



Report:

Mercury Emission Testing at the Clean Harbors Sarnia Facility (February 2019)

Date: March 19, 2019



Report:

Mercury Emission Testing at the Clean Harbors Sarnia Facility (February 2019)

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

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

Report No.: 21915
10 pages, 5 Appendices

Revision History

Version	Date	Summary Changes/Purpose of Revision
1	March 19, 2019	None

NOTICE:

This report was prepared by ORTECH Consulting Inc. (ORTECH) solely for the Client identified above and is to be used exclusively for the purposes set out in the report. The material in this report reflects the judgment of ORTECH based on information available to them at the time of preparation. Unless manifestly incorrect, ORTECH assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Unless otherwise required by law or regulation, this report shall not be shared with any Third Party without the express written consent of ORTECH. ORTECH accepts no responsibility for damages, if any, suffered by any Third Party which makes use of the results and conclusions presented in this report.

Table of Contents

		Page
	EXECUTIVE SUMMARY	4
1.	INTRODUCTION	5
2.	SAMPLING LOCATION	5
3.	SAMPLING METHODOLOGY	6
4.	ANALYSIS METHODOLOGY	7
5.	QUALITY ASSURANCE/QUALITY CONTROL PROGRAM	8
6.	RESULTS	9
7.	FACILITY PROCESS DATA	10
APPENDIX 1	Data Tables	
APPENDIX 2	Mercury Field Data Sheets	
APPENDIX 3	ORTECH Equipment Calibration Data	
APPENDIX 4	Mercury Analytical Report	
APPENDIX 5	Clean Harbors Process Data	

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 February 20, 2019. 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 reported is provided below:

Mercury Parameter	Average
Dry Reference Concentration ($\mu\text{g}/\text{Rm}^3$)*	4.71
Dry Adjusted Concentration ($\mu\text{g}/\text{Rm}^3$)**	4.34

* 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 23.8 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 February 20, 2019. 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 a dual probe assembly so that the mercury traps are positioned 1 to 2 inches apart. Each probe was heated to approximately 135°C to prevent condensation of the stack gas on the sampling media. The mercury traps used for sampling are specially designed for use at wet sources; each tube had an extended section of glass to allow for the heating of the stack gas before it 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 approximately sixty minutes in duration at an approximate sampling rate of one liter per minute.

At 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 $\pm 10\%$ 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 $\pm 10\%$ 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 $\pm 10\%$ 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 January 2018. The pre-spiked mercury trap for Test No. 2 (250 ng) and Test No. 3 (500 ng) were used for spike recovery determination as the concentrations best fit the requirements of the QA/QC criteria. The average mercury collected for Test No. 1, Test No. 2 and Test No. 3 (315 ng) was within $\pm 50\%$ of the Test No. 2 and Test No. 3 spike concentrations.

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. 2 and Test No. 3 fell within the spike range criterion stated in the test method. The spike recovery for Test No. 2 was 106.5% and the spike recover for Test No. 3 was 97.0%. 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 $\leq 10\%$ relative deviation for mercury concentrations greater than $1 \mu\text{g}/\text{Rm}^3$ or $\leq 20\%$ relative deviation for mercury concentrations less than $1 \mu\text{g}/\text{Rm}^3$. 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 $1 \mu\text{g}/\text{Rm}^3$. The average dry adjusted mercury concentration ranged from a low of $3.65 \mu\text{g}/\text{Rm}^3$ (Tube Pair No. 2) to a high of $4.91 \mu\text{g}/\text{Rm}^3$ (Tube Pair No. 1) for the three tests reported. The paired trap agreement was 1.2% for Test No. 1, 3.5% for Test No. 2, and 2.0% for Test No. 3.

6. RESULTS

Six mercury test runs were collected during one day of sampling on February 20, 2019. 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. 1, Test No. 2 and Test No. 3 are reported.

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

Mercury emission sample analyses for Test No. 1, Test No. 2 and Test No. 3 are provided in Table 2. Mercury was detected in Section 1 of each trap in quantities greater than the method detection limit (0.8 ng) in all of the traps. Mercury was also collected in Section 2 in all six traps in quantities greater than the method detection limit. However, the amount detected in Section 2 was less than 2.2% of the mercury collected in Section 1, indicating that there was no breakthrough or potential loss of mercury. US EPA Method 30B states that $\leq 10\%$ of the total mercury collected should be collected in Section 2 for mercury concentrations greater than $1 \mu\text{g}/\text{Rm}^3$ or $\leq 20\%$ of the total mercury collected should be collected in Section 2 for mercury concentrations less than $1 \mu\text{g}/\text{Rm}^3$.

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

Six unspiked mercury traps and six pre-spiked mercury traps were ordered approximately two weeks before the field testing program from Ohio Lumex. The pre-spiked mercury traps were spiked with known quantities of mercury ranging from 100 ng to 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 trap for Test No. 2 (250 ng) and Test No. 3 (500 ng) were used for spike recovery determination as the concentrations best fit the requirements of the QA/QC criteria.

US EPA Method 30B states that it is acceptable to use the field recovery runs as test runs for emission testing as long as they meet the paired trap agreement criteria. The mass of the mercury spike initially present in each of the spiked traps was subtracted from the total mercury collected in Section 1 of the trap. The difference represents the amount of mercury in the stack gas.

The paired trap agreement was 1.2% for Test No. 1, 3.5% for Test No. 2, and 2.0% for Test No. 3. The mercury emission data from the total vapour phase mercury tests is provided below:

Mercury Parameter	Test 1	Test 2	Test 3	Average
Dry Reference Conc. ($\mu\text{g}/\text{Rm}^3$)*	5.24	3.86	5.04	4.71
Dry Adjusted Conc. ($\mu\text{g}/\text{Rm}^3$)**	4.91	3.65	4.47	4.34

* 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 $\mu\text{g}/\text{Rm}^3$ adjusted to 11% oxygen. The mercury concentrations were below this limit during the test program.

The spiked mercury trap recovery calculations are shown in Table 3; the spike recovery for Test No. 2 was 106.5% and the spike recovery for Test No. 3 was 97.0%. 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, CO₂, H₂O, THC, O₂, SO₂)
- stack gas opacity
- carbon injection rate

During the emission testing program, the average powdered activated carbon (PAC) injection rate was 23.8 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	February 20, 2019	9:58	10:58	60
2	February 20, 2019	11:19	12:19	60
3	February 20, 2019	12:33	13:39	66
4	February 20, 2019	13:51	14:51	60
5	February 20, 2019	15:03	16:03	60
6	February 20, 2019	16:13	17:13	60

Note: All test times match plant time.

Table 2: Mercury Emission Data

Test/Run No.	Tube ID	Mercury Collected			Dry Gas Volume Sampled Rm ^{3*}	Mercury Concentration		Paired Trap Agreement %
		Section 1 ng	Section 2 ng	Total ng		Dry Reference µg/Rm ^{3*}	Dry Adjusted µg/Rm ^{3**}	
1	A ***	343.6	8.2	352	0.0679	5.18	4.85	-
	B	315.6	2.3	318	0.0599	5.30	4.97	-
	Average					5.24	4.91	1.2
2	A	248.5	4.3	253	0.0679	3.72	3.53	-
	B***	238.6	3.9	243	0.0608	3.99	3.78	-
	Average					3.86	3.65	3.5
3	A***	354.7	12.2	367	0.0743	4.94	4.38	-
	B	347.8	7.6	355	0.0691	5.14	4.56	-
	Average					5.04	4.47	2.0
Average				315		4.71	4.34	

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

* At 25°C and 1 atmosphere

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

*** Spiked tube, mercury collected corrected for the original spike (100 ng for Test No. 1, 250 ng for Test No. 2, and 500 ng for Test No. 3).

Table 3: Mercury Spike Tube Recovery

Test No.	Total Collected ng	Spike Tube Volume Sampled Rm ^{3*}	Mercury Concentration ng/Rm ^{3*}	Total Collected ng	Unspike Tube Volume Sampled Rm ^{3*}	Mercury Concentration ng/Rm ^{3*}	Spike Concentration ng/Rm ^{3*}	Spike Recovery %
1	451.8	0.0679	6651	317.9	0.0599	5304	1347	NA
2	492.5	0.0608	8102	252.8	0.0679	3723	4379	106.5
3	866.9	0.0743	11663	355.4	0.0691	5140	6523	97.0
Average								101.7

Note: The spike tubes were spiked with mercury by the analytical laboratory prior to sampling. The original spike concentrations were 100 ng for Test No. 1, 250 ng for Test No. 2, and 500 ng for Test No. 3.

"NA" Not Applicable. Spike recovery was not calculated as spike concentration was outside the range specified in US EPA Method 30B.

APPENDIX 2

**Mercury Field Data Sheets
(7 pages)**

**Clean Harbors, Sarnia
Mercury Tube Sampling Train
Sample Volume Corrections**

Incinerator Exhaust Stack

Test # - Tube (tube pair field ID)	DGMCF	Initial DGM Reading (L)	Final DGM Reading (L)	Actual Vol. Sampled (L)	Barometric Pressure (in Hg)	Average DGM Pressure del H (in H ₂ O)	Average DGM Temperature (°C)	Corrected Volume (L)*	Corrected Volume (Rm ³)*
T1A OLC075865 (Spiked)	1.005	96.80	160.00	63.20	29.6	1.5	3.4	67.93	0.0679
T1B OL513442	0.971	3.40	62.60	59.20	29.6	0.9	10.1	59.94	0.0599
T2A OL513441	1.005	61.70	126.00	64.30	29.5	1.5	7.5	67.90	0.0679
T2B OL500257 (Spiked)	0.971	64.30	125.00	60.70	29.5	0.9	12.3	60.79	0.0608
T3A OL426763 (Spiked)	1.005	26.70	97.50	70.80	29.4	1.5	8.5	74.33	0.0743
T3B OL513406	0.971	26.30	95.80	69.50	29.4	0.9	13.5	69.14	0.0691
T4A OL510265	1.005	99.00	162.60	63.60	29.4	1.5	8.9	66.57	0.0666
T4B OL336491 (Spiked)	0.971	97.90	159.50	61.60	29.4	0.9	12.9	61.35	0.0613
T5A OL503014 (Spiked)	1.005	63.90	126.50	62.60	29.3	1.5	7.9	65.51	0.0655
T5B OL513429	0.971	60.90	123.50	62.60	29.3	0.9	14.2	61.81	0.0618
T6A OL510413	1.005	27.10	90.50	63.40	29.2	1.5	8.0	66.24	0.0662
T6B OLC076058 (Spiked)	0.971	24.10	84.40	60.30	29.2	0.9	14.2	59.46	0.0595

* dry at 25°C and 1 atmosphere

ORTECH Environmental Mercury Tube Data Sheet

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

Test location:	Stack Breaching
Date:	February 20, 2019
Project No.:	21915

Train A

Tube Identification:	062075865	Spiked	Yes	No
Spike Concentration	100.0	ng		

Measuring Device	MII
Control Module	COC 200158
Barometer	ENV. CAN.

Barometric Pressure	29.57
---------------------	-------

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	96.9	1	1.5	2
5	101.7	1	1.5	2
10	106.6	1	1.5	2
15	111.2	2	1.5	2
20	115.8	2	1.5	2
25	121.1	2	1.5	2
30	127.0	2	1.5	2
35	132.6	2	1.5	2
40	137.6	2	1.5	2
45	143.0	2	1.5	2
50	149.0	6	1.5	2
55	155.0	6	1.5	2
60	160.0	6	1.5	2

Start Time:	9:56	Initial Leak Check	2.01 LPM@	23 "Hg	DGMCF:	1.005
Finish Time:	10:36	Final Leak Check	2.01 LPM@	16 "Hg	Sample Volume:	63.2
					Average DGM Temp:	3.4
					Average DGM Δ H:	1.5

Train B

Tube Identification:	06513442	Spiked	Yes	No
Spike Concentration		ng		

Measuring Device	MII
Control Module	A11542

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	3.6	5	1.5	2
5	8.0	5	1.5	2
10	12.4	5	1.5	2
15	17.0	10	1.5	2
20	21.3	10	1.5	2
25	26.2	10	1.5	2
30	32.0	10	1.5	2
35	37.0	10	1.5	2
40	42.0	12	1.5	2
45	47.3	12	1.5	2
50	52.6	13	1.5	2
55	57.5	13	1.5	2
60	62.6	13	1.5	2

Start Time:	9:56	Initial Leak Check	2.01 LPM@	17 "Hg	DGMCF:	0.971
Finish Time:	10:36	Final Leak Check	2.01 LPM@	17 "Hg	Sample Volume:	59.2
					Average DGM Temp:	10.1
					Average DGM Δ H:	0.9

Operator:	D. J. U.
-----------	----------

ORTECH Environmental Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	February 20, 2019
Project No.:	21915

Train A

Tube Identification:	0513441	Spiked	Yes	No
Spike Concentration	~	ng		

Measuring Device	MII
Control Module	COE 20019
Barometer	ENV. CAN.

Barometric Pressure	29.48
---------------------	-------

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	61.7	6	1.5	3
5	66.9	6	1.5	4
10	72.9	6	1.5	5.5
15	79.2	6	1.5	5.5
20	83.7	6	1.5	6
25	88.4	6	1.5	6
30	93.6	6	1.5	7
35	98.9	6	1.5	7
40	104.3	6	1.5	7
45	109.4	6	1.5	7
50	116.4	6	1.5	7
55	121.5	6	1.5	7
60	126.0	6	1.5	7

Start Time:	11:19	Initial Leak Check	201 LPM@	17 "Hg	DGMCF:	1.005
Finish Time:	12:19	Final Leak Check	201 LPM@	14 "Hg	Sample Volume:	64.3
					Average DGM Temp:	7.5
					Average DGM Δ H:	1.5

Train B

Tube Identification:	0LS00257	Spiked	Yes	No
Spike Concentration	251	ng		

Measuring Device	MII
Control Module	11547

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	64.3	10	1.5	5
5	69.3	10	1.5	5.5
10	74.3	11	1.5	6
15	79.1	12	1.5	6
20	84.1	13	1.5	6
25	89.3	13	1.5	6
30	94.3	13	1.5	6
35	99.5	13	1.5	6
40	104.5	13	1.5	6
45	109.6	13	1.5	6
50	114.6	13	1.5	6
55	119.7	13	1.5	6
60	125.0	13	1.5	6

Start Time:	11:19	Initial Leak Check	201 LPM@	17 "Hg	DGMCF:	0.971
Finish Time:	12:19	Final Leak Check	201 LPM@	15 "Hg	Sample Volume:	60.7
					Average DGM Temp:	12.3
					Average DGM Δ H:	0.9

Operator:	DILL
-----------	------

ORTECH Environmental Mercury Tube Data Sheet

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

Test location:	Stack Breaching
Date:	February 20, 2019
Project No.:	21915

Train A

Tube Identification:	OL 476763	Spiked	Yes <input checked="" type="radio"/> No <input type="radio"/>
Spike Concentration	500	ng	

Measuring Device	MII
Control Module	00520078
Barometer	ENV. CAN.

Barometric Pressure	29.41
---------------------	-------

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	26.7	25	1.5	7
5	31.9	25	1.5	7
10	37.2	25	1.5	7
15	42.2	25	1.5	7
20	48.2	25	1.5	7
25	52.8	25	1.5	7
30	58.9	25	1.5	7
35	64.3	25	1.5	7
40	69.5	25	1.5	7
45	73.0	25	1.5	7
50	80.4	25	1.5	7
55	85.7	25	1.5	7
60	91.5	25	1.5	7

Start Time:	17:33	Initial Leak Check	2.01 LPM@ 14 "Hg	DGMCF:	6.105
Finish Time:	13:39	Final Leak Check	2.01 LPM@ 15 "Hg	Sample Volume:	70.8
				Average DGM Temp:	20.5
				Average DGM Δ H:	1.5

Train B

Tube Identification:	OL 513406	Spiked	Yes <input type="radio"/> No <input checked="" type="radio"/>
Spike Concentration		ng	

Measuring Device	MII
Control Module	11592

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	26.3	11	0.9	5
5	31.0	12	0.9	5
10	35.9	13	0.9	5
15	40.8	14	0.9	5
20	45.7	14	0.9	5
25	50.9	14	0.9	5
30	56.4	14	0.9	5
35	61.7	14	0.9	5
40	67.1	13	0.9	6.5
45	72.9	14	0.9	6.5
50	79.1	14	0.9	6.5
55	83.5	14	0.9	6.5
60	95.8	15	0.9	6.5

Start Time:	17:33	Initial Leak Check	2.01 LPM@ 16 "Hg	DGMCF:	0.971
Finish Time:	13:39	Final Leak Check	2.01 LPM@ 15 "Hg	Sample Volume:	69.5
				Average DGM Temp:	13.5
				Average DGM Δ H:	0.9

Operator:	D. J. U. S.
-----------	-------------

ORTECH Environmental Mercury Tube Data Sheet

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

Test location:	Stack Breaching
Date:	February 20, 2019
Project No.:	21915

Train A

Tube Identification:	0L510265	Spiked	Yes	No
Spike Concentration		ng		

Measuring Device	MII
Control Module	COE 20079
Barometer	ENV. CAN.

Barometric Pressure	29.37
---------------------	-------

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	99.0	8	1.5	5
5	105.3	9	1.5	5
10	109.1	9	1.5	5
15	114.4	9	1.5	5
20	119.9	9	1.5	5
25	124.9	9	1.5	5
30	130.0	9	1.5	5
35	135.8	9	1.5	5
40	141.9	9	1.5	5
45	146.9	9	1.5	5
50	151.9	9	1.5	5
55	157.5	9	1.5	5
60	162.6	9	1.5	5

Start Time:	1351	Initial Leak Check	2.0 LPM@	14 "Hg	DGMCF:	1.005
Finish Time:	1451	Final Leak Check	2.0 LPM@	15 "Hg	Sample Volume:	63.60
					Average DGM Temp:	2.9
					Average DGM Δ H:	1.5

Train B

Tube Identification:	0L334491	Spiked	Yes	No
Spike Concentration	800	ng		

Measuring Device	MII
Control Module	17542

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	97.9	11	0.9	5
5	102.9	12	0.9	5
10	107.9	12	0.9	5
15	112.5	12	0.9	5
20	117.9	12	0.9	5
25	123.4	12	0.9	5
30	126.4	13	0.9	5
35	132.0	14	0.9	5
40	136.0	14	0.9	5
45	143.0	14	0.9	6.5
50	148.0	14	0.9	6.5
55	154.0	14	0.9	6.5
60	159.5	13	0.9	6.5

Start Time:	1351	Initial Leak Check	2.0 LPM@	17 "Hg	DGMCF:	0.971
Finish Time:	1451	Final Leak Check	2.0 LPM@	15 "Hg	Sample Volume:	61.6
					Average DGM Temp:	12.9
					Average DGM Δ H:	0.9

Operator:	[Signature]
-----------	-------------

ORTECH Environmental Mercury Tube Data Sheet

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

Test location:	Stack Breaching
Date:	February 20, 2019
Project No.:	21915

Train A

Tube Identification:	0LS03014	Spiked	Yes	No
Spike Concentration	1400	ng		

Measuring Device	MII
Control Module	COE20019
Barometer	ENV. CAN.

Barometric Pressure	29.26
---------------------	-------

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	63.9	28	1.5	4
5	69.0	28	1.5	4.5
10	74.5	28	1.5	4.5
15	79.7	28	1.5	4.5
20	84.9	28	1.5	4.5
25	89.9	28	1.5	4.5
30	95.3	28	1.5	4.5
35	100.5	28	1.5	4.5
40	106.0	28	1.5	4.5
45	111.7	28	1.5	4.5
50	116.4	28	1.5	4.5
55	121.5	28	1.5	4.5
60	126.5	28	1.5	4.5

Start Time:	1503	Initial Leak Check	2.01 LPM@	12 "Hg	DGMCF:	1.005
Finish Time:	1603	Final Leak Check	2.01 LPM@	17 "Hg	Sample Volume:	62.6
					Average DGM Temp:	7.9
					Average DGM Δ H:	1.5

Train B

Tube Identification:	0LS13 429	Spiked	Yes	No
Spike Concentration	-	ng		

Measuring Device	MII
Control Module	115M2

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	60.9	10	0.9	5
5	67.0	13	0.9	5
10	71.9	13	0.9	5
15	77.3	14	0.9	5
20	82.7	15	0.9	5
25	87.9	15	0.9	5
30	92.9	15	0.9	5
35	98.2	15	0.9	5
40	103.5	15	0.9	5
45	108.9	15	0.9	5
50	113.4	15	0.9	5
55	118.5	15	0.9	5
60	123.5	15	0.9	5

Start Time:	1503	Initial Leak Check	2.01 LPM@	15 "Hg	DGMCF:	0.971
Finish Time:	1603	Final Leak Check	2.01 LPM@	13 "Hg	Sample Volume:	62.6
					Average DGM Temp:	14.2
					Average DGM Δ H:	0.9

Operator:	D. J. U.S.
-----------	------------

ORTECH Environmental Mercury Tube Data Sheet

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

Test location:	Stack Breeching
Date:	February 20, 2019
Project No.:	21915

Train A

Tube Identification:	01510413	Spiked	Yes	No	
Spike Concentration		ng			

Measuring Device	MII
Control Module	C0520019
Barometer	ENV. CAN.

Barometric Pressure	29.22
---------------------	-------

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	27.1	8	1.5	4
5	33.1	8	1.5	5
10	38.1	8	1.5	6
15	43.1	8	1.5	6
20	48.9	8	1.5	6
25	53.9	8	1.5	6
30	58.9	8	1.5	6
35	64.4	8	1.5	6
40	69.8	8	1.5	6
45	75.1	8	1.5	6
50	80.5	8	1.5	6
55	85.5	8	1.5	6
60	90.5	8	1.5	6

Start Time:	1613	Initial Leak Check	2.01 LPM@	17 "Hg	DGMCF:	11005	
Finish Time:	1713	Final Leak Check	<.01 LPM@	15 "Hg	Sample Volume:	63.4	
				Average DGM Temp:			80
				Average DGM Δ H:			1.5

Train B

Tube Identification:	01C076058	Spiked	Yes	No	
Spike Concentration	7600	ng			

Measuring Device	MII
Control Module	11542

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H ₂ O	Pump Vacuum "Hg Gauge
0	29.1	10	0.9	4
5	29.9	14	0.9	5
10	35.5	14	0.9	6
15	41.0	14	0.9	6
20	45.9	14	0.9	6
25	50.6	14	0.9	6
30	55.4	13	0.9	6
35	60.1	14	0.9	6
40	65.0	13	0.9	6
45	69.3	13	0.9	6
50	74.4	13	0.9	6
55	79.4	13	0.9	6
60	84.4	13	0.9	6

Start Time:	1613	Initial Leak Check	2.01 LPM@	16 "Hg	DGMCF:	0971	
Finish Time:	1713	Final Leak Check	<.01 LPM@	14 "Hg	Sample Volume:	60.3	
				Average DGM Temp:			14.2
				Average DGM Δ H:			0.9

Operator:	D. J. U. J.
-----------	-------------

APPENDIX 3

**ORTECH Equipment Calibration Data
(4 pages)**

ORTECH Environmental

Dry Gas Meter Calibration Data

Calibration Procedure	03-J004
Meter Number	Vost 5
Date	January 16, 2019
Barometric Pressure	29.59
System Leak Check	<0.01 lpm @ 23 "Hg

MII NUMBERS	
DGM	COE 20018
Gasometer	A01463
Barometer	COE 20028

Calibrated By	Daniel Prosia
Signature	<i>[Signature]</i>
Reviewed and Accepted By	<i>CLARK BELORE</i>

ft³ = cm³ * 1.332 litres per cm³ / 28.3168 litres per ft³

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


Gasometer Reading cm	Gasometer Reading		Gasometer Volume ft ³	Gasometer Temperature °C	DGM Reading		DGM Volume ft ³	DGM Average Temperature °C	DGM Pressure in. H ₂ O	DGM Outlet °C	DGM Calibration Factor	Time min.	Flow Rate lpm
	Initial	Final			Initial	Final							
35.20	23.20	12.00	0.564	20.0	749.54	765.49	0.563	24.0	1.5	24.0	1.012	16	1.0
58.95	47.10	11.85	0.557	20.0	717.65	733.59	0.563	24.0	1.5	24.0	1.000	16	1.0
47.10	35.20	11.90	0.560	20.0	733.59	749.54	0.563	24.0	1.5	24.0	1.004	16	1.0

Acceptance Criteria:

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

DGMCF AVERAGE
1 Lpm 1.005

ORTECH Environmental Trendicator Calibration

Calibration Procedure	03-J005
Trendicator Type	Jenco 765
MII	COE 20018
Date	January 16, 2019
Calibrated By	Daniel Prosia
Signature	
Reviewed and Accepted By	CHRIS BELLE

Fluke Calibrator Output (COE 20024) (°C)	Trendicator Display Value		Percent Difference (%)
	Before Adjustment (°C)	After Adjustment (°C)	
0	0	0	0.0
10	10	10	0.0
20	20	20	0.0
50	50	50	0.0
75	75	75	0.0
100	100	100	0.0
125	126	126	-0.8
150	151	150	0.0
200	200	200	0.0
300	300	299	0.3
400	401	400	0.0
500	501	500	0.0
600	602	600	0.0

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

Acceptance Criteria:

Trendicator display must read within $\pm 1.5\%$ 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	Pbar (in. Hg)
Meter Number	Vost 4	(Pbar in. Hg+DGMPressure/13.6)
Date	January 17, 2019	
Barometric Pressure	29.71	
System Leak Check	0.02 lpm @ 21 "Hg	

$ft^3 = cm^3 \times 1.332$ litres per cm³/28.3168 litres per ft³

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

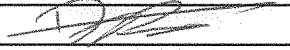
MII NUMBERS	
DGM	A11542
Gasometer	A01463
Barometer	COE 20028
Calibrated By	Daniel Prosia
Signature	<i>[Signature]</i>
Reviewed and Accepted By	CHRIS BELLORE

Gasometer Reading cm	Gasometer Reading		Gasometer Volume ft ³	Gasometer Temperature °C	DGM Reading		DGM Volume ft ³	DGM Average Temperature °C	DGM Pressure in. H ₂ O	DGM Outlet °C	DGM Calibration Factor	Time min.	Flow Rate lpm
	Initial	Final			Initial	Final							
65.50	53.20	12.30	0.579	20.0	379.51	396.55	0.602	24.0	0.9	24.0	0.972	16	1.1
53.20	37.70	15.50	0.729	20.0	396.55	417.91	0.754	24.0	0.9	24.0	0.978	20	1.1
65.40	50.25	15.15	0.713	20.0	439.01	460.19	0.748	24.0	0.9	24.0	0.964	20	1.1

DGMCF AVERAGE
1Lpm 0.971

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)

**ORTECH Environmental
Trendicator Calibration**

Calibration Procedure	03-J005
Trendicator Type	Nutech
MII	A11542
Date	January 17, 2019
Calibrated By	Daniel Prosia
Signature	
Reviewed and Accepted By	CHRIS BELORE

Fluke Calibrator Output (COE 20024) (°C)	Trendicator Display Value		Percent Difference (%)
	Before Adjustment (°C)	After Adjustment (°C)	
0	1	0	0.0
10	11	10	0.0
20	21	20	0.0
50	51	50	0.0
75	77	75	0.0
100	102	100	0.0
125	128	126	-0.8
150	152	151	-0.7
200	202	200	0.0
300	302	300	0.0
400	402	400	0.0
500	502	500	0.0
600	602	600	0.0

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

Acceptance Criteria:

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

APPENDIX 4

**Mercury Analytical Report
(1 page)**

Sorbent Trap Analysis Report

Date | 3-5-19
 Analyst[s] | James Zoller
 Project | 2017109
 Turnaround | Standard
 Company | ORTECH Environmental
 Contact | David Utley
 Phone | 905 822 4120*235
 Email | dutley@ortech.ca
 Method | EPA 7473
 Method Uncertainty | ± 10%
 MDL | 0.8ng
 LOQ | 5ng

Trap ID	Pre-Filter Mass [ng]	AGS Mass [ng]	Section 1 Mass [ng]	Section 2 Mass [ng]	Total Mass [ng] ¹	Section 3 Mass [ng]	Spike Level [ng]	Breakthrough [%] ²	Spike Recovery [%] ³	Source	Notes	Affected Section
OLC075865			443.6	8.2	451.8		100	1.8%		Incinerator T1		
OL513442			315.6	2.3	317.9			0.7%		Incinerator T1		
OL513441			248.5	4.3	252.8			1.7%		Incinerator T2		
OL500257			488.6	3.9	492.5		250	0.8%		Incinerator T2		
OL426763			854.7	12.2	866.9		500	1.4%		Incinerator T3		
OL513406			347.8	7.6	355.4			2.2%		Incinerator T3		
OL510265			210.5	4.7	215.2			2.2%		Incinerator T4		
OL336491			1079	10.8	1090		800	1.0%		Incinerator T4		
OL503014			1632	22.2	1654		1400	1.4%		Incinerator T5		
OL513429			158.8	9.3	168.1			5.9%		Incinerator T5		
OL510413			229.8	6.7	236.5			2.9%		Incinerator T6		
OLC076058			2822	22.3	2844		2600	0.8%		Incinerator T6		

¹ Total Mass = PF+AGS+S1+S2

² Breakthrough = S2 / [PF+AGS+S1]

³ For P512B only Spike Recovery = S3 / Spike Level

⁴ Data invalidation qualifier - refer to notes



APPENDIX 5

**Clean Harbors Process Data
(18 pages)**

Test No. 1

SDate	Time	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Degrees C	Primary	Secondary	Degrees C	Quench	Degrees C	SDA	Degrees C	Stack	Incinerator	mmH2O	SDA Inlet	mmH2O	BH Inlet	mmH2O	BH dP	mmH2O	PDT-622
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	m3/h	Degrees C	Degrees C	Degrees C	TE-204	TE-204	TE-258	PT-242A	PT-242A	PT-249	PT-249	PT-615	PT-615			
2019-02-20	9:58:00	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-240	TE-241	TE-203	TE-203	TE-204	TE-204	TE-258	TE-258	PT-242A	PT-242A	PT-249	PT-249	PT-615	PT-615			
2019-02-20	9:59:00	37.80	14.90	144.33	165.69	4.49	269.55	19.35	24.15	24378	11590	124067	1487	1487	1079	506	506	198	198	172	172	5.00	5.00	27.40	27.40	-270	-270	176	161	
2019-02-20	9:59:00	38.06	14.90	144.33	165.69	4.49	269.55	19.35	24.15	24378	11590	124067	1487	1487	1079	506	506	198	198	172	172	5.00	5.00	27.40	27.40	-263	-263	176	161	
2019-02-20	10:00:00	38.04	15.08	144.37	165.92	4.53	272.03	19.61	23.65	24447	11809	124061	1478	1478	1075	504	504	197	197	171	171	5.55	5.55	-22.00	-22.00	-258	-258	185	185	
2019-02-20	10:01:00	37.89	14.86	144.90	168.57	4.66	279.38	18.90	23.00	24267	11803	124042	1472	1472	1073	504	504	197	197	171	171	5.20	5.20	-23.25	-23.25	-255	-255	202	202	
2019-02-20	10:02:00	37.80	15.23	146.17	163.53	4.72	282.98	19.43	23.81	24288	11680	125547	1472	1472	1070	503	503	196	196	171	171	5.85	5.85	-18.60	-18.60	-249	-249	210	210	
2019-02-20	10:03:00	37.37	14.40	144.33	164.84	4.69	281.40	18.90	23.36	24371	11657	125200	1465	1465	1067	501	501	195	195	171	171	5.60	5.60	-21.10	-21.10	-249	-249	211	211	
2019-02-20	10:04:00	37.74	14.78	145.42	165.29	4.76	285.53	19.05	24.05	24378	11680	124072	1464	1464	1065	499	499	194	194	171	171	3.85	3.85	-21.10	-21.10	-249	-249	211	211	
2019-02-20	10:05:00	37.04	14.85	145.89	164.25	4.86	291.83	18.90	24.26	24544	11860	125534	1459	1459	1062	498	498	194	194	170	170	8.30	8.30	-27.35	-27.35	-269	-269	184	184	
2019-02-20	10:06:00	37.41	14.64	146.55	167.49	4.88	292.73	19.43	23.10	24371	11905	125640	1456	1456	1060	497	497	194	194	171	171	5.55	5.55	-23.80	-23.80	-259	-259	195	195	
2019-02-20	10:07:00	36.98	14.47	145.37	164.43	4.95	297.00	18.26	24.39	24378	11820	126278	1449	1449	1058	497	497	193	193	171	171	9.30	9.30	-31.65	-31.65	-273	-273	169	169	
2019-02-20	10:08:00	37.85	14.80	145.27	167.18	4.92	295.35	19.58	24.20	24544	11719	125153	1443	1443	1057	496	496	193	193	170	170	6.20	6.20	-24.60	-24.60	-260	-260	180	180	
2019-02-20	10:09:00	37.46	14.40	143.43	164.93	4.86	291.83	19.28	23.13	24723	11753	124621	1445	1445	1057	495	495	192	192	170	170	9.40	9.40	-28.50	-28.50	-269	-269	191	191	
2019-02-20	10:10:00	38.09	15.46	144.37	168.45	4.93	295.50	19.24	23.34	24550	11702	125064	1447	1447	1056	494	494	191	191	170	170	4.55	4.55	-19.75	-19.75	-253	-253	206	206	
2019-02-20	10:11:00	37.50	15.18	146.36	167.45	4.98	298.95	19.42	23.30	24274	11601	125064	1447	1447	1056	494	494	191	191	169	169	12.60	12.60	-37.15	-37.15	-289	-289	145	145	
2019-02-20	10:12:00	38.16	15.13	146.94	168.08	5.01	300.30	19.35	24.18	24191	11770	124293	1450	1450	1057	493	493	190	190	169	169	4.00	4.00	-22.60	-22.60	-253	-253	205	205	
2019-02-20	10:13:00	38.07	15.34	144.00	165.83	4.93	295.58	19.54	24.28	24378	11685	126567	1456	1456	1056	493	493	190	190	169	169	12.20	12.20	-35.00	-35.00	-287	-287	141	141	
2019-02-20	10:14:00	37.56	15.00	145.94	166.32	4.94	296.25	19.54	23.76	24550	11815	125283	1450	1450	1056	493	493	190	190	169	169	7.45	7.45	-28.65	-28.65	-263	-263	188	188	
2019-02-20	10:15:00	37.46	15.18	143.10	165.42	4.87	292.28	19.28	23.68	24371	11657	124563	1450	1450	1057	492	492	190	190	169	169	7.05	7.05	-24.50	-24.50	-261	-261	197	197	
2019-02-20	10:16:00	37.26	14.73	146.22	165.29	4.97	298.43	19.16	23.84	24371	11781	126075	1443	1443	1057	492	492	190	190	169	169	8.95	8.95	-28.85	-28.85	-267	-267	174	174	
2019-02-20	10:17:00	37.74	15.30	145.32	165.74	4.99	299.63	19.05	24.44	24378	11792	126273	1442	1442	1058	492	492	190	190	168	168	5.65	5.65	-22.70	-22.70	-259	-259	200	200	
2019-02-20	10:18:00	37.19	14.76	146.51	163.89	4.87	291.90	19.31	23.47	24461	11669	127464	1443	1443	1058	492	492	190	190	168	168	9.25	9.25	-26.70	-26.70	-280	-280	168	168	
2019-02-20	10:19:00	37.50	14.44	148.07	166.55	4.96	297.38	19.31	23.10	24177	11736	126112	1446	1446	1058	492	492	190	190	168	168	5.20	5.20	-23.20	-23.20	-261	-261	210	210	
2019-02-20	10:20:00	37.53	14.82	147.35	167.49	5.03	301.73	18.94	23.23	24205	11747	124927	1446	1446	1059	492	492	190	190	168	168	5.45	5.45	-23.70	-23.70	-265	-265	202	202	
2019-02-20	10:21:00	37.95	15.25	148.16	168.35	5.14	308.40	18.79	23.23	24101	11837	125939	1453	1453	1060	493	493	190	190	168	168	3.30	3.30	-19.50	-19.50	-257	-257	213	213	
2019-02-20	10:22:00	37.77	15.02	148.21	166.91	5.13	307.95	19.39	23.55	24544	11865	125827	1451	1451	1061	493	493	190	190	168	168	9.00	9.00	-28.70	-28.70	-276	-276	184	184	
2019-02-20	10:23:00	37.98	14.73	146.98	168.57	5.05	302.70	19.39	23.60	24198	11584	124573	1454	1454	1062	493	493	191	191	169	169	7.25	7.25	-23.85	-23.85	-267	-267	194	194	
2019-02-20	10:24:00	37.68	15.05	149.40	166.23	5.02	301.20	19.20	24.23	24371	11730	126455	1453	1453	1062	494	494	191	191	169	169	9.25	9.25	-26.70	-26.70	-280	-280	168	168	
2019-02-20	10:25:00	38.09	14.81	149.40	168.66	5.00	300.23	18.90	23.42	24378	11708	125770	1450	1450	1062	495	495	191	191	169	169	6.15	6.15	-25.70	-25.70	-271	-271	180	180	
2019-02-20	10:26:00	37.29	14.58	145.32	164.97	5.04	302.10	19.46	24.18	24544	11843	126532	1450	1450	1062	495	495	192	192	169	169	14.80	14.80	-35.45	-35.45	-288	-288	180	180	
2019-02-20	10:27:00	37.74	14.98	148.12	166.05	5.09	305.63	20.10	24.23	24101	11573	125924	1451	1451	1061	494	494	192	192	169	169	4.75	4.75	-22.05	-22.05	-262	-262	205	205	
2019-02-20	10:28:00	37.17	14.77	149.73	164.84	4.99	299.40	18.94	23.07	24454	11567	127593	1454	1454	1061	495	495	192	192	169	169	13.30	13.30	-36.50	-36.50	-300	-300	143	143	
2019-02-20	10:29:00	37.83	15.10	150.01	167.09	4.90	293.85	18.90	24.33	24281	11624	125182	1450	1450	1059	495	495	193	193	169	169	4.50	4.50	-23.00	-23.00	-261	-261	206	206	
2019-02-20	10:30:00	37.31	14.49	148.74	164.52	4.70	281.70	19.01	24.33	24108	11775	127869	1457	1457	1060	495	495	193	193	169	169	7.55	7.55	-35.05	-35.05	-281	-281	162	162	
2019-02-20	10:31:00	37.71	14.79	150.01	165.15	4.69	281.40	19.01	23.81	24447	11736	125825	1447	1447	1058	495	495	193	193	169	169	7.65	7.65	-27.00	-27.00	-271	-271	188	188	
2019-02-20	10:32:00	37.95	14.36	147.78	166.14	4.74	284.63	18.86	23.34	24274	11612	124375	1450	1450	1058	495	495	193	193	170	170	7.15	7.15	-25.80	-25.80	-269	-269	196	196	
2019-02-20	10:33:00	37.70	15.24	148.02	168.66	4.67	280.43	18.94	23.10	24378	11500	126636	1444	1444	1058	495	495	193	193	170	170	8.70	8.70	-27.50	-27.50	-277	-277	174	174	
2019-02-20	10:34:00	37.82	14.47	150.63	168.62	4.68	280.88	19.46	24.02	24378	11666	126013	1447	1447	1059	495	495	193	193	170	170	6.35	6.35	-25.20	-25.20	-267	-267	183	183	
2019-02-20	10:35:00	37.82	14.12	151.10	166.37	4.10	245.93	19.58	23.31	24461	11730	126609	1446	1446	1058	495	495	193	193	169	169	7.25	7.25	-25.65	-25.65	-268	-268	202	202	
2019-02-20	10:36:00	38.01	14.60	151.14	168.21	4.51	270.75	19.65	23.15	24288	11618	123748	1455	1455	1058	495	495	193	193	170	170	4.20	4.20	-23.05	-23.05	-257	-257	207	207	
2019-02-20	10:37:00	37.55	14.43	149.77																										

2019-02-20	10:54:00	38.01	14.67	140.25	164.70	5.00	300.00	18.04	24.49	24544	11787	126305	1458	1078	492	190	169	-9.25	-28.60	-271	201
2019-02-20	10:55:00	38.48	14.45	143.19	166.77	4.87	292.05	19.31	23.63	24198	11596	126726	1462	1078	492	190	169	-5.75	-23.25	-259	210
2019-02-20	10:56:00	38.27	14.87	144.05	166.77	4.87	291.90	19.31	23.23	24550	11584	126498	1462	1079	494	191	169	-11.05	-32.20	-285	181
2019-02-20	10:57:00	38.82	15.22	146.55	168.62	4.94	296.10	19.35	24.18	24378	11601	126485	1463	1079	495	192	169	-6.45	-26.55	-272	194
2019-02-20	10:58:00	38.30	14.70	146.79	167.54	5.02	301.05	19.35	23.21	24544	11691	126185	1467	1080	497	193	169	-15.40	-39.95	-299	149

FEB 20/2019		Waste Flows										Air Flows						Temperatures						Pressures		
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	Flows	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse				
		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		38.88	15.46	151.14	171.09	5.14	308.40	20.10	24.49	24806	11905	128844	1487	1080	506	198	172	-2.85	-18.60	-249	213					
Min		36.98	13.87	114.15	163.04	4.03	241.65	18.04	23.00	24101	11466	123585	1442	1054	491	189	168	-18.60	-40.80	-300	141					
Average		37.85	14.78	144.87	166.51	4.79	287.14	19.20	23.77	24395	11692	125678	1455	1064	495	192	170	-8.04	-27.53	-269	187					
Variance		0.22	0.11	56.28	2.75	0.06	198.38	0.11	0.23	29777	11446	1248140	84	73	12	4	1	12.23	30.96	153	380					

Test No. 2

SDate	STime	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Degrees C	Quench	Degrees C	SDA	Degrees C	Stack	Degrees C	Incinerator	mmH2O	SDA Inlet	mmH2O	BH Inlet	mmH2O	BH dP	mmH2O
		LPM	LPM	LPM	LPM	SCFM	LPM	LPM	Lbs/h	m3/h	m3/h	Degrees C	m3/h	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	mmH2O	mmH2O	mmH2O	mmH2O
2019-02-20	11:20:00	37.68	14.41	143.43	165.92	FT-223	PV-207	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	TE-240	TE-203	TE-241	TE-204	TE-258	TE-242A	PT-249	PT-242A	PT-249	PT-249	PT-615	PDT-622	PDT-622	212	
2019-02-20	11:21:00	37.88	14.45	143.66	166.32	5.20	312.08	18.98	23.08	24108	11528	125130	1464	1075	196	196	172	5.40	-24.15	-258	5.40	-24.15	-258	206		212	
2019-02-20	11:22:00	38.07	14.23	144.84	166.91	5.14	308.25	19.31	23.10	24550	11562	125667	1466	1077	196	196	172	5.40	-24.15	-251	5.40	-24.15	-251	213		213	
2019-02-20	11:23:00	38.39	14.54	144.52	167.94	5.05	303.08	19.99	23.07	24385	11528	125634	1469	1077	196	196	172	5.40	-24.15	-272	5.40	-24.15	-272	189		189	
2019-02-20	11:24:00	38.72	14.12	144.71	167.63	5.03	301.73	18.90	23.84	24385	11573	127087	1462	1076	196	196	172	5.40	-24.15	-261	5.40	-24.15	-261	198		198	
2019-02-20	11:25:00	38.18	14.55	144.47	167.76	4.98	298.58	19.31	23.65	24281	11500	125845	1464	1076	196	196	172	5.40	-24.15	-263	5.40	-24.15	-263	184		184	
2019-02-20	11:26:00	37.22	14.33	144.52	163.71	4.63	277.88	19.46	23.07	24454	11594	125373	1463	1075	196	196	172	5.40	-26.75	-264	5.40	-26.75	-264	198		198	
2019-02-20	11:27:00	38.00	14.70	145.94	166.01	4.70	281.78	17.74	24.10	24281	11376	122852	1466	1073	196	196	172	5.35	-22.85	-255	5.35	-22.85	-255	209		209	
2019-02-20	11:28:00	37.31	14.58	145.65	162.72	4.68	281.03	18.23	24.28	24633	11612	126759	1463	1072	195	195	172	9.05	-26.40	-270	9.05	-26.40	-270	197		197	
2019-02-20	11:29:00	37.70	14.64	146.04	166.23	4.64	278.18	18.94	24.33	24371	11500	124778	1461	1069	195	195	172	5.70	-25.95	-257	5.70	-25.95	-257	210		210	
2019-02-20	11:30:00	37.55	14.63	146.13	164.66	4.51	270.23	18.49	23.21	24730	11472	128313	1459	1067	194	194	171	16.60	-40.50	-292	16.60	-40.50	-292	161		161	
2019-02-20	11:31:00	37.62	14.32	146.04	167.94	4.55	273.08	19.50	24.28	24371	11517	125495	1452	1064	194	194	171	8.55	-28.50	-266	8.55	-28.50	-266	193		193	
2019-02-20	11:32:00	37.91	14.90	145.74	165.92	4.67	280.43	19.05	24.33	24633	11494	130261	1449	1062	194	194	172	16.10	-39.40	-296	16.10	-39.40	-296	138		138	
2019-02-20	11:33:00	38.24	14.98	146.60	168.57	4.69	281.33	19.05	23.00	24371	11641	124693	1443	1060	194	194	172	16.10	-39.40	-296	16.10	-39.40	-296	177		177	
2019-02-20	11:34:00	37.71	14.60	146.08	169.38	4.79	287.55	18.98	23.28	24371	11590	129155	1446	1058	193	193	171	10.00	-34.95	-281	10.00	-34.95	-281	155		155	
2019-02-20	11:35:00	38.18	14.75	146.41	170.92	4.91	294.60	18.90	24.36	24198	11427	126390	1441	1056	193	193	171	7.40	-25.05	-263	7.40	-25.05	-263	203		203	
2019-02-20	11:36:00	38.25	14.69	146.94	169.24	4.86	291.83	18.60	23.23	24108	11433	126316	1448	1056	194	193	171	5.70	-25.55	-256	5.70	-25.55	-256	210		210	
2019-02-20	11:37:00	38.07	14.05	145.85	171.23	4.91	294.68	19.28	23.28	24461	11371	125055	1444	1056	192	191	170	6.60	-23.50	-254	6.60	-23.50	-254	212		212	
2019-02-20	11:38:00	37.92	14.34	146.17	169.07	4.93	295.88	19.46	24.31	24198	11556	124715	1446	1056	191	191	170	10.25	-31.55	-271	10.25	-31.55	-271	187		187	
2019-02-20	11:39:00	37.47	14.41	146.13	167.99	5.06	303.53	18.49	24.23	24633	11545	127098	1435	1052	191	191	170	8.05	-27.80	-267	8.05	-27.80	-267	195		195	
2019-02-20	11:40:00	37.79	14.80	146.80	167.76	5.00	299.85	19.05	23.89	24288	11382	125636	1434	1050	190	190	170	12.05	-33.55	-278	12.05	-33.55	-278	171		171	
2019-02-20	11:41:00	37.50	13.95	145.89	166.37	4.96	297.30	19.05	23.05	24633	11584	126682	1439	1048	190	190	170	9.80	-32.15	-267	9.80	-32.15	-267	182		182	
2019-02-20	11:42:00	37.89	14.59	146.27	169.79	4.99	299.25	19.05	23.39	24461	11494	126084	1427	1046	190	190	170	10.45	-31.55	-271	10.45	-31.55	-271	196		196	
2019-02-20	11:43:00	37.19	14.68	145.37	165.15	5.03	301.88	18.94	24.23	24550	11629	126232	1421	1045	190	190	169	10.50	-23.80	-259	10.50	-23.80	-259	207		207	
2019-02-20	11:44:00	38.10	14.60	146.94	171.32	5.06	303.45	19.84	24.10	24364	11478	125299	1427	1045	190	190	169	6.55	-23.80	-259	6.55	-23.80	-259	207		207	
2019-02-20	11:45:00	37.79	15.10	146.14	168.03	5.05	303.23	18.71	24.33	24461	11641	125605	1430	1047	189	189	169	7.20	-23.70	-259	7.20	-23.70	-259	208		208	
2019-02-20	11:46:00	38.43	14.60	146.88	171.68	5.03	301.58	18.94	23.94	24288	11500	125309	1432	1047	189	189	169	7.20	-23.70	-259	7.20	-23.70	-259	208		208	
2019-02-20	11:47:00	37.40	14.34	146.08	169.34	5.02	301.20	19.05	24.05	24550	11579	127975	1434	1049	189	189	169	18.40	-45.40	-300	18.40	-45.40	-300	140		140	
2019-02-20	11:48:00	38.19	15.22	146.60	171.45	4.95	297.15	19.24	23.26	24371	11275	126725	1429	1049	189	189	169	10.45	-30.75	-273	10.45	-30.75	-273	190		190	
2019-02-20	11:49:00	38.96	14.28	145.31	168.57	4.99	300.38	19.46	23.89	24378	11264	130056	1436	1053	189	189	169	15.85	-41.80	-299	15.85	-41.80	-299	140		140	
2019-02-20	11:50:00	38.84	14.64	146.13	167.90	4.92	296.85	19.46	24.31	24378	11152	126501	1436	1056	189	189	169	10.15	-29.00	-272	10.15	-29.00	-272	176		176	
2019-02-20	11:51:00	38.25	14.84	145.27	167.58	5.00	300.23	19.46	23.60	24378	11449	124614	1442	1059	190	190	168	9.25	-27.45	-267	9.25	-27.45	-267	203		203	
2019-02-20	11:52:00	38.25	15.26	146.17	168.71	4.99	300.00	19.24	23.89	24205	11219	124320	1440	1059	191	191	168	7.80	-26.60	-261	7.80	-26.60	-261	210		210	
2019-02-20	11:53:00	38.28	14.45	146.60	169.25	5.00	298.73	18.68	24.44	24288	11096	124415	1444	1061	191	191	168	8.45	-27.75	-268	8.45	-27.75	-268	184		184	
2019-02-20	11:54:00	37.94	13.91	146.98	168.21	5.07	303.90	18.04	24.10	24184	11258	124998	1443	1060	191	191	169	8.55	-29.30	-264	8.55	-29.30	-264	203		203	
2019-02-20	11:55:00	38.43	14.46	147.12	168.57	5.03	302.03	19.13	24.47	24288	11629	123584	1446	1059	191	191	169	6.50	-23.40	-259	6.50	-23.40	-259	211		211	
2019-02-20	11:56:00	38.58	14.48	146.94	169.20	5.11	306.45	18.79	24.23	24454	11169	127705	1446	1061	192	192	169	11.20	-32.65	-276	11.20	-32.65	-276	184		184	
2019-02-20	11:57:00	39.14	13.72	147.69	172.17	5.02	301.43	19.13	23.47	24108	11433	127281	1448	1062	192	192	170	8.45	-27.75	-268	8.45	-27.75	-268	184		184	
2019-02-20	11:58:00	38.31	14.41	147.12	170.24	5.07	304.20	18.79	23.60	24550	11444	126723	1448	1064	192	192	170	11.20	-31.30	-278	11.20	-31.30	-278	170		170	
2019-02-20	11:59:00	38.73	14.94	147.26	171.23	5.11	306.38	19.61	24.28	24205	11680	124677	1452	1064	193	193	170	6.25	-24.75	-269	6.25	-24.75	-269	182		182	
2019-02-20	12:00:00	38.46	13.97	146.27	168.17	5.09	305.55	18.56	23.26	24544	11214	125605	1452	1066	193	193	170	10.90	-34.50	-277	10.90	-34.50	-277	195		195	
2019-02-20	12:01:00	39.39	14.30	147.17	171.90	5.15	308.78	19.88	23.26	24212	11079	124894	1457	1068	194	193	170	6.65	-27.40	-270	6.65	-27.40	-270	207		207	
2019-02-20	12:02:00	38.82	13.87	146.94	166.77	4.95	296.85	18.83	23.94	24640	11416	124550	1466	1072	193	193	170	15.95	-39.30	-290	15.95	-39.30	-290	172		172	
2019-02-20	12:03:00	38.96	13.60	147.74	168.57	5.03	302.03	18.83	23.44	24011	11629	124956	1466	1070	194	194	170	3.80	-21.85	-259	3.80	-21.85	-259	208		208	
2019-02-20	12:04:00	38.56	14.47	146.17	166.28	5.05	301.50	19.35	24.10	24564	11348	127806	1472	1071	194	194	170	14.90	-37.95	-299	14.90	-37.95</					

2019-02-20	12:15:00	37.77	13.67	147.26	166.23	4.97	297.90	19.80	23.68	24447	11601	127226	1471	1073	499	196	173	-9.15	-31.00	-275	170
2019-02-20	12:16:00	38.54	13.79	147.22	170.24	4.91	294.68	19.80	24.12	24288	11214	126021	1466	1070	498	196	173	-7.75	-28.35	-269	181
2019-02-20	12:17:00	38.10	14.41	146.60	166.41	4.89	293.10	19.73	23.07	24440	11062	125821	1465	1072	499	196	171	-11.40	-33.30	-278	192
2019-02-20	12:18:00	38.48	13.22	147.17	168.66	4.93	295.73	19.99	24.07	23921	11764	124778	1465	1071	498	197	172	-4.00	-21.95	-260	206
2019-02-20	12:19:00	38.18	14.15	146.60	166.37	4.90	294.08	19.91	23.81	24385	11691	127574	1472	1069	498	196	172	-14.70	-39.40	-298	144

		Waste Flows										Flows						Temperatures						Pressures		
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	TDU Flow	Leachate	PACFlow	SC-PAC-FT	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse			
		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		39.81	15.26	148.40	172.17	5.34	320.10	19.99	24.47	24730	11781	130261	1481	1078	500	197	173	-3.25	-21.05	-251	213					
Min		37.19	13.15	143.43	162.72	4.51	270.23	17.74	23.00	23914	10792	122852	1421	1045	487	189	168	-18.40	-45.40	-300	138					
Average		38.32	14.34	146.36	168.39	4.95	297.20	19.20	23.78	24324	11443	125763	1454	1064	495	193	171	-8.62	-28.74	-270	188					
Variance		0.42	0.21	1.09	4.32	0.02	89.94	0.24	0.24	38322	43155	2529103	245	100	16	6	2	12.05	31.09	146	417					

Test No. 3

SDate	STime	Rich		Emulsion		Lean		Alkaline		TDU Flow		Leachate		PAC		Primary		Secondary		Quench		SDA		Stack		Incinerator		SDA Inlet		BH Inlet		BH dP										
		LPM	FT-229	LPM	FT-219C	LPM	FT-223	LPM	PV-207	LPM	FT-313B	SCFM	FT-313	LPM	PV-211	SC-PAC-FT	m3/h	PV-236	m3/h	PV-209	m3/h	FT-240	TE-203	Degrees C	TE-204	m3/h	FT-260C	m3/h	FT-241	Degrees C	TE-258	mmH2O	PT-249	mmH2O	PT-615	mmH2O	PDT-622					
2019-02-20	12:33:00	39.50	14.12	147.74	171.99	4.84	290.33	20.10	23.70	24108	11523	125181	1489	1075	500	198	173	-5.30	-4.75	-24.25	-268	179																				
2019-02-20	12:34:00	39.50	14.65	146.36	168.75	4.86	291.45	20.10	23.34	24461	11180	124205	1479	1076	501	197	173	-4.75	-4.80	-35.50	-287	181																				
2019-02-20	12:35:00	39.86	14.82	147.26	172.04	4.94	296.48	20.48	24.49	23942	11163	125736	1479	1077	501	197	173	-4.80	-4.80	-22.05	-259	205																				
2019-02-20	12:36:00	39.53	13.66	146.94	168.62	4.96	297.45	20.63	23.10	24191	11051	125717	1487	1077	500	196	173	-5.20	-5.20	-34.25	-294	143																				
2019-02-20	12:37:00	39.80	14.08	147.22	172.67	5.00	300.08	20.74	23.60	24108	10978	122963	1484	1078	500	196	173	-5.20	-6.90	-32.90	-275	206																				
2019-02-20	12:38:00	39.89	14.06	146.60	169.16	5.01	300.75	19.80	24.28	24018	10989	125092	1488	1079	500	196	173	-6.85	-6.85	-24.15	-269	190																				
2019-02-20	12:39:00	39.11	13.90	147.41	169.34	4.99	299.48	20.85	24.44	24198	10989	125092	1488	1079	500	196	173	-6.85	-6.85	-24.15	-269	190																				
2019-02-20	12:40:00	39.53	14.06	146.70	168.75	5.04	302.48	20.85	23.13	24205	10972	124161	1483	1081	500	196	173	-5.90	-5.90	-22.75	-265	197																				
2019-02-20	12:41:00	39.56	13.70	148.07	169.99	5.03	301.88	20.33	24.26	24378	10736	124535	1478	1082	501	197	173	-9.00	-9.00	-27.05	-274	174																				
2019-02-20	12:42:00	39.86	14.97	146.84	169.61	5.01	300.53	20.78	24.28	24281	11051	124403	1481	1084	502	197	173	-4.55	-4.55	-22.90	-267	184																				
2019-02-20	12:43:00	39.80	14.40	146.98	166.73	5.01	300.45	21.04	23.05	24364	10646	124050	1481	1086	503	198	173	-6.20	-6.20	-24.25	-267	199																				
2019-02-20	12:44:00	40.43	13.59	147.65	171.54	4.92	295.20	21.08	23.23	24101	10466	123816	1487	1087	503	198	173	-4.80	-4.80	-21.80	-261	206																				
2019-02-20	12:45:00	40.26	14.05	147.12	169.79	4.98	298.80	20.59	24.33	24198	10324	123427	1492	1089	504	198	173	-6.20	-6.20	-25.65	-265	198																				
2019-02-20	12:46:00	40.59	14.00	146.70	172.04	5.01	300.60	20.59	23.60	24550	10494	122531	1493	1091	505	198	174	-8.55	-8.55	-19.50	-254	209																				
2019-02-20	12:47:00	40.19	13.41	145.70	169.52	4.92	295.20	20.66	23.23	24813	10494	124038	1494	1092	505	198	174	-8.55	-8.55	-28.20	-279	182																				
2019-02-20	12:48:00	40.83	14.83	147.03	172.26	5.00	300.15	21.11	24.47	24640	10567	122211	1492	1094	506	198	174	-3.70	-3.70	-22.60	-264	194																				
2019-02-20	12:49:00	39.98	14.45	145.85	170.19	4.88	292.65	20.89	24.18	24910	11124	126006	1491	1095	506	199	175	-7.05	-7.05	-24.75	-279	165																				
2019-02-20	12:50:00	40.16	13.70	146.22	167.63	4.97	298.20	20.33	23.57	24903	10371	125363	1490	1093	506	199	175	-5.55	-5.55	-23.35	-264	179																				
2019-02-20	12:51:00	39.45	13.72	146.22	167.63	4.95	296.70	20.51	23.18	24544	11028	123789	1490	1091	507	200	176	-5.30	-5.30	-23.40	-271	175																				
2019-02-20	12:52:00	39.96	13.91	146.98	169.70	4.90	293.93	20.59	23.81	24730	10691	124499	1486	1091	507	200	174	-3.60	-3.60	-20.45	-261	203																				
2019-02-20	12:53:00	39.71	14.87	145.98	167.45	4.83	289.50	20.59	23.15	24730	10708	126021	1493	1093	506	199	174	-10.30	-10.30	-33.20	-296	147																				
2019-02-20	12:54:00	40.32	14.30	146.55	169.97	4.82	259.43	20.21	23.07	24626	10629	122337	1489	1093	507	200	174	-3.45	-3.45	-19.95	-259	204																				
2019-02-20	12:55:00	39.90	13.94	146.27	167.76	4.57	273.90	20.21	24.31	24537	10624	120743	1495	1094	507	200	174	-2.30	-2.30	-19.20	-252	213																				
2019-02-20	12:56:00	40.17	13.73	146.64	170.42	4.63	277.65	20.44	23.70	24633	10921	123330	1487	1092	507	200	175	-3.75	-3.75	-22.70	-266	188																				
2019-02-20	12:57:00	40.34	13.97	146.41	171.09	4.50	270.23	20.66	23.34	24723	10803	120980	1492	1091	507	200	175	-3.45	-3.45	-21.10	-261	196																				
2019-02-20	12:58:00	40.38	14.65	146.94	170.78	4.75	284.85	20.63	23.18	24544	11028	123789	1490	1091	507	200	176	-5.30	-5.30	-23.40	-271	175																				
2019-02-20	12:59:00	40.44	13.28	146.37	171.68	4.61	276.83	20.93	23.15	24647	10916	121783	1492	1091	507	200	175	-2.85	-2.85	-19.50	-261	183																				
2019-02-20	13:00:00	40.13	13.86	145.94	171.23	4.68	280.80	21.49	24.26	24730	10792	122505	1488	1091	507	200	175	-3.40	-3.40	-19.70	-264	199																				
2019-02-20	13:01:00	40.37	13.97	146.27	172.62	4.70	282.15	20.78	23.21	24557	10798	123011	1493	1092	507	200	175	-1.90	-1.90	-18.50	-254	206																				
2019-02-20	13:02:00	39.42	14.19	146.22	168.57	4.63	277.95	20.78	23.18	24730	10764	121966	1496	1092	507	199	175	-4.20	-4.20	-22.55	-266	199																				
2019-02-20	13:03:00	39.92	14.73	146.41	170.28	4.68	280.58	20.70	24.39	24447	11152	122747	1497	1091	507	199	175	-1.55	-1.55	-17.20	-252	209																				
2019-02-20	13:04:00	39.50	12.86	145.61	166.91	4.53	271.73	20.70	24.41	24730	10663	121968	1495	1091	507	198	175	-8.20	-8.20	-28.35	-281	180																				
2019-02-20	13:05:00	40.23	14.48	146.75	170.73	4.59	275.10	20.48	23.91	24550	10848	123316	1489	1090	507	199	175	-2.40	-2.40	-19.80	-263	193																				
2019-02-20	13:06:00	39.78	14.32	145.65	169.92	4.52	271.28	21.04	23.23	24820	10860	123260	1492	1092	507	199	175	-10.85	-10.85	-32.85	-298	148																				
2019-02-20	13:07:00	40.25	14.28	146.27	172.85	4.56	273.83	21.11	24.28	24730	10770	121966	1490	1091	507	199	175	-4.40	-4.40	-22.05	-268	180																				
2019-02-20	13:08:00	39.54	14.22	146.32	168.48	4.70	283.65	20.85	23.52	24986	10910	123796	1496	1092	507	199	175	-10.85	-10.85	-34.00	-298	146																				
2019-02-20	13:09:00	40.28	13.57	146.27	170.82	4.38	262.73	20.89	24.36	24633	10860	120110	1494	1091	507	199	175	-3.70	-3.70	-25.00	-277	164																				
2019-02-20	13:10:00	39.81	14.45	145.94	170.96	4.59	275.63	20.89	24.41	24640	10848	120843	1497	1093	507	198	175	-3.30	-3.30	-19.40	-263	205																				
2019-02-20	13:11:00	39.87	13.94	145.94	169.70	4.56	273.60	20.89	24.26	24640	10663	120843	1497	1093	507	198	175	-3.30	-3.30	-19.40	-263	205			</																	

2019-02-20	13:29:00	40.14	12.86	145.37	170.78	4.58	274.80	21.26	24.33	24557	11000	118961	1497	1092	505	198	175	-0.90	-16.00	-258	211
2019-02-20	13:30:00	40.07	13.90	146.64	170.19	4.67	280.28	20.66	24.10	24730	10747	120109	1490	1091	505	198	175	-4.55	-22.65	-279	185
2019-02-20	13:31:00	40.29	14.39	146.70	171.41	4.58	274.58	21.53	23.02	24550	10781	119724	1496	1091	504	198	175	-4.40	-23.05	-272	194
2019-02-20	13:32:00	40.22	13.17	146.41	169.88	4.71	282.68	21.86	23.99	24550	10742	120305	1491	1091	505	197	176	-5.80	-22.90	-281	171
2019-02-20	13:33:00	40.26	14.06	146.13	172.13	4.71	282.83	21.26	24.36	24730	10742	119112	1494	1091	505	197	175	-2.95	-19.75	-271	181
2019-02-20	13:34:00	39.75	13.61	145.70	169.11	4.75	285.15	21.26	23.10	24730	10978	120066	1491	1092	505	197	175	-4.30	-22.55	-275	195
2019-02-20	13:35:00	40.11	13.55	145.98	172.17	4.87	291.90	21.04	24.41	24550	10736	119483	1498	1091	504	197	175	-2.45	-17.95	-262	204
2019-02-20	13:36:00	39.75	13.45	145.80	168.57	4.86	291.45	21.04	24.05	24820	10607	120764	1499	1092	504	196	175	-5.60	-24.45	-276	193
2019-02-20	13:37:00	40.35	14.15	146.13	171.59	4.80	288.15	21.04	23.13	24454	10573	119983	1499	1093	504	196	174	-1.85	-18.15	-262	205
2019-02-20	13:38:00	39.36	13.33	145.61	168.26	4.88	292.50	21.11	24.41	24813	10691	120714	1503	1094	504	196	174	-11.40	-31.75	-300	158
2019-02-20	13:39:00	39.93	13.92	146.51	169.20	4.82	289.13	21.19	24.33	24550	10736	118524	1498	1092	504	196	174	-3.50	-21.75	-273	189

FEB 20/2019		Waste Flows										Flows					Air Flows					Temperatures					Pressures				
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	SC-PAC-FT	Primary	Secondary	Stack	Primary	Secondary	Stack	Primary	Secondary	Stack	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse					
Max	FT-229	40.83	14.97	148.07	172.85	5.04	302.48	21.86	24.49	24986	11523	126021	1503	1095	507	200	176	-0.90	-16.00	-252	213	PT-242A	PT-249	PT-615	PDT-622						
Min	38.99	12.86	145.37	166.73	4.32	259.43	19.80	22.94	23942	10320	118524	1478	1075	500	196	173	-14.75	-35.50	-300	139											
Average	39.93	14.01	146.38	169.88	4.73	283.83	20.82	23.77	24562	10801	122034	1491	1090	505	198	175	-5.37	-23.74	-271	187											
Variance	0.13	0.21	0.34	2.67	0.03	122.58	0.14	0.28	54293	44476	4291950	31	25	5	1	1	9.88	23.17	159	381											

Test No. 4

SDate	STime	Rich		Emulsion		Lean		Alkaline		TDU Flow		Leachate		PAC		Primary		Secondary		Stack		Degrees C		Quench		SDA		Stack		Incrinator		SDA Inlet		BH Inlet		BH dP	
		LPM	FT-229	FT-219C	FT-223	FT-207	PV-211	SC-PAC-FT	PV-236	PV-209	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	FT-260C	TE-258	TE-258	TE-204	TE-204	TE-203	TE-203	TE-241	TE-241	TE-242A	TE-242A	PT-249	PT-249	PT-615	PT-615	PDT-622
2019-02-20	13:51:00	39.17	13.88	146.17	169.47	172.17	167.31	145.70	167.31	5.40	323.85	20.96	23.07	24550	10039	117131	1506	1098	1098	1098	1098	174	174	198	198	506	506	4.50	4.50	-19.55	-19.55	-274	-274	191	191		
2019-02-20	13:52:00	39.75	13.81	146.08	172.17	167.31	145.70	167.31	145.70	5.37	323.85	20.96	23.07	24550	10039	117131	1506	1098	1098	1098	1098	174	174	198	198	507	507	3.45	3.45	-18.80	-18.80	-270	-270	202	202		
2019-02-20	13:53:00	39.06	12.73	145.70	167.31	145.70	167.31	145.70	167.31	5.40	323.85	20.96	23.07	24550	10039	117131	1506	1098	1098	1098	1098	174	174	198	198	507	507	5.55	5.55	-19.55	-19.55	-282	-282	188	188		
2019-02-20	13:54:00	39.42	14.27	145.89	169.79	169.79	166.59	146.27	166.59	5.43	325.95	21.00	23.99	24544	10590	117846	1504	1094	1094	1094	1094	174	174	197	197	506	506	1.95	1.95	-17.35	-17.35	-264	-264	204	204		
2019-02-20	13:55:00	38.73	14.01	146.27	166.59	166.59	146.27	145.89	166.59	5.40	325.95	21.00	23.99	24544	10590	117846	1504	1094	1094	1094	1094	174	174	196	196	506	506	10.25	10.25	-31.85	-31.85	-300	-300	138	138		
2019-02-20	13:56:00	39.18	13.73	145.98	168.35	168.35	145.89	146.27	166.59	5.40	323.93	21.56	23.15	24461	10405	117018	1495	1092	1092	1092	1092	174	174	197	197	506	506	9.20	9.20	-28.40	-28.40	-300	-300	140	140		
2019-02-20	13:57:00	39.20	13.01	145.85	167.54	167.54	145.85	146.27	166.59	5.37	323.93	20.93	24.41	24461	10461	117018	1495	1092	1092	1092	1092	174	174	197	197	505	505	9.20	9.20	-28.40	-28.40	-300	-300	140	140		
2019-02-20	13:58:00	39.69	13.38	146.55	168.53	168.53	146.55	146.27	166.59	5.43	325.65	21.00	23.26	24461	10657	118293	1497	1092	1092	1092	1092	174	174	197	197	505	505	4.80	4.80	-21.85	-21.85	-280	-280	175	175		
2019-02-20	13:59:00	39.45	14.47	146.08	168.39	168.39	146.08	146.27	166.59	5.37	321.98	21.23	23.44	24461	10657	118293	1497	1092	1092	1092	1092	174	174	198	198	505	505	2.80	2.80	-19.85	-19.85	-275	-275	184	184		
2019-02-20	14:00:00	40.22	13.88	146.70	170.24	170.24	146.70	145.89	168.39	5.42	325.35	21.04	23.10	24550	10775	114917	1500	1095	1095	1095	1095	174	174	198	198	506	506	2.90	2.90	-19.65	-19.65	-276	-276	197	197		
2019-02-20	14:01:00	39.80	13.80	145.80	169.25	169.25	145.80	146.27	166.59	5.43	325.98	21.04	23.36	24550	10877	114993	1500	1096	1096	1096	1096	174	174	198	198	506	506	1.75	1.75	-18.50	-18.50	-267	-267	206	206		
2019-02-20	14:02:00	39.80	13.25	146.36	170.87	170.87	146.36	146.27	166.59	5.39	323.40	21.38	23.94	24550	10590	117024	1502	1098	1098	1098	1098	174	174	198	198	506	506	2.60	2.60	-19.30	-19.30	-273	-273	199	199		
2019-02-20	14:03:00	39.93	13.92	146.17	171.00	171.00	146.17	146.27	166.59	5.40	324.15	21.38	24.44	24378	10337	116083	1505	1096	1096	1096	1096	174	174	197	197	505	505	1.15	1.15	-18.10	-18.10	-264	-264	207	207		
2019-02-20	14:04:00	40.23	13.22	145.98	169.34	169.34	145.98	146.27	166.59	5.37	322.43	21.86	23.94	24461	10714	117077	1503	1097	1097	1097	1097	174	174	197	197	506	506	4.00	4.00	-21.75	-21.75	-284	-284	182	182		
2019-02-20	14:05:00	40.22	13.30	146.22	170.60	170.60	146.22	145.80	169.47	5.37	321.90	21.41	23.60	24730	9753	115476	1501	1101	1101	1101	1101	174	174	197	197	506	506	6.85	6.85	-25.40	-25.40	-288	-288	168	168		
2019-02-20	14:06:00	39.65	13.05	145.80	169.47	169.47	145.80	146.27	166.59	5.37	321.90	21.41	23.60	24730	9753	115476	1501	1101	1101	1101	1101	174	174	197	197	506	506	4.55	4.55	-22.50	-22.50	-277	-277	179	179		
2019-02-20	14:08:00	38.94	13.43	145.65	167.27	167.27	145.65	146.27	166.59	5.38	322.50	21.30	23.52	24633	10910	115747	1502	1101	1101	1101	1101	173	173	197	197	507	507	4.25	4.25	-22.45	-22.45	-285	-285	190	190		
2019-02-20	14:09:00	39.51	13.60	145.98	168.44	168.44	145.98	146.27	166.59	5.34	320.40	21.26	23.18	24467	10764	116618	1501	1099	1099	1099	1099	173	173	197	197	506	506	0.35	0.35	-13.65	-13.65	-268	-268	201	201		
2019-02-20	14:10:00	38.39	13.85	145.14	166.95	166.95	145.14	146.27	166.59	5.31	318.83	21.15	23.81	24550	10646	118044	1500	1098	1098	1098	1098	173	173	196	196	505	505	9.85	9.85	-27.15	-27.15	-298	-298	167	167		
2019-02-20	14:11:00	38.40	13.08	146.60	168.48	168.48	146.60	146.27	166.59	5.32	319.28	20.96	23.39	24737	10472	116242	1495	1095	1095	1095	1095	173	173	197	197	504	504	3.15	3.15	-20.65	-20.65	-272	-272	202	202		
2019-02-20	14:12:00	38.24	14.07	145.51	165.69	165.69	145.51	146.27	166.59	5.31	318.83	21.79	23.76	24640	10573	119277	1496	1094	1094	1094	1094	173	173	196	196	504	504	9.45	9.45	-29.70	-29.70	-300	-300	136	136		
2019-02-20	14:13:00	38.87	14.44	146.60	167.94	167.94	146.60	146.27	166.59	5.31	318.53	21.71	23.42	24557	10579	115260	1489	1092	1092	1092	1092	174	174	196	196	504	504	2.85	2.85	-19.80	-19.80	-281	-281	185	185		
2019-02-20	14:14:00	38.55	13.42	145.51	166.28	166.28	145.51	146.27	166.59	5.28	316.50	21.56	24.26	24820	10590	114257	1492	1092	1092	1092	1092	174	174	196	196	503	503	3.45	3.45	-23.15	-23.15	-292	-292	158	158		
2019-02-20	14:15:00	39.15	13.97	146.64	170.42	170.42	146.64	146.27	166.59	5.22	314.10	21.30	23.70	24813	10607	116985	1484	1089	1089	1089	1089	174	174	196	196	502	502	3.80	3.80	-19.90	-19.90	-281	-281	171	171		
2019-02-20	14:16:00	39.05	13.43	145.74	170.28	170.28	145.74	146.27	166.59	5.21	312.98	21.64	23.68	24461	10264	115278	1491	1090	1090	1090	1090	173	173	195	195	503	503	5.30	5.30	-24.45	-24.45	-281	-281	180	180		
2019-02-20	14:17:00	38.76	13.69	146.04	169.29	169.29	146.04	146.27	166.59	5.21	312.60	21.60	24.18	24461	9944	115383	1484	1092	1092	1092	1092	173	173	195	195	503	503	4.40	4.40	-21.75	-21.75	-278	-278	195	195		
2019-02-20	14:18:00	38.79	13.34	145.23	169.70	169.70	145.23	146.27	166.59	5.16	309.83	21.60	23.15	24378	9787	112901	1488	1094	1094	1094	1094	173	173	195	195	502	502	4.00	4.00	-21.60	-21.60	-273	-273	201	201		
2019-02-20	14:19:00	38.93	13.84	146.51	170.15	170.15	146.51	146.27	166.59	5.17	310.35	21.64	24.39	24550	9798	115614	1485	1095	1095	1095	1095	173	173	194	194	502	502	4.10	4.10	-21.80	-21.80	-278	-278	198	198		
2019-02-20	14:20:00	38.96	14.20	145.85	169.83	169.83	145.85	146.27	166.59	4.98	298.73	21.64	23.44	24295	10848	114528	1489	1093	1093	1093	1093	173	173	194	194	502	502	1.65	1.65	-16.85	-16.85	-270	-270	207	207		
2019-02-20	14:21:00	38.76	13.66	145.87	168.17	168.17	145.87	146.27	166.59	4.97	297.90	21.90	24.36	24730	10427	115559	1487	1090	1090	1090	1090	172	172	195	195	502	502	7.25	7.25	-26.30	-26.30	-291	-291	180	180		
2019-02-20	14:22:00	39.17	14.32	146.45	170.28	170.28	146.45	146.27	166.59	4.51	270.30	21.53	23.42	24557	10556	114918	1487	1088	1088	1088	1088	173	173	193	193	501	501	3.80	3.80	-19.60	-19.60	-277	-277	189	189		
2019-02-20	14:23:00	38.57	13.67	145.74	167.76	167.76	145.74	146.27	166.59	4.45	266.70	21.23	23.60	24813	10702	116402	1481	1088	1088	1088	1088	173	173	193	193	501	501	6.95	6.95	-26.55	-26.55	-295	-295	165	165		
2019-02-20	14:24:00	39.05	13.93	145.94	168.53	168.53	145.94	146.27	166.59	4.39	263.55	21.26	23.18	24633	10444	115243	1477	1085	1085	1085	1085	172	172	192	192	500	500	8.45	8.45	-21.75	-21.75	-279	-279	175	175		

2019-02-20	14:47:00	39.80	13.02	146.17	169.20	4.94	296.25	21.75	23.97	24730	10860	115234	1484	1083	496	189	168	-2.55	-19.60	-287	180
2019-02-20	14:48:00	39.35	13.12	145.27	167.90	4.91	294.45	21.30	23.13	24550	10652	114536	1486	1084	496	189	169	-2.50	-19.80	-282	188
2019-02-20	14:49:00	39.32	13.87	145.08	167.94	4.95	297.08	21.30	23.07	24550	10764	113090	1481	1083	497	189	169	-4.00	-22.00	-295	167
2019-02-20	14:50:00	39.83	14.01	144.14	167.76	4.97	297.98	21.30	23.15	24730	10539	114291	1483	1084	496	190	168	-2.40	-19.20	-286	176
2019-02-20	14:51:00	39.12	13.28	144.00	166.28	4.97	298.20	21.38	23.39	24640	10433	114766	1481	1085	497	190	168	-2.55	-18.10	-286	190

		Waste Flows										Flows					Air Flows					Temperatures					Pressures				
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	TDU Flow	Leachate	PACFlow	SC-PAC-FT	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Inchinerator	SDA Inlet	SD Outlet	Baghouse								
		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		40.52	14.47	147.12	172.17	5.43	325.95	21.90	24.44	24910	11270	119973	1506	1101	507	198	175	-0.35	-13.65	-264	207										
Min		37.98	12.72	144.00	165.51	4.22	252.98	20.81	23.07	24295	9753	112901	1459	1071	492	188	168	-13.50	-34.25	-300	136										
Average		39.33	13.70	145.95	168.75	4.96	297.30	21.41	23.65	24603	10478	115924	1486	1087	500	193	172	-4.83	-22.42	-283	181										
Variance		0.34	0.18	0.35	2.45	0.19	666.61	0.09	0.21	19939	114824	2470469	185	90	26	14	5	7.12	18.28	101	372										

Test No. 5

SDate	Time	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PAC	Primary	Secondary	Stack	Degrees C	Quench	Degrees C	SDA	Degrees C	Stack	Inchinator	mmH2O	SDA Inlet	mmH2O	BH Inlet	mmH2O	BH dP
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	Lbs/h	m3/h	m3/h	m3/h	Degrees C	Degrees C	Degrees C	TE-204	Degrees C	Degrees C	PT-242A	mmH2O	PT-249	mmH2O	PT-615	mmH2O	PDT-622
2019-02-20	15:03:00	39.45	12.19	144.14	166.46	4.47	267.98	21.53	24.39	24577	10618	113760	1492	496	496	190	168	168	-3.15	-18.90	-18.90	-277	-277	203	
2019-02-20	15:04:00	39.77	13.03	145.04	167.40	4.43	265.80	21.53	24.07	24896	10848	113780	1487	496	496	189	168	168	-3.45	-20.90	-20.90	-295	-295	177	
2019-02-20	15:05:00	39.57	12.10	143.62	167.45	4.42	264.90	21.53	23.23	24903	10747	112551	1490	496	496	189	169	169	-3.10	-20.90	-20.90	-291	-291	184	
2019-02-20	15:06:00	39.81	13.70	144.65	168.12	4.43	265.73	21.45	23.13	24827	10517	114389	1488	495	495	189	169	169	-4.25	-19.35	-19.35	-300	-300	163	
2019-02-20	15:07:00	39.84	14.13	144.05	170.87	4.38	262.50	21.45	24.44	24557	10758	114092	1493	495	495	189	168	168	-2.50	-19.40	-19.40	-292	-292	173	
2019-02-20	15:08:00	39.57	12.98	144.18	168.62	4.22	252.98	21.45	23.15	24820	10567	113350	1490	496	496	188	168	168	-1.20	-19.20	-19.20	-287	-287	196	
2019-02-20	15:09:00	40.62	12.86	144.09	172.35	4.39	263.48	22.35	23.34	24557	10567	113173	1494	495	495	188	168	168	-1.20	-19.20	-19.20	-287	-287	196	
2019-02-20	15:10:00	39.89	14.33	143.57	169.52	4.48	268.88	20.89	24.49	24730	10579	113536	1493	495	495	187	168	168	-2.00	-18.15	-18.15	-295	-295	187	
2019-02-20	15:11:00	39.89	13.26	143.47	169.61	4.28	256.50	21.83	24.41	24371	10855	113623	1492	495	495	187	167	167	-0.45	-15.55	-15.55	-282	-282	199	
2019-02-20	15:12:00	39.32	13.42	143.71	165.96	4.34	260.10	20.89	23.99	24910	10656	112995	1496	495	495	186	167	167	-4.85	-23.90	-23.90	-300	-300	169	
2019-02-20	15:13:00	39.83	13.94	144.65	169.07	4.23	253.73	21.49	24.41	24564	10792	112873	1495	494	494	187	167	167	-2.30	-20.30	-20.30	-295	-295	182	
2019-02-20	15:14:00	39.48	13.37	143.28	166.50	4.38	263.40	21.64	23.21	24910	10556	114679	1493	495	495	187	168	168	-9.35	-28.40	-28.40	-300	-300	138	
2019-02-20	15:15:00	39.77	12.78	144.37	167.31	4.39	263.40	21.34	24.33	24813	10180	114638	1490	495	495	187	167	167	-4.90	-21.05	-21.05	-296	-296	169	
2019-02-20	15:16:00	39.60	13.02	143.85	168.21	4.36	261.30	22.39	24.44	24467	11157	113414	1486	494	494	188	167	167	-1.80	-16.45	-16.45	-291	-291	192	
2019-02-20	15:18:00	39.60	13.73	143.94	168.84	4.15	249.23	21.11	23.31	24647	10843	115827	1493	494	494	187	167	167	-2.50	-24.30	-24.30	-300	-300	155	
2019-02-20	15:19:00	40.13	13.09	144.14	170.64	4.24	254.33	21.34	23.05	24633	11090	113729	1493	495	495	187	167	167	-2.00	-19.30	-19.30	-290	-290	193	
2019-02-20	15:20:00	39.86	13.20	143.43	167.22	4.29	257.33	21.34	23.31	24557	10854	112618	1490	493	493	186	166	166	-2.15	-20.65	-20.65	-299	-299	175	
2019-02-20	15:21:00	39.80	13.83	144.80	168.48	4.29	257.33	21.34	23.31	24557	10854	112618	1490	493	493	186	166	166	-2.15	-20.65	-20.65	-299	-299	175	
2019-02-20	15:22:00	40.16	13.15	144.18	167.63	4.29	257.25	21.34	23.68	24557	10989	111431	1498	493	493	186	167	167	-1.90	-20.40	-20.40	-294	-294	184	
2019-02-20	15:23:00	39.65	14.09	143.43	168.21	4.29	257.33	20.85	24.12	24820	10921	113506	1493	494	494	186	166	166	-3.35	-21.40	-21.40	-299	-299	172	
2019-02-20	15:24:00	39.89	13.49	144.42	168.80	4.35	260.85	20.89	23.52	24730	10697	114214	1493	493	493	186	166	166	-3.20	-21.50	-21.50	-294	-294	161	
2019-02-20	15:25:00	38.96	13.92	144.14	166.55	4.43	265.50	20.70	23.23	24557	10961	114692	1493	493	493	186	166	166	-2.10	-18.35	-18.35	-294	-294	186	
2019-02-20	15:26:00	39.83	13.71	143.81	168.66	4.38	263.03	21.19	24.44	24620	10949	110874	1491	493	493	186	166	166	-0.85	-17.05	-17.05	-288	-288	193	
2019-02-20	15:27:00	39.09	14.10	143.81	164.93	4.41	264.68	21.04	24.20	24640	10843	113443	1489	493	493	186	166	166	-2.80	-19.60	-19.60	-300	-300	186	
2019-02-20	15:28:00	39.77	13.35	144.42	167.54	4.43	266.03	21.30	23.18	24730	10966	112551	1490	493	493	186	166	166	-5.10	-23.20	-23.20	-300	-300	164	
2019-02-20	15:29:00	39.68	13.09	143.94	164.93	4.42	265.35	21.30	22.94	25083	10933	113361	1487	493	493	186	166	166	-1.25	-18.95	-18.95	-297	-297	179	
2019-02-20	15:30:00	40.11	14.55	144.37	169.97	4.88	292.58	21.30	24.44	24730	11056	113389	1499	493	493	186	166	166	-7.90	-29.35	-29.35	-300	-300	129	
2019-02-20	15:31:00	40.01	14.11	143.71	169.83	4.88	292.88	21.19	23.10	24903	11039	113868	1499	493	493	186	166	166	-7.90	-29.35	-29.35	-300	-300	129	
2019-02-20	15:32:00	39.84	14.13	144.05	170.42	4.85	291.00	21.41	23.31	24640	11118	113979	1498	494	494	187	166	166	-6.10	-15.85	-15.85	-300	-300	166	
2019-02-20	15:33:00	39.44	13.53	144.05	168.57	4.85	291.23	21.56	24.49	24467	11051	115187	1493	494	494	187	166	166	-6.10	-15.85	-15.85	-300	-300	166	
2019-02-20	15:34:00	39.57	13.03	144.14	169.61	4.91	294.68	21.56	24.36	24813	11090	111924	1491	494	494	186	166	166	-0.45	-17.65	-17.65	-289	-289	188	
2019-02-20	15:35:00	39.42	13.21	143.94	168.44	4.98	298.58	21.23	24.31	24467	10624	113124	1490	494	494	186	166	166	-1.85	-19.60	-19.60	-291	-291	195	
2019-02-20	15:36:00	38.30	12.89	144.09	168.39	4.99	299.55	21.23	23.91	24108	10517	11937	1488	494	494	186	166	166	-4.90	-21.25	-21.25	-297	-297	191	
2019-02-20	15:37:00	38.46	13.56	143.49	168.30	5.06	303.83	21.23	23.60	24115	10444	112992	1496	493	493	185	166	166	-1.60	-16.90	-16.90	-288	-288	199	
2019-02-20	15:38:00	39.00	12.59	144.80	167.18	5.02	301.13	21.30	24.02	24198	10472	111570	1487	493	493	185	165	165	-5.35	-22.80	-22.80	-300	-300	173	
2019-02-20	15:39:00	39.18	13.05	143.85	169.43	5.00	299.70	21.30	23.18	24115	10584	112928	1489	493	493	185	166	166	-4.55	-20.30	-20.30	-300	-300	181	
2019-02-20	15:40:00	38.57	12.36	144.37	166.95	5.03	301.73	20.85	23.10	24205	10596	114710	1485	493	493	185	166	166	-6.85	-22.10	-22.10	-300	-300	181	
2019-02-20	15:41:00	39.23	12.60	143.94	168.57	5.03	301.80	21.19	23.91	24191	10455	113817	1489	493	493	185	165	165	-3.75	-20.15	-20.15	-300	-300	168	
2019-02-20	15:42:00	39.12	13.47	144.00	168.30	5.04	302.55	21.53	23.84	24288	10438	113573	1490	494	494	185	165	165	-5.75	-24.25	-24.25	-300	-300	182	
2019-02-20	15:43:00	38.85	14.18	144.61	170.46	5.04	302.25	21.53	23.65	23935	10449	112184	1496	493	493	185	165	165	-6.10	-18.45	-18.45	-291	-291	190	
2019-02-20	15:44:00	38.12	12.82	143.90	167.67	5.02	301.28	20.59	23.15	24288	10230	113101	1493	494	494	184	164	164	-6.10	-22.10	-22.10	-300	-300	181	
2019-02-20	15:45:00	39.92	14.02	143.43	170.82	5.02	301.20	21.60	23.97	24115	10427	111552	1492	493	493	184	165	165	-1.35	-17.55	-17.55	-293	-293	192	
2019-02-20	15:46:00	39.09	13.48	143.19	169.16	4.96	297.75	21.53	23.60	24461	10416	114563	1497	493	493	183	165	165	-10.45	-27.80	-27.80	-300	-300	148	
2019-02-20	15																								

2019-02-20	15:59:00	38.46	12.90	96.82	168.08	4.88	292.95	21.34	23.57	24730	10961	112161	1479	1105	479	173	160	-14.10	-31.60	-300	173
2019-02-20	16:00:00	38.58	14.10	97.44	169.83	4.77	285.90	21.34	24.39	24557	11067	112264	1478	1105	477	171	159	-11.35	-28.00	-300	183
2019-02-20	16:01:00	37.88	14.32	97.38	165.65	4.83	289.88	21.19	23.13	24827	10921	114718	1477	1105	476	169	158	-15.65	-32.90	-300	172
2019-02-20	16:02:00	38.63	13.90	110.75	168.75	4.90	293.78	21.38	23.49	24454	10742	113490	1476	1103	475	168	157	-9.35	-25.85	-300	187
2019-02-20	16:03:00	38.06	13.07	110.55	165.56	4.86	291.75	20.96	23.60	24640	10848	115337	1479	1104	477	169	156	-18.50	-41.30	-300	123

FEB 20/2019		Waste Flows										Air Flows							Temperatures							Pressures		
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	TDU Flow	Leachate	PACFlow	Flows	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Inchinerator	SDA Inlet	SD Outlet	Baghouse					
		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		40.62	14.55	145.04	172.35	5.06	303.83	22.39	24.49	25083	11157	116859	1509	1105	496	190	169	-0.05	-13.65	-277	203							
Min		37.88	12.10	96.82	164.93	4.15	249.23	20.59	22.94	23935	10180	110542	1476	1080	475	168	156	-18.50	-41.30	-300	123							
Average		39.36	13.40	137.37	168.42	4.66	279.80	21.31	23.79	24524	10738	113284	1491	1086	492	184	165	-5.08	-22.29	-296	174							
Variance		0.32	0.34	244.27	2.56	0.09	309.92	0.11	0.26	83571	56488	1588842	40	49	26	25	7	20.51	33.62	30	382							

2019-02-20	17:09:00	36.81	12.87	139.97	168.30	4.56	273.60	13.91	23.57	23749	10652	110529	1470	1099	515	193	169	-4.10	-22.30	-300	131
2019-02-20	17:10:00	37.44	14.04	140.77	170.51	4.53	271.65	13.61	23.13	23762	10714	106914	1475	1099	516	193	170	1.45	-11.20	-300	186
2019-02-20	17:11:00	35.60	13.62	138.22	169.65	4.52	271.13	13.84	23.34	23852	10697	106580	1473	1100	516	193	169	0.75	-10.80	-300	193
2019-02-20	17:12:00	35.31	13.68	137.36	167.81	4.55	272.78	13.54	24.10	24025	10803	108277	1473	1096	515	192	169	-1.50	-13.60	-300	169
2019-02-20	17:13:00	35.24	12.34	137.84	167.94	4.54	272.55	13.84	24.39	23928	10753	108368	1474	1094	514	192	170	-0.90	-12.30	-300	176

FEB 20/2019	Waste Flows										Flows					Air Flows					Temperatures					Pressures				
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	PACFlow	SC-PAC-FT	Primary	Secondary	Stack	Primary	Secondary	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse									
	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	38.94	14.23	147.26	171.45	4.79	287.18	21.34	24.52	24461	10815	113741	1504	1108	520	197	170	1.50	-10.65	-300	193										
Min	35.24	11.24	137.36	163.67	4.42	264.98	12.41	22.97	23749	9742	105167	1470	1094	500	184	160	-7.65	-26.05	-300	125										
Average	37.28	13.13	141.01	167.89	4.57	273.93	14.99	23.74	24058	10375	109365	1485	1101	514	193	168	-2.74	-17.25	-300	168										
Variance	0.66	0.37	4.38	2.75	0.01	41.28	6.76	0.25	25875	42209	3351125	70	9	18	7	7	4.92	14.15	0	322										

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
2019-02-20	9:58:00	56.7	47.0	8.18	48.33	13.3	10.02	0.17	109.2
2019-02-20	9:59:00	50.8	47.4	8.05	47.99	9.7	9.76	0.08	116.3
2019-02-20	10:00:00	48.9	46.5	7.82	47.32	12.3	10.02	0.11	111.2
2019-02-20	10:01:00	49.8	45.6	7.70	47.08	10.8	10.45	0.05	102.5
2019-02-20	10:02:00	51.5	46.3	7.88	47.69	13.0	10.19	0.08	97.2
2019-02-20	10:03:00	52.9	46.3	7.96	47.99	9.9	10.14	0.15	97.2
2019-02-20	10:04:00	53.9	45.5	7.82	47.52	11.8	10.28	0.12	90.8
2019-02-20	10:05:00	53.4	45.5	7.72	47.29	11.3	10.42	0.10	85.5
2019-02-20	10:06:00	58.6	46.4	7.80	47.88	11.0	10.40	0.07	84.4
2019-02-20	10:07:00	55.5	47.2	7.86	47.83	9.9	10.27	0.12	81.0
2019-02-20	10:08:00	53.9	46.3	7.38	47.08	10.7	10.43	0.08	77.2
2019-02-20	10:09:00	55.4	45.2	7.20	46.54	11.6	10.90	0.10	72.8
2019-02-20	10:10:00	58.3	46.4	7.60	47.05	12.1	10.76	0.16	76.4
2019-02-20	10:11:00	61.2	47.4	7.81	47.65	12.8	10.47	0.11	83.3
2019-02-20	10:12:00	60.2	46.4	7.79	47.44	11.5	10.29	0.07	89.3
2019-02-20	10:13:00	62.3	46.0	7.72	47.28	13.7	10.36	0.12	89.3
2019-02-20	10:14:00	74.9	45.9	7.85	47.66	10.7	10.31	0.15	98.8
2019-02-20	10:15:00	73.1	46.6	7.91	47.92	11.5	10.25	0.15	98.8
2019-02-20	10:16:00	60.8	46.9	7.76	47.52	9.6	10.13	0.15	87.6
2019-02-20	10:17:00	57.5	45.8	7.56	46.60	11.8	10.34	0.17	81.3
2019-02-20	10:18:00	57.1	46.2	7.57	46.55	11.4	10.77	0.13	80.7
2019-02-20	10:19:00	58.3	47.7	7.76	47.21	13.8	10.48	0.07	87.9
2019-02-20	10:20:00	62.0	47.7	7.85	47.56	11.3	10.38	0.08	92.9
2019-02-20	10:21:00	64.6	45.9	7.70	47.09	14.9	10.29	0.10	97.4
2019-02-20	10:22:00	66.0	46.3	7.67	46.94	14.9	10.32	0.10	100.4
2019-02-20	10:23:00	78.4	47.5	8.00	47.78	13.5	10.18	0.06	120.4
2019-02-20	10:24:00	72.9	47.2	8.10	47.94	14.4	10.07	0.15	115.7
2019-02-20	10:25:00	74.6	46.7	7.87	47.44	13.2	10.03	0.13	112.7
2019-02-20	10:26:00	78.9	45.5	7.65	46.83	14.2	10.33	0.13	109.2
2019-02-20	10:27:00	79.1	45.5	7.84	47.28	13.2	10.38	0.13	110.7
2019-02-20	10:28:00	74.6	46.5	7.96	47.66	16.7	10.20	0.11	106.9
2019-02-20	10:29:00	79.2	46.9	7.99	47.76	11.4	10.11	0.10	112.5
2019-02-20	10:30:00	90.1	46.6	7.91	47.28	16.2	10.29	0.10	112.0
2019-02-20	10:31:00	89.2	47.0	8.02	47.52	11.2	10.28	0.12	114.6
2019-02-20	10:32:00	85.3	46.8	8.04	47.73	15.8	10.18	0.11	114.6
2019-02-20	10:33:00	83.9	46.8	7.89	47.58	11.1	10.04	0.11	105.1
2019-02-20	10:34:00	87.4	46.7	7.70	47.12	14.5	10.28	0.13	102.4
2019-02-20	10:35:00	86.4	46.4	7.68	46.98	12.8	10.65	0.08	99.5
2019-02-20	10:36:00	90.6	47.0	7.95	47.72	16.5	10.33	0.11	106.0
2019-02-20	10:37:00	91.8	47.7	8.05	47.92	13.9	10.22	0.11	109.2
2019-02-20	10:38:00	91.6	46.6	7.89	47.47	15.8	10.14	0.02	114.6
2019-02-20	10:39:00	92.1	45.4	7.82	47.42	14.1	10.25	0.13	114.6
2019-02-20	10:40:00	95.2	46.2	8.02	48.00	12.8	10.20	0.10	117.6
2019-02-20	10:41:00	87.0	47.3	8.06	48.17	12.0	10.12	0.11	110.3
2019-02-20	10:42:00	83.8	46.8	7.88	47.48	11.4	10.00	0.11	108.4
2019-02-20	10:43:00	79.2	45.3	7.60	46.51	13.7	10.39	0.15	98.1
2019-02-20	10:44:00	85.8	45.9	7.77	47.01	13.4	10.53	0.11	100.1
2019-02-20	10:45:00	100.4	47.2	8.02	47.90	21.7	10.32	0.11	105.6
2019-02-20	10:46:00	132.4	47.1	8.09	47.97	14.1	10.05	0.11	131.3
2019-02-20	10:47:00	135.7	46.7	8.04	47.65	17.7	10.05	0.12	140.2
2019-02-20	10:48:00	117.0	45.8	7.99	47.54	5.9	9.96	0.06	143.9
2019-02-20	10:49:00	89.4	44.6	7.83	47.09	6.1	10.07	0.07	127.2
2019-02-20	10:50:00	29.7	43.8	7.19	46.00	5.3	10.59	0.13	89.3
2019-02-20	10:51:00	26.3	43.2	6.74	45.33	10.1	10.92	0.08	85.1
2019-02-20	10:52:00	31.3	42.0	6.66	44.87	7.8	11.33	0.08	81.8
2019-02-20	10:53:00	35.4	43.9	7.52	46.23	8.9	10.80	0.05	90.8
2019-02-20	10:54:00	33.3	45.1	7.66	46.65	8.5	10.67	0.07	93.5
2019-02-20	10:55:00	34.0	45.8	7.64	46.63	9.5	10.59	0.12	97.1
2019-02-20	10:56:00	37.0	45.9	7.57	46.49	11.0	10.63	0.11	98.3
2019-02-20	10:57:00	46.9	46.8	7.86	47.20	11.7	10.45	0.10	119.4
2019-02-20	10:58:00	51.1	48.1	8.15	47.84	12.9	10.16	0.08	134.8

FEB 20/2019	Analyzers								
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	
	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264	
Max	135.7	48.1	8.18	48.33	21.7	11.33	0.17	143.9	
Min	26.3	42.0	6.66	44.87	5.3	9.76	0.02	72.8	
Average	69.1	46.2	7.78	47.30	12.3	10.33	0.11	102.3	
Variance	540.0	1.2	0.08	0.42	7.9	0.07	0.00	250.4	

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
2019-02-20	11:19:00	36.3	46.5	7.83	47.16	11.8	10.48	0.11	99.4
2019-02-20	11:20:00	51.3	47.0	7.88	47.47	9.1	10.18	0.06	114.3
2019-02-20	11:21:00	55.3	47.0	7.81	47.30	2.7	10.26	0.07	117.0
2019-02-20	11:22:00	30.1	47.0	2.88	22.47	13.3	12.54	0.06	39.9
2019-02-20	11:23:00	23.4	47.0	1.74	16.58	17.2	13.47	0.08	15.5
2019-02-20	11:24:00	53.5	47.0	5.33	37.80	12.5	12.21	0.06	68.8
2019-02-20	11:25:00	57.0	47.0	5.99	42.90	13.0	11.50	0.08	89.8
2019-02-20	11:26:00	53.5	47.0	7.22	46.14	11.8	10.85	0.07	106.2
2019-02-20	11:27:00	53.6	47.0	7.86	47.55	12.0	10.38	0.08	113.2
2019-02-20	11:28:00	56.1	60.2	7.96	47.75	11.3	10.26	0.10	114.2
2019-02-20	11:29:00	59.8	58.2	7.86	47.64	10.5	10.25	0.08	111.6
2019-02-20	11:30:00	58.3	57.0	7.74	47.40	12.1	10.40	0.15	104.1
2019-02-20	11:31:00	61.4	56.5	7.82	47.48	10.6	10.42	0.07	102.7
2019-02-20	11:32:00	63.9	56.2	7.85	47.75	12.0	10.37	0.08	94.0
2019-02-20	11:33:00	64.3	55.4	7.74	47.53	10.3	10.26	0.08	89.3
2019-02-20	11:34:00	65.4	52.5	7.41	46.29	13.7	10.60	0.08	79.4
2019-02-20	11:35:00	69.5	52.0	7.51	46.57	11.3	10.80	0.08	79.4
2019-02-20	11:36:00	73.8	52.1	7.82	47.48	14.6	10.55	0.15	82.5
2019-02-20	11:37:00	74.3	51.4	7.76	47.26	11.3	10.26	0.08	84.2
2019-02-20	11:38:00	74.3	50.4	7.68	47.11	14.6	10.38	0.11	86.4
2019-02-20	11:39:00	75.2	48.8	7.68	47.32	11.7	10.54	0.08	86.4
2019-02-20	11:40:00	77.4	48.3	7.76	47.49	12.6	10.45	0.08	84.9
2019-02-20	11:41:00	75.3	48.4	7.81	47.65	11.2	10.48	0.12	77.3
2019-02-20	11:42:00	70.9	46.2	7.15	46.35	12.2	10.65	0.08	67.8
2019-02-20	11:43:00	72.1	45.1	7.04	46.11	12.8	10.85	0.13	62.7
2019-02-20	11:44:00	78.8	45.8	7.51	46.91	13.5	10.80	0.08	65.5
2019-02-20	11:45:00	80.1	45.6	7.65	47.13	14.2	10.69	0.10	68.9
2019-02-20	11:46:00	87.3	44.6	7.75	47.26	13.9	10.54	0.05	76.4
2019-02-20	11:47:00	86.5	44.4	7.67	47.03	16.4	10.59	0.10	76.4
2019-02-20	11:48:00	94.2	44.8	7.81	47.38	13.1	10.52	0.08	83.8
2019-02-20	11:49:00	89.6	44.1	7.91	47.72	14.8	10.34	0.13	85.1
2019-02-20	11:50:00	82.3	42.7	7.76	47.44	13.7	10.21	0.08	85.1
2019-02-20	11:51:00	78.9	41.0	7.52	46.40	14.7	10.45	0.11	91.7
2019-02-20	11:52:00	79.5	41.3	7.69	46.64	12.1	10.61	0.05	95.9
2019-02-20	11:53:00	73.6	41.2	7.93	47.38	16.6	10.40	0.15	96.8
2019-02-20	11:54:00	72.4	41.2	7.91	47.25	11.7	10.15	0.07	101.0
2019-02-20	11:55:00	74.6	41.2	7.77	46.84	17.0	10.22	0.08	98.3
2019-02-20	11:56:00	90.8	40.6	7.78	47.02	14.8	10.42	0.15	96.1
2019-02-20	11:57:00	95.8	40.6	7.91	47.43	18.3	10.29	0.15	102.9
2019-02-20	11:58:00	90.0	41.1	8.11	47.96	16.4	10.14	0.10	110.3
2019-02-20	11:59:00	86.3	40.3	7.95	47.57	16.4	9.96	0.11	110.3
2019-02-20	12:00:00	82.9	39.2	7.72	46.71	18.7	10.24	0.11	108.6
2019-02-20	12:01:00	81.8	39.6	8.05	47.52	18.7	10.23	0.12	119.8
2019-02-20	12:02:00	80.1	40.0	8.13	47.79	22.4	10.14	0.13	123.2
2019-02-20	12:03:00	88.6	39.9	8.07	47.71	15.5	9.97	0.13	139.2
2019-02-20	12:04:00	87.1	38.9	7.98	47.42	20.2	10.05	0.13	139.2
2019-02-20	12:05:00	84.8	38.6	8.05	47.64	14.2	10.15	0.11	135.8
2019-02-20	12:06:00	82.0	38.5	8.21	48.00	20.0	9.96	0.11	134.4
2019-02-20	12:07:00	77.7	38.8	8.15	47.96	14.2	9.87	0.07	130.8
2019-02-20	12:08:00	73.6	37.3	7.76	46.83	19.4	10.28	0.13	120.9
2019-02-20	12:09:00	72.6	37.1	7.82	46.89	18.1	10.49	0.08	120.9
2019-02-20	12:10:00	76.2	38.2	8.10	47.82	26.5	10.16	0.08	135.0
2019-02-20	12:11:00	85.0	38.6	8.25	48.30	15.6	9.83	0.10	158.5
2019-02-20	12:12:00	86.2	38.2	8.18	48.11	19.9	9.89	0.13	156.6
2019-02-20	12:13:00	91.2	37.2	8.14	48.11	18.1	10.06	0.11	148.5
2019-02-20	12:14:00	94.3	37.0	8.25	48.39	17.7	9.93	0.11	151.1
2019-02-20	12:15:00	81.2	38.0	8.35	48.54	14.3	9.81	0.10	141.0
2019-02-20	12:16:00	67.6	36.5	7.79	47.85	14.7	10.04	0.11	115.7
2019-02-20	12:17:00	64.2	35.5	7.63	46.57	17.8	10.24	0.15	102.3
2019-02-20	12:18:00	72.7	36.1	7.96	47.54	15.6	10.28	0.11	111.1
2019-02-20	12:19:00	73.5	36.6	8.03	47.92	17.4	10.19	0.12	115.7

FEB 20/2019	Analyzers								
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	
	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264	
Max	95.8	60.2	8.35	48.54	26.5	13.47	0.15	158.5	
Min	23.4	35.5	1.74	16.58	2.7	9.81	0.05	15.5	
Average	73.0	44.3	7.58	46.22	14.6	10.45	0.10	102.0	
Variance	229.4	39.2	1.19	26.94	13.3	0.38	0.00	758.9	

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
2019-02-20	12:33:00	82.8	35.0	7.91	47.40	18.3	9.92	0.11	122.3
2019-02-20	12:34:00	83.6	34.3	7.77	47.15	19.8	10.10	0.08	120.1
2019-02-20	12:35:00	89.0	35.0	8.15	48.12	20.3	10.11	0.15	126.6
2019-02-20	12:36:00	86.9	35.6	8.28	48.32	23.1	9.97	0.11	131.0
2019-02-20	12:37:00	92.8	36.0	8.22	48.12	20.2	9.69	0.11	137.7
2019-02-20	12:38:00	104.2	34.3	8.10	47.96	30.0	9.86	0.08	138.3
2019-02-20	12:39:00	111.3	34.4	8.20	48.18	16.4	9.87	0.08	144.2
2019-02-20	12:40:00	96.0	34.5	8.35	48.56	23.9	9.74	0.08	135.6
2019-02-20	12:41:00	85.8	34.7	8.42	48.72	16.4	9.74	0.08	131.7
2019-02-20	12:42:00	86.6	34.0	8.04	47.71	23.9	9.94	0.05	130.4
2019-02-20	12:43:00	85.0	33.1	7.98	47.41	19.1	10.08	0.06	130.4
2019-02-20	12:44:00	87.5	34.3	8.36	48.22	29.0	9.90	0.12	141.5
2019-02-20	12:45:00	99.9	35.2	8.49	48.73	24.8	9.63	0.18	166.3
2019-02-20	12:46:00	106.5	34.4	8.34	48.38	34.4	9.61	0.11	172.3
2019-02-20	12:47:00	106.7	34.3	8.34	48.54	30.1	9.76	0.13	180.7
2019-02-20	12:48:00	105.9	34.9	8.48	48.84	19.9	9.64	0.13	183.5
2019-02-20	12:49:00	79.4	35.1	8.54	48.77	22.4	9.43	0.11	161.9
2019-02-20	12:50:00	71.3	34.7	8.25	48.64	18.2	9.59	0.08	152.6
2019-02-20	12:51:00	70.0	34.2	8.13	47.88	20.6	9.80	0.11	143.5
2019-02-20	12:52:00	62.7	34.8	8.34	48.11	17.6	9.80	0.15	134.4
2019-02-20	12:53:00	60.9	35.4	8.40	48.29	23.1	9.71	0.15	132.5
2019-02-20	12:54:00	64.8	36.5	8.42	48.58	16.2	9.53	0.12	139.6
2019-02-20	12:55:00	64.7	36.4	8.33	48.36	26.0	9.64	0.12	139.6
2019-02-20	12:56:00	67.0	36.6	8.29	48.23	15.0	9.76	0.15	146.7
2019-02-20	12:57:00	67.9	37.5	8.44	48.72	21.2	9.59	0.15	137.3
2019-02-20	12:58:00	67.3	38.1	8.55	48.94	14.7	9.58	0.12	131.0
2019-02-20	12:59:00	65.8	37.2	8.25	48.11	20.4	9.74	0.15	126.1
2019-02-20	13:00:00	62.7	37.1	8.15	47.87	16.8	9.89	0.12	124.6
2019-02-20	13:01:00	65.1	38.8	8.38	48.65	21.6	9.78	0.11	132.4
2019-02-20	13:02:00	73.1	39.0	8.55	48.91	21.1	9.50	0.15	142.6
2019-02-20	13:03:00	79.8	38.7	8.46	48.69	19.5	9.55	0.13	142.6
2019-02-20	13:04:00	77.9	38.0	8.30	48.23	21.4	9.72	0.17	140.1
2019-02-20	13:05:00	76.4	38.3	8.36	48.31	16.2	9.58	0.08	140.1
2019-02-20	13:06:00	67.9	38.6	8.41	48.75	18.6	9.58	0.16	123.2
2019-02-20	13:07:00	63.7	38.2	8.13	47.99	16.3	9.65	0.17	122.1
2019-02-20	13:08:00	64.0	38.4	8.03	47.68	21.2	9.86	0.11	123.6
2019-02-20	13:09:00	65.9	39.5	8.29	48.46	17.7	9.93	0.11	125.9
2019-02-20	13:10:00	64.8	40.0	8.39	48.61	25.5	9.74	0.07	125.9
2019-02-20	13:11:00	73.4	40.9	8.42	48.80	18.2	9.47	0.11	138.6
2019-02-20	13:12:00	72.8	39.5	8.34	48.75	23.7	9.66	0.07	142.6
2019-02-20	13:13:00	71.5	39.6	8.41	48.71	15.9	9.78	0.11	145.2
2019-02-20	13:14:00	67.7	40.6	8.44	48.85	18.2	9.62	0.11	126.8
2019-02-20	13:15:00	64.0	41.1	8.49	48.95	14.6	9.65	0.10	118.1
2019-02-20	13:16:00	57.8	39.8	8.07	47.82	18.4	9.79	0.08	109.8
2019-02-20	13:17:00	57.3	39.1	7.96	47.39	18.3	9.93	0.11	105.2
2019-02-20	13:18:00	65.2	40.7	8.32	48.34	25.0	9.90	0.12	119.3
2019-02-20	13:19:00	72.2	41.7	8.50	48.83	24.3	9.62	0.08	138.6
2019-02-20	13:20:00	77.7	41.4	8.41	48.57	22.8	9.51	0.05	142.9
2019-02-20	13:21:00	75.6	40.9	8.25	48.14	22.7	9.65	0.11	139.2
2019-02-20	13:22:00	77.0	41.6	8.36	48.56	20.1	9.68	0.06	140.8
2019-02-20	13:23:00	74.0	42.2	8.58	49.28	21.1	9.57	0.15	135.8
2019-02-20	13:24:00	68.1	41.3	8.22	49.00	14.2	9.59	0.08	123.1
2019-02-20	13:25:00	61.1	40.3	8.04	47.67	19.3	9.87	0.05	110.7
2019-02-20	13:26:00	57.0	41.0	8.26	48.28	15.7	10.07	0.08	106.9
2019-02-20	13:27:00	58.5	41.8	8.36	48.69	24.3	9.95	0.08	106.9
2019-02-20	13:28:00	66.2	42.5	8.37	48.81	15.4	9.62	0.06	113.8
2019-02-20	13:29:00	69.8	41.9	8.28	48.41	20.3	9.68	0.02	115.9
2019-02-20	13:30:00	69.0	41.5	8.30	48.33	16.8	9.82	0.11	120.4
2019-02-20	13:31:00	69.1	42.7	8.46	48.95	21.7	9.64	0.11	120.0
2019-02-20	13:32:00	72.4	43.5	8.52	49.18	16.2	9.60	0.12	116.8
2019-02-20	13:33:00	68.7	41.3	8.07	47.88	17.4	9.63	0.15	108.9
2019-02-20	13:34:00	65.6	40.9	8.19	47.54	18.1	10.05	0.10	108.8
2019-02-20	13:35:00	65.0	41.3	8.34	48.51	21.2	9.85	0.08	112.6
2019-02-20	13:36:00	69.5	42.5	8.49	49.04	22.8	9.62	0.17	122.8
2019-02-20	13:37:00	75.9	42.5	8.40	48.87	24.4	9.54	0.08	125.2
2019-02-20	13:38:00	81.7	41.0	8.30	48.53	23.5	9.68	0.12	128.3
2019-02-20	13:39:00	84.1	40.9	8.43	48.74	15.7	9.64	0.11	133.4

FEB 20/2019	Analyzers								
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	
	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264	
Max	111.3	43.5	8.58	49.28	34.4	10.11	0.18	183.5	
Min	57.0	33.1	7.77	47.15	14.2	9.43	0.02	105.2	
Average	74.9	38.4	8.30	48.40	20.5	9.73	0.11	132.2	
Variance	173.5	8.8	0.03	0.22	16.7	0.03	0.00	268.4	

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
2019-02-20	13:51:00	67.4	41.4	8.07	47.74	25.6	9.71	0.17	121.0
2019-02-20	13:52:00	81.3	42.8	8.44	48.62	24.5	9.72	0.13	139.2
2019-02-20	13:53:00	82.7	42.5	8.60	49.26	23.2	9.47	0.11	144.1
2019-02-20	13:54:00	80.3	41.8	8.48	48.94	17.7	9.32	0.12	137.7
2019-02-20	13:55:00	71.5	41.2	8.23	48.33	22.2	9.66	0.17	110.2
2019-02-20	13:56:00	72.2	41.9	8.32	48.66	16.2	9.82	0.13	106.4
2019-02-20	13:57:00	69.2	42.5	8.43	48.81	23.2	9.60	0.15	103.0
2019-02-20	13:58:00	69.9	40.6	8.15	48.23	16.9	9.42	0.08	105.2
2019-02-20	13:59:00	73.6	39.9	8.01	47.86	19.9	9.66	0.13	106.4
2019-02-20	14:00:00	75.1	41.3	8.25	48.23	18.4	9.99	0.11	110.7
2019-02-20	14:01:00	71.2	41.8	8.36	48.52	26.5	9.79	0.11	113.5
2019-02-20	14:02:00	76.8	41.6	8.49	48.95	23.0	9.44	0.12	131.5
2019-02-20	14:03:00	86.7	40.9	8.34	48.64	26.2	9.57	0.11	138.8
2019-02-20	14:04:00	94.4	41.5	8.41	48.81	21.6	9.71	0.08	140.4
2019-02-20	14:05:00	95.2	41.7	8.62	49.33	24.3	9.53	0.08	133.7
2019-02-20	14:06:00	87.5	41.6	8.68	49.49	27.7	9.46	0.08	131.0
2019-02-20	14:07:00	85.8	39.6	8.31	48.50	28.1	9.52	0.11	135.7
2019-02-20	14:08:00	85.8	38.9	8.13	48.07	26.5	9.75	0.07	135.7
2019-02-20	14:09:00	86.8	39.2	8.40	48.80	20.0	9.77	0.05	137.0
2019-02-20	14:10:00	72.6	39.1	8.54	49.24	21.8	9.59	0.05	115.4
2019-02-20	14:11:00	70.9	39.2	8.44	49.09	16.5	9.49	0.05	112.9
2019-02-20	14:12:00	65.0	38.3	8.22	48.50	22.6	9.78	0.11	100.3
2019-02-20	14:13:00	65.4	38.7	8.26	48.77	15.0	9.92	0.08	95.3
2019-02-20	14:14:00	65.1	39.3	8.39	49.08	18.7	9.73	0.08	88.6
2019-02-20	14:15:00	61.7	37.9	8.15	48.58	15.5	9.65	0.11	82.0
2019-02-20	14:16:00	62.4	37.1	7.99	47.99	22.0	9.88	0.11	79.1
2019-02-20	14:17:00	73.6	37.8	8.10	48.35	20.4	10.10	0.10	85.8
2019-02-20	14:18:00	75.0	38.2	8.25	48.76	26.0	9.88	0.11	93.7
2019-02-20	14:19:00	79.8	37.9	8.51	49.11	19.0	9.59	0.02	110.7
2019-02-20	14:20:00	81.4	37.2	8.36	48.80	20.5	9.53	0.00	110.7
2019-02-20	14:21:00	78.7	36.6	8.21	48.52	19.5	9.79	0.06	100.8
2019-02-20	14:22:00	78.7	36.1	8.34	49.09	20.0	9.77	0.05	88.4
2019-02-20	14:23:00	79.9	36.6	8.38	49.27	18.0	9.72	0.06	84.7
2019-02-20	14:24:00	76.0	35.3	8.07	48.22	15.6	9.75	0.08	81.1
2019-02-20	14:25:00	69.9	33.5	7.87	47.72	19.6	10.02	0.05	74.1
2019-02-20	14:26:00	73.1	33.7	8.07	48.39	17.6	10.23	0.06	69.5
2019-02-20	14:27:00	75.7	35.2	8.17	48.88	21.8	10.09	0.05	64.9
2019-02-20	14:28:00	78.9	35.2	8.06	48.61	17.2	9.94	0.06	64.9
2019-02-20	14:29:00	79.0	34.2	7.91	48.10	21.7	10.18	0.11	67.5
2019-02-20	14:30:00	81.6	33.8	7.96	48.19	15.5	10.27	0.06	67.5
2019-02-20	14:31:00	88.4	33.5	8.04	48.59	23.5	10.11	0.05	63.7
2019-02-20	14:32:00	90.7	33.3	7.94	48.25	14.3	9.88	0.08	63.7
2019-02-20	14:33:00	87.6	31.9	7.72	47.57	21.6	10.11	0.08	59.5
2019-02-20	14:34:00	90.1	31.4	7.80	47.65	19.6	10.46	0.01	61.6
2019-02-20	14:35:00	99.7	32.4	8.02	48.21	24.5	10.22	0.08	68.6
2019-02-20	14:36:00	106.2	32.9	8.22	48.94	20.2	9.95	0.07	78.4
2019-02-20	14:37:00	104.4	31.4	7.98	48.18	23.6	9.92	0.05	80.7
2019-02-20	14:38:00	105.7	31.0	7.99	48.18	27.2	10.04	0.15	80.7
2019-02-20	14:39:00	110.9	31.7	8.24	48.81	20.7	9.95	0.06	84.4
2019-02-20	14:40:00	104.0	32.1	8.27	48.80	25.1	9.87	0.06	83.0
2019-02-20	14:41:00	96.6	31.2	7.97	48.03	18.0	9.85	0.08	84.2
2019-02-20	14:42:00	93.8	29.4	7.80	47.51	21.8	10.05	0.11	80.5
2019-02-20	14:43:00	92.2	30.2	8.05	48.24	20.2	10.22	0.10	77.0
2019-02-20	14:44:00	89.3	31.2	8.24	48.78	24.9	9.93	0.08	78.7
2019-02-20	14:45:00	94.7	31.2	8.27	48.86	20.3	9.75	0.11	86.7
2019-02-20	14:46:00	98.5	29.8	8.15	48.47	32.0	9.87	0.02	94.9
2019-02-20	14:47:00	104.0	29.4	8.22	48.58	18.7	9.92	0.05	102.1
2019-02-20	14:48:00	106.6	29.5	8.39	49.05	24.5	9.65	0.11	104.1
2019-02-20	14:49:00	84.9	29.6	8.21	48.73	13.6	9.48	0.06	92.6
2019-02-20	14:50:00	78.5	28.3	7.98	47.97	19.3	9.78	0.07	85.2
2019-02-20	14:51:00	66.5	27.8	8.00	47.83	17.0	10.26	0.08	77.0

FEB 20/2019	Analyzers								
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	
	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264	
Max	110.9	42.8	8.68	49.49	32.0	10.46	0.17	144.1	
Min	61.7	27.8	7.72	47.51	13.6	9.32	0.00	59.5	
Average	82.8	36.1	8.20	48.53	21.1	9.82	0.08	96.8	
Variance	158.4	20.2	0.05	0.22	14.9	0.06	0.00	586.7	

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
2019-02-20	15:03:00	80.6	27.9	8.12	48.18	19.3	9.92	0.05	87.3
2019-02-20	15:04:00	75.9	27.7	8.15	48.12	14.8	10.03	0.07	87.3
2019-02-20	15:05:00	70.9	27.5	8.24	48.74	19.0	9.92	0.05	78.7
2019-02-20	15:06:00	66.2	27.4	8.14	48.38	15.1	9.69	0.00	72.5
2019-02-20	15:07:00	67.0	27.1	7.91	47.66	20.3	9.92	0.05	72.5
2019-02-20	15:08:00	73.0	26.8	7.96	47.94	18.2	10.33	0.00	79.1
2019-02-20	15:09:00	75.9	26.8	8.15	48.53	21.6	10.11	0.05	83.1
2019-02-20	15:10:00	80.3	27.4	8.32	49.02	20.6	9.86	0.02	88.4
2019-02-20	15:11:00	93.5	27.1	8.17	48.58	21.8	9.83	0.00	91.1
2019-02-20	15:12:00	91.3	26.2	8.09	48.34	22.3	9.87	0.02	92.1
2019-02-20	15:13:00	90.8	26.1	8.29	48.84	17.0	9.77	0.06	95.6
2019-02-20	15:14:00	84.7	26.3	8.37	48.93	19.2	9.69	0.05	90.0
2019-02-20	15:15:00	74.8	25.5	8.09	48.20	14.6	9.69	0.00	82.3
2019-02-20	15:16:00	74.3	24.6	7.86	47.59	16.6	9.98	0.00	78.5
2019-02-20	15:17:00	73.0	24.9	7.97	47.84	15.4	10.26	0.00	72.4
2019-02-20	15:18:00	72.5	25.2	8.15	48.47	21.4	10.07	0.02	67.3
2019-02-20	15:19:00	76.9	25.3	8.19	48.61	16.0	9.93	0.00	70.5
2019-02-20	15:20:00	80.4	24.3	8.02	48.17	19.5	9.99	0.00	77.5
2019-02-20	15:21:00	80.7	24.0	8.02	48.25	15.9	10.09	0.02	78.8
2019-02-20	15:22:00	89.7	25.3	8.25	48.90	18.7	9.92	0.00	81.0
2019-02-20	15:23:00	79.9	24.8	8.20	48.82	13.8	9.65	0.00	77.8
2019-02-20	15:24:00	74.1	24.1	7.95	47.99	16.3	9.86	0.06	72.8
2019-02-20	15:25:00	66.5	22.9	7.89	47.60	15.7	10.34	0.03	68.7
2019-02-20	15:26:00	66.5	23.2	8.07	48.19	18.2	10.21	0.02	71.4
2019-02-20	15:27:00	68.0	24.5	8.26	48.79	18.4	9.99	0.08	75.7
2019-02-20	15:28:00	74.2	24.1	8.11	48.35	16.1	9.89	0.00	80.5
2019-02-20	15:29:00	75.3	23.4	8.00	48.21	17.4	9.99	0.08	80.5
2019-02-20	15:30:00	77.7	23.4	8.16	48.63	15.3	9.96	0.06	80.5
2019-02-20	15:31:00	73.5	23.8	8.25	48.69	19.1	9.85	0.02	77.7
2019-02-20	15:32:00	69.7	24.2	8.14	48.33	14.9	9.62	0.00	80.7
2019-02-20	15:33:00	69.3	22.9	7.90	47.54	15.7	9.98	0.06	80.5
2019-02-20	15:34:00	69.3	23.2	8.08	48.19	14.8	10.18	0.00	80.5
2019-02-20	15:35:00	69.1	24.1	8.26	48.86	20.0	9.92	0.05	78.7
2019-02-20	15:36:00	74.8	24.0	8.34	48.97	14.7	9.80	0.02	83.1
2019-02-20	15:37:00	79.3	23.0	8.13	48.39	20.2	9.90	0.02	84.1
2019-02-20	15:38:00	79.6	22.7	8.01	48.33	14.9	10.05	0.03	81.6
2019-02-20	15:39:00	83.7	22.4	8.11	48.72	21.3	9.99	0.02	78.6
2019-02-20	15:40:00	78.2	22.4	8.14	48.64	16.8	9.78	0.01	78.6
2019-02-20	15:41:00	81.9	21.9	7.94	47.99	17.5	9.95	0.02	80.7
2019-02-20	15:42:00	84.1	22.0	7.78	47.68	24.5	10.46	0.05	73.3
2019-02-20	15:43:00	91.3	22.2	7.98	48.24	26.4	10.29	0.08	77.5
2019-02-20	15:44:00	105.5	22.6	8.25	48.85	23.2	9.90	0.06	95.8
2019-02-20	15:45:00	113.0	21.7	8.10	48.59	21.2	9.85	0.02	92.2
2019-02-20	15:46:00	111.8	21.5	8.04	48.44	28.4	10.00	0.08	83.5
2019-02-20	15:47:00	120.0	22.0	8.22	48.94	18.9	9.95	0.05	95.3
2019-02-20	15:48:00	115.2	22.3	8.29	49.09	22.5	9.82	0.07	98.2
2019-02-20	15:49:00	87.6	22.0	8.07	48.41	16.3	9.55	0.05	87.9
2019-02-20	15:50:00	84.1	21.3	7.88	47.85	21.1	9.88	0.11	81.2
2019-02-20	15:51:00	91.6	21.0	7.98	47.99	15.1	10.32	0.08	82.0
2019-02-20	15:52:00	88.6	21.3	8.13	48.51	22.5	10.00	0.05	80.7
2019-02-20	15:53:00	90.1	21.1	8.20	48.69	15.1	9.89	0.06	80.7
2019-02-20	15:54:00	91.1	20.6	8.13	48.17	25.1	9.90	0.00	86.6
2019-02-20	15:55:00	91.8	20.8	8.10	48.20	9.9	9.98	0.01	89.8
2019-02-20	15:56:00	87.9	20.1	8.01	48.14	5.3	9.91	0.07	85.9
2019-02-20	15:57:00	33.2	18.3	7.07	46.25	4.8	10.65	0.05	57.0
2019-02-20	15:58:00	24.8	17.7	6.50	44.96	5.0	11.11	0.07	51.3
2019-02-20	15:59:00	23.9	17.2	6.01	44.02	6.0	11.77	0.13	46.3
2019-02-20	16:00:00	26.3	16.9	6.12	44.43	5.3	11.83	0.11	46.3
2019-02-20	16:01:00	25.4	17.0	6.24	44.87	5.7	11.68	0.11	46.3
2019-02-20	16:02:00	24.0	17.0	6.13	44.49	5.8	11.68	0.11	45.4
2019-02-20	16:03:00	25.3	16.7	6.12	44.37	6.4	11.73	0.08	42.1

FEB 20/2019	Analyzers								
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	
	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264	
Max	120.0	27.9	8.37	49.09	28.4	11.83	0.13	98.2	
Min	23.9	16.7	6.01	44.02	4.8	9.55	0.00	42.1	
Average	75.7	23.1	7.90	47.96	16.8	10.13	0.04	77.8	
Variance	468.4	8.6	0.36	1.54	30.5	0.30	0.00	165.3	

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
2019-02-20	16:13:00	76.6	74.3	8.25	48.38	16.3	9.96	0.11	132.9
2019-02-20	16:14:00	67.7	66.3	8.29	48.56	15.2	9.78	0.11	135.9
2019-02-20	16:15:00	62.3	61.7	8.01	47.74	14.0	9.79	0.15	135.9
2019-02-20	16:16:00	55.4	56.2	7.81	47.02	16.6	10.26	0.15	140.5
2019-02-20	16:17:00	57.3	56.0	8.04	47.69	16.9	10.29	0.15	154.1
2019-02-20	16:18:00	58.8	54.8	8.28	48.31	21.8	9.91	0.11	182.9
2019-02-20	16:19:00	69.3	53.1	8.19	48.09	18.1	9.65	0.13	212.3
2019-02-20	16:20:00	73.5	51.4	8.12	47.86	34.8	9.74	0.16	217.7
2019-02-20	16:21:00	95.7	50.2	8.40	48.59	19.5	9.76	0.08	233.2
2019-02-20	16:22:00	99.0	51.3	8.52	48.96	18.9	9.59	0.08	238.5
2019-02-20	16:23:00	73.2	49.9	8.41	48.66	9.9	9.20	0.07	234.3
2019-02-20	16:24:00	51.1	45.9	7.96	47.28	17.7	9.73	0.15	214.3
2019-02-20	16:25:00	53.2	45.7	8.12	47.59	11.4	10.00	0.11	218.2
2019-02-20	16:26:00	54.7	44.5	8.44	48.51	20.0	9.62	0.15	223.1
2019-02-20	16:27:00	58.1	43.7	8.55	48.80	11.1	9.51	0.11	227.2
2019-02-20	16:28:00	56.9	42.1	8.30	48.27	15.2	9.47	0.11	229.8
2019-02-20	16:29:00	46.1	41.5	8.27	48.17	10.2	9.75	0.15	217.5
2019-02-20	16:30:00	43.2	41.5	8.32	48.28	9.5	9.66	0.10	205.2
2019-02-20	16:31:00	31.4	41.5	8.25	48.49	9.0	9.76	0.03	174.7
2019-02-20	16:32:00	29.7	40.8	7.96	47.69	8.9	9.66	0.07	162.8
2019-02-20	16:33:00	27.1	41.7	7.72	46.80	9.8	10.11	0.05	149.6
2019-02-20	16:34:00	26.8	44.8	7.98	47.52	9.4	10.28	0.06	154.9
2019-02-20	16:35:00	26.5	48.4	8.15	48.25	10.4	10.01	0.01	156.9
2019-02-20	16:36:00	27.6	50.1	8.05	47.89	7.7	9.88	0.05	169.3
2019-02-20	16:37:00	28.5	50.3	7.95	47.66	10.0	10.02	0.11	164.3
2019-02-20	16:38:00	29.4	47.6	8.04	48.03	7.5	10.13	0.11	157.1
2019-02-20	16:39:00	28.7	46.9	8.10	48.20	9.6	10.04	0.08	155.0
2019-02-20	16:40:00	26.4	44.7	8.01	47.92	7.3	9.80	0.08	146.6
2019-02-20	16:41:00	26.0	42.2	7.64	47.28	9.2	10.25	0.02	137.0
2019-02-20	16:42:00	25.0	42.0	7.73	47.06	8.6	10.48	0.01	139.2
2019-02-20	16:43:00	26.9	42.1	8.05	47.88	11.2	10.12	0.03	150.6
2019-02-20	16:44:00	29.5	42.2	8.17	48.14	8.5	9.99	0.02	159.9
2019-02-20	16:45:00	28.6	41.5	8.07	47.81	10.9	9.91	0.05	169.3
2019-02-20	16:46:00	28.0	40.8	8.00	47.68	10.0	10.02	0.11	170.9
2019-02-20	16:47:00	34.1	40.3	8.20	48.42	10.4	9.97	0.00	183.6
2019-02-20	16:48:00	33.6	40.8	8.34	48.73	9.0	9.78	0.07	179.4
2019-02-20	16:49:00	30.2	40.6	8.09	48.07	7.6	9.58	0.06	174.8
2019-02-20	16:50:00	26.2	39.0	7.68	46.94	8.7	10.14	0.05	148.2
2019-02-20	16:51:00	27.2	39.3	7.86	47.34	9.1	10.38	0.06	145.1
2019-02-20	16:52:00	28.7	40.2	8.11	48.17	10.1	10.05	0.10	155.5
2019-02-20	16:53:00	29.1	40.9	8.09	48.05	7.6	9.78	0.11	172.2
2019-02-20	16:54:00	29.0	41.9	8.01	47.85	10.8	9.92	0.08	170.4
2019-02-20	16:55:00	30.6	42.2	8.10	48.12	8.2	10.02	0.01	180.7
2019-02-20	16:56:00	30.3	42.1	8.18	48.40	10.8	9.89	0.06	184.2
2019-02-20	16:57:00	29.3	41.4	8.25	48.66	7.5	9.67	0.08	181.7
2019-02-20	16:58:00	26.5	40.1	7.86	47.32	10.3	9.98	0.05	174.9
2019-02-20	16:59:00	27.2	39.8	7.89	47.36	8.5	10.22	0.10	175.9
2019-02-20	17:00:00	29.7	40.5	8.24	48.22	9.6	9.95	0.05	186.5
2019-02-20	17:01:00	29.7	41.8	8.30	48.49	8.4	9.85	0.08	188.5
2019-02-20	17:02:00	28.9	41.6	8.15	47.95	8.3	9.82	0.08	183.8
2019-02-20	17:03:00	26.8	40.9	8.13	47.66	9.0	10.06	0.15	181.7
2019-02-20	17:04:00	27.5	41.3	8.16	48.18	8.9	9.94	0.07	183.0
2019-02-20	17:05:00	28.0	41.4	8.29	48.69	7.3	9.81	0.05	181.0
2019-02-20	17:06:00	26.6	40.7	8.11	48.15	6.8	9.62	0.05	173.9
2019-02-20	17:07:00	27.1	39.0	7.74	46.83	8.5	10.11	0.05	147.4
2019-02-20	17:08:00	28.5	39.6	7.93	47.41	8.0	10.33	0.11	153.5
2019-02-20	17:09:00	28.7	42.1	8.24	48.41	9.9	9.93	0.07	167.8
2019-02-20	17:10:00	31.5	42.0	8.17	48.29	8.3	9.73	0.07	185.1
2019-02-20	17:11:00	33.2	41.3	8.08	48.01	10.2	9.83	0.07	192.6
2019-02-20	17:12:00	34.7	40.9	8.20	48.25	6.1	9.84	0.07	196.3
2019-02-20	17:13:00	32.1	41.1	8.23	48.44	6.8	9.81	0.10	179.6

FEB 20/2019	Analyzers								
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	
	AT-205	AT-213A	AT-213B	AT-213C	AT-259	AT-261	AT-263	AT-264	
Max	99.0	74.3	8.55	48.96	34.8	10.48	0.16	238.5	
Min	25.0	39.0	7.64	46.80	6.1	9.20	0.00	132.9	
Average	39.2	44.9	8.11	47.99	11.1	9.90	0.08	177.0	
Variance	330.8	47.3	0.04	0.27	23.2	0.06	0.00	772.8	