Report No. 21783

ORTECH
a Kontrol Energy Company

Report:

Mercury Emission Testing
at the Clean Harbors Sarnia Facility (June 2017)

Date: July 20, 2017



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Report No.: 21783
10 pages, 5 Appendices

Revision History

Version	Date	Summary Changes/Purpose of Revision
1	July 20, 2017	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 29, 2017. 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 2600 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 is provided below:

Mercury Parameter	Average
Dry Reference Concentration ($\mu g/Rm^3$)*	12.5
Dry Adjusted Concentration ($\mu g/Rm^3$)**	10.0

* 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 23.9 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 29, 2017. The spike tubes from each test pair were spiked with increasing amounts of mercury, ranging from 100 ng to 2600 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 two probes in parallel so that the mercury traps were only 1 to 2 inches apart. Each probe was heated to approximately 135°C to prevent condensation of the stack gas on the sampling media. Each mercury trap was also specially designed for sampling at wet sources. Each tube had an extended section of glass to allow for the heating of the stack gas before it came 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 sixty minutes in duration at an approximate sampling rate of approximately one liter per minute.

At approximately five minute time increments 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 2600 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 2017. The pre-spiked mercury traps for Test No. 3 (500 ng) and Test No. 4 (800 ng) were used for spike recovery determination as the concentrations best fit the requirements of the QA/QC criteria (within ±50% of the expected concentration). The concentration in the Test No. 3 spiked tube (500 ng) was 70% of the average mercury collected for Test No. 2, Test No. 3 and Test No. 4 (717 ng). The concentration in the Test No. 4 spiked tube (800 ng) was 112% of the average mercury collected for the three tests (717 ng).

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. 3 and Test No. 4 fell within the spike range criterion stated in the test method. The spike recovery for Test No. 3 was 94.2% and the spike recovery for Test No. 4 was 98.3%. 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 6.78 µg/Rm^3 (Tube Pair No. 5, not reported) to a high of 10.9 µg/Rm^3 for the six tests performed. The paired trap agreement was 0.4% for Test No. 2, 1.8% for Test No. 3, and 0.9% for Test No. 4.

6. RESULTS

Six mercury runs were collected during one day of sampling on June 29, 2017. 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 2600 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. 2, Test No. 3 and Test No. 4 are reported.

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

Mercury emission sample analyses for Test No. 2, Test No. 3 and Test No. 4 are provided in Table 3. Mercury was detected in Section 1 of each trap in quantities greater than the method detection limit (0.46 ng) in all of the traps. Mercury was also collected in Section 2 in one of the six traps in quantities greater than or equal to the method detection limit. However, the amount detected in Section 2 was less than 0.05% of the mercury collected in Section 1, indicating that there was no breakthrough or potential loss of mercury. US EPA Method 30B states 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. 2, Test No. 3 and Test No. 4. 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 2600 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 traps for Test No. 3 (500 ng) and Test No. 4 (800 ng) were used for spike recovery determination as the concentrations best fit the requirements of the QA/QC criteria (within ±50% of the expected concentration).

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 0.4% for Test No. 2, 1.8% for Test No. 3, and 0.9% for Test No. 4. The mercury emission data from the total vapour phase mercury tests is provided below:

Mercury Parameter	Test 2	Test 3	Test 4	Average
Dry Reference Conc. (µg/Rm^3)*	11.5	13.6	12.4	12.5
Dry Adjusted Conc. (µg/Rm^3)**	9.35	10.9	9.83	10.0

* 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 for Test No. 3 and Test No. 4 are shown in Table 3; the spike recovery for Test No. 3 was 94.2% and the spike recovery for Test No. 4 was 98.3%. 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 (CO, HCl, CO_2, H_2O, THC, O_2, SO_2)
- stack gas opacity
- carbon injection rate

During the emission testing program, the average powdered activated carbon (PAC) injection rate was 23.9 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 29, 2017	9:31	10:31	60
2	June 29, 2017	10:46	11:46	60
3	June 29, 2017	12:02	13:02	60
4	June 29, 2017	13:15	14:15	60
5	June 29, 2017	14:27	15:27	60
6	June 29, 2017	15:37	16:37	60

Note: All test times match plant time (i.e. daylight savings 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**	%
2	A ***	677.1	<0.46	677	0.0589	11.5	9.31	-
	B	618.2	<0.46	618	0.0534	11.6	9.39	-
	Average					11.5	9.35	0.4
3	A	801.0	<0.46	801	0.0578	13.9	11.1	-
	B***	806	0.6	807	0.0603	13.4	10.7	-
	Average					13.6	10.9	1.8
4	A***	702	<0.46	702	0.0572	12.3	9.74	-
	B	699.4	<0.46	699	0.0560	12.5	9.92	-
	Average					12.4	9.83	0.9
Average				717		12.5	10.0	

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 (250 ng for Test No. 2, 500 ng for Test No. 3, and 800 ng for Test No. 4).

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*	%
2	927	0.0589	15729	618.2	0.0534	11576	4153	N/A
3	1307	0.0603	21673	801.0	0.0578	13864	7809	94.2
4	1502	0.0572	26245	699.4	0.0560	12497	13748	98.3
Average								96.3

Note: The spike tubes were spiked with mercury by the analytical laboratory prior to sampling. The original spike concentrations were 250 ng for Test No. 2, 500 ng for Test No. 3, and 800 ng for Test No. 4.
"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 OL387169 Spiked	0.996	50.20	115.49	65.29	29.2	1.5	24.1	63.84	0.0638
T1B OL411821	0.983	19.52	75.08	55.56	29.2	2.0	26.5	53.25	0.0533
T2A OLC038307 Spiked	0.996	21.34	82.00	60.66	29.2	1.5	25.9	58.94	0.0589
T2B OL411814	0.983	79.04	134.90	55.86	29.2	2.0	27.2	53.40	0.0534
T3A OL411818	0.996	84.20	144.00	59.80	29.2	1.5	27.5	57.78	0.0578
T3B OL426799 Spiked	0.983	37.60	101.10	63.50	29.2	2.0	29.2	60.29	0.0603
T4A OL331391 Spiked	0.996	47.72	107.90	60.18	29.2	1.5	32.2	57.23	0.0572
T4B OL411752	0.983	3.08	63.10	60.02	29.2	2.0	34.6	55.97	0.0560
T5A OL411783	0.996	10.70	74.75	64.05	29.2	1.5	34.9	60.39	0.0604
T5B OL336493 Spiked	0.983	65.58	119.03	53.45	29.2	2.0	35.5	49.69	0.0497
TAB OL331404 Spiked	0.996	84.25	144.39	60.14	29.2	1.5	35.0	56.68	0.0567
T6B OL411922	0.983	26.20	86.40	60.20	29.2	2.0	35.9	55.90	0.0559

* dry at 25°C and 1 atmosphere

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 29, 2017
Project No.:	21783

Train ~~A~~ P OL411821

Tube Identification:	OL411821	Spiked	Yes / No
Spike Concentration	~~100~~ 100 ng		

Measuring Device	MII
Control Module	COE 200154
Barometer	ENV. CAN

Barometric Pressure	29.17

Clock Time	Dry Gas Meter L	Meter Temperature Outlet AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	50.70	22		1.5	2
5	55.8	23		1.5	4
10	60.9	23		1.5	5
15	66.6	23		1.5	5
20	72.4	24		1.5	5
25	77.9	24		1.5	5
30	83.5	24		1.5	5
35	89.1	25		1.5	5
40	94.5	25		1.5	6
45	99.7	25		1.5	6
50	105.00	25		1.5	6
55	110.1	25		1.5	6
60	115.45	25		1.5	6

Start Time:	931	Initial Leak Check	2.01 Lpm@ 24 "Hg	DGMCF:	0.996
Finish Time:	1031	Final Leak Check	Lpm@ "Hg	Sample Volume:	63.29
				Average DGM Temp:	24.1
				Average DGM Δ H:	1.5

Train B OL3571169

Tube Identification:	OL3571169	Spiked	Yes / ~~No~~
Spike Concentration	~~100~~ ng		

Measuring Device	MII
Control Module	10117

Clock Time	Dry Gas Meter L	Meter Temperature Outlet AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	19.52	23		2.0	2
5	24.0	24		2.0	4
10	28.6	25		2.0	5
15	31.9	26		2.0	5
20	36.6	26		2.0	5
25	41.5	26		2.0	7
30	46.4	27		2.0	8
35	51.3	27		2.0	8
40	56.0	28		2.0	8
45	60.7	24		2.0	8
50	65.2	24		2.0	8
55	70.1	24		2.0	8
60	75.08	25		2.0	8

Start Time:	931	Initial Leak Check	2.01 Lpm@ 21 "Hg	DGMCF:	0.983
Finish Time:	1031	Final Leak Check	Lpm@ "Hg	Sample Volume:	55.56
				Average DGM Temp:	26.5
				Average DGM Δ H:	2.0

Operator: [signature]

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 29, 2017
Project No.:	21783

Measuring Device	MII
Control Module	COE20119
Barometer	ENV. CAN.

Barometric Pressure	29.17

Train A

Tube Identification:	OLC038307	Spiked	Yes (No)
Spike Concentration	750 ng		

Clock Time	Dry Gas Meter L	Meter Temperature Outlet ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	21.34	25		1.5	4
5	26.6	26		1.5	7
10	31.5	26		1.5	7
15	36.5	26		1.5	7
20	41.6	26		1.5	7
25	46.6	26		1.5	7
30	51.7	26		1.5	7
35	56.8	26		1.5	7
40	61.8	26		1.5	7
45	66.8	26		1.5	7
50	71.9	26		1.5	7
55	76.9	26		1.5	7
60	82.00	26		1.5	7

Start Time:	1046	Initial Leak Check	<0.01 Lpm@	15 "Hg	DGMCF: 0.996
Finish Time:	1146	Final Leak Check	Lpm@	"Hg	Sample Volume: 60.68
					Average DGM Temp: 26.0
					Average DGM Δ H: 1.5

Train B

Tube Identification:	OL411814	Spiked	Yes (No)
Spike Concentration	— ng		

Measuring Device	MII
Control Module	1011

Clock Time	Dry Gas Meter L	Meter Temperature Outlet ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	79.04	24		2.0	4
5	83.7	25		2.0	6
10	88.4	26		2.0	7
15	93.1	27		2.0	7
20	97.7	28		2.0	7
25	102.3	28		2.0	7
30	106.9	28		2.0	7
35	111.7	28		2.0	7
40	116.3	28		2.0	7
45	120.9	28		2.0	7
50	125.6	28		2.0	7
55	130.3	28		2.0	7
60	134.90	28		2.0	7

Start Time:	1046	Initial Leak Check	<0.01 Lpm@	15 "Hg	DGMCF: 0.983
Finish Time:	1146	Final Leak Check	Lpm@	"Hg	Sample Volume: 55.46
					Average DGM Temp: 27.2
					Average DGM Δ H: 2.0

Operator:	DO LS

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 29, 2017
Project No.:	21783

Train A OL411818

Tube Identification: ~~OL089309~~	Spiked (Yes) No
Spike Concentration ~~250~~	ng

Measuring Device	MII
Control Module	CoE 20015
Barometer	ENV. CAN

Barometric Pressure	29.16

Clock Time	Dry Gas Meter L	Meter Temperature Outlet °C	Meter Temperature Inlet °C	Meter Pressure Δ H H_2O	Pump Vacuum "Hg Gauge
0	84.2	25		1.5	2
5	89.1	26		1.5	4
10	94.1	27		1.5	5
15	99.1	28		1.5	7
20	104.2	28		1.5	8
25	109.1	28		1.5	8
30	114.2	28		1.5	8
35	119.1	28		1.5	8
40	124.1	28		1.5	8
45	129.2	28		1.5	8
50	134.3	28		1.5	8
55	139.1	28		1.5	8
60	144.00	28		1.5	8

Start Time:	1202	Initial Leak Check	<.01 Lpm@ 15 "Hg	DGMCF:	0.996
Finish Time:	1302	Final Leak Check	<.01 Lpm@ 16 "Hg	Sample Volume:	59.9
				Average DGM Temp:	27.3
				Average DGM Δ H:	1.5

Train B ~~OL426199~~

Tube Identification: ~~OL411818~~	Spiked Yes (No)
Spike Concentration 250	ng

Measuring Device	MII
Control Module	

Clock Time	Dry Gas Meter L	Meter Temperature ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H H_2O	Pump Vacuum "Hg Gauge
0	37.6	24		2.0	3
5	42.9	25		2.0	4
10	48.2	26		2.0	7
15	53.5	27		2.0	7
20	58.8	28		2.0	7
25	64.1	29		2.0	7
30	69.4	30		2.0	7
35	74.7	31		2.0	7
40	79.9	32		2.0	7
45	85.3	32		2.0	7
50	90.6	32		2.0	7
55	95.9	32		2.00	7
60	101.10	32		2.0	7

Start Time:	1202	Initial Leak Check	<.01 Lpm@ 15 "Hg	DGMCF:	0.983
Finish Time:	1302	Final Leak Check	<.01 Lpm@ 15 "Hg	Sample Volume:	63.95
				Average DGM Temp:	29.2
				Average DGM Δ H:	2.0

Operator:

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 29, 2017
Project No.:	21783

Measuring Device	MII
Control Module	CUE 2001
Barometer	ENV. CAN

Train A

Tube Identification:	OL331391	Spiked	(Yes) No
Spike Concentration	2000 ng		

Barometric Pressure	29.15

Clock Time	Dry Gas Meter L	Meter Temperature Outlet °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O	Pump Vacuum "Hg Gauge
0	47.72	29		1.5	4
5	52.6	30		1.5	4
10	57.6	31		1.5	4
15	62.7	32		1.5	4
20	67.5	33		1.5	4
25	72.5	33		1.5	4
30	77.6	33		1.5	4
35	82.7	33		1.5	4
40	87.8	33		1.5	4
45	92.9	33		1.5	4
50	97.9	33		1.5	4
55	102.9	33		1.5	4
60	107.90	33		1.5	4

Start Time:	1315	Initial Leak Check	<.01 Lpm@ 15 "Hg	DGMCF:	0.996
Finish Time:	1415	Final Leak Check	<.01 Lpm@ 15 "Hg	Sample Volume:	32.2
				Average DGM Temp:	60.18
				Average DGM Δ H:	1.5

Train B

Tube Identification:	OL411752	Spiked	Yes (No)
Spike Concentration	— ng		

Measuring Device	MII
Control Module	1011

Clock Time	Dry Gas Meter L	Meter Temperature Outlet °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O	Pump Vacuum "Hg Gauge
0	3.056	28		2.0	3
5	8.1	30		2.0	4
10	13.2	32		2.0	5.5
15	18.2	34		2.0	7
20	23.2	36		2.0	7
25	28.3	36		2.0	7
30	33.3	36		2.0	7
35	38.4	36		2.0	7
40	43.4	36		2.0	7
45	48.3	36		2.0	7
50	53.2	36		2.0	7
55	58.1	36		2.0	7
60	63.10	36		2.0	7

Start Time:	1315	Initial Leak Check	<.01 Lpm@ 15 "Hg	DGMCF:	0.983
Finish Time:	1415	Final Leak Check	<.01 Lpm@ 15 "Hg	Sample Volume:	60.02
				Average DGM Temp:	34.5
				Average DGM Δ H:	2.0

Operator:	DM

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 29, 2017
Project No.:	21783

Measuring Device	MII
Control Module	COF 2019
Barometer	ENV. CAN

Train A

Tube Identification:	OL411783	Spiked Yes (No)	
Spike Concentration	— ng		

Barometric Pressure	29.15

Clock Time	Dry Gas Meter L	Meter Temperature ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	10.70	33		1.5	3
5	16.0	35		1.5	7
10	21.3	35		1.5	7
15	26.6	35		1.5	7
20	31.9	35		1.5	7
25	37.2	35		1.5	7
30	42.5	35		1.5	7
35	47.8	35		1.5	7
40	53.1	35		1.5	7
45	58.4	35		1.5	7
50	63.7	35		1.5	7
55	69.0	35		1.5	7
60	74.15	35		1.5	7

Start Time:	1427	Initial Leak Check	<0.01 Lpm@ 16 "Hg	DGMCF:	0.996
Finish Time:	1527	Final Leak Check	<0.01 Lpm@ 16 "Hg	Sample Volume:	64.05
				Average DGM Temp:	35.0
				Average DGM Δ H:	

Train B

Tube Identification:	OL 336493	Spiked (Yes) No	
Spike Concentration	1400 ng		

Measuring Device	MII
Control Module	1017

Clock Time	Dry Gas Meter L	Meter Temperature ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	65.35	33		2.0	4
5	70.05	34		2.0	7
10	74.59	35		2.0	8
15	79.04	36		2.0	8
20	83.58	36		2.0	8
25	88.05	36		2.0	8
30	92.58	36		2.0	8
35	97.04	36		2.0	8
40	101.58	36		2.0	8
45	106.05	36		2.0	8
50	110.58	36		2.0	8
55	115.09	36		2.0	8
60	119.03	36		2.0	8

Start Time:	1427	Initial Leak Check	<0.01 Lpm@ 16 "Hg	DGMCF:	0.953
Finish Time:	1527	Final Leak Check	Lpm@ "Hg	Sample Volume:	
				Average DGM Temp:	
				Average DGM Δ H:	

Operator:	DD MG

ORTECH Environmental
Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	June 29, 2017
Project No.:	21783

Measuring Device	MII
Control Module	CGC 200154
Barometer	ENV. CAN

Train A

Tube Identification:	OL 33 4047	Spiked	Yes (No)
Spike Concentration	2600 ng		

Barometric Pressure	29.15

Clock Time	Dry Gas Meter L	Meter Temperature Outlet ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	84.25	35		1.5	3
5	89.3	35		1.5	4
10	94.3	35		1.5	7
15	99.4	35		1.5	7
20	104.4	35		1.5	7
25	109.5	35		1.5	7
30	114.6	35		1.5	7
35	119.6	35		1.5	7
40	124.6	35		1.5	7
45	129.6	35		1.5	7
50	134.6	35		1.5	7
55	139.6	35		1.5	7
60	144.36	35		1.5	7

Start Time:	1537	Initial Leak Check	<0.01	Lpm@ 10 "Hg	DGMCF: 0.996
Finish Time:	1637	Final Leak Check	<0.01	Lpm@ 17 "Hg	Sample Volume: 60.14
					Average DGM Temp: 35
					Average DGM Δ H: 1.5

Train B

Tube Identification:	OL 411922	Spiked	Yes (No)
Spike Concentration	— ng		

Measuring Device	MII
Control Module	10115

Clock Time	Dry Gas Meter L	Meter Temperature Outlet ~~Outlet~~ AVG °C	Meter Temperature Inlet °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	26.26	35		2.0	4
5	31.1	36		2.0	5
10	36.1	36		2.0	7
15	41.1	36		2.0	7
20	46.1	36		2.0	7
25	51.1	36		2.0	7
30	56.0	36		2.0	7
35	61.1	36		2.0	7
40	66.1	36		2.0	7
45	71.2	36		2.0	7
50	76.3	36		2.0	7
55	81.3	36		2.0	7
60	86.40	36		2.0	7

Start Time:	1537	Initial Leak Check	<0.01	Lpm@ 10 "Hg	DGMCF: 0.993
Finish Time:	1637	Final Leak Check	<0.01	Lpm@ 15 "Hg	Sample Volume: 60.20
					Average DGM Temp: 36
					Average DGM Δ H: 2.0

Operator: [illegible]

APPENDIX 3

ORTECH Equipment Calibration Data
(4 pages)

ORTECH Environmental

Dry Gas Meter Calibration Data

Calibration Procedure	03-J004
Meter Number	Vost 5
Date	June 28, 2017
Barometric Pressure	29.56
System Leak Check	<0.01 lpm @ 24 "Hg

MII NUMBERS	
DGM	COE 20018
Gasometer	A01463
Barometer	COE 20028

Calibrated By	David Utley
Signature	
Reviewed and Accepted By	

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

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

Gasometer Reading cm			Gasometer Volume	Gasometer Temperature	DGM Reading L		DGM Volume	DGM Average Temperature	DGM Pressure	DGM Outlet	DGM Calibration	Time	Flow Rate
Initial	Final	cm	ft^3	°C	Initial	Final	ft^3	°C	in. H_2O	°C	Factor	min.	lpm
64.30	17.90	46.40	2.183	22.0	72.44	136.15	2.250	32.0	1.5	32.0	0.999	61	1.0
67.30	43.80	23.50	1.105	22.0	12.54	44.64	1.134	31.0	1.5	31.0	1.001	31	1.0
84.40	64.30	20.10	0.945	22.0	44.64	72.44	0.982	31.0	1.5	31.0	0.989	27	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	0.996

ORTECH Environmental

Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Jenco 765**
MII	**COE 20018**
Date	**June 28, 2017**
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	NA	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	151		-0.7
200	200		0.0
300	300		0.0
400	401		-0.3
500	501		-0.2
600	600		0.0

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

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 2
Date	June 28, 2017
Barometric Pressure	29.59
System Leak Check	<0.01 lpm @ 21"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

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

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
84.55	70.50	14.05	0.661	22.0	6.200	25.490	0.681	29.0	2.0	29.0	0.988	20	1.0
70.50	55.90	14.60	0.687	22.0	25.490	45.810	0.718	32.0	2.0	32.0	0.985	21.3	1.0
83.60	64.70	18.90	0.889	22.0	45.810	72.540	0.944	34.0	2.0	34.0	0.975	28	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	0.983

ORTECH Environmental

Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Nutech**
MII	**A10117**
Date	**June 28, 2017**
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	NA	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	151		-0.7
200	200		0.0
300	301		-0.3
400	400		0.0
500	500		0.0
600	600		0.0

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

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

Project Number: 2010947

Turn-around: Standard

Plant: ORTECH Environmental
Contact: David Utley
Phone: (905)-822-4120*235
Email: dutley@ortech.ca

Date: 2017-07-14
Analyst(s): Anna Rogalski
Method: EPA 7473
Method Uncertainty: ± 10%

Trap ID	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
OL387169	T1A	727.0	0.0	**727.0**		100	0.00%			Red particulate on front plug
OL411821	T1B	777.1	0.0	**777.1**			0.00%			Red particulate on front plug
OLC038307	T2A	927.1	0.4	**927.5**		250	0.04%			Red particulate on front plug
OL411814	T2B	618.2	0.0	**618.2**			0.00%			
OL411818	T3A	801.0	0.4	**801.4**			0.05%			Red particulate on front plug
OL426799	T3B	1306	0.6	**1307**		500	0.05%			Red particulate on front plug
OL331391	T4A	1502	0.1	**1502**		800	0.00%			Red particulate on front plug
OL411752	T4B	699.4	0.4	**699.8**			0.05%			Red particulate on front plug
OL411783	T5A	476.1	0.0	**476.1**			0.00%			
OL336493	T5B	1838	0.8	**1839**		1400	0.04%			
OL331404	T6A	3183	0.7	**3184**		2600	0.02%			
OL411922	T6B	491.0	1.1	**492.1**			0.22%			

MDL = 0.46 ng	LOQ = 5 ng

[1] Total Mass = PF+AGS+S1+S2

[2] Breakthrough = S2 / (PF+AGS+S1)

[3] Spike Recovery = S3 / Spike Level

For PS-12B Only

R = Data invalidation qualifier. Refer to notes

Ohio Lumex Co., Inc. 30350 Bruce Industrial Pkwy, Solon, OH 44139 | Phone: (440)264-2500 | Fax: (440) 264-2501

APPENDIX 5

Clean Harbors Process Data
(12 pages)

Test No. 1		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Primary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
29/06/2017	9:31:00	39.12	12.64	174.54	184.77	4.81	288.75	17.18	24.23	29292	10506	94059	1341.6	1075.7	483.4	204.0	199.4	-12.30	-39.80	-83.70	178.63
29/06/2017	9:32:00	39.08	13.01	175.44	186.71	4.78	286.88	17.18	24.31	28850	10506	92962	1344.6	1076.1	482.8	203.5	199.4	-7.80	-37.95	-76.69	188.94
29/06/2017	9:33:00	39.24	12.92	174.84	185.22	4.63	277.80	17.18	23.65	29292	10506	94628	1345.9	1076.5	482.3	202.5	199.4	-14.75	-42.75	-87.15	179.19
29/06/2017	9:34:00	39.02	12.70	175.35	187.38	4.54	272.40	17.18	23.44	28940	10399	92602	1348.6	1075.6	481.6	202.0	198.3	-7.40	-34.40	-75.30	185.38
29/06/2017	9:35:00	38.87	12.54	174.88	185.13	4.67	279.98	17.18	24.47	29652	10517	93683	1349.4	1076.0	481.2	201.0	198.3	-16.00	-46.90	-88.69	170.31
29/06/2017	9:36:00	39.54	12.91	174.12	185.45	4.75	284.85	17.18	24.47	29299	10517	95142	1345.5	1074.3	481.3	201.0	198.3	-12.95	-42.75	-84.15	180.75
29/06/2017	9:37:00	39.26	12.33	175.35	184.19	4.61	276.60	17.18	24.02	29472	10629	95881	1344.4	1073.1	480.9	200.5	198.3	-19.60	-49.05	-92.21	161.81
29/06/2017	9:38:00	39.32	12.22	175.07	185.18	4.34	260.33	17.18	23.18	29120	10427	93700	1344.5	1071.7	480.9	200.5	197.3	-12.80	-43.05	-81.56	167.00
29/06/2017	9:39:00	38.97	12.74	175.59	184.19	4.53	271.65	17.18	23.44	29120	10545	93169	1343.1	1071.8	480.8	200.0	197.3	-13.90	-43.35	-84.94	184.63
29/06/2017	9:40:00	40.01	12.05	174.97	186.62	4.61	276.30	17.18	24.57	28940	10528	92821	1351.0	1073.3	480.5	200.0	197.3	-8.45	-35.20	-75.86	189.69
29/06/2017	9:41:00	38.87	12.02	175.02	184.86	4.52	271.35	17.18	24.52	29389	10534	94306	1348.1	1074.2	480.3	199.5	197.3	-11.30	-38.90	-85.58	180.75
29/06/2017	9:42:00	39.33	11.88	175.25	185.85	4.83	289.73	17.18	24.49	28940	10433	93046	1350.8	1074.4	480.3	199.5	197.3	-9.00	-36.10	-77.36	188.06
29/06/2017	9:43:00	39.75	12.46	174.31	184.77	4.63	277.88	17.18	23.73	29832	10573	94211	1348.6	1074.7	481.3	199.5	196.3	-20.60	-50.10	-91.24	175.25
29/06/2017	9:44:00	39.90	12.02	174.41	185.90	4.57	274.35	17.18	23.63	29120	10573	93372	1349.9	1073.4	481.1	199.5	196.3	-13.80	-41.85	-84.75	180.19
29/06/2017	9:45:00	39.99	12.50	174.60	185.09	4.40	264.15	17.18	24.54	29742	10573	93004	1346.5	1072.7	480.9	199.5	196.3	-18.05	-48.35	-89.06	154.50
29/06/2017	9:46:00	39.09	12.98	174.22	186.75	4.65	278.85	17.18	24.28	29299	10556	93253	1346.0	1072.5	480.3	199.5	196.3	-12.85	-42.65	-82.13	162.69
29/06/2017	9:47:00	39.72	12.40	174.41	186.21	4.67	280.43	17.18	24.60	29659	10539	94424	1343.5	1072.6	481.0	199.5	196.3	-13.40	-41.85	-85.91	182.44
29/06/2017	9:48:00	39.63	12.65	174.93	187.74	4.14	248.48	17.18	23.65	28940	10427	93742	1345.3	1073.2	480.9	199.5	196.3	-9.80	-39.55	-78.15	190.69
29/06/2017	9:49:00	40.04	13.08	174.78	187.07	4.45	267.08	17.51	23.65	29216	10545	93752	1341.9	1073.2	480.8	199.0	196.3	-14.10	-42.05	-82.69	181.69
29/06/2017	9:50:00	39.20	12.23	174.54	187.52	4.34	260.48	17.51	23.42	29037	10438	92926	1347.1	1073.3	479.8	198.5	196.3	-7.45	-32.90	-78.34	190.69
29/06/2017	9:51:00	39.32	12.01	174.22	187.43	4.59	274.28	17.51	23.23	29472	10545	94904	1342.8	1073.0	479.7	198.0	195.3	-19.60	-48.05	-91.31	176.38
29/06/2017	9:52:00	39.72	12.57	174.22	187.61	4.71	282.68	17.51	23.84	29299	10427	92594	1339.6	1071.8	479.5	198.0	195.3	-12.15	-41.35	-84.34	183.88
29/06/2017	9:53:00	39.51	12.94	175.02	186.89	4.52	271.43	17.36	23.91	29569	10640	94558	1337.5	1070.8	479.5	197.5	195.3	-15.50	-46.60	-88.35	156.44
29/06/2017	9:54:00	39.80	12.25	174.35	184.77	4.45	267.15	17.36	23.94	29562	10421	94149	1336.8	1070.2	478.7	197.5	195.3	-14.45	-43.15	-84.15	167.25
29/06/2017	9:55:00	39.29	12.61	174.65	184.41	4.44	266.63	17.36	24.47	29209	10511	94183	1337.6	1069.5	478.8	197.5	195.3	-12.20	-39.45	-86.29	183.19
29/06/2017	9:56:00	39.35	12.31	173.70	185.27	4.53	272.03	17.36	23.65	29037	10511	93902	1340.4	1070.4	477.9	197.0	195.3	-8.60	-37.50	-78.45	189.13
29/06/2017	9:57:00	40.11	11.63	174.22	182.16	4.38	262.50	17.44	23.26	29389	10511	92645	1338.4	1070.2	478.5	197.5	195.3	-15.00	-45.95	-84.19	182.50
29/06/2017	9:58:00	39.21	11.90	173.75	182.30	4.59	274.13	17.44	23.52	29120	10511	93619	1341.3	1070.4	478.1	197.5	194.3	-9.85	-37.30	-77.40	186.69
29/06/2017	9:59:00	39.41	12.22	174.54	181.89	3.94	236.25	17.36	23.31	29562	10517	93275	1337.6	1069.5	478.4	198.0	194.3	-19.30	-47.95	-89.63	174.63
29/06/2017	10:00:00	39.06	12.56	173.88	183.06	3.88	232.80	17.36	23.15	29299	10517	94322	1336.8	1068.6	478.3	198.5	194.3	-17.95	-51.95	-85.80	151.56
29/06/2017	10:01:00	40.14	12.14	175.21	184.68	4.69	280.35	17.36	24.47	29396	10517	94763	1334.0	1067.9	478.3	199.0	194.3	-16.80	-47.80	-87.08	154.88
29/06/2017	10:02:00	39.35	12.39	173.84	182.93	4.47	268.28	17.36	24.44	29120	10517	96070	1334.5	1068.7	478.0	198.5	194.3	-19.35	-53.55	-89.48	145.88
29/06/2017	10:03:00	39.77	11.69	174.69	183.11	4.39	263.10	17.36	23.65	29652	10517	93769	1337.8	1069.2	478.2	199.0	194.3	-10.90	-40.25	-80.74	179.06
29/06/2017	10:04:00	39.41	11.25	173.64	181.71	3.96	237.53	17.36	24.41	29652	10517	95789	1341.1	1070.2	477.2	198.5	195.4	-24.75	-57.40	-90.11	143.31
29/06/2017	10:05:00	39.00	12.17	174.45	184.41	4.62	277.28	17.36	24.44	29216	10517	93215	1337.1	1068.9	477.5	198.5	195.4	-11.10	-39.40	-82.88	180.19
29/06/2017	10:06:00	39.92	12.00	173.22	180.77	4.67	280.13	17.36	23.10	29465	10517	96052	1342.6	1069.7	476.7	198.0	195.4	-27.15	-61.45	-95.36	144.00
29/06/2017	10:07:00	38.72	12.24	174.50	182.79	4.52	271.35	17.36	23.21	29659	10528	94484	1337.0	1068.3	477.1	198.5	195.4	-16.55	-47.05	-88.05	175.63
29/06/2017	10:08:00	39.47	11.61	173.45	182.39	4.65	278.85	17.36	24.44	29742	10421	96551	1336.8	1067.4	476.7	198.5	195.4	-28.45	-60.05	-97.91	138.44
29/06/2017	10:09:00	39.29	12.42	173.98	183.24	4.61	276.83	17.36	23.73	29389	10433	94931	1332.1	1066.1	477.2	199.0	195.4	-16.85	-44.00	-88.09	156.31
29/06/2017	10:10:00	39.72	11.65	173.84	179.55	4.42	264.90	17.36	23.13	29479	10539	96708	1336.4	1066.4	477.2	198.5	195.4	-28.80	-58.30	-99.60	148.38
29/06/2017	10:11:00	39.84	11.54	173.79	182.79	4.48	268.50	17.36	23.23	29209	10438	93597	1335.0	1066.0	476.8	199.0	195.4	-11.45	-39.10	-83.06	183.19
29/06/2017	10:12:00	40.16	11.95	174.03	181.49	4.10	246.00	17.36	24.02	29742	10545	97231	1338.0	1067.3	476.2	198.5	195.4	-28.60	-59.90	-98.33	145.56
29/06/2017	10:13:00	39.30	11.89	173.94	185.18	4.47	268.20	17.36	24.02	29389	10444	92172	1335.5	1066.5	476.4	198.5	195.4	-10.35	-36.50	-80.70	181.44
29/06/2017	10:14:00	38.84	11.75	172.89	181.98	4.57	273.98	17.36	24.52	29832	10545	95640	1340.8	1067.6	476.1	198.0	195.4	-32.05	-62.50	-102.64	145.50
29/06/2017	10:15:00	39.47	11.57	173.55	183.47	4.46	267.23	17.36	24.44	29486	10433	93259	1335.3	1065.8	476.4	198.0	195.4	-16.20	-46.40	-85.95	174.31
29/06/2017	10:16:00	39.51	11.99	173.88	180.45	4.47	268.28	17.06	23.81	30011	10556	96492	1332.9	1065.0	475.7	198.0	195.4	-30.75	-60.20	-100.95	139.06
29/06/2017	10:17:00	39.33	11.53	174.17	182.48	4.06	243.75	17.06	23.18	29472	10556	94585	1328.1	1063.3	475.9	198.0	195.4	-14.80	-43.05	-86.33	158.19
29/06/2017	10:18:00	40.17	11.52	173.41	180.36	4.66	279.60	17.06	23.28	29921	10657	93352	1329.3	1063.1	475.6	198.0	194.3	-22.60	-48.30	-101.55	174.75
29/06/2017	10:19:00	39.12	15.15	174.35	182.12	4.57	274.35	17.06	23.91	29037	10449	94440	1333.0	1063.2	475.2	198.0	194.3	-8.40	-36.65	-78.79	180.94
29/06/2017	10:20:00	39.45	15.08	174.22	180.54	4.53	271.58	17.06	23.39	29921	10449	95454	1337.8	1069.0	477.9	198.0	194.3	-27.40	-57.05	-100.50	164.06
29/06/2017	10:21:00	39.26	15.08	174.74	184.50	4.65	279.75	17.06	24.31	29037	10348	93813	1340.0	1071.4	480.8	199.5	194.3	-10.50	-40.15	-79.54	187.25
29/06/2017	10:22:00	39.75	14.96	174.41	182.61	4.54	272.40	17.06	23.26	30101	10567	95055	1345.8	1073.7	481.5	199.5	194.3	-23.05	-52.65	-99.86	173.81
29/06/2017	10:23:00	39.72	14.17	174.07	185.13	3.89	233.18	17.06	23.49	29299	10466	94689	1341.5	1072.1	481.8	200.0	195.4	-13.70	-42.30	-84.23	177.44
29/06/2017	10:24:00	39.69	13.40	173.13	181.40	4.11	246.68	17.06	23.60	29569	10567	94106	1342.5	1071.6	481.0	200.0	195.4	-21.30	-49.20	-93.86	151.94
29/06/2017	10:25:00	39.45	13.62	174.31	184.05	4.01	240.83	17.06	23.26	29389	10466	94423	1339.5	1069.9	480.8	200.0	195.4	-15.25	-45.60	-84.23	160.81
29/06/2017	10:26:00	39.72	14.44	173.84	182.21	4.48	268.58	17.06	24.49	29659	10579	92912	1342.0	1069.5	480.0	200.0	195.4	-15.55	-44.15	-88.58	179.50
29/06/2017	10:27:00	39.92	13.35	173.60	183.15	4.47	267.98	17.06	23.97	29120	10365	92872	1344.8	1069.3	479.5	200.0	195.4	-8.65	-34.45	-78.34	185.69
29/06/2017	10:28:00	38.96	13.65	173.36	181.04	4.42	265.05	17.06	23.23	29569	10573	94860	1349.3	1070.5	479.5	199.5	195.4	-16.90	-44.40	-93.23	179.50
29/06/2017	10:29:00	40.64	14.08	172.61	182.52	4.71	282.60	17.06	24.47	28857	10461	93093	1353.0	1071.5	480.2	200.0	195.4	-5.60	-31.85	-77.59	186.00
29/06/2017	10:30:00	40.50	13.93	173.36	179.91	4.60	276.68	17.06	23.65	29569	10579	94457	1355.4	1075.0	481.9	200.5	195.4	-19.05	-45.55	-94.16	174.38
29/06/2017	10:31:00	40.29	14.31	173.17	181.98	4.53	271.80	17.06	24.26	29479	10472	94147	1357.3	1075.5	482.9	201.0	196.4	-11.75	-39.80	-82.58	177.88

June 29/2017	Waste Flows							Flows	Air Flows	Temperatures							Pressures			
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209c	FT-260c	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
Max	40.64	15.15	175.59	187.74	4.83	289.73	17.51	24.60	30101	10657	97231	1357.3	1076.5	483.4	204.0	199.4	-5.60	-31.85	-75.30	190.69
Min	38.72	11.25	172.61	179.55	3.88	232.80	17.06	23.10	28850	10348	92172	1328.1	1063.1	475.2	197.0	194.3	-32.05	-62.50	-102.64	138.44
Average	39.52	12.65	174.24	183.89	4.48	268.75	17.24	23.86	29395	10507	94194	1341.6	1070.7	479.3	199.2	195.9	-15.83	-44.88	-86.71	171.67
Variance	0.18	0.96	0.44	4.71	0.05	186.40	0.02	0.25	89779	4064	1315055	38.4	11.4	4.4	2.0	1.8	40.69	56.72	50.82	225.92

Test No. 1

		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205CORR	AT-213A	AT-213B	AT-213C	AT-259CORR	AT-261	AT-263	AT-264
29/06/2017	9:31:00	67.3	31.6	9.17	49.65	11.6	8.75	0.41	335.2
29/06/2017	9:32:00	68.1	32.4	9.34	50.52	12.7	8.81	0.38	336.5
29/06/2017	9:33:00	68.1	31.9	9.45	50.89	12.4	8.70	0.38	339.3
29/06/2017	9:34:00	66.7	30.6	9.38	50.56	12.2	8.51	0.36	335.5
29/06/2017	9:35:00	65.2	30.2	9.32	50.56	12.1	8.71	0.38	333.1
29/06/2017	9:36:00	63.2	29.9	9.38	50.75	11.8	8.67	0.36	335.2
29/06/2017	9:37:00	63.3	29.7	9.34	50.71	10.4	8.64	0.40	331.4
29/06/2017	9:38:00	62.7	29.3	9.23	50.38	11.4	8.65	0.38	323.6
29/06/2017	9:39:00	65.4	28.6	9.14	49.87	10.5	8.86	0.40	319.0
29/06/2017	9:40:00	65.0	29.3	9.35	50.41	11.7	8.83	0.38	329.5
29/06/2017	9:41:00	60.4	29.4	9.42	50.73	10.1	8.72	0.38	338.3
29/06/2017	9:42:00	56.6	28.1	9.29	50.18	11.9	8.59	0.38	334.3
29/06/2017	9:43:00	58.9	26.8	9.25	50.09	10.5	8.68	0.41	332.2
29/06/2017	9:44:00	63.3	27.4	9.35	50.57	11.2	8.69	0.38	337.1
29/06/2017	9:45:00	55.4	27.8	9.29	50.30	10.1	8.69	0.41	334.1
29/06/2017	9:46:00	54.9	28.0	9.21	50.08	11.1	8.83	0.38	329.0
29/06/2017	9:47:00	55.8	29.3	9.25	50.26	10.5	9.04	0.42	330.1
29/06/2017	9:48:00	59.4	29.8	9.33	50.61	12.0	8.94	0.41	335.3
29/06/2017	9:49:00	66.2	28.4	9.34	50.88	10.2	8.78	0.42	342.8
29/06/2017	9:50:00	69.8	28.4	9.21	50.37	12.6	8.78	0.38	331.9
29/06/2017	9:51:00	72.0	28.4	9.26	50.55	10.4	8.85	0.38	331.9
29/06/2017	9:52:00	68.0	27.1	9.33	50.73	11.1	8.76	0.37	331.9
29/06/2017	9:53:00	63.2	26.7	9.30	50.53	10.3	8.73	0.38	331.9
29/06/2017	9:54:00	67.5	26.6	9.18	50.14	11.0	8.83	0.38	322.2
29/06/2017	9:55:00	68.8	26.6	9.16	50.11	10.6	8.93	0.42	320.2
29/06/2017	9:56:00	64.2	26.8	9.30	50.56	12.3	8.94	0.36	329.1
29/06/2017	9:57:00	63.9	26.0	9.30	50.52	10.0	8.71	0.42	334.4
29/06/2017	9:58:00	63.2	25.2	9.22	50.10	12.1	8.75	0.38	331.8
29/06/2017	9:59:00	64.3	26.6	9.22	49.96	10.5	8.88	0.42	335.4
29/06/2017	10:00:00	66.1	28.0	9.25	50.09	12.2	8.79	0.35	338.0
29/06/2017	10:01:00	61.7	28.0	9.20	50.02	10.8	8.77	0.42	336.3
29/06/2017	10:02:00	68.3	28.4	9.10	49.88	12.4	8.96	0.37	328.7
29/06/2017	10:03:00	74.3	28.0	9.20	50.08	11.5	9.07	0.38	334.0
29/06/2017	10:04:00	75.3	27.2	9.34	50.50	12.7	8.85	0.36	350.0
29/06/2017	10:05:00	76.4	27.6	9.32	50.57	11.0	8.72	0.38	351.1
29/06/2017	10:06:00	74.7	26.5	9.21	50.26	12.4	8.86	0.37	335.9
29/06/2017	10:07:00	73.9	25.9	9.23	50.28	11.3	8.95	0.41	335.9
29/06/2017	10:08:00	72.9	25.8	9.29	50.38	11.3	8.86	0.37	337.5
29/06/2017	10:09:00	69.0	27.2	9.17	49.99	11.5	8.88	0.38	332.1
29/06/2017	10:10:00	68.4	27.9	9.11	49.72	11.4	8.96	0.36	329.0
29/06/2017	10:11:00	66.5	27.4	9.17	49.87	11.9	9.06	0.41	333.1
29/06/2017	10:12:00	64.3	27.6	9.21	50.10	12.0	8.97	0.38	335.9
29/06/2017	10:13:00	67.6	27.9	9.25	50.31	11.7	8.76	0.38	340.4
29/06/2017	10:14:00	75.2	26.2	9.18	50.00	12.6	8.86	0.37	335.6
29/06/2017	10:15:00	79.3	24.8	9.22	50.07	10.9	8.89	0.38	335.6
29/06/2017	10:16:00	72.4	24.5	9.26	50.38	11.1	8.84	0.37	338.9
29/06/2017	10:17:00	67.0	25.0	9.17	50.20	11.1	8.83	0.41	337.0
29/06/2017	10:18:00	68.2	25.7	9.05	49.59	11.4	9.01	0.37	327.9
29/06/2017	10:19:00	78.1	26.1	9.19	50.11	12.5	9.08	0.38	332.0
29/06/2017	10:20:00	81.8	25.4	9.26	50.44	12.6	9.01	0.36	339.5
29/06/2017	10:21:00	76.2	25.6	9.32	50.43	12.9	8.69	0.36	364.7
29/06/2017	10:22:00	72.8	25.6	9.32	50.31	13.1	8.63	0.35	372.3
29/06/2017	10:23:00	76.4	25.6	9.43	50.64	12.3	8.59	0.36	374.3
29/06/2017	10:24:00	71.8	25.8	9.44	50.76	12.1	8.56	0.41	368.1
29/06/2017	10:25:00	69.6	24.9	9.33	50.37	12.5	8.57	0.37	360.5
29/06/2017	10:26:00	71.5	24.7	9.21	50.05	13.0	8.80	0.38	355.3
29/06/2017	10:27:00	77.4	24.6	9.29	50.39	13.3	8.84	0.38	357.1
29/06/2017	10:28:00	87.4	25.4	9.41	50.83	12.4	8.64	0.35	363.1
29/06/2017	10:29:00	88.4	25.0	9.37	50.52	14.1	8.50	0.38	363.1
29/06/2017	10:30:00	84.2	23.5	9.34	50.36	13.5	8.63	0.38	367.6
29/06/2017	10:31:00	80.9	24.0	9.46	50.70	11.7	8.47	0.38	382.0

June 29/2017	Analyzers							
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
Test 1	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264
Max	88.4	32.4	9.46	50.89	14.1	9.08	0.42	382.0
Min	54.9	23.5	9.05	49.59	10.0	8.47	0.35	319.0
Average	69.0	27.3	9.27	50.32	11.7	8.79	0.38	339.7
Variance	55.3	3.9	0.01	0.09	0.9	0.02	0.00	195.4

Test No. 2		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Primary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
29/06/2017	10:46:00	38.91	13.73	171.61	182.66	4.12	247.35	17.06	23.65	29389	10573	93346	1340.9	1071.8	479.0	200.0	197.4	-17.75	-43.70	-88.61	169.56
29/06/2017	10:47:00	38.27	15.23	172.18	183.65	4.56	273.75	17.06	24.44	29209	10466	94104	1340.9	1070.6	479.1	200.0	197.4	-12.20	-42.05	-80.66	176.06
29/06/2017	10:48:00	38.55	14.60	171.95	182.21	4.67	279.90	17.06	23.39	29479	10573	93982	1338.3	1069.9	479.2	200.0	197.4	-16.15	-46.85	-87.68	151.44
29/06/2017	10:49:00	38.63	13.55	171.37	182.97	4.70	238.73	17.06	23.21	29120	10466	94746	1337.3	1069.4	479.2	200.0	196.3	-12.35	-40.85	-80.85	160.94
29/06/2017	10:50:00	38.70	13.45	171.80	182.70	3.95	237.00	17.06	23.34	29299	10466	92005	1337.5	1069.1	479.2	200.0	196.3	-13.65	-44.25	-84.34	178.81
29/06/2017	10:51:00	39.21	12.41	171.52	184.95	3.88	232.88	17.25	24.07	29120	10360	93704	1339.8	1069.2	477.8	199.5	196.3	-8.80	-36.00	-78.49	187.31
29/06/2017	10:52:00	38.42	12.34	172.70	188.01	4.56	273.83	17.25	23.26	29299	10567	94413	1336.6	1068.1	477.0	199.0	196.3	-13.05	-41.50	-81.98	176.06
29/06/2017	10:53:00	38.61	12.37	172.94	186.17	4.49	270.08	17.25	23.55	29120	10466	93689	1341.5	1068.0	475.8	197.5	196.3	-8.25	-36.20	-74.14	188.50
29/06/2017	10:54:00	38.78	13.37	172.70	184.95	4.67	280.35	17.25	23.91	29389	10579	94217	1337.5	1067.3	475.9	197.0	195.3	-17.15	-43.50	-86.25	173.69
29/06/2017	10:55:00	39.26	14.25	171.05	184.55	4.61	275.70	17.25	24.23	29209	10466	93233	1339.3	1068.8	477.6	197.0	195.3	-12.45	-40.05	-81.79	182.19
29/06/2017	10:56:00	39.33	13.09	172.70	184.82	3.93	235.80	17.25	23.10	29299	10567	94790	1338.8	1070.7	480.2	197.5	195.3	-13.80	-42.60	-85.01	154.75
29/06/2017	10:57:00	39.30	14.66	171.80	183.38	4.82	288.90	17.25	23.34	29216	10567	92606	1345.1	1072.9	481.2	198.0	195.3	-12.45	-39.55	-80.48	161.00
29/06/2017	10:58:00	39.47	14.68	172.42	183.87	4.88	292.88	17.14	24.54	29037	10455	92701	1346.1	1074.3	482.5	198.5	195.3	-10.10	-38.90	-76.16	184.25
29/06/2017	10:59:00	39.60	12.93	171.05	183.11	4.58	274.50	17.14	24.47	28587	10455	92103	1350.9	1077.3	483.1	199.0	195.3	-9.70	-45.25	-75.11	172.94
29/06/2017	11:00:00	39.57	14.43	171.99	182.84	4.77	285.45	17.14	23.42	29216	10455	94423	1348.5	1077.9	483.7	199.5	195.3	-9.50	-38.80	-79.28	182.63
29/06/2017	11:01:00	40.25	13.75	171.61	183.15	4.57	274.43	17.14	24.33	28947	10455	94487	1358.8	1080.1	484.7	200.0	195.3	-15.10	-48.25	-80.85	144.63
29/06/2017	11:02:00	40.43	14.10	172.65	183.83	4.56	273.53	17.06	23.49	29120	10556	93101	1355.5	1081.1	486.7	201.0	195.3	-11.70	-40.05	-83.18	172.19
29/06/2017	11:03:00	40.68	15.15	171.52	184.23	4.77	286.35	17.06	23.34	28857	10455	95361	1357.5	1082.8	487.9	201.5	196.5	-21.80	-56.00	-86.25	139.38
29/06/2017	11:04:00	40.61	13.49	173.17	185.27	4.56	273.53	17.06	23.18	29120	10556	93048	1355.1	1083.5	489.2	202.5	196.5	-11.05	-38.80	-83.25	155.44
29/06/2017	11:05:00	39.54	14.14	171.80	184.01	4.56	273.83	17.06	23.57	29652	10449	96271	1358.9	1085.1	489.3	202.5	196.5	-20.00	-49.80	-88.69	149.81
29/06/2017	11:06:00	39.42	14.54	172.98	183.78	4.62	276.90	17.06	23.65	29389	10348	91845	1358.6	1082.8	488.6	203.0	196.5	-2.95	-31.70	-73.31	183.44
29/06/2017	11:07:00	39.36	13.44	171.65	183.92	4.58	274.73	17.06	23.23	29652	10455	96924	1362.0	1083.0	487.2	203.0	197.6	-21.10	-52.00	-88.88	146.75
29/06/2017	11:08:00	39.93	14.04	172.37	184.55	4.76	285.23	17.06	24.47	29562	10455	94531	1358.1	1081.3	487.5	203.0	197.6	-5.00	-33.40	-75.15	183.31
29/06/2017	11:09:00	38.63	13.69	171.65	181.94	4.76	285.60	17.06	24.49	29921	10455	96542	1360.3	1081.8	486.3	202.5	197.6	-23.10	-53.75	-93.19	150.19
29/06/2017	11:10:00	38.34	14.55	169.67	184.46	4.93	295.95	17.06	24.31	29832	10461	94148	1350.9	1078.9	486.4	202.5	197.6	-12.45	-40.25	-83.74	179.88
29/06/2017	11:11:00	39.05	14.24	170.00	180.99	5.03	301.80	17.06	24.41	30184	10584	96918	1345.1	1076.5	485.2	202.5	197.6	-25.45	-55.20	-95.93	143.94
29/06/2017	11:12:00	38.21	13.20	171.42	183.20	4.75	284.78	17.06	24.49	29832	10365	93362	1342.4	1072.9	484.1	202.5	197.6	-11.30	-39.20	-82.09	161.50
29/06/2017	11:13:00	38.40	13.26	170.62	182.12	4.70	281.85	17.06	23.65	30274	10596	97356	1340.6	1072.0	483.1	202.0	197.6	-24.90	-56.00	-97.65	152.44
29/06/2017	11:14:00	39.27	13.93	170.94	183.56	4.74	284.55	17.06	23.70	29652	10478	94058	1341.5	1070.7	481.8	202.0	197.6	-5.60	-31.90	-75.26	185.50
29/06/2017	11:15:00	38.66	13.34	170.75	182.39	3.99	239.40	17.06	24.41	30094	10489	96583	1346.4	1071.9	480.9	201.5	197.6	-25.45	-53.80	-99.19	153.13
29/06/2017	11:16:00	38.66	13.24	171.56	183.87	4.56	273.60	17.06	23.10	29742	10371	92441	1341.6	1070.9	480.9	201.5	197.6	-6.15	-33.50	-76.09	185.81
29/06/2017	11:17:00	38.88	13.21	170.34	182.03	4.40	263.85	17.06	24.52	30267	10478	95370	1343.9	1071.6	480.3	200.5	197.6	-20.75	-48.25	-97.54	168.50
29/06/2017	11:18:00	39.20	14.60	171.56	184.01	4.86	291.38	17.06	23.94	29832	10478	95456	1338.9	1069.6	480.3	201.0	197.6	-11.35	-43.60	-81.08	178.81
29/06/2017	11:19:00	39.41	13.58	171.61	182.48	5.22	312.68	17.06	24.49	30274	10601	94993	1338.9	1069.8	481.1	200.5	197.6	-21.55	-48.10	-95.18	153.06
29/06/2017	11:20:00	38.79	14.14	171.05	183.92	5.01	300.68	17.06	23.73	29832	10500	94003	1336.0	1069.5	482.1	201.0	197.6	-9.30	-36.70	-80.29	159.69
29/06/2017	11:21:00	39.23	13.51	171.05	183.11	4.96	296.85	17.06	23.73	30094	10500	94447	1338.8	1069.9	482.3	201.0	197.6	-16.25	-47.00	-88.35	184.06
29/06/2017	11:22:00	38.16	14.01	171.71	184.50	4.76	285.83	17.06	23.15	29299	10399	93706	1341.4	1069.9	481.9	201.0	197.6	-6.10	-33.85	-75.41	183.81
29/06/2017	11:23:00	38.40	13.87	171.47	182.88	5.02	301.58	17.06	23.63	30357	10500	93781	1343.3	1071.2	481.6	200.5	197.6	-15.90	-44.20	-89.33	178.94
29/06/2017	11:24:00	38.78	14.44	171.71	185.27	5.08	304.88	17.06	24.26	29569	10399	92725	1341.5	1070.5	481.6	200.5	196.6	-4.55	-30.10	-74.10	183.50
29/06/2017	11:25:00	38.76	14.04	171.24	183.42	4.57	272.85	17.06	24.52	30094	10511	94605	1340.8	1071.2	481.2	200.0	196.6	-18.75	-47.60	-90.11	172.88
29/06/2017	11:26:00	39.32	14.12	171.37	185.40	4.78	286.73	16.99	24.15	29811	10410	92543	1339.6	1069.6	482.1	200.0	196.6	-11.20	-40.75	-80.81	178.94
29/06/2017	11:27:00	39.66	14.04	170.85	183.60	4.75	284.25	16.99	24.49	29921	10444	94306	1341.0	1070.5	482.4	200.0	196.6	-15.65	-45.10	-90.04	154.63
29/06/2017	11:28:00	39.00	13.41	171.28	186.08	4.53	271.58	16.99	23.44	29832	10444	92361	1342.9	1070.5	483.0	200.5	196.6	-10.45	-38.25	-80.89	160.25
29/06/2017	11:29:00	39.96	14.35	171.18	183.60	4.64	278.40	16.99	23.60	30281	10455	92779	1344.5	1071.0	483.2	200.5	196.6	-11.05	-40.95	-82.35	182.81
29/06/2017	11:30:00	39.81	13.65	170.66	184.10	4.53	275.78	16.99	24.12	29479	10354	93583	1347.0	1071.8	483.0	200.5	196.6	-5.95	-35.20	-72.98	188.31
29/06/2017	11:31:00	39.66	13.69	171.56	182.48	4.08	244.80	16.99	23.15	30184	10382	92192	1350.8	1073.0	483.1	200.0	196.6	-10.60	-39.00	-85.05	180.31
29/06/2017	11:32:00	39.32	13.91	171.18	184.46	4.42	265.43	16.99	23.52	29659	10382	92154	1351.9	1073.2	483.0	200.5	196.6	-4.25	-32.25	-73.35	185.94
29/06/2017	11:33:00	39.57	13.41	170.24	181.85	4.77	286.05	16.99	23.89	30101	10483	92577	1349.1	1074.0	484.2	200.5	196.6	-16.15	-44.20	-90.98	175.19
29/06/2017	11:34:00	39.57	14.10	171.47	184.73	4.64	278.33	16.99	24.28	29652	10483	92091	1349.4	1072.7	484.5	201.0	196.6	-9.40	-38.30	-79.13	180.00
29/06/2017	11:35:00	39.80	14.88	170.81	181.94	4.83	289.65	16.99	23.18	29652	10371	93962	1349.1	1072.6	485.0	201.0	196.6	-15.20	-43.90	-85.09	156.06
29/06/2017	11:36:00	39.33	13.42	171.56	185.36	4.55	271.80	16.99	24.49	29838	10371	93280	1348.8	1071.9	484.7	201.5	196.6	-8.45	-38.20	-78.04	163.38
29/06/2017	11:37:00	39.84	12.58	171.56	184.14	4.64	278.48	16.99	23.68	29569	10584	93288	1347.5	1071.7	484.5	201.5	196.6	-8.30	-36.25	-77.63	179.50
29/06/2017	11:38:00	39.75	13.58	171.90	184.86	4.75	285.68	16.99	23.76	29389	10382	92782	1353.0	1073.0	484.7	201.5	196.6	-4.75	-33.40	-71.29	186.81
29/06/2017	11:39:00	40.17	14.15	170.43	182.03	4.72	283.43	16.99	24.26	29652	10483	94023	1354.6	1074.4	485.1	201.0	196.6	-8.85	-36.05	-80.21	176.31
29/06/2017	11:40:00	40.13	14.15	171.28	183.65	3.97	238.13	16.99	23.31	29659	10371	92336	1358.4	1076.5	486.5	202.0	196.6	-4.75	-30.95	-71.81	184.75
29/06/2017	11:41:00	40.65	14.12	171.18	183.06	3.83	229.95	16.99	24.18	30004	10365	94940	1360.6	1078.2	488.0	202.5	196.6	-14.70	-44.40	-85.05	172.06
29/06/2017	11:42:00	40.14	13.85	171.14	183.60	4.79	287.25	16.99	23.23	29486	10365	92880	1360.3	1078.0	488.6	203.0	197.7	-7.80	-37.40	-76.88	179.94
29/06/2017	11:43:00	39.21	13.94	171.14	183.06	3.96	237.30	16.99	23.18	30101	10478	95059	1358.1	1078.2	489.9	203.5	197.7	-14.65	-46.00	-83.29	157.25
29/06/2017	11:44:00	40.11	13.31	171.56	184.10	3.97	238.05	16.99	23.13	29652	10472	94555	1357.8	1077.2	488.5	204.0	197.7	-7.50	-37.95	-76.24	164.13
29/06/2017	11:45:00	40.11	13.41	171.75	184.23	4.54	272.48	16.99	23.18	29832	10466	93098	1353.9	1075.5	487.8	204.0	197.7	-6.15	-35.15	-75.90	179.50

June 29/2017	Waste Flows								Flows	Air Flows	Temperatures								Pressures			
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse
Test 2	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209c	FT-260c	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
Max	40.68	15.23	173.17	188.01	5.22	312.68	17.25	24.54	30357	10601	97356	1362.0	1085.1	489.9	204.0	197.7	-2.95	-30.10	-71.29	188.50
Min	38.16	12.34	169.67	180.99	3.83	229.95	16.99	23.10	28587	10348	91845	1336.0	1067.3	475.8	197.0	195.3	-25.45	-56.00	-99.19	139.38
Average	39.31	13.81	171.50	183.73	4.59	274.45	17.06	23.80	29620	10465	93915	1347.2	1073.8	483.2	200.9	196.8	-12.51	-41.45	-82.53	170.61
Variance	0.43	0.40	0.52	1.54	0.10	395.64	0.01	0.25	165819	4972	1824757	60.6	21.4	12.3	2.6	0.6	32.92	42.54	47.79	190.90

Test No. 2		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205CORR	AT-213A	AT-213B	AT-213C	AT-259CORR	AT-261	AT-263	AT-264
29/06/2017	10:46:00	58.1	28.3	9.26	50.09	10.8	8.90	0.41	359.8
29/06/2017	10:47:00	62.1	28.2	9.30	50.66	11.6	8.81	0.38	361.5
29/06/2017	10:48:00	64.2	0.0	9.25	50.37	10.1	8.75	0.35	356.3
29/06/2017	10:49:00	64.2	28.4	9.20	49.98	11.6	8.84	0.38	352.0
29/06/2017	10:50:00	73.2	27.9	9.22	50.00	10.9	9.04	0.38	353.4
29/06/2017	10:51:00	75.2	27.8	9.27	50.28	11.9	8.93	0.37	357.1
29/06/2017	10:52:00	73.7	27.3	9.32	50.59	10.4	8.75	0.42	357.1
29/06/2017	10:53:00	76.3	25.7	9.19	50.31	12.8	8.89	0.38	342.8
29/06/2017	10:54:00	85.4	25.4	9.19	50.38	10.3	8.95	0.38	339.1
29/06/2017	10:55:00	90.9	24.1	9.28	50.69	12.5	8.81	0.38	344.4
29/06/2017	10:56:00	86.5	23.7	9.32	50.62	10.5	8.75	0.38	353.4
29/06/2017	10:57:00	82.0	25.0	9.28	50.23	11.7	8.75	0.35	364.1
29/06/2017	10:58:00	72.6	24.4	9.37	50.26	11.5	8.77	0.36	373.4
29/06/2017	10:59:00	74.2	24.2	9.44	50.72	13.1	8.66	0.38	380.2
29/06/2017	11:00:00	75.7	25.9	9.47	50.77	10.8	8.43	0.38	392.7
29/06/2017	11:01:00	70.1	26.8	9.42	50.77	14.0	8.53	0.38	392.7
29/06/2017	11:02:00	74.4	27.7	9.49	51.00	12.3	8.62	0.37	398.6
29/06/2017	11:03:00	78.7	27.8	9.53	50.98	12.3	8.46	0.37	402.6
29/06/2017	11:04:00	65.5	28.5	9.47	50.58	11.3	8.27	0.38	402.2
29/06/2017	11:05:00	57.5	26.3	9.38	50.47	13.0	8.50	0.40	395.8
29/06/2017	11:06:00	59.0	27.1	9.44	50.72	11.5	8.59	0.38	398.6
29/06/2017	11:07:00	59.3	29.1	9.49	50.85	12.2	8.39	0.41	400.4
29/06/2017	11:08:00	60.1	29.0	9.48	50.91	11.0	8.34	0.35	398.0
29/06/2017	11:09:00	66.5	28.2	9.41	50.63	10.6	8.52	0.36	388.9
29/06/2017	11:10:00	64.1	26.0	9.44	50.82	10.1	8.55	0.37	384.6
29/06/2017	11:11:00	60.4	26.1	9.40	50.79	10.4	8.59	0.35	380.1
29/06/2017	11:12:00	59.6	27.7	9.25	50.21	10.5	8.76	0.42	366.4
29/06/2017	11:13:00	61.4	27.9	9.17	49.84	10.9	8.87	0.38	358.8
29/06/2017	11:14:00	69.1	28.5	9.22	50.17	11.2	9.00	0.36	362.1
29/06/2017	11:15:00	67.0	27.9	9.37	50.72	11.0	8.84	0.38	371.2
29/06/2017	11:16:00	66.6	28.3	9.32	50.50	10.5	8.66	0.35	369.7
29/06/2017	11:17:00	68.9	27.3	9.21	50.10	11.2	8.75	0.41	364.6
29/06/2017	11:18:00	72.0	27.1	9.24	50.25	10.2	8.83	0.38	365.9
29/06/2017	11:19:00	73.1	28.2	9.32	50.51	11.0	8.76	0.37	369.7
29/06/2017	11:20:00	72.0	27.2	9.21	50.35	11.2	8.80	0.38	366.5
29/06/2017	11:21:00	77.3	28.2	9.14	49.74	10.9	8.84	0.37	363.6
29/06/2017	11:22:00	79.2	28.7	9.29	50.35	11.3	8.86	0.41	370.4
29/06/2017	11:23:00	78.4	29.0	9.36	50.64	11.0	8.77	0.38	373.4
29/06/2017	11:24:00	86.9	28.2	9.31	50.38	11.1	8.63	0.38	371.3
29/06/2017	11:25:00	88.8	0.0	9.26	50.25	11.4	8.71	0.42	369.8
29/06/2017	11:26:00	94.5	27.6	9.30	50.59	11.4	8.74	0.38	372.5
29/06/2017	11:27:00	89.6	28.0	9.33	50.70	11.0	8.71	0.38	374.9
29/06/2017	11:28:00	83.4	27.9	9.29	50.43	11.1	8.66	0.38	374.9
29/06/2017	11:29:00	73.6	27.0	9.25	50.09	11.2	8.78	0.42	373.0
29/06/2017	11:30:00	78.4	27.6	9.33	50.43	11.5	8.85	0.38	376.3
29/06/2017	11:31:00	79.0	27.8	9.47	50.99	10.2	8.66	0.42	387.5
29/06/2017	11:32:00	71.2	0.0	9.36	50.54	11.9	8.56	0.41	385.5
29/06/2017	11:33:00	76.0	27.3	9.32	50.42	10.8	8.63	0.41	384.0
29/06/2017	11:34:00	83.3	27.8	9.39	50.62	10.7	8.61	0.38	384.8
29/06/2017	11:35:00	77.2	27.7	9.40	50.72	10.5	8.63	0.38	383.6
29/06/2017	11:36:00	81.5	28.0	9.29	50.32	10.8	8.74	0.35	376.2
29/06/2017	11:37:00	83.0	28.2	9.24	49.98	12.1	8.78	0.41	372.9
29/06/2017	11:38:00	101.6	28.6	9.37	50.47	12.1	8.76	0.41	381.6
29/06/2017	11:39:00	108.3	27.0	9.44	50.99	10.3	8.52	0.38	394.7
29/06/2017	11:40:00	93.3	26.4	9.39	50.69	12.3	8.47	0.38	391.7
29/06/2017	11:41:00	90.1	26.5	9.38	50.44	9.8	8.53	0.41	396.8
29/06/2017	11:42:00	89.0	27.2	9.46	50.75	11.0	8.51	0.35	404.2
29/06/2017	11:43:00	79.8	27.6	9.48	50.82	9.5	8.50	0.42	404.2
29/06/2017	11:44:00	79.9	27.4	9.31	50.17	10.6	8.57	0.41	392.4
29/06/2017	11:45:00	79.0	27.6	9.29	50.22	10.0	8.71	0.41	390.1

June 29/2017	Analyzers							
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
Test 2	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264
Max	108.3	29.1	9.53	51.00	14.0	9.04	0.42	404.2
Min	57.5	0.0	9.14	49.74	9.5	8.27	0.35	339.1
Average	75.7	25.9	9.33	50.48	11.2	8.69	0.38	376.3
Variance	124.1	37.5	0.01	0.09	0.8	0.03	0.00	276.8

Test No. 3		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Primary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
29/06/2017	12:02:00	36.77	14.83	171.37	182.12	4.67	280.73	17.06	23.28	29037	10416	95896	1346.9	1076.4	484.6	203.0	199.6	-23.00	-56.05	-86.81	146.25
29/06/2017	12:03:00	37.91	13.99	173.13	184.14	4.50	269.70	17.06	23.89	28857	10517	93338	1343.5	1075.6	485.3	203.0	199.6	-10.25	-38.80	-78.79	180.81
29/06/2017	12:04:00	38.45	14.24	171.18	182.97	4.02	241.43	17.06	23.89	28767	10393	95310	1350.0	1078.3	485.5	202.5	198.6	-25.50	-58.60	-89.59	141.94
29/06/2017	12:05:00	38.52	14.90	172.08	183.74	4.00	239.93	17.06	23.18	29120	10500	94408	1347.3	1079.2	487.8	203.0	198.6	-15.00	-44.75	-83.70	174.50
29/06/2017	12:06:00	38.55	14.15	169.53	182.07	4.49	269.63	17.06	24.52	29209	10500	97273	1349.0	1080.5	488.4	203.0	198.6	-27.10	-59.30	-92.06	135.75
29/06/2017	12:07:00	38.42	14.28	171.61	185.40	3.89	233.40	17.06	23.23	29030	10500	93489	1347.3	1080.4	489.4	203.5	198.6	-13.20	-41.75	-82.43	155.69
29/06/2017	12:08:00	38.43	14.83	170.94	182.97	4.57	274.05	17.06	24.10	29389	10500	95005	1349.6	1082.0	489.8	203.5	198.6	-27.05	-59.35	-93.08	148.81
29/06/2017	12:09:00	38.84	15.00	170.81	182.84	4.42	265.35	17.06	23.10	28767	10399	93483	1350.6	1082.8	490.7	204.0	198.6	-9.45	-37.80	-73.88	178.50
29/06/2017	12:10:00	38.51	14.69	170.43	180.77	4.69	281.25	17.06	23.42	29071	10500	96434	1358.8	1085.2	490.7	204.0	198.6	-26.55	-58.65	-93.38	144.38
29/06/2017	12:11:00	38.30	14.29	172.08	182.75	4.65	278.70	17.06	24.33	29030	10500	94368	1353.4	1085.7	492.6	205.0	199.7	-8.15	-36.35	-74.96	179.50
29/06/2017	12:12:00	37.20	14.61	169.10	180.27	5.01	300.38	17.06	24.28	29209	10500	96006	1356.5	1087.8	493.3	205.0	199.7	-28.85	-62.10	-96.56	143.13
29/06/2017	12:13:00	37.85	14.02	170.19	182.34	4.62	277.05	17.06	24.47	28940	10399	93495	1349.3	1085.4	493.1	206.0	199.7	-14.60	-42.95	-81.71	173.38
29/06/2017	12:14:00	37.73	14.17	169.29	180.09	4.04	242.18	17.06	23.65	29389	10506	96388	1346.6	1083.7	492.0	206.0	199.7	-27.30	-57.75	-96.38	137.38
29/06/2017	12:15:00	37.56	13.30	171.95	183.87	4.10	246.15	17.06	24.31	29037	10506	94057	1343.8	1081.2	491.3	206.0	199.7	-14.70	-43.10	-80.33	156.50
29/06/2017	12:16:00	37.68	14.79	169.38	182.61	3.88	232.50	17.06	23.70	29120	10500	93577	1345.8	1081.2	490.6	206.0	199.7	-19.05	-46.90	-93.64	171.63
29/06/2017	12:17:00	38.21	14.90	171.95	184.32	4.01	240.83	17.06	24.36	28767	10399	91273	1345.6	1081.3	490.5	205.5	199.7	-8.40	-37.15	-73.91	180.81
29/06/2017	12:18:00	37.35	14.88	170.52	181.62	4.55	272.78	17.06	23.26	29389	10511	94452	1349.5	1083.4	490.0	205.5	200.7	-25.85	-56.90	-95.55	165.06
29/06/2017	12:19:00	37.86	14.22	171.00	184.55	4.74	284.25	17.06	24.07	28767	10405	93379	1348.1	1083.3	490.9	205.5	200.7	-8.45	-37.40	-74.25	184.06
29/06/2017	12:20:00	38.06	14.54	168.86	182.16	4.00	239.70	17.06	23.18	29126	10517	92640	1352.1	1084.9	490.7	205.0	200.7	-20.35	-49.90	-92.66	169.94
29/06/2017	12:21:00	37.40	15.41	169.44	182.03	4.53	271.50	17.06	24.31	28504	10517	93497	1346.0	1083.5	490.7	205.5	200.7	-10.40	-38.20	-79.01	173.94
29/06/2017	12:22:00	38.12	14.59	169.76	181.26	4.50	269.93	17.06	24.49	29126	10528	94708	1346.6	1083.5	490.8	205.5	200.7	-20.90	-50.75	-91.84	154.56
29/06/2017	12:23:00	37.94	15.45	170.24	181.62	4.59	275.63	17.06	24.28	28594	10528	93160	1345.1	1082.5	491.8	206.0	200.7	-11.40	-38.95	-79.80	159.56
29/06/2017	12:24:00	37.35	14.39	169.38	180.45	4.64	278.63	17.06	23.23	28947	10545	92057	1344.5	1083.7	492.3	206.0	200.7	-14.45	-44.25	-82.73	179.44
29/06/2017	12:25:00	37.76	14.64	169.67	182.21	4.46	267.75	17.06	23.49	28415	10421	92209	1346.1	1083.9	491.9	206.5	200.7	-7.80	-33.60	-73.61	183.94
29/06/2017	12:26:00	37.49	14.30	169.05	179.64	3.97	238.20	17.06	24.44	28767	10629	91927	1346.4	1084.7	492.0	206.0	200.7	-14.70	-42.35	-87.23	177.88
29/06/2017	12:27:00	37.67	15.10	170.52	182.97	4.66	280.80	17.06	24.47	28408	10427	91499	1346.4	1084.2	491.9	206.5	200.7	-7.65	-34.90	-73.05	186.38
29/06/2017	12:28:00	37.58	14.11	169.95	180.05	4.58	274.65	17.06	23.91	29126	10528	93188	1345.4	1084.6	491.6	206.0	200.7	-19.40	-49.20	-88.50	171.25
29/06/2017	12:29:00	38.67	14.61	169.48	182.48	4.57	273.90	17.06	24.15	28421	10528	93653	1343.1	1083.1	491.7	206.5	200.7	-12.95	-41.45	-78.53	177.31
29/06/2017	12:30:00	38.00	15.06	169.48	178.61	4.72	283.28	17.06	24.18	29030	10534	94535	1341.0	1083.1	492.0	206.5	201.7	-18.35	-48.45	-89.06	156.06
29/06/2017	12:31:00	37.40	13.86	169.29	179.51	4.58	274.73	17.06	23.60	28767	10534	92675	1341.8	1082.2	492.0	207.5	201.7	-11.85	-40.95	-77.81	161.44
29/06/2017	12:32:00	37.50	14.07	169.62	179.42	4.76	285.00	17.06	24.31	28767	10556	92699	1341.6	1082.7	492.5	207.5	201.7	-12.45	-41.40	-79.31	181.31
29/06/2017	12:33:00	38.13	14.75	170.15	181.67	4.51	270.68	17.06	23.47	28325	10455	90766	1347.1	1083.5	492.4	208.0	201.7	-6.75	-34.00	-72.34	187.63
29/06/2017	12:34:00	37.88	14.48	170.85	180.32	4.73	283.58	17.06	24.47	28684	10562	92293	1343.3	1084.3	492.0	207.5	201.7	-11.45	-39.90	-79.28	177.50
29/06/2017	12:35:00	37.58	15.16	168.95	182.39	4.75	284.85	17.06	24.31	28235	10444	91662	1347.1	1084.7	492.3	207.5	201.7	-9.05	-36.95	-70.20	185.75
29/06/2017	12:36:00	37.40	14.82	170.28	183.96	3.81	228.68	17.06	23.34	28947	10551	92914	1346.9	1085.5	492.6	207.5	201.7	-14.55	-42.30	-85.69	172.88
29/06/2017	12:37:00	37.46	14.75	170.81	185.22	4.67	279.98	17.06	23.52	28497	10551	92131	1343.1	1084.7	493.3	207.0	201.7	-9.70	-36.55	-76.84	176.38
29/06/2017	12:38:00	38.27	13.83	170.24	183.33	4.51	270.83	17.06	23.21	28857	10551	93410	1343.5	1084.9	493.6	207.0	201.7	-15.55	-44.65	-82.65	155.19
29/06/2017	12:39:00	38.30	14.31	170.28	184.46	4.47	268.28	17.06	24.12	28684	10449	91749	1342.0	1084.9	494.0	207.0	201.7	-12.10	-42.85	-77.14	163.75
29/06/2017	12:40:00	37.38	14.93	170.24	183.78	4.45	266.85	17.06	23.36	28152	10449	92122	1343.6	1084.9	493.3	206.5	201.7	-10.25	-37.45	-75.94	178.50
29/06/2017	12:41:00	37.85	14.04	170.28	184.95	4.58	274.73	17.06	23.15	27979	10449	91542	1348.9	1086.1	491.6	206.0	201.7	-6.55	-34.45	-71.59	186.00
29/06/2017	12:42:00	37.46	14.22	170.52	183.29	4.57	274.05	17.06	24.18	28235	10562	92156	1348.4	1086.6	491.2	205.5	201.7	-13.75	-44.10	-80.36	178.81
29/06/2017	12:43:00	37.49	14.52	170.66	183.47	4.36	261.83	17.06	24.52	28242	10461	92399	1348.6	1086.9	490.8	205.5	201.7	-7.20	-37.95	-72.26	187.94
29/06/2017	12:44:00	37.68	14.36	170.28	184.32	3.72	223.13	17.06	24.49	28767	10562	94065	1346.9	1086.8	490.9	205.5	201.7	-16.75	-45.75	-85.09	174.31
29/06/2017	12:45:00	38.10	15.71	171.05	184.91	4.48	268.73	17.06	23.23	28594	10449	93606	1347.4	1086.9	491.1	205.5	201.7	-10.55	-39.95	-76.09	179.13
29/06/2017	12:46:00	37.31	14.64	169.72	184.95	4.57	274.20	17.06	23.68	28691	10466	93512	1342.4	1088.6	492.8	205.5	201.7	-15.20	-45.35	-83.10	156.81
29/06/2017	12:47:00	37.79	14.61	169.57	186.48	4.62	277.13	17.06	23.39	28415	10466	92556	1346.1	1089.6	493.3	206.0	201.7	-10.70	-40.15	-78.08	164.06
29/06/2017	12:48:00	38.13	14.86	171.99	185.22	4.41	264.38	17.06	23.81	28504	10466	93461	1343.9	1090.1	493.5	206.0	201.7	-6.85	-35.05	-76.95	179.13
29/06/2017	12:49:00	37.47	14.79	153.42	185.36	3.82	229.20	17.06	23.18	28677	10365	92336	1345.1	1090.9	492.0	205.5	201.7	-10.40	-37.10	-74.89	189.56
29/06/2017	12:50:00	38.15	14.90	173.64	185.81	4.52	270.90	17.06	23.89	28062	10466	92075	1346.4	1089.9	489.4	204.5	201.7	-9.35	-39.40	-75.75	180.88
29/06/2017	12:51:00	37.34	15.20	169.81	184.28	4.40	263.55	17.06	23.23	28145	10365	93679	1348.4	1091.0	489.6	204.0	200.6	-5.15	-32.65	-70.65	188.69
29/06/2017	12:52:00	37.34	14.66	168.15	184.55	3.98	238.73	17.06	23.15	28408	10478	93119	1347.4	1090.2	490.8	204.0	200.6	-16.40	-45.85	-82.16	176.31
29/06/2017	12:53:00	37.55	15.52	169.20	183.78	4.41	264.68	17.06	23.97	28325	10478	93547	1345.5	1089.3	490.6	204.5	200.6	-10.40	-40.60	-77.81	182.88
29/06/2017	12:54:00	36.69	15.19	171.42	185.09	3.92	235.28	17.06	24.54	28580	10478	94402	1341.8	1087.3	490.2	204.5	200.6	-14.25	-43.20	-81.26	157.31
29/06/2017	12:55:00	36.65	16.85	168.95	184.41	4.48	269.18	17.06	24.47	28760	10360	94275	1338.9	1084.8	488.8	204.0	200.6	-7.80	-37.45	-73.43	160.50
29/06/2017	12:56:00	37.55	17.76	170.38	184.82	4.46	267.75	17.06	23.99	28857	10376	91490	1337.1	1086.6	491.0	204.5	200.6	-6.55	-35.90	-73.91	182.88
29/06/2017	12:57:00	36.90	17.40	168.72	184.19	3.99	239.48	17.06	23.15	28587	10376	92371	1346.6	1090.4	492.1	205.0	200.6	-3.40	-31.60	-73.13	159.81
29/06/2017	12:58:00	36.39	18.08	169.48	185.00	4.45	267.08	17.06	24.47	28415	10393	92943	1340.4	1091.8	494.1	205.5	200.6	-7.15	-36.90	-73.24	183.44
29/06/2017	12:59:00	36.59	16.63	168.48	184.10	4.50	270.08	17.06	24.36	28767	10393	93278	1345.4	1094.0	494.4	206.0	200.6	-15.55	-48.25	-80.85	148.31
29/06/2017	13:00:00	36.02	17.33	169.48	185.22	4.53	271.65	17.06	23.15	29120	10399	93188	1339.0	1092.4	494.5	206.0	200.6	-10.35	-40.70	-78.53	180.94
29/06/2017	13:01:00	35.58	17.35	169.48	184.14	4.61	276.68	17.06	24.33	28940	10287	95783	1337.4	1090.0	492.4	206.0	200.6	-18.90	-51.50	-84.83	143.31
29/06/2017	13:02:00	36.15	16.42	170.38	185.94	3.80	227.93	17.06	24.39	28947	10393	93257	1329.5	1086.6	491.5	206.0	201.7	-9.80	-39.10	-79.58	159.81

June 29/2017	Waste Flows								Flows	Air Flows		Temperatures							Pressures			
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse
Test 3	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209c	FT-260c	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
Max	38.84	18.08	173.64	187.34	5.01	300.38	17.06	24.54	29389	10629	97273	1358.8	1094.0	494.5	208.0	201.7	-3.40	-31.60	-70.20	189.56
Min	35.58	13.30	153.42	178.61	3.72	223.13	17.06	23.10	27979	10287	90766	1329.5	1075.6	484.6	202.5	198.6	-28.85	-62.10	-96.56	135.75
Average	37.51	15.08	169.97	183.31	4.41	264.88	17.06	23.83	28767	10463	93427	1345.2	1084.9	490.8	205.3	200.6	-13.85	-43.17	-81.03	168.62
Variance	0.54	1.23	5.26	3.66	0.09	309.73	0.00	0.25	114012	5002	1859371	29.6	14.0	5.3	1.7	1.0	39.65	57.61	49.47	225.15

Test No. 3		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205CORR	AT-213A	AT-213B	AT-213C	AT-259CORR	AT-261	AT-263	AT-264
29/06/2017	12:02:00	72.4	32.8	9.36	50.72	11.8	8.85	0.35	400.8
29/06/2017	12:03:00	88.2	31.9	9.35	50.73	10.2	8.57	0.42	407.3
29/06/2017	12:04:00	85.0	32.8	9.30	50.52	11.6	8.65	0.37	407.3
29/06/2017	12:05:00	71.8	33.0	9.39	50.73	9.9	8.72	0.38	420.8
29/06/2017	12:06:00	67.2	33.2	9.45	50.84	10.7	8.55	0.37	432.9
29/06/2017	12:07:00	67.3	33.7	9.44	50.90	9.5	8.46	0.37	430.1
29/06/2017	12:08:00	56.9	34.7	9.30	50.43	10.7	8.65	0.36	424.2
29/06/2017	12:09:00	50.3	35.4	9.36	50.52	9.9	8.77	0.38	432.5
29/06/2017	12:10:00	44.6	37.3	9.51	50.88	11.0	8.48	0.36	448.5
29/06/2017	12:11:00	49.1	0.0	9.47	50.58	10.1	8.32	0.42	452.7
29/06/2017	12:12:00	49.5	39.6	9.44	50.51	10.4	8.39	0.38	455.2
29/06/2017	12:13:00	47.2	40.5	9.47	50.74	9.2	8.42	0.41	458.6
29/06/2017	12:14:00	45.0	42.0	9.45	50.68	9.9	8.44	0.37	451.6
29/06/2017	12:15:00	44.8	45.5	9.34	50.38	9.4	8.59	0.35	434.5
29/06/2017	12:16:00	45.1	45.9	9.26	50.04	10.1	8.80	0.38	426.2
29/06/2017	12:17:00	45.4	46.7	9.34	50.41	10.4	8.83	0.38	432.1
29/06/2017	12:18:00	46.7	46.2	9.48	51.06	9.9	8.58	0.35	448.0
29/06/2017	12:19:00	44.7	45.5	9.42	50.70	9.5	8.37	0.38	446.2
29/06/2017	12:20:00	41.9	46.8	9.39	50.55	9.5	8.50	0.41	444.9
29/06/2017	12:21:00	39.8	47.1	9.48	51.01	9.5	8.61	0.42	450.1
29/06/2017	12:22:00	39.6	50.2	9.46	51.14	8.7	8.54	0.38	447.3
29/06/2017	12:23:00	38.1	50.7	9.31	50.33	8.1	8.60	0.41	436.6
29/06/2017	12:24:00	34.6	49.8	9.26	50.05	9.6	8.67	0.41	435.2
29/06/2017	12:25:00	40.8	52.0	9.41	50.69	10.3	8.69	0.41	450.3
29/06/2017	12:26:00	47.5	54.1	9.47	50.88	9.9	8.57	0.42	451.7
29/06/2017	12:27:00	54.3	50.6	9.41	50.71	10.5	8.47	0.38	445.5
29/06/2017	12:28:00	53.9	48.6	9.36	50.57	10.0	8.55	0.41	444.0
29/06/2017	12:29:00	52.7	49.7	9.40	50.74	10.1	8.58	0.38	444.0
29/06/2017	12:30:00	52.0	51.2	9.45	50.71	9.0	8.56	0.45	442.5
29/06/2017	12:31:00	49.4	52.6	9.36	50.28	9.5	8.58	0.41	436.6
29/06/2017	12:32:00	48.0	54.3	9.29	50.14	9.0	8.80	0.41	434.5
29/06/2017	12:33:00	48.6	53.2	9.38	50.47	10.4	8.79	0.35	441.6
29/06/2017	12:34:00	51.7	52.5	9.52	50.89	9.1	8.55	0.38	454.6
29/06/2017	12:35:00	50.2	51.6	9.40	50.65	10.7	8.52	0.41	444.9
29/06/2017	12:36:00	47.9	52.9	9.33	50.39	9.9	8.54	0.38	441.5
29/06/2017	12:37:00	51.7	52.1	9.45	50.77	10.2	8.47	0.38	446.1
29/06/2017	12:38:00	51.2	51.5	9.47	50.90	9.1	8.46	0.41	446.1
29/06/2017	12:39:00	46.4	52.8	9.35	50.42	10.6	8.49	0.42	435.0
29/06/2017	12:40:00	49.5	52.7	9.39	50.59	9.7	8.74	0.41	439.6
29/06/2017	12:41:00	51.1	52.3	9.44	50.84	11.2	8.62	0.41	443.3
29/06/2017	12:42:00	51.0	51.3	9.50	51.08	9.5	8.39	0.42	448.5
29/06/2017	12:43:00	51.7	50.2	9.45	50.98	10.7	8.40	0.45	446.6
29/06/2017	12:44:00	53.3	48.8	9.38	50.82	9.6	8.57	0.42	445.0
29/06/2017	12:45:00	52.2	49.4	9.44	50.95	12.0	8.49	0.42	444.5
29/06/2017	12:46:00	55.9	51.3	9.49	51.11	9.5	8.49	0.45	450.6
29/06/2017	12:47:00	56.3	49.9	9.45	50.90	10.7	8.52	0.46	456.8
29/06/2017	12:48:00	51.5	49.9	9.44	50.75	10.0	8.55	0.45	455.7
29/06/2017	12:49:00	54.6	53.3	9.56	51.21	9.5	8.43	0.45	463.6
29/06/2017	12:50:00	53.0	50.3	9.54	51.23	12.4	8.29	0.45	458.6
29/06/2017	12:51:00	54.8	48.2	9.27	50.41	11.0	8.46	0.48	420.9
29/06/2017	12:52:00	71.0	48.0	9.41	50.91	9.7	8.59	0.48	441.2
29/06/2017	12:53:00	57.6	47.8	9.48	51.02	10.6	8.41	0.43	447.9
29/06/2017	12:54:00	44.1	47.4	9.39	50.61	9.6	8.35	0.47	444.5
29/06/2017	12:55:00	44.3	48.3	9.31	50.30	10.2	8.49	0.48	436.4
29/06/2017	12:56:00	49.1	50.1	9.31	50.47	10.5	8.80	0.51	435.0
29/06/2017	12:57:00	49.1	53.2	9.55	51.25	11.6	8.50	0.48	472.8
29/06/2017	12:58:00	47.3	53.5	9.60	51.32	11.0	8.24	0.50	486.1
29/06/2017	12:59:00	44.9	52.9	9.56	51.08	10.3	8.28	0.51	487.2
29/06/2017	13:00:00	41.8	53.1	9.55	51.09	9.4	8.34	0.47	489.9
29/06/2017	13:01:00	36.4	54.7	9.51	51.05	10.4	8.26	0.51	481.0
29/06/2017	13:02:00	36.2	54.7	9.46	50.99	10.2	8.33	0.51	473.9

June 29/2017	Analyzers							
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
Test 3	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264
Max	88.2	55.1	9.60	51.32	12.4	8.94	0.55	489.9
Min	34.6	0.0	9.23	50.04	8.1	8.24	0.35	392.3
Average	50.7	46.2	9.41	50.74	10.1	8.54	0.42	443.6
Variance	107.2	89.9	0.01	0.09	0.7	0.02	0.00	367.0

Test No. 4		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Primary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
29/06/2017	13:15:00	36.83	17.55	168.72	184.28	4.39	263.10	17.06	23.13	29832	10343	95136	1334.5	1088.5	489.7	203.5	199.6	-27.80	-56.15	-99.79	175.31
29/06/2017	13:16:00	37.37	17.22	170.81	186.62	4.95	297.00	17.06	23.23	28774	10236	93115	1329.8	1087.9	490.9	204.0	199.6	-10.15	-40.60	-80.29	181.88
29/06/2017	13:17:00	36.68	18.03	170.81	184.46	4.70	281.93	17.06	24.10	29216	10337	93883	1330.4	1088.9	491.2	203.5	199.6	-22.05	-49.75	-95.18	158.25
29/06/2017	13:18:00	36.92	17.95	171.75	186.93	4.87	292.28	17.06	23.15	29216	10230	93636	1329.6	1088.1	491.9	203.5	199.6	-11.30	-38.35	-85.20	164.94
29/06/2017	13:19:00	37.43	17.53	171.61	186.53	4.56	272.85	17.06	23.47	29569	10337	93788	1328.8	1088.9	492.1	203.5	199.6	-15.75	-44.35	-88.73	188.25
29/06/2017	13:20:00	37.04	17.40	169.81	187.43	4.83	289.80	17.06	24.57	28864	10129	92029	1332.6	1090.5	492.6	203.5	199.6	-8.45	-35.50	-75.11	190.56
29/06/2017	13:21:00	36.62	16.75	170.52	183.92	5.08	304.80	17.06	24.60	29389	10258	93418	1335.9	1092.9	492.8	203.0	199.6	-13.70	-40.70	-91.01	180.63
29/06/2017	13:22:00	36.72	17.40	169.29	186.03	4.92	294.90	17.06	23.52	29037	10157	93764	1336.1	1092.3	492.3	203.0	199.6	-7.55	-32.45	-73.95	189.50
29/06/2017	13:23:00	36.95	17.18	169.14	184.37	4.83	289.73	17.06	23.26	29486	10264	93542	1339.8	1093.3	492.1	203.0	199.6	-17.55	-43.60	-94.31	178.06
29/06/2017	13:24:00	36.86	18.08	171.33	187.11	4.61	276.30	17.06	23.31	28774	10157	94384	1335.5	1091.6	492.1	203.0	199.6	-10.95	-36.30	-79.13	177.75
29/06/2017	13:25:00	36.74	16.72	168.77	183.47	4.62	277.20	17.06	24.44	29396	10275	92907	1336.4	1091.3	492.1	203.0	199.6	-18.30	-46.85	-90.45	155.94
29/06/2017	13:26:00	37.53	18.07	169.10	185.67	3.92	235.28	17.06	23.81	29133	10275	94715	1335.3	1091.4	492.3	203.5	199.6	-13.05	-39.75	-84.11	165.63
29/06/2017	13:27:00	36.90	16.52	171.61	186.03	4.67	280.13	17.06	24.49	29126	10270	94240	1336.1	1092.4	493.0	203.5	199.6	-12.85	-35.15	-88.50	188.75
29/06/2017	13:28:00	37.20	17.01	168.58	188.28	4.48	269.03	17.06	23.65	29037	10152	93026	1341.5	1093.8	492.5	203.5	199.6	-7.05	-33.50	-77.29	196.44
29/06/2017	13:29:00	37.55	16.73	169.76	186.53	4.67	281.03	16.99	24.31	29749	10258	92722	1341.0	1095.2	492.6	203.0	199.6	-13.80	-39.95	-85.20	188.44
29/06/2017	13:30:00	37.28	16.93	169.20	188.10	4.75	284.85	16.99	24.44	28940	10152	92130	1345.3	1095.6	492.8	203.0	199.6	-5.60	-32.50	-74.29	192.56
29/06/2017	13:31:00	36.75	17.30	169.05	186.21	4.61	276.30	16.99	24.07	29742	10360	93767	1347.6	1097.4	493.8	202.5	199.6	-17.35	-45.60	-88.20	180.44
29/06/2017	13:32:00	36.83	17.15	171.37	189.05	4.70	281.70	16.99	24.33	29396	10247	93434	1346.3	1096.2	493.8	202.5	199.6	-9.40	-34.30	-81.00	183.31
29/06/2017	13:33:00	37.20	16.64	169.81	185.45	4.91	294.75	16.99	24.15	29396	10247	93888	1343.4	1096.6	494.5	202.5	199.6	-15.00	-44.10	-83.81	160.00
29/06/2017	13:34:00	36.45	16.79	171.14	187.52	4.92	295.28	16.99	24.52	29486	10129	92972	1342.5	1096.9	494.8	203.0	199.6	-11.05	-41.45	-78.30	171.00
29/06/2017	13:35:00	37.35	17.98	169.72	185.40	4.80	287.85	16.99	23.84	29479	10225	92724	1339.9	1096.9	495.4	203.5	199.6	-11.25	-34.85	-82.50	197.50
29/06/2017	13:36:00	36.98	16.64	170.52	186.53	4.89	293.63	16.99	24.07	29133	10225	92627	1347.5	1097.3	494.5	203.5	199.6	-6.75	-34.85	-73.80	203.88
29/06/2017	13:37:00	36.89	16.62	169.76	185.67	4.97	298.20	16.99	23.73	29486	10219	95458	1345.6	1098.1	494.3	203.0	199.6	-13.20	-42.65	-81.75	193.69
29/06/2017	13:38:00	37.29	17.12	171.00	186.66	4.81	288.30	16.99	24.20	29396	10219	91195	1351.4	1098.7	493.8	203.5	199.6	-2.70	-29.00	-70.76	194.63
29/06/2017	13:39:00	36.83	17.07	170.52	185.09	5.17	310.43	16.80	24.44	29652	10320	93193	1347.8	1099.0	494.3	203.5	199.6	-16.35	-44.40	-87.41	182.13
29/06/2017	13:40:00	37.07	17.45	169.29	186.17	4.99	299.33	16.80	24.36	29306	10202	91842	1348.0	1098.2	494.3	203.5	199.6	-7.45	-36.20	-74.63	178.44
29/06/2017	13:41:00	36.72	16.81	171.75	185.76	4.90	293.78	16.80	23.68	29756	10079	93130	1344.0	1098.2	495.2	204.0	199.6	-12.10	-42.05	-82.13	154.94
29/06/2017	13:42:00	36.99	17.41	170.38	187.79	4.84	289.65	16.80	24.36	29126	10214	91321	1346.8	1098.0	495.5	204.0	199.6	-9.40	-36.70	-78.71	164.44
29/06/2017	13:43:00	37.17	16.93	172.37	186.08	4.78	286.65	16.80	24.36	29652	10112	92917	1345.1	1098.0	495.1	204.5	199.6	-10.05	-38.65	-81.04	186.19
29/06/2017	13:44:00	36.69	16.85	171.28	187.52	4.90	293.70	16.80	23.65	29216	10112	91471	1350.6	1099.4	494.3	204.0	199.6	-4.50	-28.45	-72.94	190.69
29/06/2017	13:45:00	36.96	16.77	171.52	187.11	4.89	293.63	16.80	23.39	29299	10219	93950	1348.1	1099.3	493.8	204.0	199.6	-7.85	-36.15	-76.54	179.00
29/06/2017	13:46:00	36.17	16.47	170.19	188.24	4.63	277.50	16.80	24.10	29126	10219	92149	1349.6	1099.4	493.1	203.5	199.6	-6.55	-33.00	-77.29	197.69
29/06/2017	13:47:00	36.56	17.42	169.95	187.34	4.74	284.25	16.80	23.21	29928	10230	92818	1344.3	1097.0	491.7	203.0	199.6	-13.30	-43.30	-84.49	181.81
29/06/2017	13:48:00	35.94	17.69	169.05	186.84	4.62	277.43	16.80	23.70	29576	10230	92927	1341.8	1094.7	490.2	202.5	199.6	-10.30	-40.20	-77.81	184.00
29/06/2017	13:49:00	36.03	16.83	171.05	187.07	4.58	274.50	16.39	24.23	29659	10247	94211	1339.1	1092.8	489.5	202.5	199.6	-11.85	-35.00	-86.63	159.75
29/06/2017	13:50:00	35.97	17.15	169.95	188.46	4.93	295.80	17.55	24.44	29486	10140	92890	1336.5	1091.5	488.6	202.0	199.6	-10.60	-37.45	-79.01	171.19
29/06/2017	13:51:00	35.91	16.27	170.00	187.88	4.96	297.45	17.55	24.05	29576	10343	92853	1338.5	1090.3	487.9	201.5	199.6	-10.00	-37.35	-77.21	184.81
29/06/2017	13:52:00	36.35	17.45	170.62	188.01	4.94	296.10	17.55	23.31	29223	10124	93185	1342.6	1090.7	486.7	200.5	198.6	-6.25	-35.15	-73.46	191.88
29/06/2017	13:53:00	36.17	17.85	170.04	188.73	4.66	279.75	17.55	24.15	29216	10242	94092	1341.1	1090.4	487.4	200.5	198.6	-8.60	-36.30	-80.59	182.81
29/06/2017	13:54:00	36.18	17.63	168.77	184.46	4.92	294.90	17.55	24.60	29223	10242	92281	1345.4	1091.3	487.1	199.5	198.6	-10.70	-37.55	-76.31	194.19
29/06/2017	13:55:00	35.61	17.53	172.27	189.05	4.50	270.08	17.55	23.26	29659	10140	93646	1338.5	1090.7	487.5	199.5	197.6	-15.15	-41.75	-84.19	174.25
29/06/2017	13:56:00	36.18	16.31	171.33	186.12	4.88	292.88	17.55	23.97	29306	10146	93304	1338.8	1089.9	487.1	199.5	197.6	-10.00	-39.40	-78.75	166.56
29/06/2017	13:57:00	36.18	16.32	169.72	188.06	4.75	286.05	17.55	23.31	29659	10247	93447	1335.1	1088.6	487.3	199.5	197.6	-13.50	-37.05	-85.95	156.31
29/06/2017	13:58:00	36.57	17.16	169.57	186.08	4.87	292.20	17.55	24.52	29659	10045	96795	1336.0	1088.1	486.7	199.5	197.6	-18.90	-51.80	-87.04	153.25
29/06/2017	13:59:00	36.00	16.85	169.72	188.01	4.98	298.65	16.43	24.12	29666	10056	92418	1334.8	1087.3	486.5	199.5	197.6	-12.00	-33.85	-81.68	187.69
29/06/2017	14:00:00	35.94	16.90	169.72	185.45	4.78	286.80	16.58	24.49	29756	10163	95958	1340.4	1088.6	486.2	199.0	197.6	-21.40	-52.35	-84.94	148.63
29/06/2017	14:01:00	36.00	16.54	171.99	187.34	4.78	286.65	17.59	24.23	30018	10180	93173	1340.3	1087.5	485.1	199.0	197.6	-10.10	-39.90	-76.91	183.06
29/06/2017	14:02:00	36.56	15.34	169.67	185.81	4.92	294.98	16.39	24.07	30018	10180	94769	1340.9	1087.7	485.1	198.5	196.6	-27.10	-57.35	-91.91	144.50
29/06/2017	14:03:00	35.76	16.12	172.04	188.24	4.98	298.73	17.63	24.15	29838	10197	93850	1333.9	1085.8	485.0	198.5	196.6	-16.55	-45.55	-84.53	174.94
29/06/2017	14:04:00	36.36	15.56	168.35	186.30	4.99	299.48	16.54	23.65	30011	10197	96317	1333.5	1085.2	484.7	198.0	196.6	-28.40	-52.00	-98.48	147.69
29/06/2017	14:05:00	35.94	15.10	170.19	187.83	4.82	289.13	16.54	23.10	30018	10197	95623	1325.6	1083.9	484.2	198.0	196.6	-15.25	-42.95	-85.58	167.44
29/06/2017	14:06:00	35.99	16.16	169.67	186.08	5.03	301.88	16.54	23.36	30198	10197	95487	1329.6	1083.8	483.5	197.5	196.6	-29.40	-56.60	-97.46	155.06
29/06/2017	14:07:00	36.09	15.63	170.47	187.11	4.83	289.88	17.55	24.39	29838	10197	93040	1328.9	1082.7	483.1	197.5	196.6	-13.15	-39.45	-81.64	187.94
29/06/2017	14:08:00	36.56	15.29	169.62	185.36	4.93	295.65	17.44	24.44	30267	10197	96039	1331.8	1083.2	481.7	196.5	196.6	-30.05	-58.80	-100.24	150.13
29/06/2017	14:09:00	36.44	14.64	170.66	187.65	4.83	289.73	17.44	24.12	29403	10096	94035	1329.3	1081.6	481.3	196.5	195.6	-12.20	-36.15	-80.59	181.88
29/06/2017	14:10:00	35.75	15.19	170.34	186.62	4.37	261.98	17.03	24.54	30461	10337	97022	1331.6	1082.1	480.4	195.5	195.6	-33.10	-62.15	-105.86	150.63
29/06/2017	14:11:00	35.87	15.38	171.28	188.64	4.57	274.13	17.03	24.41	29749	10236	93688	1324.9	1080.2	480.5	195.5	195.6	-16.85	-41.15	-89.48	186.75
29/06/2017	14:12:00	36.33	15.18	172.37	185.85	5.03	300.90	17.03	23.44	30281	10236	94925	1324.0	1079.8	480.5	195.0	194.6	-31.30	-61.50	-102.75	157.19
29/06/2017	14:13:00	36.47	15.36	173.32	188.33	4.97	298.20	17.03	23.23	29576	10236	94511	1320.9	1078.4	480.2	195.5	194.6	-15.80	-39.40	-87.19	172.81
29/06/2017	14:14:00	37.31	15.44	171.42	185.72	4.94	296.40	17.03	24.41	30281	10326	94928	1325.5	1079.1	480.2	195.0	194.6	-20.00	-43.70	-95.74	185.81
29/06/2017	14:15:00	36.84	15.17	170.94	187.20	5.05	302.93	17.03	23.31	29493	10208	93301	1327.5	1080.3	481.2	195.0	194.6	-11.75	-40.90	-81.15	191.00

June 29/2017	Waste Flows							Flows	Air Flows		Temperatures						Pressures			
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse
Test 4	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209c	FT-260c	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
Max	37.55	18.08	173.32	189.05	5.17	310.43	17.63	24.60	30461	10360	97022	1351.4	1099.4	495.5	204.5	199.6	-2.70	-28.45	-70.76	203.88
Min	35.61	14.64	168.35	183.47	3.92	235.28	16.39	23.10	28774	10045	91195	1320.9	1078.4	480.2	195.0	194.6	-33.10	-62.15	-105.86	144.50
Average	36.60	16.73	170.40	186.68	4.80	287.84	17.05	23.95	29528	10213	93672	1337.9	1090.9	489.4	201.1	198.5	-14.10	-41.38	-84.11	176.47
Variance	0.26	0.76	1.22	1.75	0.04	153.32	0.11	0.23	146891	5253	1658359	55.6	35.3	23.0	8.5	2.7	48.02	59.66	63.82	230.79

Test No. 4		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205CORR	AT-213A	AT-213B	AT-213C	AT-259CORR	AT-261	AT-263	AT-264
29/06/2017	13:15:00	55.4	51.7	9.44	50.82	10.3	8.44	0.51	470.8
29/06/2017	13:16:00	59.7	51.5	9.52	51.12	9.8	8.48	0.51	474.0
29/06/2017	13:17:00	60.5	52.6	9.53	51.34	9.5	8.45	0.51	478.0
29/06/2017	13:18:00	58.0	52.9	9.48	51.07	9.0	8.40	0.48	473.4
29/06/2017	13:19:00	58.7	50.1	9.41	50.88	9.0	8.56	0.51	470.7
29/06/2017	13:20:00	58.0	51.6	9.47	51.06	10.8	8.56	0.51	473.7
29/06/2017	13:21:00	53.7	52.7	9.62	51.43	8.7	8.34	0.47	488.9
29/06/2017	13:22:00	49.8	0.0	9.56	51.29	8.6	8.19	0.47	490.3
29/06/2017	13:23:00	45.9	48.3	9.43	50.95	9.5	8.37	0.51	479.3
29/06/2017	13:24:00	48.0	48.1	9.52	51.15	7.8	8.47	0.47	484.0
29/06/2017	13:25:00	42.9	50.0	9.54	51.14	8.0	8.35	0.47	482.6
29/06/2017	13:26:00	42.1	49.7	9.43	50.90	8.7	8.49	0.48	474.1
29/06/2017	13:27:00	44.1	50.0	9.42	50.74	8.2	8.52	0.47	472.8
29/06/2017	13:28:00	47.5	53.0	9.53	51.08	8.9	8.49	0.43	487.8
29/06/2017	13:29:00	48.0	52.1	9.57	51.26	8.4	8.37	0.50	493.9
29/06/2017	13:30:00	47.6	50.2	9.55	51.31	8.7	8.26	0.48	490.1
29/06/2017	13:31:00	44.8	50.3	9.57	51.33	7.7	8.38	0.45	493.7
29/06/2017	13:32:00	43.4	49.0	9.64	51.38	8.8	8.27	0.43	498.0
29/06/2017	13:33:00	42.1	51.0	9.67	51.56	7.8	8.24	0.43	495.5
29/06/2017	13:34:00	42.7	51.3	9.61	51.31	8.0	8.25	0.45	489.5
29/06/2017	13:35:00	40.5	50.6	9.53	51.05	7.5	8.41	0.47	489.5
29/06/2017	13:36:00	40.3	52.7	9.58	51.26	8.1	8.36	0.45	497.3
29/06/2017	13:37:00	41.1	52.5	9.66	51.43	7.6	8.28	0.47	503.5
29/06/2017	13:38:00	45.2	49.5	9.58	51.25	9.9	8.27	0.45	501.2
29/06/2017	13:39:00	50.4	48.9	9.53	51.10	8.7	8.32	0.47	500.0
29/06/2017	13:40:00	59.6	49.1	9.63	51.31	10.4	8.19	0.45	505.5
29/06/2017	13:41:00	60.4	50.0	9.56	51.40	8.1	8.10	0.43	498.7
29/06/2017	13:42:00	60.8	49.8	9.53	51.07	10.6	8.24	0.45	496.5
29/06/2017	13:43:00	63.9	48.3	9.56	51.18	9.1	8.45	0.45	500.9
29/06/2017	13:44:00	60.4	48.6	9.65	51.43	10.2	8.33	0.41	507.3
29/06/2017	13:45:00	56.6	48.8	9.71	51.75	8.3	8.11	0.43	519.3
29/06/2017	13:46:00	57.5	48.6	9.60	51.40	10.5	8.14	0.41	511.9
29/06/2017	13:47:00	55.5	49.2	9.58	51.28	9.1	8.31	0.45	502.0
29/06/2017	13:48:00	47.7	48.1	9.55	51.50	9.9	8.29	0.43	495.3
29/06/2017	13:49:00	44.1	47.2	9.53	51.54	8.8	8.31	0.47	491.5
29/06/2017	13:50:00	38.2	47.9	9.41	50.87	9.5	8.44	0.45	476.1
29/06/2017	13:51:00	37.4	49.2	9.37	50.68	8.8	8.55	0.42	471.5
29/06/2017	13:52:00	37.8	47.7	9.50	51.21	9.9	8.49	0.42	480.8
29/06/2017	13:53:00	40.0	45.2	9.49	51.24	7.7	8.23	0.41	484.1
29/06/2017	13:54:00	40.7	44.8	9.45	51.21	9.4	8.34	0.45	482.6
29/06/2017	13:55:00	38.8	45.4	9.54	51.38	7.7	8.48	0.43	488.6
29/06/2017	13:56:00	36.8	46.6	9.52	51.42	9.5	8.40	0.45	488.6
29/06/2017	13:57:00	40.1	55.0	9.43	51.20	8.4	8.35	0.45	483.4
29/06/2017	13:58:00	44.0	58.3	9.43	51.05	9.1	8.48	0.41	479.6
29/06/2017	13:59:00	47.6	58.0	9.41	50.86	8.5	8.67	0.48	475.5
29/06/2017	14:00:00	49.1	57.1	9.50	51.08	10.5	8.48	0.43	481.8
29/06/2017	14:01:00	52.0	56.2	9.52	51.09	7.7	8.33	0.47	485.4
29/06/2017	14:02:00	45.5	53.8	9.41	51.01	8.7	8.52	0.41	478.5
29/06/2017	14:03:00	40.7	54.2	9.41	51.16	8.0	8.64	0.43	480.4
29/06/2017	14:04:00	37.9	53.8	9.45	51.25	8.0	8.54	0.45	482.8
29/06/2017	14:05:00	34.0	54.6	9.35	50.99	7.5	8.57	0.43	469.5
29/06/2017	14:06:00	34.0	54.6	9.28	50.53	7.9	8.64	0.45	460.6
29/06/2017	14:07:00	34.6	53.8	9.34	50.81	8.4	8.80	0.41	463.3
29/06/2017	14:08:00	36.1	54.5	9.39	51.15	8.3	8.74	0.41	469.3
29/06/2017	14:09:00	38.8	0.0	9.39	51.21	8.2	8.52	0.41	469.7
29/06/2017	14:10:00	37.1	55.0	9.29	50.72	8.7	8.66	0.41	459.9
29/06/2017	14:11:00	40.3	59.4	9.34	50.95	8.1	8.73	0.41	464.7
29/06/2017	14:12:00	42.4	60.8	9.38	51.24	8.7	8.64	0.41	467.7
29/06/2017	14:13:00	44.3	60.1	9.32	50.99	8.4	8.60	0.43	460.9
29/06/2017	14:14:00	43.2	58.4	9.19	50.42	9.1	8.78	0.45	452.3
29/06/2017	14:15:00	44.6	57.1	9.39	50.68	11.0	8.77	0.41	469.8

June 29/2017	Analyzers							
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
Test 4	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264
Max	63.9	60.8	9.71	51.75	11.0	8.80	0.51	519.3
Min	34.0	0.0	9.19	50.42	7.5	8.10	0.41	452.3
Average	46.4	50.0	9.49	51.14	8.8	8.43	0.45	483.8
Variance	65.8	100.1	0.01	0.07	0.8	0.03	0.00	198.9

Test No. 5		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Primary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
29/06/2017	14:27:00	36.89	14.96	171.71	187.88	5.00	299.93	17.03	24.33	28864	10124	93432	1336.8	1084.3	483.5	197.0	194.7	-14.55	-43.65	-82.80	172.94
29/06/2017	14:28:00	36.78	15.90	173.51	187.16	5.00	299.85	17.03	23.15	29576	10225	93681	1333.5	1083.9	483.7	196.5	194.7	-17.90	-43.80	-90.00	150.56
29/06/2017	14:29:00	36.93	16.08	171.61	188.82	5.01	301.58	17.03	23.57	28781	10118	94237	1334.6	1082.1	482.8	196.5	194.7	-16.00	-40.10	-85.65	158.44
29/06/2017	14:30:00	36.99	15.39	170.62	184.91	4.81	288.75	17.03	23.65	28947	10225	94605	1331.8	1082.1	481.8	196.0	194.7	-15.55	-42.70	-88.35	178.94
29/06/2017	14:31:00	36.78	15.09	171.24	187.74	4.99	298.80	16.91	24.52	28691	10118	93949	1338.0	1082.4	481.1	196.0	194.7	-10.75	-36.65	-79.24	187.44
29/06/2017	14:32:00	37.31	14.88	167.15	185.81	4.94	296.10	16.91	23.21	29403	10236	94338	1335.9	1082.5	480.3	195.5	194.7	-18.65	-41.65	-90.68	185.25
29/06/2017	14:33:00	37.44	14.81	169.48	188.51	4.72	284.10	16.91	23.63	29044	10135	93135	1338.0	1082.1	479.6	195.0	193.6	-11.50	-34.75	-80.78	193.19
29/06/2017	14:34:00	36.93	15.38	172.18	187.38	4.68	280.73	16.91	23.81	29306	10129	94067	1336.6	1083.3	480.1	195.0	193.6	-18.45	-48.45	-90.64	176.06
29/06/2017	14:35:00	36.32	15.31	169.91	189.32	5.11	306.75	16.91	23.99	29133	10129	94304	1336.0	1083.0	481.3	195.0	193.6	-14.10	-42.10	-80.70	178.06
29/06/2017	14:36:00	37.26	15.31	167.96	187.52	5.02	300.15	16.91	23.60	29479	10230	94399	1334.3	1083.0	482.3	195.0	193.6	-20.55	-49.40	-91.61	154.94
29/06/2017	14:37:00	36.57	15.39	167.92	189.27	4.87	292.35	16.91	23.42	29299	10118	94416	1335.1	1082.6	482.3	194.5	193.6	-15.65	-42.05	-81.71	158.31
29/06/2017	14:38:00	37.25	14.76	168.11	187.52	4.98	298.73	16.91	23.44	29403	10219	94936	1333.5	1083.0	482.1	194.5	193.6	-14.70	-43.60	-82.54	180.56
29/06/2017	14:39:00	36.90	15.16	168.01	187.79	4.87	292.20	16.73	23.99	29044	10112	92253	1339.4	1083.6	481.2	194.0	193.6	-10.20	-39.85	-76.13	185.44
29/06/2017	14:40:00	36.60	14.37	166.74	185.76	5.02	298.58	16.73	23.23	29126	10101	94222	1337.1	1083.6	481.6	194.0	193.6	-16.20	-44.30	-85.46	179.56
29/06/2017	14:41:00	36.83	15.04	170.04	187.97	4.99	299.55	16.73	23.23	28954	10096	94188	1337.6	1083.7	481.2	193.5	192.6	-8.30	-35.80	-77.85	183.88
29/06/2017	14:42:00	36.72	15.10	168.54	187.16	4.87	292.28	16.73	24.41	29306	10214	94140	1336.5	1083.9	481.8	193.5	192.6	-19.85	-45.95	-91.95	170.19
29/06/2017	14:43:00	36.84	15.64	175.40	187.29	4.91	294.38	16.73	23.31	28871	10112	94181	1334.9	1083.3	482.3	194.0	192.6	-13.45	-40.35	-82.65	177.13
29/06/2017	14:44:00	36.60	14.81	173.32	187.02	4.95	297.98	16.73	23.23	29479	10202	93991	1332.9	1083.1	483.8	194.5	192.6	-18.15	-43.65	-87.26	152.63
29/06/2017	14:45:00	37.38	15.13	170.24	187.61	4.86	291.68	16.73	23.31	28767	10000	92346	1333.8	1083.0	484.7	195.0	192.6	-15.40	-43.90	-82.65	163.94
29/06/2017	14:46:00	37.07	15.75	172.08	187.38	4.80	286.65	16.73	23.15	28864	10208	95024	1333.3	1082.9	485.0	195.5	192.6	-13.35	-40.35	-83.51	177.81
29/06/2017	14:47:00	37.16	14.91	173.36	187.07	4.66	279.60	16.73	24.02	28601	10000	91654	1338.9	1084.5	485.2	195.5	192.6	-8.70	-36.15	-74.29	185.63
29/06/2017	14:48:00	36.74	14.63	174.78	186.62	4.74	284.25	16.73	24.36	29037	10140	94250	1336.3	1084.7	485.4	195.5	192.6	-14.10	-42.60	-79.46	175.88
29/06/2017	14:49:00	36.65	15.59	174.22	185.67	4.81	288.68	16.73	23.15	28781	10039	93271	1339.3	1085.2	485.3	195.5	192.6	-6.90	-33.20	-77.18	181.56
29/06/2017	14:50:00	36.99	14.18	171.56	186.75	4.70	282.23	16.69	23.28	29306	10264	93940	1334.6	1083.9	485.7	196.0	192.6	-16.65	-43.75	-87.56	166.44
29/06/2017	14:51:00	37.10	14.26	170.28	186.39	4.68	280.95	16.69	24.18	29044	10157	94399	1334.9	1082.0	484.3	196.0	192.6	-17.05	-44.75	-81.98	173.38
29/06/2017	14:52:00	36.69	15.14	173.32	188.87	4.63	277.73	17.14	23.52	29486	10264	95195	1330.9	1080.5	484.5	196.0	192.6	-16.30	-40.20	-85.39	151.19
29/06/2017	14:53:00	36.77	14.97	171.37	188.82	4.64	277.20	17.14	23.65	29126	10163	94046	1334.6	1080.9	484.4	195.5	192.6	-13.30	-41.40	-80.40	156.06
29/06/2017	14:54:00	36.65	15.64	168.95	189.05	4.64	278.48	17.14	24.49	29037	10163	92944	1334.0	1081.6	485.3	195.5	192.6	-13.90	-43.75	-79.05	179.06
29/06/2017	14:55:00	37.40	15.53	174.78	189.27	4.56	273.38	17.14	23.23	28601	10062	92669	1338.8	1083.7	484.7	195.0	192.6	-16.20	-46.80	-82.01	155.63
29/06/2017	14:56:00	36.71	14.09	173.60	190.17	4.75	284.93	17.14	23.36	29050	10073	93817	1334.4	1084.3	485.5	195.0	192.6	-11.00	-39.80	-80.96	182.00
29/06/2017	14:57:00	36.63	14.95	170.38	186.84	4.87	292.95	17.14	23.84	28684	10073	94544	1336.4	1085.7	485.2	195.0	192.6	-19.65	-53.60	-89.06	150.69
29/06/2017	14:58:00	36.92	15.23	172.74	187.47	5.07	304.05	17.14	23.63	29306	10185	93746	1331.9	1084.7	485.6	195.0	192.6	-15.20	-43.15	-88.05	174.38
29/06/2017	14:59:00	37.16	14.37	170.04	185.81	4.94	296.63	17.14	23.23	29486	10073	97370	1331.8	1084.3	485.1	195.0	192.6	-25.90	-54.90	-89.70	138.88
29/06/2017	15:00:00	36.93	14.85	172.23	186.93	5.01	300.83	17.14	24.26	29306	10084	93568	1327.3	1083.2	486.0	195.5	192.6	-15.45	-39.30	-84.45	157.44
29/06/2017	15:01:00	36.86	13.20	173.64	186.21	4.93	296.03	17.14	24.41	29583	10084	96196	1330.1	1081.6	484.1	195.5	192.6	-28.45	-54.30	-93.86	152.75
29/06/2017	15:02:00	37.29	14.35	173.98	188.06	4.94	296.33	17.14	23.15	29230	10101	93592	1328.0	1078.8	482.8	195.5	192.6	-12.60	-40.15	-79.88	187.94
29/06/2017	15:03:00	37.17	13.98	174.45	187.74	4.94	296.33	17.14	24.23	29223	10124	96307	1334.6	1078.0	480.7	194.5	192.6	-28.45	-53.60	-97.31	146.88
29/06/2017	15:04:00	36.96	13.67	174.41	190.89	4.77	286.35	17.14	24.33	28684	10112	93943	1331.9	1076.0	480.5	194.0	192.6	-13.00	-38.30	-81.49	183.31
29/06/2017	15:05:00	36.65	14.01	172.85	187.20	4.97	298.05	16.99	24.49	29306	10129	97198	1336.1	1075.2	478.4	193.0	192.6	-30.40	-59.15	-97.24	144.69
29/06/2017	15:06:00	37.31	12.94	173.55	190.13	4.86	291.53	16.99	24.49	30371	10242	95001	1332.0	1072.5	477.6	192.5	192.6	-19.05	-46.80	-88.09	175.94
29/06/2017	15:07:00	36.69	13.10	170.94	188.15	5.03	300.90	16.99	23.55	30640	10242	97286	1332.0	1071.1	477.4	191.5	191.6	-32.30	-61.95	-102.19	147.00
29/06/2017	15:08:00	36.86	12.94	171.24	189.90	4.78	286.73	16.99	23.15	30820	10230	94677	1329.4	1069.1	477.1	191.5	191.6	-18.60	-44.95	-89.21	162.06
29/06/2017	15:09:00	36.63	13.18	170.28	185.63	4.63	277.20	16.99	23.81	30903	10230	95498	1326.5	1068.7	475.7	190.5	190.6	-34.90	-65.25	-100.76	158.38
29/06/2017	15:10:00	36.68	12.39	171.14	189.18	4.05	243.90	16.99	23.21	30640	10124	94050	1327.8	1067.3	474.2	190.0	190.6	-15.05	-40.80	-82.80	184.44
29/06/2017	15:11:00	37.10	12.66	170.57	185.72	4.78	286.73	16.99	24.52	31076	10236	97905	1328.9	1067.0	472.3	189.5	190.6	-36.15	-67.55	-109.31	150.69
29/06/2017	15:12:00	36.90	12.32	168.77	189.09	4.62	276.30	16.99	24.54	30288	10034	92844	1324.8	1065.5	472.3	189.0	189.6	-15.65	-41.30	-82.39	180.94
29/06/2017	15:13:00	37.22	13.02	169.48	186.62	4.43	265.65	16.99	24.20	30640	10253	96875	1329.5	1066.2	470.8	188.0	189.6	-35.05	-59.90	-109.54	169.13
29/06/2017	15:14:00	36.89	13.25	172.23	189.00	4.61	277.73	16.99	23.57	30461	10253	94966	1322.8	1065.4	470.9	188.0	189.6	-20.40	-47.30	-89.93	175.94
29/06/2017	15:15:00	37.58	12.88	169.44	185.72	4.61	276.68	16.99	24.44	30378	10253	94099	1322.5	1065.0	471.0	188.0	189.6	-31.50	-56.55	-102.04	150.75
29/06/2017	15:16:00	37.74	12.74	170.75	188.19	4.75	286.13	16.99	23.78	30108	10146	94906	1323.4	1064.4	472.0	188.0	188.6	-19.75	-49.30	-87.41	157.88
29/06/2017	15:17:00	37.97	12.31	172.80	185.85	4.74	284.10	16.99	24.49	30281	10247	94606	1325.6	1065.4	473.3	188.5	188.6	-22.55	-47.45	-100.35	177.06
29/06/2017	15:18:00	37.70	13.62	173.60	188.24	4.38	263.33	16.99	23.99	29396	10039	94171	1329.8	1066.2	473.8	188.5	188.6	-17.40	-45.80	-87.38	186.00
29/06/2017	15:19:00	37.28	12.02	171.00	186.66	4.61	276.38	16.99	23.63	30550	10264	96679	1329.1	1067.9	474.4	188.5	188.6	-27.20	-50.95	-102.11	181.13
29/06/2017	15:20:00	37.82	13.66	172.80	188.24	4.72	283.13	16.99	24.57	29576	10146	92252	1328.5	1067.9	475.7	188.5	188.6	-14.50	-39.65	-79.88	182.63
29/06/2017	15:21:00	37.25	13.33	172.98	186.98	4.65	278.93	16.99	24.28	29928	10270	95320	1331.5	1069.3	475.7	188.5	188.6	-24.90	-55.40	-94.80	170.38
29/06/2017	15:22:00	37.43	12.98	171.84	189.63	4.74	283.13	16.99	24.52	29583	10056	94363	1330.6	1068.6	476.2	188.5	188.6	-18.90	-46.40	-85.01	175.94
29/06/2017	15:23:00	37.25	12.80	174.03	188.42	4.76	285.83	16.99	23.91	29935	10135	95167	1328.3	1069.0	477.1	188.5	188.6	-23.00	-50.15	-94.69	151.31
29/06/2017	15:24:00	38.12	13.90	175.21	189.99	4.48	268.58	17.06	24.39	29216	10023	94205	1326.9	1068.3	477.1	188.5	188.6	-17.80	-41.55	-84.15	157.19
29/06/2017	15:25:00	37.13	13.55	172.85	187.79	4.66	279.45	17.06	24.49	29928	10140	94047	1329.5	1068.4	477.5	188.5	187.6	-19.60	-45.20	-88.80	178.69
29/06/2017	15:26:00	37.95	13.10	172.80	190.44	4.54	272.48	17.06	23.97	29396	10146	94054	1331.6	1068.8	477.2	188.5	187.6	-14.10	-42.25	-79.95	186.13
29/06/2017	15:27:00	37.77	12.66	171.75	186.62	4.61	274.58	17.06	24.54	29493	10264	93747	1334.6	1070.0	477.9	188.5	187.6	-18.75	-46.60	-87.83	176.50

June 29/2017	Waste Flows							Flows	Air Flows			Temperatures						Pressures			
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse
Test 5	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209c	FT-260c	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
Max	38.12	16.08	175.40	190.89	5.11	306.75	17.14	24.57	31076	10270	97905	1339.4	1085.7	486.0	197.0	194.7	-6.90	-33.20	-74.29	193.19
Min	36.32	12.02	166.74	184.91	4.05	243.90	16.69	23.15	28601	10000	91654	1322.5	1064.4	470.8	188.0	187.6	-36.15	-67.55	-109.54	138.88
Average	37.06	14.21	171.59	187.73	4.78	286.81	16.96	23.85	29489	10153	94413	1332.4	1077.2	480.1	192.9	191.8	-18.42	-45.65	-87.38	169.59
Variance	0.16	1.22	4.58	1.95	0.04	135.27	0.02	0.25	416909	5785	1628711	18.1	55.7	20.6	9.5	4.4	45.16	53.01	62.56	194.24

Test No. 5		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205CORR	AT-213A	AT-213B	AT-213C	AT-259CORR	AT-261	AT-263	AT-264
29/06/2017	14:27:00	60.9	45.6	9.55	51.34	11.4	8.44	0.42	490.9
29/06/2017	14:28:00	62.0	45.3	9.54	51.48	9.2	8.42	0.41	490.9
29/06/2017	14:29:00	56.4	43.1	9.39	50.90	7.8	8.48	0.41	480.2
29/06/2017	14:30:00	49.8	42.5	9.27	50.53	8.8	8.58	0.38	463.0
29/06/2017	14:31:00	46.4	41.6	9.35	51.05	9.2	8.80	0.38	466.2
29/06/2017	14:32:00	46.2	41.4	9.46	51.29	8.4	8.74	0.38	478.0
29/06/2017	14:33:00	43.8	41.0	9.36	50.74	9.5	8.52	0.38	472.4
29/06/2017	14:34:00	44.3	40.1	9.29	50.52	8.7	8.72	0.41	466.4
29/06/2017	14:35:00	44.5	39.6	9.38	50.90	9.3	8.69	0.41	474.1
29/06/2017	14:36:00	41.4	40.0	9.40	51.15	7.7	8.54	0.38	484.1
29/06/2017	14:37:00	39.6	40.1	9.31	50.69	9.0	8.65	0.37	471.2
29/06/2017	14:38:00	39.8	40.2	9.28	50.51	7.7	8.75	0.41	465.5
29/06/2017	14:39:00	39.7	40.6	9.43	51.10	9.0	8.71	0.37	474.6
29/06/2017	14:40:00	39.0	39.8	9.48	51.36	6.8	8.63	0.41	481.7
29/06/2017	14:41:00	38.7	39.7	9.30	50.70	7.7	8.61	0.38	470.1
29/06/2017	14:42:00	38.2	39.7	9.25	50.53	6.7	8.71	0.37	466.5
29/06/2017	14:43:00	38.0	41.7	9.38	51.03	8.6	8.70	0.41	476.4
29/06/2017	14:44:00	42.1	44.1	9.42	51.06	7.3	8.58	0.37	478.9
29/06/2017	14:45:00	44.0	44.1	9.35	50.75	8.9	8.61	0.38	477.2
29/06/2017	14:46:00	44.3	43.6	9.35	50.83	7.9	8.76	0.42	481.2
29/06/2017	14:47:00	44.3	44.1	9.45	51.17	9.9	8.65	0.37	490.5
29/06/2017	14:48:00	52.8	43.3	9.54	51.32	8.3	8.36	0.38	505.5
29/06/2017	14:49:00	59.1	41.7	9.44	51.30	9.6	8.50	0.38	499.6
29/06/2017	14:50:00	58.6	41.8	9.44	51.23	8.4	8.58	0.43	497.9
29/06/2017	14:51:00	56.8	42.8	9.48	51.33	9.1	8.50	0.45	493.6
29/06/2017	14:52:00	54.2	44.0	9.42	51.15	8.4	8.53	0.41	486.2
29/06/2017	14:53:00	50.2	41.4	9.22	50.64	9.8	8.65	0.41	472.7
29/06/2017	14:54:00	51.3	40.0	9.25	50.67	8.6	8.70	0.42	475.7
29/06/2017	14:55:00	52.2	41.3	9.49	51.26	9.7	8.58	0.41	493.5
29/06/2017	14:56:00	47.3	41.6	9.53	51.43	7.4	8.36	0.41	505.7
29/06/2017	14:57:00	44.9	40.2	9.47	51.23	10.2	8.43	0.41	504.6
29/06/2017	14:58:00	51.0	39.6	9.50	51.39	8.2	8.54	0.45	508.8
29/06/2017	14:59:00	51.0	40.2	9.49	51.48	8.2	8.46	0.42	508.8
29/06/2017	15:00:00	41.5	40.2	9.37	51.01	7.7	8.41	0.45	498.1
29/06/2017	15:01:00	41.3	40.1	9.27	50.56	9.0	8.62	0.41	484.9
29/06/2017	15:02:00	46.9	41.9	9.35	50.86	8.9	8.79	0.37	486.8
29/06/2017	15:03:00	58.9	42.7	9.42	51.33	12.4	8.68	0.41	484.0
29/06/2017	15:04:00	70.4	41.6	9.38	51.26	10.0	8.58	0.41	485.6
29/06/2017	15:05:00	80.7	37.9	9.31	51.04	9.9	8.64	0.41	483.3
29/06/2017	15:06:00	68.9	37.2	9.37	51.22	7.7	8.62	0.41	472.9
29/06/2017	15:07:00	57.4	36.3	9.35	51.22	8.5	8.66	0.38	465.2
29/06/2017	15:08:00	46.4	34.4	9.24	50.79	7.6	8.78	0.41	452.4
29/06/2017	15:09:00	46.4	34.8	9.18	50.52	8.5	8.91	0.41	445.6
29/06/2017	15:10:00	46.9	35.8	9.17	50.64	9.8	9.05	0.38	443.8
29/06/2017	15:11:00	60.7	35.2	9.19	50.68	8.6	8.87	0.38	441.5
29/06/2017	15:12:00	65.4	34.0	9.13	50.38	10.0	8.74	0.42	435.8
29/06/2017	15:13:00	65.9	33.5	9.10	50.43	9.1	9.00	0.41	435.3
29/06/2017	15:14:00	63.0	34.1	9.15	50.52	9.1	9.07	0.37	439.8
29/06/2017	15:15:00	52.8	35.7	9.19	50.63	8.1	8.95	0.38	441.5
29/06/2017	15:16:00	53.4	35.3	9.10	50.51	9.2	8.92	0.41	437.1
29/06/2017	15:17:00	57.9	34.9	9.06	50.23	9.5	9.11	0.41	436.2
29/06/2017	15:18:00	61.5	36.9	9.25	50.78	9.6	9.06	0.40	452.4
29/06/2017	15:19:00	61.5	36.9	9.28	50.88	9.8	8.92	0.41	457.8
29/06/2017	15:20:00	62.4	35.4	9.24	50.66	9.4	8.83	0.37	463.0
29/06/2017	15:21:00	62.6	34.9	9.20	50.51	9.5	8.90	0.38	461.4
29/06/2017	15:22:00	60.7	35.4	9.26	50.88	9.7	8.83	0.41	469.0
29/06/2017	15:23:00	57.3	37.9	9.26	50.84	8.5	8.72	0.41	466.7
29/06/2017	15:24:00	55.9	44.1	9.20	50.53	8.2	8.76	0.37	460.1
29/06/2017	15:25:00	51.6	49.5	9.17	50.40	9.3	8.97	0.38	454.6
29/06/2017	15:26:00	54.9	47.8	9.23	50.68	10.4	8.94	0.38	461.7
29/06/2017	15:27:00	71.1	44.4	9.36	51.16	12.1	8.73	0.37	475.7

June 29/2017	Analyzers							
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
Test 5	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264
Max	80.7	49.5	9.55	51.48	12.4	9.11	0.45	508.8
Min	38.0	33.5	9.06	50.23	6.7	8.36	0.37	435.3
Average	52.4	40.1	9.33	50.91	8.9	8.70	0.40	472.9
Variance	93.1	13.2	0.02	0.11	1.2	0.03	0.00	387.6

Test No. 6		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Primary	Secondary	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
29/06/2017	15:37:00	37.34	13.25	172.74	188.64	4.63	277.73	17.06	23.15	29403	10202	94664	1328.3	1072.1	474.1	189.0	187.6	-22.65	-50.35	-89.81	172.31
29/06/2017	15:38:00	37.94	12.62	175.87	189.54	4.67	280.20	17.06	24.36	29403	9989	93198	1326.8	1071.6	474.0	189.0	187.6	-16.55	-41.85	-84.71	177.56
29/06/2017	15:39:00	37.53	12.83	173.27	186.98	4.78	286.80	17.06	24.36	29576	10017	94082	1341.9	1071.7	474.6	189.0	187.6	-21.25	-50.20	-92.21	152.63
29/06/2017	15:40:00	37.92	14.64	176.30	188.37	4.63	276.75	17.06	24.41	29486	10124	94797	1341.8	1072.1	475.3	189.5	187.6	-12.75	-44.25	-80.70	160.50
29/06/2017	15:41:00	37.40	15.15	173.84	188.24	4.60	276.15	17.06	24.23	29223	10023	94715	1340.8	1075.9	477.4	190.0	187.6	-10.85	-39.35	-82.84	173.25
29/06/2017	15:42:00	37.70	15.23	173.45	187.11	4.40	263.85	17.06	23.31	28684	9921	93610	1344.6	1080.5	479.6	191.0	188.7	-8.95	-33.65	-77.85	187.38
29/06/2017	15:43:00	37.44	14.61	174.35	187.07	4.72	282.90	17.06	23.65	29313	10023	93948	1341.9	1082.7	480.7	191.5	188.7	-16.20	-44.20	-90.83	184.13
29/06/2017	15:44:00	36.98	14.88	175.44	188.55	4.60	274.80	17.06	23.65	28871	10023	92919	1346.6	1084.1	481.3	192.0	188.7	-8.95	-37.10	-77.33	189.75
29/06/2017	15:45:00	37.38	14.51	173.88	188.24	4.51	270.68	17.06	23.60	29666	10135	94694	1343.4	1084.6	481.5	192.5	188.7	-17.35	-47.15	-87.04	170.94
29/06/2017	15:46:00	37.40	15.65	171.52	187.70	4.63	276.75	17.06	23.21	29306	10034	92522	1342.5	1084.3	481.6	193.0	189.7	-13.50	-43.70	-79.28	177.88
29/06/2017	15:47:00	37.58	15.02	174.84	188.51	4.70	281.70	17.06	23.47	29486	9927	94602	1339.9	1083.8	482.3	193.5	189.7	-14.70	-41.95	-84.86	152.81
29/06/2017	15:48:00	37.41	14.81	174.88	187.11	4.53	271.50	17.06	23.28	29133	10034	93120	1342.0	1083.5	481.7	194.0	189.7	-10.70	-38.95	-77.14	163.31
29/06/2017	15:49:00	37.16	14.54	175.40	186.62	4.76	285.53	17.06	24.10	29133	10034	92804	1337.3	1082.7	480.3	194.0	189.7	-9.70	-37.65	-79.13	174.88
29/06/2017	15:50:00	38.07	16.06	170.75	186.75	4.82	289.43	17.10	23.57	29044	9933	92857	1343.3	1083.3	479.5	193.5	190.7	-9.25	-36.95	-76.09	186.75
29/06/2017	15:51:00	37.26	15.47	174.41	188.10	4.67	279.90	17.10	23.15	29576	10034	94469	1340.8	1083.3	479.8	193.5	190.7	-10.85	-36.40	-81.60	179.63
29/06/2017	15:52:00	38.01	15.33	168.86	187.92	4.63	278.03	17.10	24.52	29223	9921	92627	1342.3	1083.9	479.2	193.5	190.7	-8.20	-33.00	-82.01	191.81
29/06/2017	15:53:00	37.80	15.47	172.14	189.00	4.66	279.38	17.10	23.36	29666	10023	94684	1339.4	1082.5	478.6	193.0	190.7	-16.35	-42.95	-87.19	178.13
29/06/2017	15:54:00	37.91	14.71	165.93	186.89	4.49	269.40	17.10	23.42	29396	10017	91930	1337.1	1081.8	478.0	192.5	190.7	-14.20	-42.45	-88.65	155.31
29/06/2017	15:55:00	37.55	14.86	172.04	189.45	4.47	268.35	17.10	24.33	29493	10011	93373	1337.4	1081.5	478.7	192.5	190.7	-21.40	-47.40	-92.66	159.19
29/06/2017	15:56:00	37.38	14.97	169.48	188.42	4.61	276.75	17.10	24.05	29749	10011	94972	1344.4	1081.9	479.3	192.5	190.7	-23.90	-51.70	-87.11	153.88
29/06/2017	15:57:00	37.94	15.81	169.10	187.79	4.77	286.05	17.10	23.47	29306	10017	94667	1344.0	1082.3	480.1	192.5	190.7	-12.85	-37.50	-80.21	182.63
29/06/2017	15:58:00	37.98	15.37	169.72	185.94	4.80	287.78	17.10	23.42	29659	10017	95341	1353.4	1085.3	481.3	192.5	190.7	-22.35	-51.10	-86.55	146.94
29/06/2017	15:59:00	37.53	14.91	172.14	187.61	4.66	279.60	17.10	23.97	29306	10017	92861	1349.0	1085.9	483.2	193.0	190.7	-8.15	-37.65	-77.06	179.31
29/06/2017	16:00:00	38.04	14.46	170.81	185.72	4.71	282.75	17.21	23.89	29493	10118	95472	1351.1	1088.0	483.9	193.0	190.7	-25.55	-57.20	-89.74	141.25
29/06/2017	16:01:00	37.49	14.64	172.08	189.63	4.62	277.58	17.21	23.78	29762	10011	95067	1347.1	1088.0	485.7	193.5	190.7	-16.25	-43.20	-85.54	170.00
29/06/2017	16:02:00	38.10	14.62	169.44	187.38	4.62	277.35	17.21	23.34	29403	10118	96964	1346.1	1088.2	486.9	193.5	190.7	-28.70	-56.90	-99.98	138.50
29/06/2017	16:03:00	37.83	15.33	174.35	190.08	4.42	265.43	17.21	23.68	29838	10118	94646	1342.3	1086.8	486.8	194.0	190.7	-12.50	-41.50	-80.10	152.75
29/06/2017	16:04:00	37.83	15.32	170.43	188.42	4.50	270.00	17.21	24.47	30191	10017	95131	1344.1	1086.5	486.0	194.0	190.7	-25.80	-54.95	-93.15	143.69
29/06/2017	16:05:00	37.59	15.18	170.28	190.17	4.50	271.05	17.21	23.28	29479	10028	91576	1347.6	1086.9	486.5	194.0	190.7	-9.65	-38.60	-76.09	173.44
29/06/2017	16:06:00	37.11	14.88	170.66	187.79	4.56	273.60	17.21	24.54	29756	10028	97382	1349.1	1089.1	486.9	194.0	190.7	-26.80	-55.90	-92.44	140.13
29/06/2017	16:07:00	37.74	14.52	171.09	188.15	4.32	259.20	17.25	23.18	29576	10051	92149	1349.3	1088.6	487.4	194.5	190.7	-10.35	-33.60	-78.30	179.19
29/06/2017	16:08:00	37.56	14.98	170.90	185.99	4.47	268.13	17.25	23.39	30108	10157	94027	1351.1	1089.4	486.9	194.0	190.7	-27.90	-58.00	-100.99	143.44
29/06/2017	16:09:00	37.95	15.39	169.10	188.24	4.69	281.18	16.50	24.15	29756	10045	93345	1349.3	1087.4	486.1	194.5	190.7	-13.05	-42.95	-83.89	176.75
29/06/2017	16:10:00	37.49	15.61	162.37	185.63	4.55	274.35	16.65	24.54	30288	10129	96532	1348.9	1087.2	485.3	194.5	191.7	-34.35	-63.95	-104.29	153.31
29/06/2017	16:11:00	37.35	15.27	170.28	186.53	4.55	273.15	16.65	24.41	29838	10129	94717	1349.9	1086.3	485.6	194.5	191.7	-13.35	-40.15	-82.16	159.13
29/06/2017	16:12:00	37.80	15.27	169.10	186.26	4.66	279.30	16.65	23.65	30025	10028	95440	1347.0	1086.7	485.6	195.0	191.7	-17.75	-44.35	-93.15	177.25
29/06/2017	16:13:00	37.16	15.44	167.82	187.47	4.61	276.83	16.65	23.47	29050	10056	91669	1347.0	1086.6	484.8	195.0	191.7	-13.70	-38.70	-81.30	186.69
29/06/2017	16:14:00	38.24	15.03	166.59	183.38	4.59	276.68	16.65	23.21	30108	10051	95422	1349.5	1088.4	484.3	194.5	191.7	-26.15	-50.45	-99.00	166.88
29/06/2017	16:15:00	37.34	15.02	171.18	182.61	4.45	267.08	16.65	23.49	29403	9938	92881	1348.8	1088.0	484.4	195.0	191.7	-8.65	-33.40	-75.45	180.00
29/06/2017	16:16:00	37.59	14.08	171.65	181.44	4.46	268.50	16.65	23.60	29928	10039	93445	1350.9	1089.8	485.0	195.5	191.7	-20.30	-44.85	-95.10	173.88
29/06/2017	16:17:00	37.64	15.43	172.37	183.96	4.61	276.60	16.65	24.12	29313	10039	92627	1350.1	1088.7	485.7	196.5	191.7	-12.80	-40.65	-79.65	177.63
29/06/2017	16:18:00	37.70	15.87	167.40	182.25	4.58	274.58	16.65	24.54	30371	10146	93947	1347.9	1089.1	486.0	197.0	192.7	-21.95	-50.40	-99.15	156.13
29/06/2017	16:19:00	37.46	16.31	167.11	185.99	4.72	283.43	17.74	23.47	29576	10045	93325	1345.6	1088.0	485.8	198.0	192.7	-15.45	-42.25	-83.29	159.19
29/06/2017	16:20:00	37.01	16.23	169.62	182.88	4.71	283.80	17.29	23.52	29756	10146	93239	1349.6	1087.5	484.2	197.5	192.7	-15.95	-43.75	-87.34	176.56
29/06/2017	16:21:00	38.03	16.52	169.05	184.59	4.53	271.73	17.29	23.18	29306	9938	92833	1352.8	1087.2	483.5	197.5	192.7	-8.95	-33.50	-78.64	185.75
29/06/2017	16:22:00	37.85	16.75	168.35	181.94	4.58	275.55	17.29	23.18	29845	10039	92310	1353.3	1089.7	484.6	197.5	192.7	-17.55	-41.25	-92.70	175.19
29/06/2017	16:23:00	37.59	15.86	167.02	184.68	4.78	286.65	17.29	23.97	29140	9933	92427	1357.0	1091.8	486.0	198.0	192.7	-10.05	-32.85	-77.93	184.94
29/06/2017	16:24:00	37.91	16.38	166.16	181.71	4.59	275.48	17.29	23.18	29576	10051	93436	1357.4	1094.3	487.7	198.0	192.7	-21.65	-52.05	-93.94	175.44
29/06/2017	16:25:00	37.16	16.90	168.11	182.88	4.64	278.10	17.33	23.21	29493	10056	92565	1351.4	1094.0	487.9	199.0	193.7	-13.25	-42.20	-79.88	183.81
29/06/2017	16:26:00	37.97	17.20	165.93	180.86	4.80	287.70	16.24	23.18	29403	10180	94575	1348.6	1095.5	488.8	199.5	193.7	-18.45	-46.30	-92.59	159.19
29/06/2017	16:27:00	37.02	16.19	166.50	182.93	4.59	275.33	17.40	24.57	29659	9966	91881	1348.5	1096.2	488.8	200.5	193.7	-11.50	-38.60	-77.51	161.13
29/06/2017	16:28:00	37.94	15.92	168.72	180.18	4.68	280.80	16.31	24.02	29486	10090	92457	1347.8	1097.0	488.9	201.0	194.7	-9.00	-34.70	-80.48	172.44
29/06/2017	16:29:00	37.92	15.64	168.11	182.88	4.68	280.50	16.24	24.49	29486	9989	91121	1352.0	1097.6	488.4	201.0	194.7	-6.40	-34.95	-72.04	183.75
29/06/2017	16:30:00	36.89	16.97	167.25	181.98	4.90	293.70	17.63	23.84	30018	10090	91228	1353.4	1098.3	488.3	201.0	195.7	-11.80	-37.30	-81.86	178.00
29/06/2017	16:31:00	37.17	16.58	167.25	184.77	4.68	281.63	16.50	24.41	29583	9888	93275	1353.3	1098.0	487.7	201.0	195.7	-6.45	-33.50	-73.28	188.00
29/06/2017	16:32:00	36.53	16.54	172.04	183.38	4.81	288.45	16.73	23.84	30108	10028	94231	1347.3	1097.4	486.9	200.5	195.7	-13.50	-39.55	-84.94	176.94
29/06/2017	16:33:00	36.11	17.34	163.85	183.96	4.85	291.15	17.03	24.44	29928	10023	92536	1340.3	1094.2	485.2	200.5	195.7	-12.15	-39.65	-82.80	183.44
29/06/2017	16:34:00	36.02	17.24	167.87	182.97	5.02	300.98	17.03	24.54	30115	10124	93693	1337.4	1091.7	483.8	200.0	195.7	-15.45	-43.85	-88.09	162.06
29/06/2017	16:35:00	35.90	16.34	167.68	185.00	5.03	298.35	17.03	23.94	29935	10017	93862	1335.0	1090.0	482.6	199.5	195.7	-10.05	-34.25	-77.63	169.50
29/06/2017	16:36:00	35.91	16.42	168.63	181.89	4.74	284.55	17.03	24.36	30115	10028	92927	1334.0	1089.2	481.9	199.0	195.7	-9.85	-34.40	-76.84	181.31
29/06/2017	16:37:00	36.06	17.22	166.40	182.61	4.65	279.08	17.03	24.57	29935	9927	92461	1340.4	1089.7	481.0	198.5	195.7	-8.55	-33.85	-75.53	187.69

June 29/2017	Waste Flows							Flows	Air Flows			Temperatures					Pressures			
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse
Test 6	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	SC-PAC-FT	PV-236	PV-209c	FT-260c	TE-240	TE-241	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622
Max	38.24	17.34	176.30	190.17	5.03	300.98	17.74	24.57	30371	10202	97382	1357.4	1098.3	488.9	201.0	195.7	-6.40	-32.85	-72.04	191.81
Min	35.90	12.62	162.37	180.18	4.32	259.20	16.24	23.15	28684	9888	91121	1326.8	1071.6	474.0	189.0	187.6	-34.35	-63.95	-104.29	138.50
Average	37.45	15.43	170.23	185.90	4.64	278.53	17.01	23.81	29594	10038	93677	1345.4	1086.9	483.3	195.1	191.5	-15.30	-42.56	-84.75	170.25
Variance	0.31	0.99	9.76	7.16	0.02	63.53	0.09	0.24	126475	4747	1832549	39.4	38.6	15.2	11.2	5.3	40.38	54.00	57.21	201.78

Test No. 6		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
		PPM	PPM	%	%	PPM	%	%	PPM
$Date	$Time	AT-205CORR	AT-213A	AT-213B	AT-213C	AT-259CORR	AT-261	AT-263	AT-264
29/06/2017	15:37:00	56.5	31.0	9.34	51.19	8.3	8.74	0.35	476.7
29/06/2017	15:38:00	54.7	30.5	9.39	51.31	9.4	8.69	0.38	480.9
29/06/2017	15:39:00	50.0	31.2	9.38	51.18	7.9	8.65	0.37	479.2
29/06/2017	15:40:00	49.0	32.8	9.26	50.66	9.2	8.78	0.40	472.1
29/06/2017	15:41:00	50.4	32.3	9.27	50.73	9.5	8.91	0.38	477.7
29/06/2017	15:42:00	53.6	33.6	9.55	51.37	10.2	8.64	0.35	520.5
29/06/2017	15:43:00	54.0	34.8	9.66	51.67	8.4	8.42	0.38	540.8
29/06/2017	15:44:00	52.7	34.9	9.51	51.42	11.3	8.29	0.37	535.0
29/06/2017	15:45:00	59.4	34.6	9.52	51.23	8.3	8.42	0.38	534.2
29/06/2017	15:46:00	57.4	33.6	9.55	51.49	9.9	8.32	0.37	531.1
29/06/2017	15:47:00	51.7	33.1	9.45	51.30	8.0	8.24	0.41	516.1
29/06/2017	15:48:00	53.9	33.0	9.43	51.07	10.0	8.38	0.35	509.0
29/06/2017	15:49:00	52.0	33.8	9.47	51.15	8.2	8.59	0.35	506.4
29/06/2017	15:50:00	49.5	33.4	9.49	51.31	12.2	8.45	0.37	505.3
29/06/2017	15:51:00	58.7	33.1	9.51	51.47	7.9	8.33	0.38	502.7
29/06/2017	15:52:00	59.4	31.9	9.42	51.15	10.0	8.42	0.41	497.7
29/06/2017	15:53:00	51.7	32.0	9.41	51.22	7.7	8.51	0.35	495.7
29/06/2017	15:54:00	43.8	32.8	9.41	51.26	9.0	8.51	0.37	489.7
29/06/2017	15:55:00	40.9	32.0	9.38	51.18	7.9	8.54	0.41	484.1
29/06/2017	15:56:00	41.4	31.8	9.29	50.85	9.7	8.71	0.38	477.7
29/06/2017	15:57:00	48.4	32.8	9.40	51.27	9.0	8.76	0.35	490.8
29/06/2017	15:58:00	53.0	33.5	9.47	51.43	10.3	8.62	0.41	498.5
29/06/2017	15:59:00	63.0	33.3	9.50	51.24	7.9	8.30	0.38	510.0
29/06/2017	16:00:00	64.6	32.5	9.46	51.09	11.3	8.36	0.38	510.0
29/06/2017	16:01:00	69.3	32.9	9.51	51.33	8.3	8.43	0.38	515.6
29/06/2017	16:02:00	66.3	33.1	9.55	51.41	9.6	8.32	0.38	519.8
29/06/2017	16:03:00	65.0	33.0	9.50	51.29	8.2	8.27	0.37	512.0
29/06/2017	16:04:00	74.2	32.5	9.35	50.97	9.6	8.52	0.38	498.0
29/06/2017	16:05:00	73.6	33.2	9.42	51.25	9.9	8.67	0.38	502.3
29/06/2017	16:06:00	75.8	32.0	9.53	51.68	11.3	8.41	0.38	516.9
29/06/2017	16:07:00	79.2	29.5	9.55	51.70	8.4	8.22	0.38	519.8
29/06/2017	16:08:00	77.3	29.1	9.48	51.30	11.0	8.31	0.38	514.6
29/06/2017	16:09:00	80.5	29.1	9.53	51.52	7.1	8.41	0.35	514.6
29/06/2017	16:10:00	69.3	29.6	9.47	51.30	9.0	8.37	0.41	501.1
29/06/2017	16:11:00	47.2	30.2	9.32	50.71	7.8	8.56	0.38	481.0
29/06/2017	16:12:00	52.5	29.7	9.30	50.69	8.4	8.72	0.38	484.9
29/06/2017	16:13:00	57.1	32.6	9.39	51.14	9.4	8.72	0.38	496.3
29/06/2017	16:14:00	59.0	33.1	9.55	51.51	8.7	8.44	0.41	515.9
29/06/2017	16:15:00	59.3	31.3	9.49	51.30	8.3	8.26	0.35	515.9
29/06/2017	16:16:00	54.5	30.8	9.39	50.90	8.5	8.42	0.38	511.3
29/06/2017	16:17:00	54.2	32.3	9.48	51.07	8.6	8.48	0.38	516.8
29/06/2017	16:18:00	63.5	34.1	9.62	51.35	8.7	8.38	0.38	523.7
29/06/2017	16:19:00	66.2	33.8	9.54	51.15	8.0	8.30	0.37	509.7
29/06/2017	16:20:00	57.0	33.9	9.36	50.64	8.2	8.52	0.41	499.7
29/06/2017	16:21:00	49.1	35.6	9.49	51.05	9.0	8.57	0.38	505.8
29/06/2017	16:22:00	53.6	35.5	9.56	51.45	9.9	8.51	0.35	512.0
29/06/2017	16:23:00	61.4	35.2	9.51	51.34	9.4	8.36	0.36	523.8
29/06/2017	16:24:00	61.2	35.1	9.51	51.19	9.3	8.34	0.35	528.7
29/06/2017	16:25:00	59.3	36.2	9.66	51.39	8.2	8.22	0.38	543.1
29/06/2017	16:26:00	43.1	37.2	9.62	51.35	6.9	8.19	0.38	543.1
29/06/2017	16:27:00	38.8	37.5	9.55	51.19	7.2	8.21	0.35	539.2
29/06/2017	16:28:00	36.3	39.9	9.53	51.16	6.7	8.37	0.37	542.8
29/06/2017	16:29:00	34.4	41.0	9.61	51.33	8.7	8.35	0.37	546.6
29/06/2017	16:30:00	39.0	40.5	9.70	51.53	6.3	8.11	0.38	552.6
29/06/2017	16:31:00	38.9	40.6	9.58	51.09	6.6	8.04	0.32	540.7
29/06/2017	16:32:00	36.9	40.5	9.55	51.14	5.8	8.17	0.35	536.7
29/06/2017	16:33:00	37.8	39.4	9.57	51.39	6.4	8.23	0.35	530.1
29/06/2017	16:34:00	37.4	39.2	9.55	51.34	5.7	8.26	0.37	519.6
29/06/2017	16:35:00	37.0	41.2	9.42	51.10	6.4	8.50	0.35	499.7
29/06/2017	16:36:00	41.1	41.8	9.42	51.12	6.0	8.72	0.35	498.5
29/06/2017	16:37:00	41.1	41.8	9.45	51.12	7.2	8.56	0.28	501.0

June 29/2017	Analyzers							
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2
Test 6	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264
Max	80.5	41.8	9.70	51.70	12.2	8.91	0.41	552.6
Min	34.4	29.1	9.26	50.64	5.7	8.04	0.28	472.1
Average	54.4	34.1	9.48	51.23	8.6	8.44	0.37	511.1
Variance	136.7	11.5	0.01	0.06	2.0	0.03	0.00	401.9