	22:02:00	31.995	10.37	173.5988	162.99	3.64	218.4	20.775	16193.75	14129.27	30.85394	17.86514	1389.188	1103.6	525.2	198.5	189.6	-13.85	-27.85	-84.525	326.5625	26.565
2020-06-23	22:03:00	32.04	10.165	174.645	162.855	3.6575	219.45	20.925	16762.5	14331.52	31.39116	18.13158	1383.438	1102.9	525.1	198.5	189.6	-24.4	-41	-105.8625	285.625	26.27625
2020-06-23	22:04:00	32.175	9.93	175.0725	163.35	3.67875	220.725	21.8625	16406.25	14325.9	31.05841	17.99029	1380.313	1101.6	524.4	198.5	189.6	-19.85	-35.3	-95.8125	293.5	26.74875
2020-06-23	22:05:00	32.295	10.41	172.3163	163.935	3.7475	224.85	20.4	16456.25	14348.37	30.69383	17.812	1377.813	1100.6	524.9	198.5	189.6	-21.8	-37.4	-99.6	305.0625	26.67
2020-06-23	22:06:00	32.475	10.46	174.2175	164.34	3.72	223.2	22.0125	16287.5	14236.01	30.07592	17.4635	1380.938	1101.2	524.9	198.5	189.6	-17.35	-32.85	-91.0875	309.8125	25.85625
2020-06-23	22:07:00	31.755	10.22	174.4088	163.035	3.6875	221.25	21.8625	16931.25	14342.75	31.41703	18.25246	1381.063	1101.5	525.5	198.5	189.6	-22.05	-38.5	-100.275	280.0625	26.04
2020-06-23	22:08:00	32.355	10.49	173.9812	163.26	3.67125	220.275	20.8125	16268.75	14325.9	30.83997	17.90327	1382.563	1101.4	525.6	198.5	189.6	-17.25	-32.8	-90.9375	286.6875	27.0375
2020-06-23	22:09:00	32.025	9.855	172.845	163.845	3.555	213.3	21.9375	16856.25	14455.11	30.19208	17.55267	1383.188	1102.2	524.9	198.5	189.6	-24.05	-39.35	-101.1375	316.125	27.3
2020-06-23	22:10:00	32.28	9.995	172.89	163.8	3.47875	208.725	21.375	16131.25	14106.8	30.37607	17.57325	1386.063	1102	524.4	198.5	189.6	-16.15	-29.6	-87.7125	318.625	26.32875
2020-06-23	22:11:00	32.085	10.18	172.935	163.845	3.4775	208.65	21.75	16868.75	14359.61	32.118	18.54085	1390.063	1104.2	524.9	198	189.6	-38.7	-59.15	-124.725	252.75	25.935
2020-06-23	22:12:00	32.175	10.675	174.0712	162.675	3.37125	202.275	21.9	16681.25	14320.28	30.59591	17.70092	1379.188	1102	524.4	198	189.6	-23.9	-42.4	-102.675	290.625	25.935
2020-06-23	22:13:00	31.905	10	172.3163	163.485	3.40375	204.225	22.05	16418.75	14325.9	30.88122	17.95306	1378.188	1100.4	524.5	198	189.6	-30.85	-53.5	-106.0125	275.125	25.9875
2020-06-23	22:14:00	31.98	9.985	173.9363	163.26	3.40125	204.075	20.9625	16468.75	14224.78	31.02078	18.04688	1375.938	1099	524.6	198.5	189.6	-19.55	-35.35	-93.45	306.875	27.27375
2020-06-23	22:15:00	31.935	9.97	176.445	163.71	3.52625	211.575	22.275	16481.25	14247.25	30.89921	18.03147	1378.563	1099.3	523.7	198	189.6	-16.2	-30.9	-89.8125	312.9375	25.935
2020-06-23	22:16:00	32.13	10.385	174.6	163.35	3.52375	211.425	22.35	16356.25	14207.92	31.05841	18.04437	1375.188	1099.5	522.5	198	189.6	-20.7	-36.8	-96.9375	283.3125	25.85625
2020-06-23	22:17:00	31.92	10.38	174.4988	164.07	3.58125	214.875	20.5125	16268.75	14219.16	30.64042	17.82514	1378.438	1099.8	522.6	197.5	189.6	-18.05	-33.55	-92.1375	291.125	25.90875
2020-06-23	22:18:00	32.085	9.95	172.8	164.115	3.67125	220.275	21.5625	16325	14348.37	31.19547	18.18545	1376.313	1098.9	523.5	197.5	189.6	-17.45	-34	-90.8625	320.4375	27.195
2020-06-23	22:19:00	31.875	10.38	173.79	162.99	3.6475	218.85	21.9375	16131.25	14236.01	29.76979	17.28997	1383.188	1099.9	523.6	197.5	189.6	-14.1	-27.7	-84.0375	324.375	26.4075
2020-06-23	22:20:00	32.13	10.12	172.6087	164.16	3.64375	218.625	20.7	16843.75	14477.59	30.89308	17.88904	1378.188	1099.7	523.6	197	189.6	-28.25	-44.95	-107.1	287.5	26.6175
2020-06-23	22:21:00	32.295	10.07	173.5537	164.7	3.6625	219.75	20.8125	16487.5	14370.84	31.02821	17.94284	1375.313	1097.5	523.6	197	189.6	-21.9	-39.75	-98.325	295.9375	26.355
2020-06-23	22:22:00	32.04	10.33	173.2725	164.295	3.695	221.7	20.3625	16637.5	14353.99	30.76536	17.94501	1372.188	1097.6	523.2	197	189.6	-22.3	-39	-98.7375	303.8125	27.27375
2020-06-23	22:23:00	32.085	10.165	175.2525	163.935	3.61875	217.125	20.3625	16362.5	14224.78	30.2816	17.70191	1373.813	1097.1	523.5	197	189.6	-19.05	-32.8	-92.0625	310.75	26.3025
2020-06-23	22:24:00	31.875	9.98	176.1525	163.44	3.67375	220.425	21.1875	16912.5	14376.46	31.19096	18.21915	1374.063	1097.6	524	197	189.6	-25.95	-42.35	-105.075	283.0625	26.48625
2020-06-23	22:25:00	31.8	10.31	171.4725	164.205	3.67	220.2	20.7375	16425	14191.07	31.09733	18.15407	1374.438	1096.5	523.7	197	189.6	-20.9	-35.9	-96.1875	288.4375	27.195
2020-06-23	22:26:00	31.86	10.07	174.3525	162.81	3.66375	219.825	20.7	16943.75	14427.02	31.46103	18.40819	1375.688	1098	522.5	197	188.6	-25.5	-39.75	-107.475	300.75	27.2475
2020-06-23	22:27:00	32.085	9.965	173.88	163.08	3.64	218.4	20.7	16275	14224.78	30.41107	17.68971	1377.563	1098.1	521.9	197	188.6	-17.45	-30.35	-89.325	322.125	26.25
2020-06-23	22:28:00	32.16	10.035	171.18	162.9	3.67	220.2	20.775	16568.75	14466.35	32.59554	18.8289	1383.563	1100	522.5	196.5	188.6	-41.7	-63.05	-127.5375	258.375	26.06625
2020-06-23	22:29:00	32.1	10.33	174.78	163.8	3.70625	222.375	21.4125	16806.25	14455.11	31.38519	18.13104	1373.438	1097.7	522.9	197	188.6	-25.45	-43.9	-104.55	287.1875	26.3025
2020-06-23	22:30:00	32.04	10.195	173.2725	163.665	3.685	221.1	21.225	16331.25	14455.11	30.70324	17.89696	1372.813	1097	522.4	197	189.7	-23.55	-39.4	-101.0625	294.25	26.80125
2020-06-23	22:31:00	31.965	10.38	171.7987	163.26	3.695	221.7	20.5125	16487.5	14314.66	32.12914	18.84825	1370.063	1096.9	522	197	189.7	-22.5	-37.65	-98.8125	305.6875	26.80125
2020-06-23	22:32:00	31.815	10.245	173.2725	163.08	3.67875	220.725	20.8875	16225	14309.05	30.79067	18.12878	1374.313	1098.5	521.6	197	189.7	-21.95	-37.05	-95.8875	311.3125	27.06375
2020-06-23	22:33:00	31.68	9.935	174.4537	162.765	3.7475	224.85	21.4125	16325	14202.3	31.08942	18.14216	1371.313	1097.3	521.9	197	189.7	-20.6	-36.25	-97.0875	281.75	26.69625
2020-06-23	22:34:00	32.04	10.225	175.3988	162.72	3.735	224.1	20.925	16287.5	14309.05	31.08487	18.17936	1374.438	1097.3	522.5	197	188.6	-19.3	-35	-93.5625	290.25	26.04
2020-06-23	22:35:00	31.695	10.145	173.2163	162.54	3.755	225.3	20.55	16493.75	14269.72	30.88098	18.11204	1372.813	1097.1	522.6	197	188.6	-18	-31.9	-92.775	316.9375	26.11875
2020-06-23	22:36:00	31.755	9.75	173.9363	163.035	3.7475	224.85	20.8875	16118.75	14258.48	30.51783	17.8155	1378.938	1098.4	522.2	197	188.6	-16.45	-30.05	-87.375	322.625	26.3025
2020-06-23	22:37:00	31.89	9.975	173.5988	163.17	3.755	225.3	20.325	16943.75	14466.35	31.47125	18.31149	1375.563	1097.8	522.2	196.5	188.6	-26.45	-44.75	-106.2	282.875	27.0375
2020-06-23	22:38:00	32.04	10.25	172.98	163.62	3.745	224.7	20.8125	16675	14359.61	31.02271	17.97278	1371.938	1096.1	523.1	197	188.6	-22.75	-39.5	-100.575	295.4375	27.32625
2020-06-23	22:39:00	31.965	10.16	175.5	163.035	3.75	225	21.9	16687.5	14365.23	30.29797	17.7101	1370.938	1096.1	523.5	197	189.7	-23.6	-40.05	-102.6	302.8125	27.2475
2020-06-23	22:40:00	32.025	10.12	172.98	162.585	3.72625	223.575	22.05	16293.75	14236.01	31.44339	18.47421	1373.188	1097.5	522.8	197	189.7	-18.3	-33.35	-93.1125	308.75	27.3
2020-06-23	22:41:00	31.65	10.115	174.6	162.675	3.72875	223.725	21.825	16806.25	14466.35	31.06543	18.15899	1375.938	1100.1	523.1	197	189.7	-26.15	-43.7	-105.8625	280.375	25.9875
2020-06-23	22:42:00	31.875	10.15	175.3088	162.63	3.69375	221.625	21.5625	16431.25	14230.39	30.95799	18.04702	1376.313	1100.6	522.8	197	189.7	-19.65	-35.85	-95.2875	289.625	27.195
2020-06-23	22:43:00	31.83	10.22	172.98	162.765	3.75375	225.225	21.375	16775	14337.14	31.54735	18.43814	1377.563	1102.5	524.3	197	188.6	-38.1	-57.95	-124.65	272.1875	26.43375
2020-06-23	22:44:00	32.025	9.975	170.9437	162.72	3.7525	225.15	21.375	16362.5	14236.01	31.31121	18.29421	1377.813	1102.5	525.8	197.5	188.6	-17.3	-32.9	-90.0375	320.25	27.06375
2020-06-23	22:45:00	31.935	10.085	176.2087	158.4	4.0775	244.65	21.15	16306.25	14353.99	32.48107	19.02812	1385.313	1104.9	524.4	197.5	188.6	-33.2	-53.55	-114.75	253.125	27.32625
2020-06-23	22:46:00	31.995	10.17	172.5075	159.075	4.0275	241.65	20.775	16537.5	14432.64	31.17624	18.17613	1375.938	1103	523.6	197.5	189.7	-26.25	-43.2	-102.75	289.4375	25.83
2020-06-23	22:47:00	31.875	9.61	173.835	162.45	3.9975	239.85	21.3	16418.75	14320.28	31.47503	18.33939	1375.813	1101.8	524.5	198	189.7	-20.4	-34.95	-96.7125	298.5	27.1425
2020-06-23	22:48:00	32.025	9.935	174.4088	162.81	3.99875	239.925	20.4	16500	14331.52	30.6494	17.96406	1373.438	1100.7	524	198	189.7	-18.25	-34.8	-93.675	301.6875	27.06375
2020-06-23	22:49:00	31.875	10	172.845	162.72	4.03125	241.875	22.0125	16381.25	14224.78	30.6617	17.99458	1377.813	1100.6	523.8	198	189.7	-19.1	-34.35	-92.2875	315	26.80125
2020-06-23	22:50:00	32.205	10.325	172.8	163.305	4.05375	243.225	20.625	16425	14230.39	31.13789	18.13619	1375.938	1100.6	523.4	198	189.7	-21.2	-36.85	-96.825	281.875	26.04
2020-06-23	22:51:00	32.175	9.915	173.0363	162.27	4.0525	243.15	20.5125	16425	14348.37	30.64182	17.80832	1380.688	1101.5	523.3	198	189.7	-18.2	-33.5	-92.175	291.625	26.3025
2020-06-23	22:52:00	32.04	9.895	173.9812	162.09	4.065	243.9	20.55	16343.75	14359.61	30.46465	17.75214	1379.688	1102	523.9	198	189.7	-18.9	-34.35	-92.025	315.125	25.8825
2020-06-23	22:53:00	32.13	10.005	173.5988	162.63	4.06375	243.825	21.6	16218.75	14370.84	30.65176	17.82429	1386.313	1103.1	522.9	198	189.7	-13.85	-25.6	-85.725	321.25	26.90625
2020-06-23	22:54:00	32.265	10.21	172.8	162.315	4.1125	246.75	22.5	16856.25	14370.84	30.8738	17.89623	1384.813	1103.4	522	197.5	189.7	-30.25	-48.65	-112.0875	285.9375	25.96125
2020-06-23	22:55:00	31.92	9.97	173.1712	162.135	4.06625	243.975	21.75	16750	14264.1	31.33155	18.12799	1378.813	1101.7	521.4	197.5	189.7	-22.8	-40.15	-101.2125	295	27.01125

Max		32.5	10.7	176.4	165.1	4.1	246.8	22.5	16943.8	14477.6	32.7	19.0	1390.1	1104.9	526.4	199.0	190.7	-13.9	-25.6	-84.0	326.6	27.3
Min		31.7	9.6	170.9	158.4	3.4	202.3	20.3	16118.8	14106.8	29.8	17.3	1370.1	1096.1	521.4	196.5	188.6	-41.7	-63.1	-127.5	252.8	25.8
Average		32.0	10.1	173.7	163.1	3.7	223.5	21.3	16489.7	14313.4	31.0	18.1	1378.4	1100.2	523.8	197.7	189.5	-22.3	-38.5	-98.7	296.1	26.6
Variance		0.032948	0.042242	1.422521	1.101509	0.031224	112.406	0.368408	52561.05	8014.971	0.341899853	0.122259978	21.33543	5.044344	1.713366	0.537158	0.274475	34.39146	61.20154	86.53394	319.9723	0.259070932

		CO	HCl	CO2	H2O	THC	Main O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205-1NE	AT-213A-1NEW	AT-213B-1	AT-213CB	AT-259-1N	AT-261A-1NEW	AT-263	AT-264-1N
2020-06-23	21:55:00	67.57	57.11	9.69	50.62	8.4	9.63	0.36	672.5
2020-06-23	21:56:00	61.62	56.09	9.59	50.37	10.4	9.63	0.42	658.7
2020-06-23	21:57:00	50.5	56.09	9.51	50.23	9.3	9.88	0.48	646.7
2020-06-23	21:58:00	51.16	56.09	9.52	50.28	9.7	9.88	0.55	648.9
2020-06-23	21:59:00	49.19	56.09	9.61	50.42	8.3	9.88	0.46	657.1
2020-06-23	22:00:00	44.4	56.09	9.52	50.31	9.4	9.88	0.52	650
2020-06-23	22:01:00	43.94	56.09	9.53	50.41	8.9	9.88	0.07	652.7
2020-06-23	22:02:00	47.91	56.09	9.63	50.59	12	9.88	0.02	661.8
2020-06-23	22:03:00	52.48	57.29	9.67	50.69	8.4	9.88	0.28	671.3
2020-06-23	22:04:00	52.06	57.29	9.29	50.66	8.2	9.88	0.4	666.6
2020-06-23	22:05:00	43.83	57.29	9.23	50.48	9.2	9.88	0.52	653.1
2020-06-23	22:06:00	45.94	57.29	9.51	50.43	10.5	9.88	0.55	648.6
2020-06-23	22:07:00	52.02	57.29	9.54	50.37	10.6	9.88	0.45	652.1
2020-06-23	22:08:00	54.57	57.29	9.58	50.43	9.8	9.88	0.5	657.4
2020-06-23	22:09:00	51.47	57.29	9.58	50.4	9.6	9.88	0.35	656
2020-06-23	22:10:00	50.33	57.29	9.65	50.68	12.2	9.88	0.07	660.9
2020-06-23	22:11:00	53.07	57.29	9.67	50.75	10.8	9.88	0.23	665.5
2020-06-23	22:12:00	54.09	57.29	9.66	50.61	7.9	9.68	0.36	666.2
2020-06-23	22:13:00	46.12	57.29	9.56	50.38	8.9	9.68	0.42	653.3
2020-06-23	22:14:00	41.2	57.29	9.18	50.28	8.2	9.92	0.42	641.9
2020-06-23	22:15:00	42.36	57.29	9.15	50.16	10.3	9.92	0.57	639.2
2020-06-23	22:16:00	45.24	57.29	9.52	50.38	8.1	9.92	0.5	648.3
2020-06-23	22:17:00	42	57.29	9.16	50.4	9.2	9.92	0.48	646.3
2020-06-23	22:18:00	41.46	57.29	9.17	50.33	8.5	9.92	0.05	646.3
2020-06-23	22:19:00	45.09	57.29	9.58	50.45	11.2	9.92	0.05	653.8
2020-06-23	22:20:00	49.63	58.42	9.65	50.64	9.2	9.92	0.3	663.7
2020-06-23	22:21:00	53.78	58.42	9.34	50.63	9.2	9.92	0.45	662.3
2020-06-23	22:22:00	44.4	57.04	9.2	50.29	8.4	9.92	0.48	646
2020-06-23	22:23:00	43.5	57.04	9.19	50.16	9.3	9.92	0.52	641.5
2020-06-23	22:24:00	45.41	57.04	9.21	50.22	9.2	9.92	0.48	643
2020-06-23	22:25:00	46.9	57.04	9.51	50.27	9.5	9.92	0.46	648
2020-06-23	22:26:00	46.4	57.04	9.44	50.2	9.9	9.92	0.45	644.3
2020-06-23	22:27:00	48.1	57.04	9.53	50.47	10.2	9.92	0.07	651.9
2020-06-23	22:28:00	50.17	58.05	9.63	50.7	11.8	9.92	0.17	661.2
2020-06-23	22:29:00	56	58.05	9.65	50.66	7.7	9.92	0.33	668.2
2020-06-23	22:30:00	50.74	56.56	9.24	50.34	9	9.92	0.48	653
2020-06-23	22:31:00	42.07	55.45	9.11	49.94	8	9.92	0.48	633.8
2020-06-23	22:32:00	43.85	55.45	9.14	50.02	9.6	9.92	0.52	635.4
2020-06-23	22:33:00	44.34	56.58	9.2	50.29	7.7	10.13	0.46	645.6
2020-06-23	22:34:00	43.75	56.58	9.17	50.17	10.1	10.13	0.56	641.5
2020-06-23	22:35:00	45.49	56.58	9.17	50.07	8	10.13	0.02	642.6
2020-06-23	22:36:00	46.48	56.58	9.52	50.26	9.6	10.13	0.01	648.7
2020-06-23	22:37:00	45.41	56.58	9.56	50.41	9.9	10.13	0.3	653.3
2020-06-23	22:38:00	48.98	56.58	9.29	50.46	8.7	9.91	0.36	656.6
2020-06-23	22:39:00	43.64	56.58	9.2	50.12	8.3	9.91	0.46	643.3
2020-06-23	22:40:00	42.9	56.58	9.46	49.95	8.4	9.91	0.52	637.5
2020-06-23	22:41:00	42.24	56.58	9.5	50.13	9	9.91	0.45	637.1
2020-06-23	22:42:00	40.82	56.58	9.55	50.33	8.6	9.91	0.45	645.5
2020-06-23	22:43:00	38.24	56.58	9.54	50.18	9	9.91	0.45	644.5
2020-06-23	22:44:00	38.04	56.58	9.58	50.25	9	9.91	0.08	647.9
2020-06-23	22:45:00	37.18	56.58	9.57	50.25	10.9	9.91	0.13	647.9
2020-06-23	22:46:00	42.05	56.58	9.67	50.53	7.7	9.91	0.35	662.8
2020-06-23	22:47:00	40.1	56.58	9.58	50.29	9.3	9.91	0.42	652.5
2020-06-23	22:48:00	37.42	56.58	9.44	49.92	8.2	9.91	0.46	638.5
2020-06-23	22:49:00	38.19	56.58	9.43	49.92	12.8	9.91	0.51	636.4
2020-06-23	22:50:00	48.56	58.16	9.55	50.33	8.7	9.91	0.46	646.8
2020-06-23	22:51:00	50.94	58.16	9.55	50.42	11.7	9.91	0.45	650.9
2020-06-23	22:52:00	49.49	58.16	9.55	50.36	8.7	9.91	0.02	652.9
2020-06-23	22:53:00	48.35	58.16	9.64	50.41	12.7	9.91	0.08	656.4
2020-06-23	22:54:00	51.48	58.16	9.69	50.6	14.6	9.91	0.23	663.4
2020-06-23	22:55:00	66.46	58.16	9.7	50.67	9.3	9.65	0.32	668

Max	67.6	58.4	9.7	50.8	14.6	10.1	0.6	672.5
Min	37.2	55.5	9.1	49.9	7.7	9.6	0.0	633.8
Average	47.2	57.0	9.5	50.4	9.5	9.90	0.4	651.6
Variance	38.688876	0.492610383	0.033512	0.042952	1.998956	0.009740437	0.029575	91.11377