Report No. | 22278

ORTECH
a Kontrol Technologies Company

Report:

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

Date: July 25, 2023



Report:

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

Submitted to: Mackenzie Costello
Senior Environmental Compliance Manager
Clean Harbors Canada
4090 Telfer Road, RR #1 Corunna, Ontario N0N 1G0
Tel: (519) 864-3890
Cell: (343) 370-6701
E-mail: costello.mackenzie@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.: 22278
10 pages, 5 Appendices

Revision History

Version	Date	Summary Changes/Purpose of Revision
1	July 25, 2023	None

Table of Contents

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 two days of testing on June 27 and June 28, 2023. To try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method one tube from each of the six pairs of adsorbent tubes were spiked with increasing amounts of mercury, ranging from 150 ng to 2000 ng, by the analytical laboratory prior to commencing the test program.

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

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

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

Mercury Parameter	Average
Dry Reference Concentration (µg/Rm^3)*	7.37
Dry Adjusted Concentration (µg/Rm^3)**	6.19

* 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 23.6 lb/hr.

1. INTRODUCTION

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

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

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

Six pairs of adsorbent tubes were collected during two days of sampling on June 27 and June 28, 2023. The spike tubes from each test pair were spiked with increasing amounts of mercury, ranging from 150 ng to 2000 ng, prior to commencing the test program to try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method. The test method states that the recovery spike should be within 50 to 150 percent of the expected mass collected in the traps during sampling. The results of three of the pairs of tubes, including the spikes that best represented the mercury concentration in the stack gas at the time of testing, are reported.

All tables referenced herein are included in Appendix 1.

2. SAMPLING LOCATION

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

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

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

3. SAMPLING METHODOLOGY

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

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

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

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

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

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

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

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

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

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

4. ANALYSIS METHODOLOGY

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

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

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

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

5. QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

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

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

Six unspiked mercury traps and six pre-spiked mercury traps were ordered approximately two weeks before the field testing program from Ohio Lumex. The pre-spiked mercury traps were spiked with known quantities of mercury ranging from 150 ng to 2000 ng in order to try to ensure that at least one of the traps met the spiking criterion stated in the test method. The recovery spike should be within 50 to 150 percent of the expected mass collected in the traps during sampling according to the test method. The spiking levels for the field recovery traps was estimated using mercury emission data from previous testing programs conducted between 2014 and 2022. The average mercury collected for Test No. 2, Test No. 3 and Test No. 4 was 442.6 ng.

The field spike recovery provides specific verification of the performance of the combined sampling and analytical approach for the test program. The spike recovery for Test No. 2, Test No. 3 and Test No. 4 was 94.1%, 95.7% and 100.0%, respectively. US EPA Method 30B requires the spike recovery to be between 85% and 115%.

US EPA Method 30B requires the paired sorbent trap agreement to be ≤10% relative deviation for mercury concentrations greater than 1 µg/Rm^3 or ≤20% relative deviation for mercury concentrations less than 1 µg/Rm^3. If the paired trap agreement is greater than the above stated limits the run is not valid. All of the traps collected during the test program had concentrations greater than 1 µg/Rm^3. The average dry adjusted mercury concentration ranged from a low of 6.13 µg/Rm^3 (Tube Pair No. 2) to a high of 6.22 µg/Rm^3 (Tube Pair No. 3) for the three tests reported. The paired trap agreement was 1.6% for Test No. 2, 2.0% for Test No. 3, and 0.01% for Test No. 4.

6. RESULTS

Six mercury test runs were collected during two days of sampling on June 27 and June 28, 2023. A run consisted of paired mercury traps, identified as either A or B, sampled simultaneously. The spike tubes from each test pair were spiked with increasing amounts of mercury, ranging from 150 ng to 2000 ng, prior to commencing the test program to try to ensure that at least one of the spike concentrations would fall within the concentration range requirements of the test method. The results for Test No. 2, Test No. 3 and Test No. 4 are reported.

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

Mercury emission sample analyses for Test No. 2, Test No. 3 and Test No. 4 are provided in Table 2. Mercury was detected in Section 1 of each trap in quantities greater than the method detection limit (0.6 ng) in all of the traps. Mercury was also collected in Section 2 in three of the six traps in quantities greater than the method detection limit. However, the amount detected in Section 2 was less than 0.6% of the mercury collected in Section 1 in all traps, indicating that there was no breakthrough or potential loss of mercury. US EPA Method 30B recommends that ≤10% of the total mercury collected should be collected in Section 2 for mercury concentrations greater than 1 µg/Rm^3 or ≤20% of the total mercury collected should be collected in Section 2 for mercury concentrations less than 1 µg/Rm^3.

Included in Table 2 are the mercury concentration calculations for Test No. 2, Test No. 3 and Test No. 4. The average oxygen concentration measured by the Clean Harbors CEM system for each test was used to determine the dry reference concentration adjusted to 11% oxygen.

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

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

Mercury Parameter	Test 1	Test 2	Test 3	Average
Dry Reference Conc. (µg/Rm^3)*	7.66	7.25	7.20	7.37
Dry Adjusted Conc. (µg/Rm^3)**	6.13	6.22	6.20	6.19

* reference conditions are 25°C and 1 atmosphere

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

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

The spiked mercury trap recovery calculations are shown in Table 3; the spike recovery for Test No. 2, Test No. 3 and Test No. 4 was 94.1%, 95.7% and 100.0%, respectively. US EPA Method 30B requires the spike recovery to be between 85% and 115%.

7. FACILITY PROCESS DATA

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

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

During the emission testing program, the average powdered activated carbon (PAC) injection rate was 23.6 lb/hr.

APPENDIX 1

Data Tables
(2 pages)

Table 1: Mercury Test Schedule

Test Number	Test Date	Sampling Period		Sampling Time
		Start	Finish	min
1	June 27, 2023	11:45	12:45	60
2	June 27, 2023	13:05	14:05	60
3	June 27, 2023	14:23	15:23	60
4	June 27, 2023	15:44	16:44	60
5	June 28, 2023	9:30	10:30	60
6	June 28, 2023	10:42	11:42	60

Note: All test times match plant time.

Table 2: Mercury Emission Data

Test/Run No.	Tube ID	Mercury Collected Section 1	Mercury Collected Section 2	Mercury Collected Total	Dry Gas Volume Sampled	Mercury Concentration Dry Reference	Mercury Concentration Dry Adjusted	Paired Trap Agreement
		ng	ng	ng	Rm^3*	µg/Rm^3*	µg/Rm^3**	%
2	A	489.4	2.7	492.1	0.0632	7.78	6.23	-
	B***	458.5	<0.6	<459.1	0.0609	7.54	6.04	-
	Average					7.66	6.13	1.6
3	A***	413.3	0.4	413.7	0.0582	7.10	6.09	-
	B	484.2	0.4	484.6	0.0655	7.40	6.35	-
	Average					7.25	6.22	2.0
4	A	383.1	0.9	384.0	0.0534	7.19	6.20	-
	B***	420.0	1.9	421.9	0.0586	7.20	6.20	-
	Average					7.20	6.20	0.01
Average				442.6		7.37	6.19	

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

* At 25°C and 1 atmosphere
** At 25°C and 1 atmosphere, adjusted to 11% oxygen
*** Spiked tube, mercury collected corrected for the original spike (250 ng for Test No. 2, 400 ng for Test No. 3 and 600 ng for Test No. 4).

Table 3: Mercury Spike Tube Recovery

Test No.	Spike Tube Total Collected	Spike Tube Volume Sampled	Spike Tube Mercury Concentration	Unspike Tube Total Collected	Unspike Tube Volume Sampled	Unspike Tube Mercury Concentration	Spike Concentration	Spike Recovery
	ng	Rm^3*	ng/Rm^3*	ng	Rm^3*	ng/Rm^3*	ng/Rm^3*	%
2	709	0.0609	11643	492.1	0.0632	7780	3863	94.1
3	814	0.0582	13972	484.6	0.0655	7401	6571	95.7
4	1022	0.0586	17431	384.0	0.0534	7195	10237	100.0
Average								96.6

Note: The spike tubes were spiked with mercury by the analytical laboratory prior to sampling. The original spike concentrations were 250 ng for Test No. 2, 400 ng for Test No. 3 and 600 ng for Test No. 4.

APPENDIX 2

Mercury Field Data Sheets
(7 pages)

Clean Harbors, Sarnia
Mercury Tube Sampling Train
Sample Volume Corrections

Incinerator Exhaust Stack

Test # - Tube (tube pair field ID)	DGMCF	Initial DGM Reading (L)	Final DGM Reading (L)	Actual Vol. Sampled (L)	Barometric Pressure (in Hg)	Average DGM Pressure del H (in H_2O)	Average DGM Temperature (°C)	Corrected Volume (L)*	Corrected Volume (Rm^3)*
T1A OL618282 (Spiked)	1.012	24.6	90.1	65.5	29.07	2.0	28.3	64.02	0.0640
T1B OL629572	0.993	17.6	83.7	66.1	29.07	1.0	29.8	62.93	0.0629
T2A OL629554	1.012	94.1	159.1	65.0	29.09	2.0	29.9	63.25	0.0632
T2B OL661382 (Spiked)	0.993	89.2	154.2	65.0	29.09	1.0	34.9	60.90	0.0609
T3A OL569050 (Spiked)	1.012	62.0	122.0	60.0	29.12	2.0	30.9	58.24	0.0582
T3B OL529553	0.993	57.2	126.7	69.5	29.12	1.0	33.5	65.48	0.0655
T4A OL663194	1.012	24.0	78.7	54.7	29.14	2.0	29.5	53.37	0.0534
T4B OL610647 (Spiked)	0.993	29.0	91.4	62.4	29.14	1.0	34.5	58.62	0.0586
T5A OL620087 (Spiked)	1.012	83.3	140.7	57.4	29.38	2.0	30.2	56.35	0.0564
T5B OL661398	0.993	94.7	157.0	62.3	29.38	1.0	29.2	60.05	0.0600
T6A OL663104	1.012	43.7	98.4	54.7	29.39	2.0	32.1	53.38	0.0534
T6B OL618297 (Spiked)	0.993	58.6	119.1	60.5	29.39	1.0	35.5	57.14	0.0571

* dry at 25°C and 1 atmosphere

ORTECH
Mercury Tube Data Sheet

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

Test location:	Stack
Date:	June 27 2022
Project No.:	22278

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

Train A

Tube Identification:	OL6182582	Spiked (Yes) No	
Spike Concentration	150 ng		

Barometric Pressure	29.07

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	24.6	22	2	5
5	30.5	24	2	6
10	36.0	25	2	6
15	41.8	26	2	6
20	46.6	28	2	6
25	51.6	29	2	6.5
30	57.0	29	2	7
35	62.1	30	2	7
40	68.1	31	2	7
45	73.1	31	2	7
50	79.0	31	2	7
55	84.9	31	2	7
60	90.1	31	2	7

Start Time:	1145	Initial Leak Check	<.01	LPM@ 15 "Hg	DGMCF: 1.012
Finish Time:	1245	Final Leak Check	<.01	LPM@ 15 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 2

Train B

Tube Identification:	OL629572	Spiked Yes (No)	
Spike Concentration	ng		

Measuring Device	MII
Control Module	V057 4

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	17.6	23	1	5.5
5	23.0	25	1	6
10	28.5	26	1	6
15	34.1	27	1	7
20	39.2	27	1	7
25	45.1	29	1	8
30	50.0	30	1	8
35	55.3	31	1	8
40	61.0	33	1	9
45	66.5	34	1	9
50	72.0	34	1	9
55	78.0	34	1	9
60	83.4	34	1	9

Start Time:	1145	Initial Leak Check	<.01	LPM@ 16 "Hg	DGMCF: .993
Finish Time:	1245	Final Leak Check	<.01	LPM@ 15 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 1

Operator: RM

ORTECH
Mercury Tube Data Sheet

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

Test location:	Stack
Date:	Jun 27/23
Project No.:	22278

Train A

Tube Identification:	OL629554	Spiked Yes (No)	
Spike Concentration	ng		

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

Barometric Pressure	29.09

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	94.1	28	2	6
5	100.5	30	2	7
10	105.2	30	2	9
15	111.1	30	2	8
20	116.1	30	2	8
25	121.5	30	2	8
30	126.5	30	2	8
35	132.0	30	2	8
40	137.6	30	2	8
45	142.9	30	2	8
50	148.2	30	2	8
55	153.7	30	2	8
60	159.1	30	2	8

Start Time:	1305	Initial Leak Check	<.01	LPM@ 15 "Hg	DGMCF: 1.012
Finish Time:	1405	Final Leak Check	<.01	LPM@ 15 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 2

Train B

Tube Identification:	OL661382	Spiked (Yes) No	
Spike Concentration	250 ng		

Measuring Device	MII
Control Module	VOST 4

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	89.2	32	1	6
5	95.3	35	1	7
10	100.0	35	1	8
15	105.9	35	1	8
20	109.0	35	1	8
25	114.9	36	1	8
30	121.1	36	1	8
35	127.0	36	1	8
40	132.5	35	1	8
45	137.9	35	1	9
50	143.0	35	1	9
55	148.7	34	1	9
60	154.2	34	1	9

Start Time:	1305	Initial Leak Check	<.01	LPM@ 16 "Hg	DGMCF: .993
Finish Time:	1405	Final Leak Check	<.01	LPM@ 17 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 1

Operator: DM

ORTECH
Mercury Tube Data Sheet

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

Test location:	Stack
Date:	Jun 27/23
Project No.:	22278

Train A

Tube Identification:	OL5C9050	Spiked (Yes) No	
Spike Concentration	400 ng		

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

Barometric Pressure	29.12

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O	Pump Vacuum "Hg Gauge
0	62.0	28	2	6
5	67.5	30	2	7
10	73.0	31	2	8
15	78.0	32	2	8
20	83.0	32	2	8
25	87.1	32	2	8
30	92.2	31	2	8
35	97.3	31	2	8
40	102.3	31	2	8
45	107.3	31	2	8
50	112.2	31	2	8
55	117.1	31	2	8
60	122.0	31	2	8

Start Time:	1423	Initial Leak Check <.01 LPM@	17 "Hg
Finish Time:	1523	Final Leak Check <.01 LPM@	16 "Hg

DGMCF:	1.012
Sample Volume:	
Average DGM Temp:	
Average DGM Δ H:	2

Train B

Tube Identification:	OL629553	Spiked Yes (No)	
Spike Concentration	— ng		

Measuring Device	MII
Control Module	VOST 4

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O	Pump Vacuum "Hg Gauge
0	57.2	31	1	6
5	63.5	33	1	7
10	69.0	34	1	7
15	74.0	34	1	7
20	79.9	34	1	7
25	86.0	34	1	7
30	91.0	34	1	7
35	96.9	34	1	8
40	102.9	34	1	8
45	109.5	34	1	8
50	115.2	33	1	8
55	121.1	33	1	
60	126.7			

Start Time:	1423	Initial Leak Check <.01 LPM@	15 "Hg
Finish Time:	1523	Final Leak Check <.01 LPM@	16 "Hg

DGMCF:	0.993
Sample Volume:	
Average DGM Temp:	
Average DGM Δ H:	1

Operator:	DM

ORTECH
Mercury Tube Data Sheet

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

Test location:	Stack
Date:	Jun 27/23
Project No.:	22278

Train A

Tube Identification:	OL663194	Spiked Yes (No)	
Spike Concentration	— ng		

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

Barometric Pressure	29.14

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O	Pump Vacuum "Hg Gauge
0	24.0	26	2	5
5	29.3	28	2	6
10	33.3	29	2	7
15	37.3	30	2	7
20	41.5	30	2	7
25	45.8	30	2	7
30	50.0	30	2	7
35	54.4	30	2	7
40	58.0	31	2	7
45	63.0	30	2	7
50	68.0	30	2	7
55	73.1	30	2	7
60	78.7	30	2	7

Start Time:	1544	Initial Leak Check	LPM@	"Hg	DGMCF: 1.012
Finish Time:	1644	Final Leak Check	LPM@	"Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 2

Train B

Tube Identification:	OL610647	Spiked (Yes) No	
Spike Concentration	600 ng		

Measuring Device	MII
Control Module	VOST 4

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O	Pump Vacuum "Hg Gauge
0	29.0	31	1	5
5	35.2	32	1	7
10	40.1	33	1	7
15	45.0	34	1	7
20	50.1	35	1	7
25	55.0	36	1	7
30	60.1	37	1	7
35	65.2	37	1	7
40	70.0	37	1	7
45	75.2	37	1	7
50	80.0	37	1	7
55	85.4	37	1	7
60	91.4	37	1	7

Start Time:	1644	Initial Leak Check	LPM@	"Hg	DGMCF: .993
Finish Time:	1644	Final Leak Check	LPM@	"Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 1

Operator:	RM

ORTECH
Mercury Tube Data Sheet

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

Test location:	Stack
Date:	JUNE 28, 2023
Project No.:	22278

Train A

Tube Identification:	OL620087	Spiked (Yes) No	
Spike Concentration	1000 ng		

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

Barometric Pressure	29.38

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	93.3	26	2	5
5	88.0	30	2	6
10	93.0	31	2	7
15	97.5	31	2	8
20	101.8	31	2	8
25	106.3	31	2	8
30	111.3	30	2	8
35	116.3	30	2	8
40	121.2	30	2	9
45	126.0	31	2	9
50	131.0	31	2	10
55	136.0	30	2	10
60	140.7	30	2	10

Start Time:	930	Initial Leak Check	<.01 LPM@	16 "Hg	DGMCF: 1.012
Finish Time:	1030	Final Leak Check	<.01 LPM@	16 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 2

Train B

Tube Identification:	OL661398	Spiked Yes (No)	
Spike Concentration	ng		

Measuring Device	MII
Control Module	VOST 4

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	94.7	24	1	5
5	100.0	25	1	7
10	105.0	27	1	9
15	110.0	28	1	11
20	115.1	28	1	11
25	120.5	29	1	11
30	125.5	31	1	11
35	130.5	31	1	11
40	136.1	32	1	11
45	141.3	32	1	11
50	146.7	32	1	11
55	152.0	32	1	11
60	157.0	32	1	11

Start Time:	930	Initial Leak Check	<.01 LPM@	16 "Hg	DGMCF: .993
Finish Time:	1030	Final Leak Check	<.01 LPM@	16 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H: 1

Operator:	[illegible]

ORTECH
Mercury Tube Data Sheet

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

Test location:	Stack
Date:	JUN 28/23
Project No.:	22278

Train A

Tube Identification:	OL603104	Spiked Yes (No)	
Spike Concentration	ng		

Measuring Device	MII
Control Module	V057
Barometer	ENV. CAN.

Barometric Pressure	29.39

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	43.7	27	2	5
5	48.2	30	2	8
10	52.7	31	2	8
15	57.1	32	2	8
20	61.5	33	2	8
25	66.0	33	2	8
30	70.4	33	2	8
35	74.8	33	2	8
40	79.2	33	2	8
45	83.7	33	2	8
50	88.4	33	2	8
55	93.4	33	2	8
60	98.4	33	2	8

Start Time:	1042	Initial Leak Check	5.01 LPM@	16 "Hg	DGMCF: 1.012
Finish Time:	1142	Final Leak Check	5.01 LPM@	17 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H:

Train B

Tube Identification:	OL618297	Spiked (Yes) No	
Spike Concentration	7000 ng		

Measuring Device	MII
Control Module	V057 4

Clock Time	Dry Gas Meter L	Average Meter Temperature °C	Meter Pressure Δ H "H_2O"	Pump Vacuum "Hg Gauge
0	58.6	30	1	5
5	63.6	31	1	7
10	68.5	32	1	7
15	73.5	33	1	7
20	78.6	35	1	7
25	83.4	36	1	7
30	88.0	37	1	7
35	93.0	38	1	7
40	98.1	38	1	7
45	103.6	39	1	7
50	108.7	38	1	7
55	114.1	39	1	8
60	119.1	38	1	8

Start Time:	1042	Initial Leak Check	5.01 LPM@	16 "Hg	DGMCF: .993
Finish Time:	1142	Final Leak Check	5.01 LPM@	17 "Hg	Sample Volume:
					Average DGM Temp:
					Average DGM Δ H:

Operator:	RM

APPENDIX 3

ORTECH Equipment Calibration Data
(4 pages)

ORTECH

Dry Gas Meter Calibration Data

Calibration Procedure	**03-J004**
Meter Number	**Vost 2**
Date	**June 29, 2023**
Barometric Pressure	**29.53**
System Leak Check	**<0.01 Lpm @ 17 "Hg**

MII NUMBERS	
DGM	**A10117**
Gasometer	**A01463**
Barometer	**COE20028**

Calibrated By	**David Utley**
Signature	
Reviewed and Accepted By	

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

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

Gasometer Reading cm			Gasometer Volume	Gasometer Temperature	DGM Reading L		DGM Volume	DGM Average Temperature	DGM Pressure	DGM Outlet	DGM Calibration	Time	Flow Rate
Initial	Final	cm	ft^3	°C	Initial	Final	ft^3	°C	in. H_2O	°C	Factor	min.	lpm
50.30	34.80	15.50	0.729	24.0	14.300	34.750	0.722	27.0	2.0	27.0	1.015	20	1.0
49.00	33.60	15.40	0.724	24.0	34.750	55.200	0.722	29.0	2.0	29.0	1.015	20	1.0
49.10	33.90	15.20	0.715	23.0	55.200	75.650	0.722	29.5	2.0	29.5	1.007	20	1.0

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

DGMCF AVERAGE

1 Lpm	1.012

Revision June 5, 2007

ORTECH
Trendicator Calibration

Calibration Procedure	03-J005
Trendicator Type	Nutech
MII	A10117
Date	June 29, 2023
Calibrated By	David Utley
Signature	
Reviewed and Accepted By	

Fluke Calibrator Output (COE 20024) (°C)	Tredicator Display Value		Percent Difference
	Before Adjustment (°C)	After Adjustment (°C)	(%)
0	0		0.0
20	20		0.0
50	50		0.0
100	101		-1.0
150	151		-0.7
200	201		-0.5
300	300		0.0
400	401		-0.3
500	500		0.0
600	600		0.0

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

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

ORTECH

Dry Gas Meter Calibration Data

Calibration Procedure	**03-J004**
Meter Number	**Vost 4**
Date	**June 29. 2023**
Barometric Pressure	**29.53**
System Leak Check	**<.01 @ 18 "Hg**

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

Calibrated By	**David Utley**
Signature	
Reviewed and Accepted By	

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

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

Gasometer Reading cm			Gasometer Volume	Gasometer Temperature	DGM Reading L		DGM Volume	DGM Average Temperature	DGM Pressure	DGM Outlet	DGM Calibration	Time	Flow Rate
Initial	Final	cm	ft^3	°C	Initial	Final	ft^3	°C	in. H_2O	°C	Factor	min.	lpm
58.40	43.30	15.10	0.710	21.0	95.20	115.50	0.717	23.0	1.0	26.0	0.995	20	1.0
53.50	38.10	15.40	0.724	21.0	15.50	36.40	0.738	24.0	1.0	24.0	0.989	20	1.0
50.70	35.60	15.10	0.710	21.0	36.40	56.90	0.724	26.0	1.0	25.0	0.995	20	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
1Lpm 0.993

Revision June 5, 2007

ORTECH
Trendicator Calibration

Calibration Procedure	**03-J005**
Trendicator Type	**Nutech**
MII	**A11542**
Date	**June 29. 2023**
Calibrated By	**David Utley**
Signature	
Reviewed and Accepted By	

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

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

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

APPENDIX 4

Mercury Analytical Report
(17 pages)

Sorbent Trap Analysis Report

Date	7/10/23	Company	ORTECH	Method	EPA 7473
Analyst[s]	Alexis Aldhizer	Contact	Chris Before	Method Uncertainty	± 10%
Project	2032667-HG	Phone	905-822-4120 ext. 324	MDL	0.6 ng
Turnaround	Standard	Email	cbefore@ortech.ca	LOQ	5 ng

Trap ID	Pre-Filter Mass [ng]	AGS Mass [ng]	Section 1 Mass [ng]	Section 2 Mass [ng]	Total Mass [ng][1]	Section 3 Mass [ng]	Spike Level [ng]	Breakthrough [%][2]	Spike Recovery [%][3]	Source	Notes	Affected Section
OL618282			961.8	*0.4*	*962.2*		150	0.0%	N/A			
OL629572			801.2	*0.3*	*801.5*			0.0%				
OL629554			489.4	*2.7*	*492.1*			0.6%				
OL661382			708.5	0.0	708.5		250	0.0%	N/A			
OL569050			813.3	*0.4*	*813.7*		400	0.0%	N/A			
OL629553			484.2	*0.4*	*484.6*			0.1%				
OL663194			383.1	*0.9*	*384.0*			0.2%				
OL610647			1020	*1.9*	*1022*		600	0.2%	N/A			
OL620087			4077	*1.2*	*4078*		1000	0.0%	N/A			
OL661398			3236	*0.8*	*3237*			0.0%				
OL663104			1606	*0.8*	*1607*			0.1%				
OL618297			3596	*0.9*	*3597*		2000	0.0%	N/A			

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

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

[3] For PS12B only Spike Recovery = S3 / Spike Level

[R] Data invalidation qualifier - refer to notes

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

ORTECH 07/10/23

Analyst : Alexis Aldhizer
File Name : 230710_ALA_ORTECH_2032667-HG
Analyzer : 1644
Cell type : Short

Temperature (°C) : 680
Flow Rate (L/min) : 1.5
MDL (ng) : 0.6
SD : 0.7

	Trap ID	IV Mass (ng)	AGS Mass (ng)	Section 1 Mass (ng)	Section 2 Mass (ng)	Section 3 Mass (ng)	Section 4 Mass (ng)	Spike Level (ng)	Source	Notes	Affected Section
1	OL618282			961.8	0.4						
2	OL629572			801.2	0.3						
3	OL629554			489.6	2.7						
4	OL661382			708.5	0.0						
5	OL660050			813.3	0.4						
6	OL629553			484.2	0.4						
7	OL663194			383.1	0.9						
8	OL610647			1020	1.9						
9	OL620087			4077	1.2						
10	OL661398			3236	0.8						
11	OL663104			1606	0.8						
12	OL618297			3596	0.9						
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

Additional Notes

Daily Calibration[1]

Lot Std. ID	Std. (ng)	Calculated (ng)
U2-MER729102 A	5.0	see cal. report
U2-MER729107 A	10.0	see cal. report
U2-MER729103 A	100.0	see cal. report
U2-HG729095 A	1000.0	see cal. report
T2-MER719966 A	5000.0	see cal. report
T2-MER719966 A	10000.0	see cal. report

Continuing Calibration Verifications[2]

Lot Std. ID	Std. (ng)	Calculated (ng)
U2-HG729095 A	1000.0	990.4
U2-HG729095 A	1000.0	997.6
U2-HG729095 A	1000.0	1002
U2-HG729095 A	1000.0	1026

Active Hg Standard Bank[3]

Kit Used: ☑ A ☐ B

Concentration (µg/mL)	Lot Std. ID	Exp. Date
0.1	U2-MER729107 B	5/25/2024
1	U2-MER729103 B	4/27/2024
10	U2-HG729095 B	4/27/2024
100	T2-MER719966 B	4/27/2024
1000	T2-HG722184 B	4/27/2024
0.1	U2-MER729102 A	4/27/2024
1	U2-MER729103 A	4/27/2024
10	U2-HG729095 A	4/27/2024
100	T2-MER719966 A	4/27/2024
1 (Independent)	T2-HG720308	4/27/2024
10 (Independent)	T2-MER719967	4/27/2024
100 (Independent)	P2-MER681004	1/11/2024

Independent Calibration Verification[2]

Lot Std. ID	Std. (ng)	Calculated (ng)
T2-MER719967	1000	997.9

Response Factor (Method 308 Only)[4]

Lot Std. ID	Std. (ng)	Area/Mass
U2-MER729103 A	2	41.5

Pipette Identification: A6
RF Pipette ID (if different from cal):

Method Blank measured mass[5]: 0.1

Other Reagents

Sodium Carbonate	2202861006
Iodinated Activated Carbon	4041

[1]Performed daily prior to analysis of sorbent traps, Refer to SOP for Instrument Calibration for acceptance criteria
[2]Performed immediately after calibration curve is verified, must come within 10% of expected value
[3]Performed between every 10 samples for method 308 and after every analytical batch
[4]Response factor value must fall between the LOQ and MDL
[5]Subject to change, for analyst convenience only
[6]Method blank must be measured at a value less than LOQ
[7]Data Invalidation qualifier - refer to notes

Immediately report any QA/QC failures or anything suspicious to the QA/QC Manager

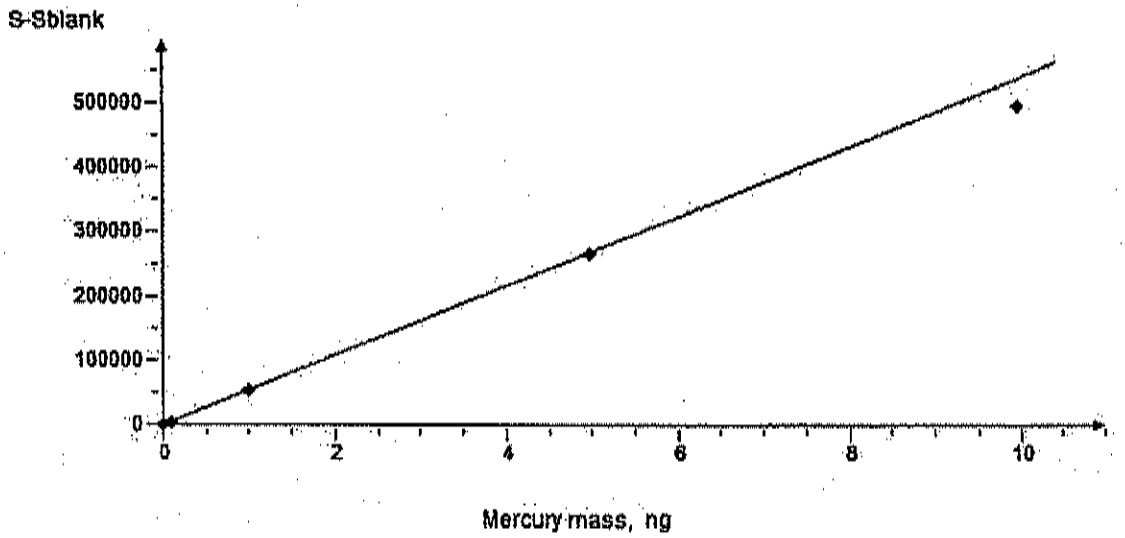
Analyst Signature: Alexis Aldhizer
By signing this report I confirm that the above data are true to the best of my knowledge.

Date: 07/10/2023

OHIO LUMEX

REPORT

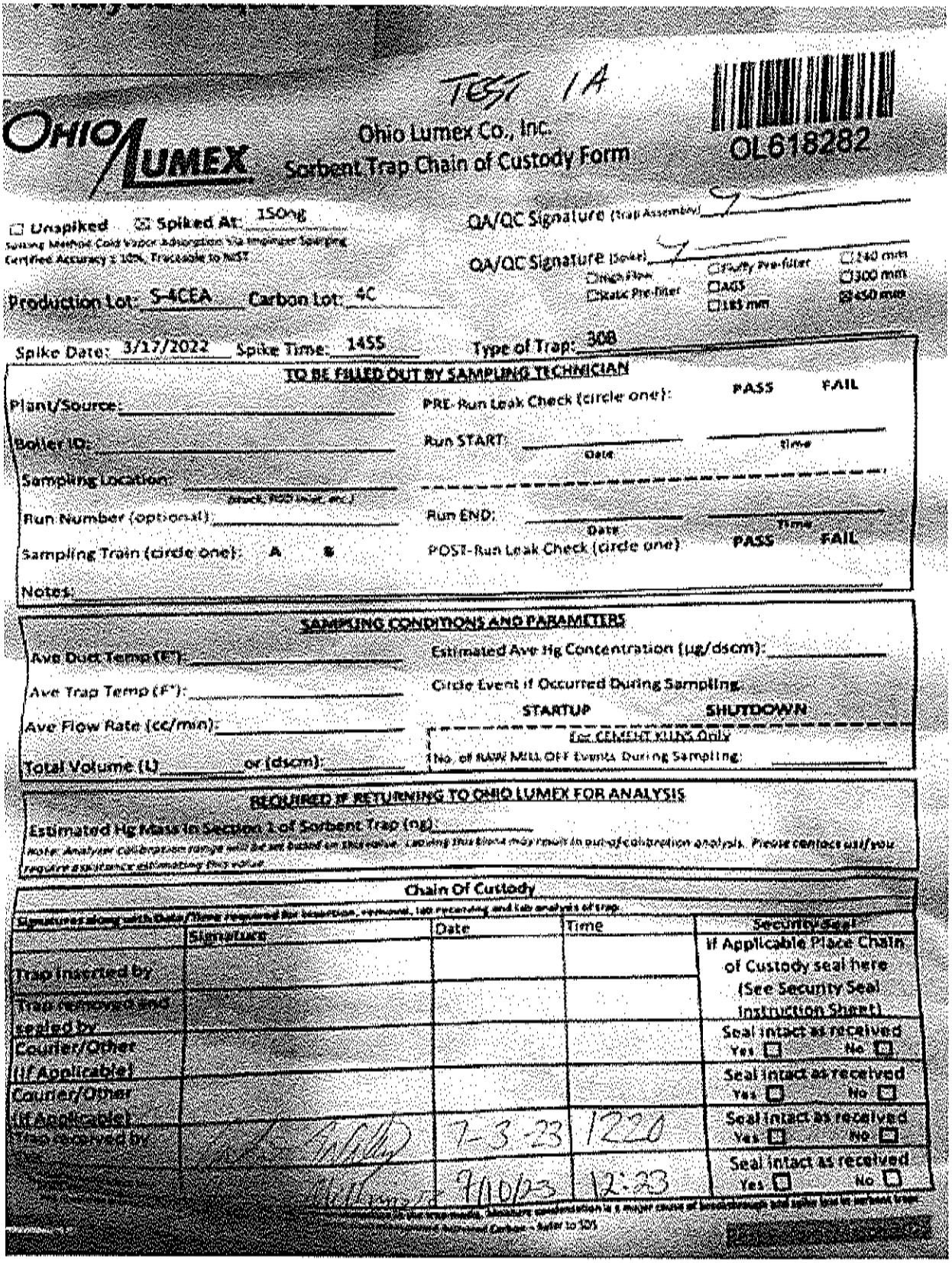
Report created	10.07.2023 08:29:47
Instrument UNKNOWN(0)	Serial number 1644
Calibration created	10.07.2023 08:29:44
Calibration name	230710_ALA_5-10000ng



Results

N	Mercury mass, ng	S-Sblank	Ref.data, ppb	Calculated, ppb	d, %
1	10.00	498700	10000.0	9188.9	-8.1
2	5.00	268300	5000.0	4943.6	-1.1
3	1.00	54460	1000.0	1003.3	0.3
4	0.10	5679	100.0	104.6	4.6
5	0.01	545	10.0	10.0	0.4
6	0.01	282	5.0	5.2	3.8

Calibration	S - Sblank = a·m
Algorithm	WLSM
Correlation coefficient	0.999451
Residual standard deviation	257.104735
Coefficient	a = 54280.0000
Blank	Sblank = 0.0000



TEST 1A

OHIO LUMEX — Ohio Lumex Co., Inc.

Sorbent Trap Chain of Custody Form

OL618282

☐ Unspiked ☒ Spiked At: 150ng

Spiking Method: Cold Vapor Adsorption Via Impinger Sparging
Certified Accuracy ± 10%, Traceable to NIST

QA/QC Signature (Trap Assembly)

QA/QC Signature (Solar)

☐ High Flow ☐ Fritty Pre-filter ☐ 140 mm
☐ Static Pre-filter ☐ AGS ☐ 300 mm
☐ 185 mm ☒ 450 mm

Production Lot: S-4CEA Carbon Lot: 4C

Spike Date: 3/17/2022 Spike Time: 1455 Type of Trap: 308

TO BE FILLED OUT BY SAMPLING TECHNICIAN

Plant/Source:

Boiler ID:

Sampling Location: (Stack, RAW Inlet, etc.)

Run Number (optional):

Sampling Train (circle one): A B

PRE-Run Leak Check (circle one): PASS FAIL

Run START: Date Time

Run END: Date Time

POST-Run Leak Check (circle one) PASS FAIL

Notes:

SAMPLING CONDITIONS AND PARAMETERS

Ave Duct Temp (F):

Ave Trap Temp (F°):

Ave Flow Rate (cc/min):

Total Volume (L) or (dscm):

Estimated Ave Hg Concentration (µg/dscm):

Circle Event if Occurred During Sampling:

STARTUP SHUTDOWN

For CEMS HG units Only

No. of RAW MILL OFF Events During Sampling:

REQUIRED IF RETURNING TO OHIO LUMEX FOR ANALYSIS

Estimated Hg Mass in Section 1 of Sorbent Trap (ng):

Note: Analysis calibration range will be set based on this value. Leaving this blank may result in out-of-calibration analysis. Please contact us if you require assistance estimating this value.

Chain Of Custody

Signature along with Date/Time required for insertion, retrieval, lab receiving and lab analysis of trap.

	Signature	Date	Time	Security Seal
Trap Inserted by:				If Applicable Place Chain of Custody seal here (See Security Seal Instruction Sheet)
Trap Retrieved and sealed by:				Seal intact as received Yes ☐ No ☐
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Trap received by:	[illegible]	7-3-23	1220	Seal intact as received Yes ☐ No ☐
	[illegible]	7/10/23	12:23	Seal intact as received Yes ☐ No ☐

Exposure to the wrong media, temperature consideration is a major cause of breakthrough and spike loss on sorbent traps

Refer to SOP

TEST 1B

HIO LUMEX

Ohio Lumex Co., Inc.

Hg Sorbent Trap Chain of Custody Form

OL629572

SPIKED ☐ SPIKED AT: ______ QA/QC Signature ______ Willi C

ion Lot: U-1210 Spike Date: ______

Lot: 4C Spike Time: ______

Signature ______

☐ High Flow ☐ Fluidy Pre-filter ☐ 185 mm ☐ 240 mm
☐ Static Pre-filter ☐ AGS ☐ 300 mm ☒ 450 mm

Type of Trap: 308

LING INFORMATION

ty / Source: ______ PRE-Run Leak Check: ☐ PASS ☐ FAIL

ID: ______ Run Start Date/Time: ______ / ______

pling Location: ______ Run End Date/Time: ______ / ______

Number (Optional): ______

pling Train: ☐ A ☐ B POST-Run Leak Check: ☐ PASS ☐ FAIL

PLING CONDITIONS AND PARAMETERS

Duct Temp (F°): ______ Estimated Avg. Hg Concentration (µg/dscm): ______

Trap Temp (F°): ______ Event Occurred During Sampling: ☐ Startup ☐ Shutdown

Flow Rate (cc/min): ______ CEMENT ONLY:

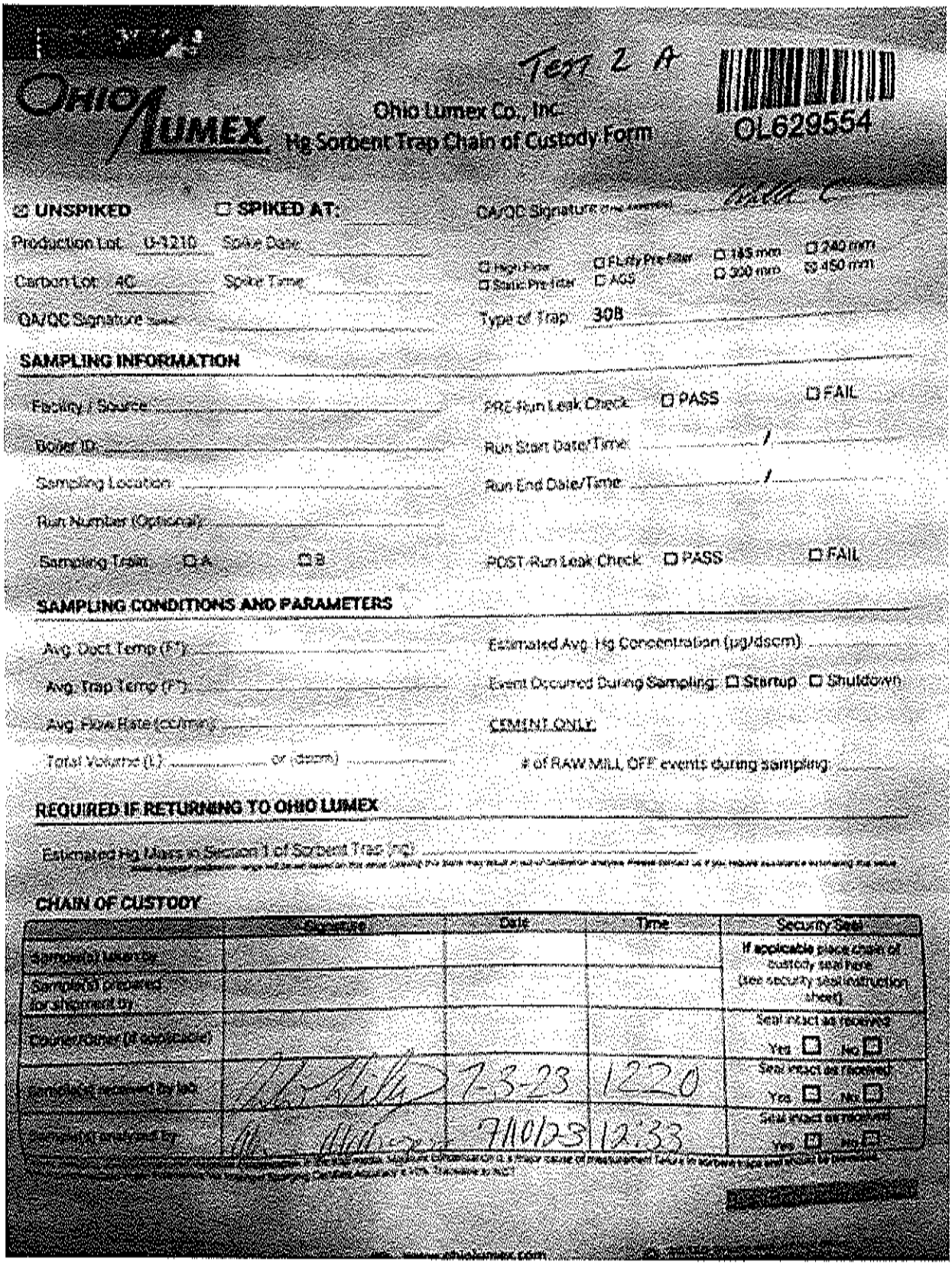
l Volume (L) ______ or (dscm) ______ # of RAW MILL OFF events during sampling: ______

JIRED IF RETURNING TO OHIO LUMEX

nated Hg Mass in Section 1 of Sorbent Trap (ng): ______

OF CUSTODY

	Signature	Date	Time	Security Seal
taken by:				If applicable place chain of custody seal here (see security seal instruction sheet)
) packed for shipment by:				
(if applicable)				Seal intact as received: Yes ☐ No ☐
) received by lab:	[signature]	7-3-23	1220	Seal intact as received: Yes ☐ No ☐
analyzed by:	[signature]	7/10/23	12:28	Seal intact as received: Yes ☐ No ☐



Test 2 A

OHIO LUMEX

Ohio Lumex Co., Inc.

Hg Sorbent Trap Chain of Custody Form

OL629554

☑ UNSPIKED ☐ SPIKED AT:

Production Lot: U-3210 Spike Date:

Carbon Lot: AC Spike Time:

QA/QC Signature (spike):

QA/QC Signature (pre-weighed):

☐ High Flow ☐ Flatty Pre-Filter ☐ 185 mm ☐ 240 mm
☐ Static Pre-Filter ☐ AGS ☐ 300 mm ☑ 450 mm

Type of Trap: 30B

SAMPLING INFORMATION

Facility / Source:

Boiler ID:

Sampling Location:

Run Number (Optional):

Sampling Train: ☐ A ☐ B

PRE-Run Leak Check: ☐ PASS ☐ FAIL

Run Start Date/Time: /

Run End Date/Time: /

POST-Run Leak Check: ☐ PASS ☐ FAIL

SAMPLING CONDITIONS AND PARAMETERS

Avg. Duct Temp (°F):

Avg. Trap Temp (°F):

Avg. Flow Rate (cc/min):

Total Volume (L): or (dscm):

Estimated Avg. Hg Concentration (µg/dscm):

Event Occurred During Sampling: ☐ Startup ☐ Shutdown

CEMENT ONLY:

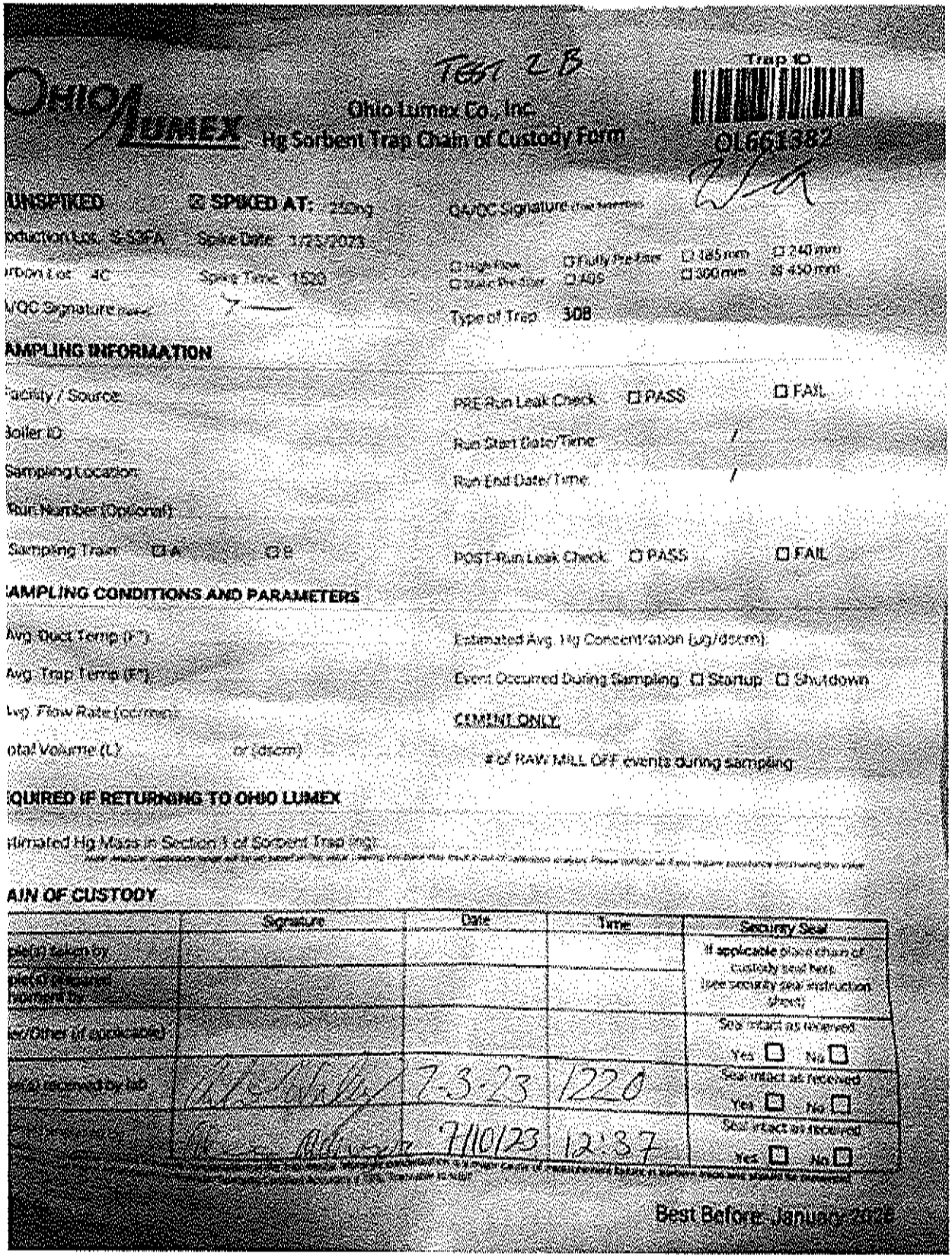
# of RAW MILL OFF events during sampling:

REQUIRED IF RETURNING TO OHIO LUMEX

Estimated Hg Mass in Section 1 of Sorbent Trap (ng):

CHAIN OF CUSTODY

	Signature	Date	Time	Security Seal
Sampled by/on by:				If applicable place chain of custody seal here (see security seal instruction sheet)
Sample(s) shipped for shipment by:				
Courier/Carrier (if applicable):				Seal intact as received: Yes ☐ No ☐
Sample(s) received by lab:	[illegible]	7-3-23	1220	Seal intact as received: Yes ☐ No ☐
Sample(s) analyzed by:	[illegible]	7/10/23	12:33	Seal intact as received: Yes ☐ No ☐



Test 2B

OHIO LUMEX

Ohio Lumex Co., Inc.

Hg Sorbent Trap Chain of Custody Form

Trap ID

OL661382

UNSPIKED ☑ SPIKED AT: 250ng

QA/QC Signature

oduction Lot: S-53FA Spike Date: 7/5/2023

rbon Lot: 4C Spike Time: 1520

A/QC Signature

☐ High Flow ☐ Fully Pre-Fired ☐ 185mm ☐ 240mm
☐ Quartz Pre-Fired ☑ 40S ☐ 300mm ☐ 450mm

Type of Trap: 30B

AMPLING INFORMATION

acility / Source:

oiler ID:

Sampling Location:

Run Number (Optional):

Sampling Train: ☐ A ☐ B

PRE-Run Leak Check: ☐ PASS ☐ FAIL

Run Start Date/Time: /

Run End Date/Time: /

POST-Run Leak Check: ☐ PASS ☐ FAIL

AMPLING CONDITIONS AND PARAMETERS

Avg. Duct Temp (F°):

Avg. Trap Temp (F°):

Avg. Flow Rate (cc/min):

otal Volume (L) or (dscm)

Estimated Avg. Hg Concentration (ug/dscm):

Event Occurred During Sampling: ☐ Startup ☐ Shutdown

CEMENT ONLY:

# of RAW MILL OFF events during sampling:

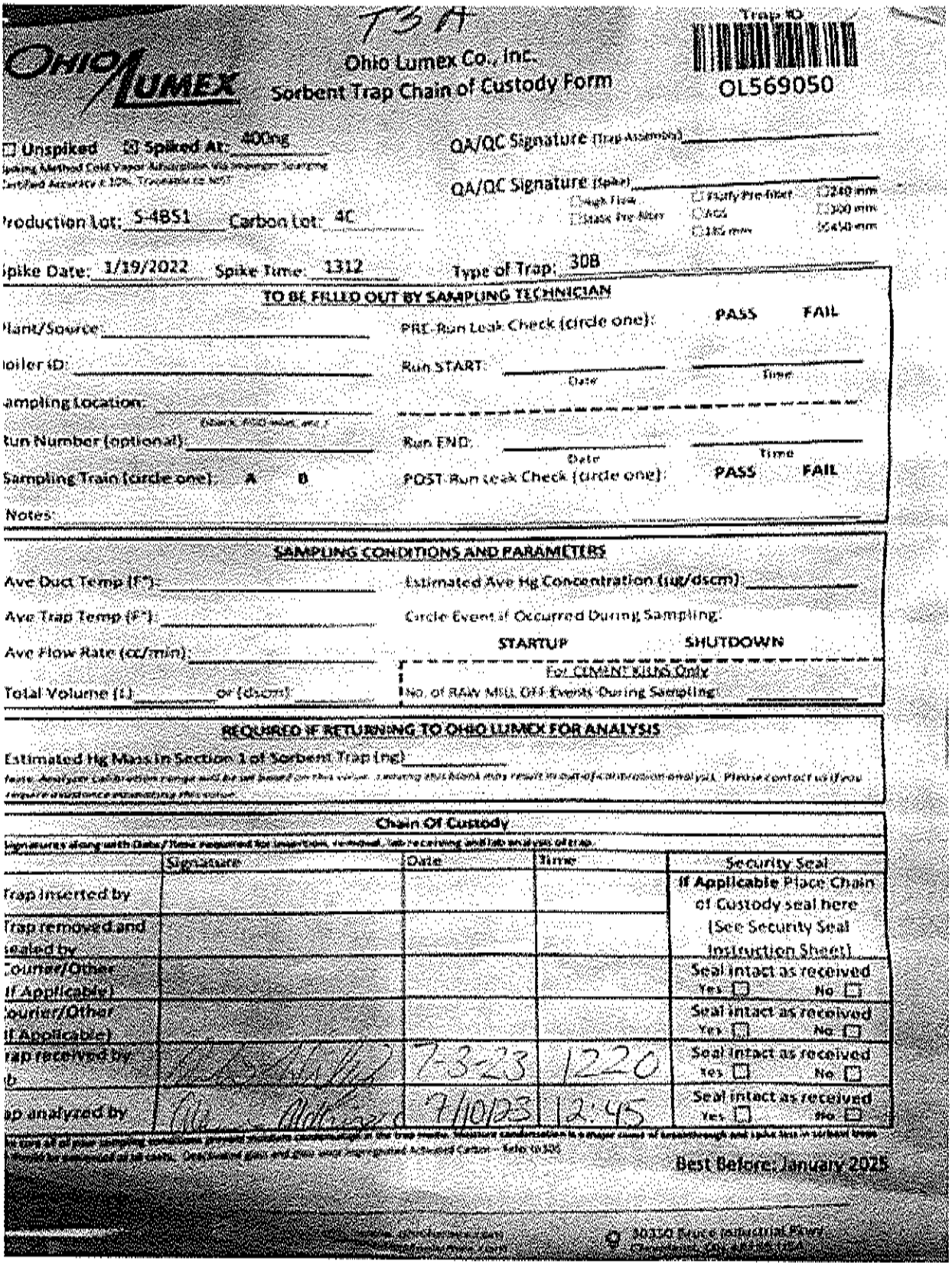
QUIRED IF RETURNING TO OHIO LUMEX

timated Hg Mass in Section 1 of Sorbent Trap (ng):

AIN OF CUSTODY

	Signature	Date	Time	Security Seal
pped/Taken by:				If applicable place chain of custody seal here. (see security seal instruction sheet)
pected/Received by:				Seal intact as received Yes ☐ No ☐
er/Other (if applicable)				Seal intact as received Yes ☐ No ☐
ed/Received by lab	[signature]	7-3-23	1220	Seal intact as received Yes ☐ No ☐
	[signature]	7/10/23	12:37	

Best Before: January 2026



T3A

OHIO LUMEX

Ohio Lumex Co., Inc.
Sorbent Trap Chain of Custody Form

Trap ID
OL569050

☐ Unspiked ☒ Spiked At: 400ng

QA/QC Signature (Trap Assembly)

QA/QC Signature (Spike)

Production Lot: S-4851 Carbon Lot: 4C

Spike Date: 1/19/2022 Spike Time: 1312 Type of Trap: 30B

TO BE FILLED OUT BY SAMPLING TECHNICIAN

Plant/Source:

Boiler ID:

Sampling Location:

Run Number (optional):

Sampling Train (circle one): A B

PRE-Run Leak Check (circle one): PASS FAIL

Run START: Date Time

Run END: Date Time

POST-Run Leak Check (circle one): PASS FAIL

Notes:

SAMPLING CONDITIONS AND PARAMETERS

Ave Duct Temp (F°):

Ave Trap Temp (F°):

Ave Flow Rate (cc/min):

Total Volume (L) or (dscm):

Estimated Ave Hg Concentration (ug/dscm):

Circle Event if Occurred During Sampling:
STARTUP SHUTDOWN

For CEMENT Kilns Only
No. of RAW Mill OFF Events During Sampling:

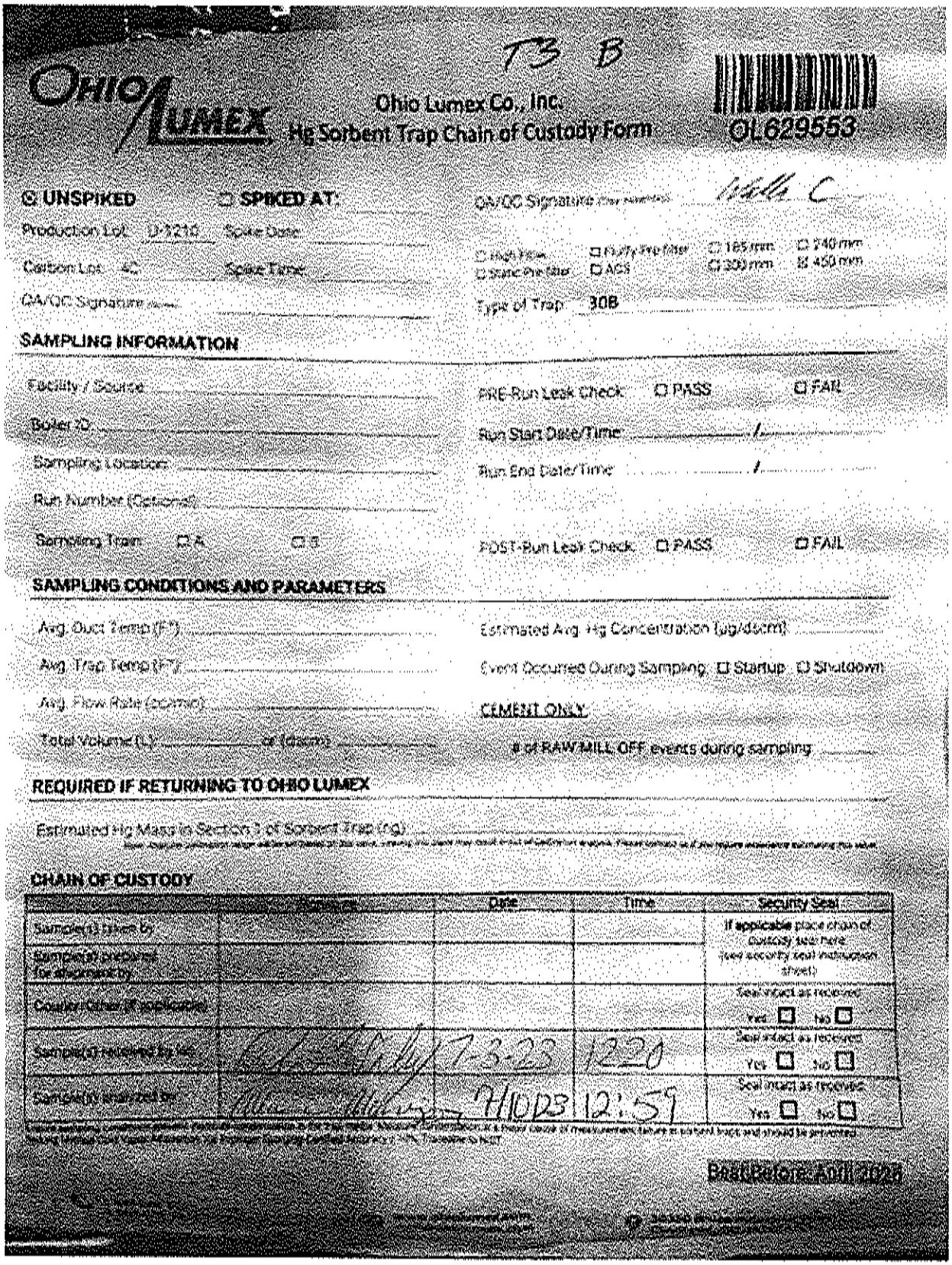
REQUIRED IF RETURNING TO OHIO LUMEX FOR ANALYSIS

Estimated Hg Mass in Section 1 of Sorbent Trap (ng):

Chain Of Custody

	Signature	Date	Time	Security Seal
Trap inserted by				If Applicable Place Chain of Custody seal here (See Security Seal Instruction Sheet)
Trap removed and sealed by				
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Trap received by Lab	[signature]	7-3-23	1220	Seal intact as received Yes ☐ No ☐
Trap analyzed by	[signature]	7/10/23	12:45	Seal intact as received Yes ☐ No ☐

Best Before: January 2025



T3 B

OHIO LUMEX

Ohio Lumex Co., Inc.

Hg Sorbent Trap Chain of Custody Form

OL629553

☒ UNSPIKED ☐ SPIKED AT:

QA/QC Signature

Production Lot: U-7210 Spike Date:

Carbon Lot: 42 Spike Time:

QA/QC Signature:

☐ High Flow ☐ Poly Pre-filter ☐ 165 mm ☐ 240 mm
☐ Spike Pre-filter ☐ ACS ☐ 300 mm ☒ 450 mm

Type of Trap: 30B

SAMPLING INFORMATION

Facility / Source:

Boiler ID:

Sampling Location:

Run Number (Optional):

Sampling Train: ☐ A ☐ B

PRE-Run Leak Check: ☐ PASS ☐ FAIL

Run Start Date/Time: /

Run End Date/Time: /

POST-Run Leak Check: ☐ PASS ☐ FAIL

SAMPLING CONDITIONS AND PARAMETERS

Avg. Duct Temp (F°):

Avg. Trap Temp (F°):

Avg. Flow Rate (cc/min):

Total Volume (L): or (dscm):

Estimated Avg. Hg Concentration (ug/dscm):

Event Occurred During Sampling: ☐ Startup ☐ Shutdown

CEMENT ONLY

# of RAW MILL OFF events during sampling:

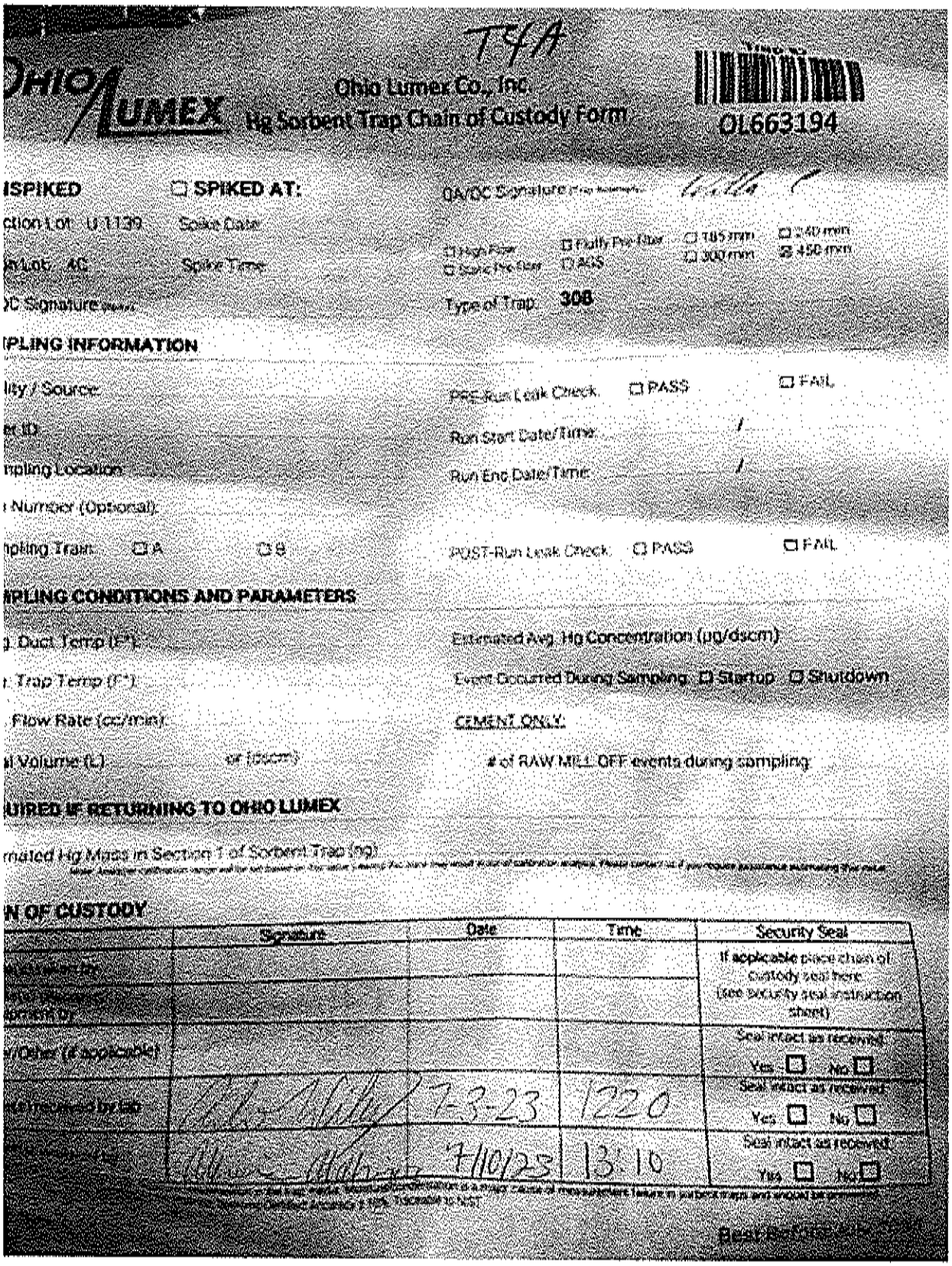
REQUIRED IF RETURNING TO OHIO LUMEX

Estimated Hg Mass in Section 1 of Sorbent Trap (ng):

CHAIN OF CUSTODY

	Signature	Date	Time	Security Seal
Sample(s) taken by:				If applicable place chain of custody seal here (see security seal instruction sheet)
Sample(s) received for shipment by:				
Courier/Other (if applicable):				Seal intact as received: Yes ☐ No ☐
Sample(s) returned by lab:	[signature]	7-3-23	1220	Seal intact as received: Yes ☐ No ☐
Sample(s) analyzed by:	[signature]	7/10/23	12:59	Seal intact as received: Yes ☐ No ☐

Best Before: April 2026



TFA

OHIO LUMEX

Ohio Lumex Co., Inc.

Hg Sorbent Trap Chain of Custody Form

OL663194

☐ SPIKED ☐ SPIKED AT:

QA/QC Signature

Spike Date

Spike Time

☐ Fully Pre-Filled ☐ 185 mm ☐ 240 mm
☐ 300 mm ☒ 450 mm
☐ PASS

Type of Trap: 308

PLING INFORMATION

PRE-Run Leak Check ☐ PASS ☐ FAIL

Run Start Date/Time

Run End Date/Time

☐ A ☐ B

POST-Run Leak Check ☐ PASS ☐ FAIL

PLING CONDITIONS AND PARAMETERS

Estimated Avg. Hg Concentration (µg/dscm)

Event Occurred During Sampling: ☐ Startup ☐ Shutdown

CEMENT ONLY:

# of RAW MILL OFF events during sampling

UIRED IF RETURNING TO OHIO LUMEX

mated Hg Mass in Section 1 of Sorbent Trap (ng)

N OF CUSTODY

	Signature	Date	Time	Security Seal
				If applicable place chain of custody seal here (see security seal instruction sheet)
/Other (if applicable)				Seal intact as received: Yes ☐ No ☐
received by lab		7-3-23	1220	Seal intact as received: Yes ☐ No ☐
		7/10/23	13:10	Seal intact as received: Yes ☐ No ☐

Best Before

T4 13

OHIO LUMEX

Ohio Lumex Co., Inc.
Sorbent Trap Chain of Custody Form

Trap ID
OL610647

☐ Unspiked ☒ Spiked At: 600ng
Spiking Method Cold Vapor Adsorption via Impinger Sampling
Certified Accuracy ± 10%, Traceable to NIST

QA/QC Signature (Trap Assembly)
QA/QC Signature (Spike)

Production Lot: S-4DF9 Carbon Lot: 4C

☐ High Flow ☐ Stack Pre-filter ☐ Fluffy Pre-filter ☐ AGS ☐ 185 mm ☐ 240 mm ☐ 300 mm ☒ 450 mm

Spike Date: 05/02/2022 Spike Time: 1218 Type of Trap: 308

TO BE FILLED OUT BY SAMPLING TECHNICIAN

Plant/Source: ______ PRE-Run Leak Check (circle one) PASS FAIL

Boiler ID: ______ Run START: ______ Date ______ Time

Sampling Location: ______ (Stack, Duct, etc.)

Run Number (optional) ______ Run END: ______ Date ______ Time

Sampling Train (circle one): A B POST-Run Leak Check (circle one): PASS FAIL

Notes:

SAMPLING CONDITIONS AND PARAMETERS

Ave Duct Temp (F°): ______ Estimated Ave Hg Concentration (ug/dscm): ______

Ave Trap Temp (F°): ______ Circle Event if Occurred During Sampling:

STARTUP SHUTDOWN

Ave Flow Rate (cc/min) ______ For CEMENT KILNS Only

Total Volume (L) ______ or (dscm) ______ No. of RAW MILL OFF Events During Sampling:

REQUIRED IF RETURNING TO OHIO LUMEX FOR ANALYSIS

Estimated Hg Mass in Section 1 of Sorbent Trap (ng) ______

Note: Analyzer calibration range will be set based on this value. Leaving this blank may result in use of calibration ranges. Please contact us if you require assistance estimating this value.

Chain Of Custody

Signature along with Date/Time required for insertion, removal, lab receiving and lab analysis of trap.

	Signature	Date	Time	Security Seal
Trap inserted by				If Applicable Place Chain of Custody seal here (See Security Seal Instruction Sheet)
Trap removed and sealed by				Seal intact as received Yes ☐ No ☐
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Trap received by Lab	[signature]	7-3-23	1220	Seal intact as received Yes ☐ No ☐
Trap analyzed by	[signature]	7/10/23	13:25	Seal intact as received Yes ☐ No ☐

Best Before: May 2025

TSA

Ohio Lumex Co., Inc.
Sorbent Trap Chain of Custody Form

Trap ID
OL620087

☐ Unspiked ☑ Spiked At: 3,000ng
Spiking Method Used Flame Atomization Fine Droplet Sparging
Certified Accuracy ± 10%, Traceable to NIST

QA/QC Signature (Trap Assembler)
QA/QC Signature (Spiker)

Production Lot: 5-4DF8 Carbon Lot: 4C

☐ Single Flow ☐ Dual Pre-Filter ☐ Fluffy Pre-Filter ☐ 240 mm
☐ Dual Pre-Filter ☐ AGS ☐ 300 mm
☐ 385 mm ☐ 450 mm

Spike Date: 05/02/2022 Spike Time: 1122 Type of Trap: 308

TO BE FILLED OUT BY SAMPLING TECHNICIAN

Plant/Source:
Boiler ID:
Sampling Location:
Run Number (optional): (Unit#1, FGD inlet, etc.)
Sampling Train (circle one): A B
Notes:

PRE-Run Leak Check (circle one): PASS FAIL
Run START: Date Time
Run END: Date Time
POST-Run Leak Check (circle one): PASS FAIL

SAMPLING CONDITIONS AND PARAMETERS

Ave Duct Temp (F°):
Ave Trap Temp (F°):
Ave Flow Rate (cc/min):
Total Volume (L) or (dscm):

Estimated Ave Hg Concentration (µg/dscm):
Circle Event if Occurred During Sampling:
STARTUP SHUTDOWN
FOR CEMENT KILNS Only
No. of RAW MILL OFF Events During Sampling:

REQUIRED IF RETURNING TO OHIO LUMEX FOR ANALYSIS

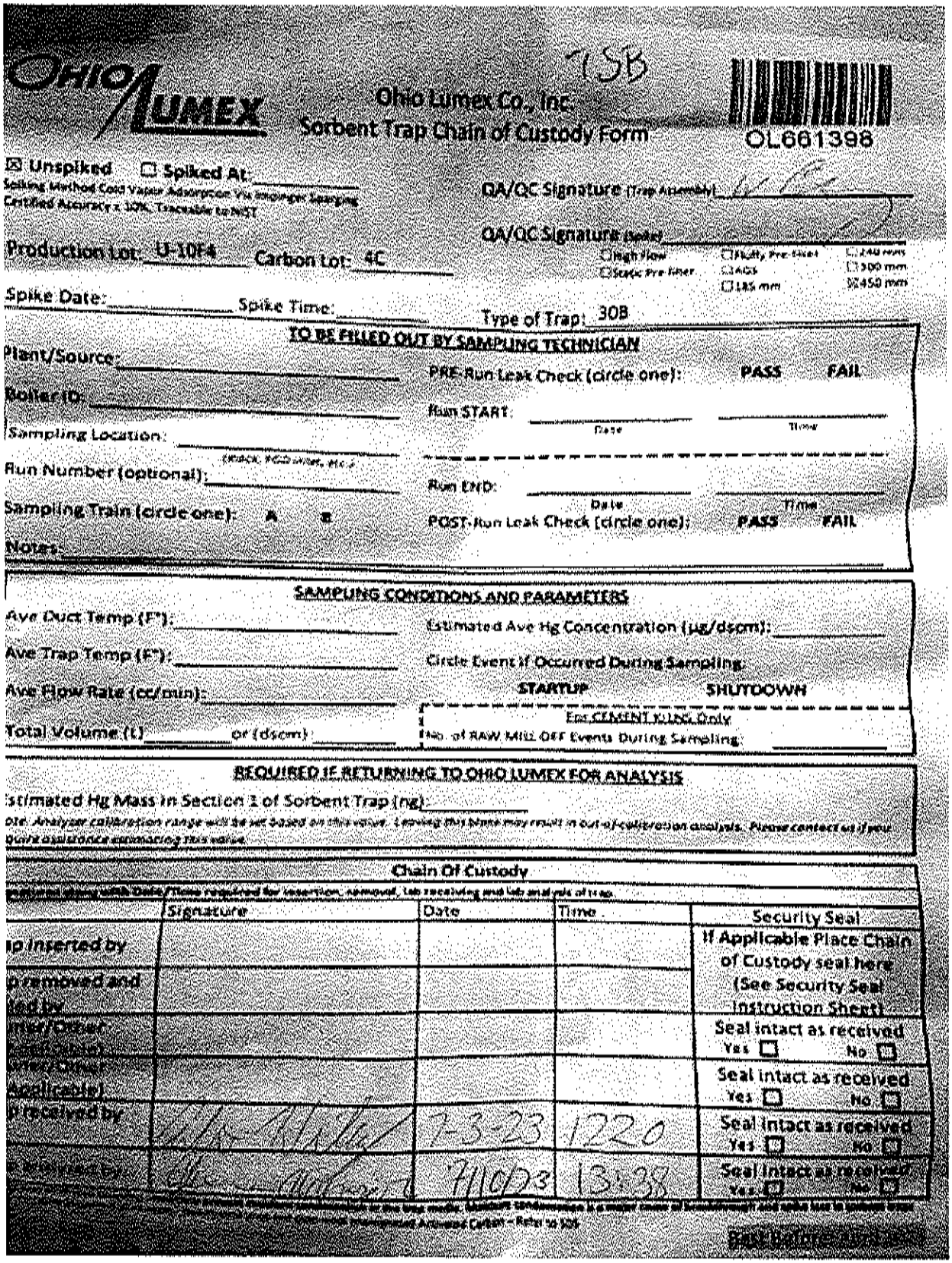
Estimated Hg Mass in Section 1 of Sorbent Trap (ng):
(c: Analyzer calibration range will be set around this value. Entering this blank may result in out-of-calibration analysis. Please contact us if you have assistance estimating this value.

Chain Of Custody

(Signatures along with Date/Time required for insertion, removal, lab receiving and lab analysis of trap.)

	Signature	Date	Time	Security Seal
p inserted by:				If Applicable Place Chain of Custody seal here (See Security Seal Instruction Sheet)
p removed and led by:				
iner/Other applicable)				Seal Intact as received Yes ☐ No ☐
ner/Other applicable)				Seal Intact as received Yes ☐ No ☐
received by:	[signature]	7-3-23	1220	Seal Intact as received Yes ☐ No ☐
ived by:	[signature]	7/10/23	1332	Seal Intact as received Yes ☐ No ☐

Best Before: MAY 2025



OHIO LUMEX

Ohio Lumex Co., Inc.
Sorbent Trap Chain of Custody Form

OL661398

☒ Unspiked ☐ Spiked At:
Spiking Method: Cold Vapor Adsorption via manual spiking
Certified Accuracy ± 10%, Traceable to NIST

QA/QC Signature (Trap Assembly):

QA/QC Signature (Spike):

Production Lot: U-10F4 Carbon Lot: 4C

☐ High Flow ☐ Static Pre-filter ☐ Fluff, Pre-filter ☐ 140S ☐ 185 mm ☐ 240 mm ☐ 300 mm ☒ 450 mm

Spike Date: Spike Time: Type of Trap: 30B

TO BE FILLED OUT BY SAMPLING TECHNICIAN

Plant/Source:
Boiler ID:
Sampling Location: (CRACK, FGD outlet, etc.)
Run Number (optional):
Sampling Train (circle one): A B
Notes:

PRE-Run Leak Check (circle one): PASS FAIL
Run START: Date Time
Run END: Date Time
POST-Run Leak Check (circle one): PASS FAIL

SAMPLING CONDITIONS AND PARAMETERS

Ave Duct Temp (F°):
Ave Trap Temp (F°):
Ave Flow Rate (cc/min):
Total Volume (L): or (dscm):

Estimated Ave Hg Concentration (µg/dscm):
Circle Event if Occurred During Sampling:
STARTUP SHUTDOWN
For CEMENT Kilns Only
No. of RAW MILL OFF Events During Sampling:

REQUIRED IF RETURNING TO OHIO LUMEX FOR ANALYSIS

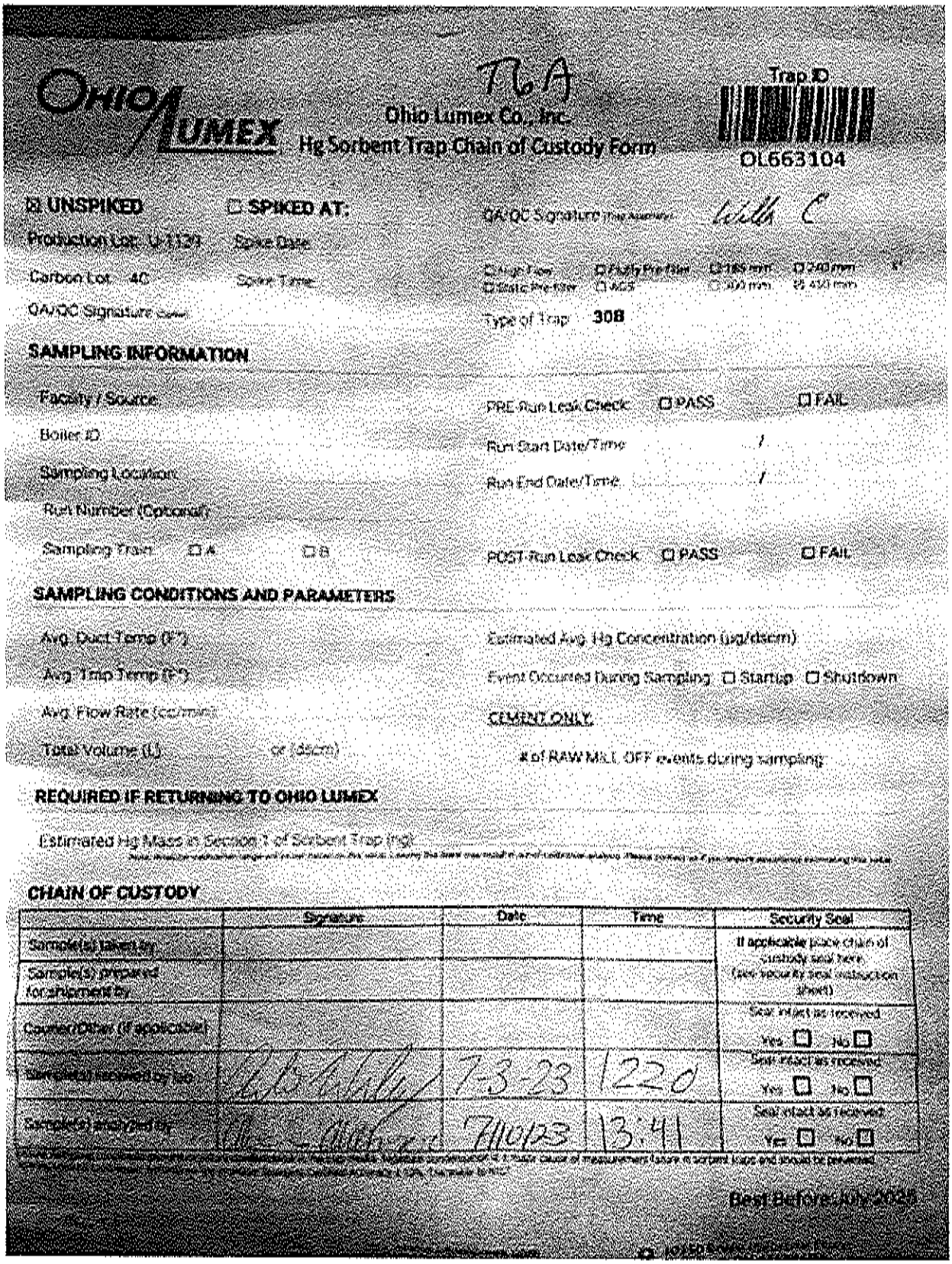
Estimated Hg Mass in Section 1 of Sorbent Trap (ng):
Note: Analyzer calibration range will be set based on this value. Leaving this blank may result in out-of-calibration analysis. Please contact us if you require assistance estimating this value.

Chain Of Custody

	Signature	Date	Time	Security Seal
Trap Inserted by				If Applicable Place Chain of Custody seal here (See Security Seal Instruction Sheet)
Trap removed and sealed by				
Relinquished by (Client)				Seal intact as received Yes ☐ No ☐
Received by (Courier)				Seal intact as received Yes ☐ No ☐
Received by	[signature]	7-3-23	1220	Seal intact as received Yes ☐ No ☐
Relinquished by	[signature]	7/10/23	13:38	Seal intact as received Yes ☐ No ☐

Activated Carbon - Refer to SDS

BAG Before Analysis



OHIO LUMEX

N/A

Ohio Lumex Co., Inc.

Hg Sorbent Trap Chain of Custody Form

Trap ID

OL663104

☒ UNSPIKED ☐ SPIKED AT:

Production Lot: 0-1120

Spike Date:

Carbon Lot: 40

Spike Time:

QA/QC Signature (Spiker):

QA/QC Signature (Tube Assembly): Linda C

☐ High Flow ☐ Fully Pre-Filter ☐ 185 mm ☐ 240 mm

☐ Static Pre-filter ☐ ACS ☐ 300 mm ☒ 450 mm

Type of Trap: 308

SAMPLING INFORMATION

Facility / Source:

Boiler ID:

Sampling Location:

Run Number (Optional):

Sampling Train: ☐ A ☐ B

PRE-Run Leak Check: ☐ PASS ☐ FAIL

Run Start Date/Time: /

Run End Date/Time: /

POST-Run Leak Check: ☐ PASS ☐ FAIL

SAMPLING CONDITIONS AND PARAMETERS

Avg. Duct Temp (°F):

Avg. Trap Temp (°F):

Avg. Flow Rate (cc/min):

Total Volume (L): or (dscm):

Estimated Avg. Hg Concentration (ug/dscm):

Event Occurred During Sampling: ☐ Startup ☐ Shutdown

CEMENT ONLY:

# of RAW MILL OFF events during sampling:

REQUIRED IF RETURNING TO OHIO LUMEX

Estimated Hg Mass in Section 1 of Sorbent Trap (ng):

CHAIN OF CUSTODY

	Signature	Date	Time	Security Seal
Sample(s) taken by:				If applicable place chain of custody seal here (see security seal instruction sheet)
Sample(s) prepared for shipment by:				
Courier/Other (if applicable):				Seal intact as received: Yes ☐ No ☐
Sample(s) received by lab:	[illegible]	7-3-23	1220	Seal intact as received: Yes ☐ No ☐
Sample(s) analyzed by:	[illegible]	7/10/23	13:41	Seal intact as received: Yes ☐ No ☐

Best Before: July 2025

TGB

OHIO LUMEX

Ohio Lumex Co., Inc.
Sorbent Trap Chain of Custody Form

OL618297

☐ Unspiked ☒ Spiked At: 2,000ng

QA/QC Signature (Trap Assembly):

QA/QC Signature (Spike):

Production Lot: S-4858 Carbon Lot: 4C

Type of Trap: 308

TO BE FILLED OUT BY SAMPLING TECHNICIAN

Plant/Source:

Boiler ID:

Sampling Location: (Inlet, ESP Inlet, etc.)

Run Number (optional):

Sampling Train (circle one): A B

Notes:

PRE-Run Leak Check (circle one): PASS FAIL

Run START: Date Time

Run END: Date Time

POST-Run Leak Check (circle one): PASS FAIL

SAMPLING CONDITIONS AND PARAMETERS

Ave Duct Temp (F°):

Ave Trap Temp (F°):

Ave Flow Rate (cc/min):

Total Volume (L): or (dscm):

Estimated Ave Hg Concentration (µg/dscm):

Circle Event if Occurred During Sampling:

STARTUP SHUTDOWN

For CEMENT KILNS Only:

No. of RAW MILL OFF Events During Sampling:

REQUIRED IF RETURNING TO OHIO LUMEX FOR ANALYSIS

Estimated Hg Mass in Section 1 of Sorbent Trap (ng):

Note: Analyzer calibration range will be set based on this value. Loading this blank may result in out-of-calibration analysis. Please contact us if you require assistance estimating this value.

Chain Of Custody

Signatures along with Date/Times required for insertion, removal, lab receiving and lab analysis of trap.

	Signature	Date	Time	Security Seal
Trap inserted by				If Applicable Place Chain of Custody seal here (See Security Seal Instruction Sheet)
Trap removed and sealed by				
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Courier/Other (If Applicable)				Seal intact as received Yes ☐ No ☐
Trap received by lab:	[signature]	7-3-23	1220	Seal intact as received Yes ☐ No ☐
Trap analyzed by:	[signature]	7/10/23	13:47	Seal intact as received Yes ☐ No ☐

Best Before

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

Job/Report Number: 22278
Received By: David Utley
Job Assigned To: Ohio Lumex
PO #: 22278-12910

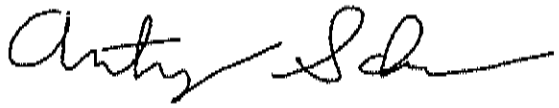
Tube ID	Spiked?	Sample Date	Sample Description	Approx. Sample Volume m^3	Sample Analysis
OL618282	Yes	June 27, 2023	Test 1 Tube A	0.06	Hg
OL629572	No	June 27, 2023	Test 1 Tube B	0.06	Hg
OL629534	No	June 27, 2023	Test 2 Tube A	0.06	Hg
OL661382	Yes	June 27, 2023	Test 2 Tube B	0.06	Hg
OL569050	Yes	June 27, 2023	Test 3 Tube A	0.06	Hg
OL629543	No	June 27, 2023	Test 3 Tube B	0.06	Hg
OL661394	No	June 27, 2023	Test 4 Tube A	0.06	Hg
OL610647	Yes	June 27, 2023	Test 4 Tube B	0.06	Hg
OL620087	Yes	June 28, 2023	Test 5 Tube A	0.06	Hg
OL661398	No	June 28, 2023	Test 5 Tube B	0.06	Hg
OL663104	No	June 28, 2023	Test 6 Tube A	0.06	Hg
OL618297	Yes	June 28, 2023	Test 6 Tube B	0.06	Hg

All tubes sampled at approximately 1 litre/minute for 60 minutes.
Expected concentrations are approximately 200 - 400ng

Relinquished To: Date
Relinquished By: Date June 27/23

This report has been reviewed and approved by:

Anthony Schneider
Directory of Laboratory Services and Analytical R&D



OHIO LUMEX

APPENDIX 5

Clean Harbors Process Data
(12 pages)

June 27/2023		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	SecondaryB	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/Hr	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFORYHOUR	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-06-27	11:45:00	31.23	5.535	161.145	190.125	4.6925	281.55	24.525	15900	6898.904	28.96681	71630.05	1395.094	1144.3	1144.1	507.2	192.5	191.1	-15.75	-31.625	-83.2125	372.4375	23.44
2023-06-27	11:46:00	31.095	5.775	160.38	190.35	4.6675	280.05	24.525	15743.75	6803.398	28.48557	70374.48	1402.906	1143.3	1144.1	507	193	191.1	-9.8	-27.25	-77.2875	387.1875	24.04
2023-06-27	11:47:00	31.56	5.865	160.9537	189.315	4.69375	281.625	24.525	16393.75	6915.758	31.72098	78253.83	1392.188	1145.6	1145.1	506.7	192.5	191.1	-35.3	-54	-119.4	325.75	23
2023-06-27	11:48:00	31.485	5.83	160.8525	190.305	4.6825	280.95	24.525	15887.5	6921.376	29.50737	72730.92	1399.219	1142.6	1142.9	507.7	193	191.1	-19.6	-37	-89.5125	370.875	23.06
2023-06-27	11:49:00	31.575	5.73	160.0538	189.585	4.67	280.2	24.525	15750	6910.14	29.56876	72824.28	1406.219	1142.7	1142.9	507.1	193	191.1	-11.05	-29.125	-78.7125	377.625	23.9
2023-06-27	11:50:00	31.89	5.84	160.0538	192.33	4.68625	281.175	24.525	16043.75	6803.398	30.11489	74480.87	1401.469	1143.6	1142.9	507	193	191.1	-19.2	-33.25	-91.275	362.4375	22.96
2023-06-27	11:51:00	31.845	6.295	161.0437	191.655	4.6875	281.25	24.525	15656.25	6915.758	29.52327	72964.71	1417.344	1146.2	1146.1	506.5	192.5	191.1	-12.75	-30	-80.025	374.5	23.92
2023-06-27	11:52:00	30.255	5.32	160.4812	184.905	4.7	282	24.525	16056.25	6803.398	31.79228	78286.43	1386.625	1145.3	1146.1	506.3	192.5	191.1	-34.95	-55.75	-112.35	309.3125	23.96
2023-06-27	11:53:00	30.375	5.335	159.1087	184.95	4.6725	280.35	24.525	16062.5	6848.342	29.27108	72283.95	1383.125	1138.7	1138.9	506.8	193	191.1	-18.5	-36.625	-89.775	353.875	23.82
2023-06-27	11:54:00	30.585	5.69	159.9075	185.085	4.69625	281.775	24.525	15843.75	6848.342	29.74499	73821.26	1385.375	1135.8	1135.9	507.1	194	191.1	-16.65	-34.125	-84.3375	365.8125	23.48
2023-06-27	11:55:00	30.195	5.265	160.245	185.895	4.665	279.9	24.525	16075	6960.702	30.04942	75226.43	1376.531	1133.6	1133.9	507.4	194.5	191.1	-19.05	-37.875	-88.8375	377.9375	23.64
2023-06-27	11:56:00	30.555	5.35	160.335	185.895	4.6925	281.55	24.525	15718.75	6842.724	28.8674	72049.37	1390.344	1133.4	1132.9	507.9	195	191.1	-10.25	-28.125	-75.225	381.5	23.08
2023-06-27	11:57:00	31.5	5.6	161.5725	189.72	4.67625	280.575	24.525	15643.75	6842.724	32.26147	80286.51	1395.906	1136	1135.1	508	195	191.1	-33.3	-57.625	-105.75	318	24.04
2023-06-27	11:58:00	31.695	5.585	160.9537	190.035	4.67625	280.575	24.525	15937.5	6938.23	30.0291	74481.18	1400.656	1136.3	1136.1	508.5	195.5	192.2	-18	-36.875	-87.4125	367.6875	23.26
2023-06-27	11:59:00	31.59	5.9	159.8175	190.8	4.67875	280.725	24.525	15662.5	6949.466	29.04872	71900.02	1409.094	1138.5	1138.2	508.5	195	192.2	-12.6	-30.25	-80.025	380.1875	23.9
2023-06-27	12:00:00	31.215	6.02	160.5263	189.315	4.67	280.2	24.525	16050	6938.23	29.60233	72975.5	1400.25	1140	1140.4	508.4	194.5	192.2	-20.25	-40.125	-95.325	359	23.8
2023-06-27	12:01:00	31.8	5.74	160.8075	190.845	4.69375	281.625	24.525	15787.5	6837.106	29.23002	72029.93	1400.031	1141	1140.4	508.3	194.5	192.2	-15.2	-31.75	-83.7375	371.5	24.08
2023-06-27	12:02:00	31.305	5.99	160.6725	188.595	4.66625	279.975	24.525	15612.5	6735.982	28.23852	69666.42	1397.156	1143.4	1142.6	507.8	194	192.2	-10.85	-29	-77.55	385.0625	23.02
2023-06-27	12:03:00	31.38	5.945	160.2	190.755	4.685	281.1	24.525	15850	6865.196	29.82535	73528.57	1397.969	1141.3	1141.5	508.4	194	192.2	-18.5	-37	-90.7125	348.3125	23.34
2023-06-27	12:04:00	31.305	5.77	159.6263	189.945	4.70375	282.225	24.525	15731.25	6865.196	29.19595	72151.72	1406	1141.3	1141.5	508.4	194	192.2	-12.3	-29.375	-80.85	360.75	23.94
2023-06-27	12:05:00	31.545	6.155	160.7175	189.855	4.69	281.4	24.525	16300	6971.938	29.78673	73985.77	1403.125	1142.8	1142.6	508	194	192.2	-17.2	-34	-90.4125	368	23.74
2023-06-27	12:06:00	31.83	5.93	160.6163	191.565	4.6775	280.65	24.525	15500	6848.342	29.42386	72539.41	1407.469	1143.5	1142.6	508.3	194	192.2	-11.25	-28.25	-75.075	384.8125	23.14
2023-06-27	12:07:00	31.41	5.8	160.4812	190.665	4.68625	281.175	24.525	15450	6730.364	28.58655	70240.81	1417.969	1147.6	1147.6	507.6	193.5	192.2	-6.4	-20.75	-71.25	393.1875	23.58
2023-06-27	12:08:00	31.56	5.755	160.335	190.8	4.68875	281.325	24.525	15900	6848.342	29.95052	73252.87	1401.875	1147.4	1147.6	508.1	193.5	192.2	-17.15	-32.625	-89.775	362.8125	23.74
2023-06-27	12:09:00	31.44	5.755	159.435	190.35	4.68375	281.025	24.525	15687.5	6809.016	29.20924	71635.94	1412	1148.3	1147.6	508.6	193.5	192.2	-14.85	-29.875	-82.7625	378.5625	24.06
2023-06-27	12:10:00	31.425	6.345	160.8075	189.63	4.67	280.2	24.525	16193.75	6921.376	29.85431	73390.22	1402.906	1146.9	1147.6	509	193.5	192.2	-27.9	-47.75	-106.2	350.375	23.66
2023-06-27	12:11:00	31.47	5.84	160.7625	189.9	4.69375	281.625	24.525	15800	6831.488	29.70927	73198.15	1407.031	1143.8	1144.4	509.1	194	192.2	-15.25	-33.75	-85.125	376.0625	23.8
2023-06-27	12:12:00	31.275	5.545	160.29	189.315	4.67125	280.275	24.525	15662.5	6949.466	29.27803	72030.44	1412	1145	1144.4	508.9	194	192.2	-11.5	-28.375	-78.0375	384.4375	23.8
2023-06-27	12:13:00	31.485	6.285	160.7625	189.9	4.6925	281.55	24.525	15956.25	6848.342	29.83985	73524.09	1408.688	1144.7	1144.4	508.7	193.5	192.2	-19.5	-40	-91.3875	348.75	23.68
2023-06-27	12:14:00	31.335	5.89	161.1	189.9	4.66625	279.975	24.525	15681.25	6848.342	28.59941	70501.17	1415.281	1145.7	1145.5	509.2	194	192.2	-12.8	-30.625	-81.6	356.5625	23.68
2023-06-27	12:15:00	31.125	5.435	159.8625	190.035	4.70375	282.225	24.525	15993.75	6848.342	31.98168	78698.29	1400.031	1147.8	1147.6	509.2	194	192.2	-34.35	-56.25	-112.35	321.75	23.9
2023-06-27	12:16:00	31.8	6.155	160.9988	190.89	4.66875	280.125	24.525	15606.25	6859.578	29.28812	72103.13	1415.281	1146.4	1146.5	509.4	194	192.2	-12.6	-30.125	-80.7	385.125	24.08
2023-06-27	12:17:00	31.335	6	159.8625	189.27	4.68875	281.325	24.525	15481.25	6752.836	28.67036	70477.43	1413.031	1148.1	1147.6	509.4	194	192.2	-8.4	-23.625	-75.375	392.875	23
2023-06-27	12:18:00	31.485	5.94	160.9988	190.305	4.68	280.8	24.525	16093.75	6853.96	30.42236	74620.95	1400.844	1148.1	1148.6	510	194	192.2	-19.65	-40	-92.0625	360.6875	23.66
2023-06-27	12:19:00	31.29	6	160.4363	191.295	4.6725	280.35	24.525	15693.75	6853.96	29.20924	71697.26	1396.125	1147	1147.5	510.3	194.5	192.2	-13.8	-28.625	-84.4875	374.125	23.14
2023-06-27	12:20:00	31.41	5.88	160.4812	191.205	4.705	282.3	24.525	15825	6971.938	31.16581	76679.11	1394.875	1147.3	1147.5	510	194.5	192.2	-30.1	-52.625	-104.775	310.8125	23.8
2023-06-27	12:21:00	31.425	5.69	161.7075	191.205	4.68875	281.325	24.525	15775	6842.724	29.57623	72730.96	1394.656	1146	1146.4	510.2	194.5	192.2	-12.9	-29.375	-84.225	370.25	23.88
2023-06-27	12:22:00	31.44	5.95	160.8075	191.16	4.68625	281.175	24.525	15662.5	6943.848	29.50305	72600.5	1395.5	1145.9	1146.4	510.3	194.5	192.2	-10.75	-27.25	-79.4625	383.0625	23.38
2023-06-27	12:23:00	31.17	6.06	159.9075	190.395	4.66375	279.825	24.525	16150	6943.848	29.12929	71592.06	1383.938	1144.3	1144.3	510.1	194	192.2	-18.6	-37.75	-93.825	339.875	23.96
2023-06-27	12:24:00	31.605	5.995	161.19	191.565	4.71375	282.825	24.525	15656.25	6842.724	29.86073	73399.5	1401.469	1143.5	1143.3	510.1	194.5	192.2	-15.25	-32.375	-84.1125	358.75	23
2023-06-27	12:25:00	31.08	5.795	160.4812	189.45	4.675	280.5	24.525	15643.75	6865.196	30.99463	76496.13	1401.688	1144.2	1143.3	509.9	194	192.2	-20.2	-47.875	-86.9625	333.9375	23.26
2023-06-27	12:26:00	31.11	5.805	160.7175	190.395	4.70125	282.075	24.525	15675	6853.96	28.90994	71150.47	1394.063	1142.1	1142.3	509.6	194	192.2	-14.1	-30.25	-78.975	380.125	23.94
2023-06-27	12:27:00	31.365	6.345	160.38	189.495	4.67125	280.275	24.525	15568.75	6853.96	28.64524	70385.02	1400.438	1144	1143.4	509.8	194	192.2	-9.2	-26.875	-73.9125	391.0625	23.16
2023-06-27	12:28:00	31.08	6.115	160.29	188.865	4.7025	282.15	24.525	16250	6853.96	29.99543	73826.58	1384.969	1143.2	1143.4	509.3	193.5	192.2	-26.4	-47.125	-99.75	353.125	23.98
2023-06-27	12:29:00	31.215	5.715	160.4363	190.035	4.67375	280.425	24.525	15781.25	6949.466	29.12814	71476.52	1398.188	1140.4	1140.4	510.1	194	192.2	-15.95	-33.125	-85.0125	372.4375	24.04
2023-06-27	12:30:00	30.9	5.925	160.335	189.27	4.665	279.9	24.525	15793.75	6955.084	29.0353	71632.15	1406.844	1140.9	1140.4	509.7	194	192.2	-12.4	-29	-78.7875	381.6875	23.82
2023-06-27	12:31:00	31.26	5.885	161.1	190.44	4.69625	281.775	24.525	16000	6741.6	30.58235	75577.09	1397.156	1138.9	1139.4	509.5	194.5	192.2	-18.9	-34.375	-89.7	368.9375	24.04
2023-06-27	12:32:00	31.2	6.27	160.1437	190.26	4.67875	280.725	24.525	15643.75	6949.466	29.78342	73656.04	1410.125	1137.8	1138.4	509.5	194.5	192.2	-13.3	-29.875	-79.3875	379.375	23.48
2023-06-27	12:33:00	31.155	6.11	161.0437	190.98	4.67125	280.275	24.525	16362.5	6882.05	30.13136	74435.8	1385.594	1139.7	1139.5	508.8	194	192.2	-26.85	-46.375	-101.7	335.6875	23.04
2023-06-27	12:34:00	31.2	5.72	160.6163	192.375	4.7125	282.75	24.525	15843.75	6882.05	29.88645	73745.23	1401.063	1139.2	1139.5	508.8	194	192.2	-15.5	-33	-85.9125	357.4375	23.9
2023-06-27	12:35:00	31.02	5.36	159.8625	189.405	4.69625	281.775	24.525	15831.25	6870.814	29.68034	73474.28	1411.375	1140.3	1139.5	508.7	193.5	192.2	-12.35	-29.75	-77.775	368.125	24.04
2023-06-27	12:36:00	31.08	5.955	160.38	190.35	4.6825	280.95	24.525	15831.25	6876.432	29.75781	73581.88	1397.344	1138.4	1138.4	508.6	193.5	192.2	-15	-32.125	-81.7125	383.0625	23.26
2023-06-27	12:37:00	31.335	5.89	160.8075	191.835	4.6875	281.25	24.525	15575	6853.96	29.14346	71866.17	1409.313	1138.3	1138.4	508.5	193.5	192.2	-11.55	-28.75	-74.4375	392.25	24.02
2023-06-27	12:38:00	30.795	5.985	160.9088	186.975	4.69625	281.775	24.525	16312.5	6971.938	30.56719	75242.53	1387.438	1140.7	1140.6	508	193	192.2	-33.95	-55.25	-115.425	326.3125	23.28
2023-06-27	12:39:00	31.02	5.905	160.1437	189.585	4.7225	283.35	24.525	15918.75	6848.342	29.04651	71352.89	1388.688	1137.5	1138.4	508.2	193	192.2	-16.05	-30.75	-86.1375	371.25	23.96
2023-06-27	12:40:00	30.885	6.065	160.38	188.505	4.8125	288.75	24.525	15731.25	6848.342	28.8757	71233.35	1396.531	1136.4	1136.4	508	193	192.2	-13.2	-28.125	-81.45	385.9375	24.04
2023-06-27	12:41:00	31.065	5.87	160.6725	189.72	4.7975	287.85	24.525	16068.75	6853.96	29.25028	72301.54	1381.469	1134.2	1134.3	508.1	193	192.2	-21.8	-41.875	-91.0125	367.375	23.96
2023-06-27	12:42:00	30.855	5.965	161.0437	190.215	4.7425	284.55	24.525	15831.25	6853.96	29.38123	72785.6	1400.031	1132.2	1132.3	508.2	193.5	192.2	-14.45	-31.75	-81.1875	380.1875	23.74
2023-06-27	12:43:00	30.75	5.975	160.335	189.405	4.75	285	24.525	15793.75	6853.96	31.56144	78258.95	1399.406	1133.7	1133.4	507.2	193	192.2	-32.95	-56.5	-110.1	310.875	23.06
2023-06-27	12:44:00	30.975	6.13	161.0437	189.72	4.715	282.9	24.525	15912.5	6966.32	29.3114	72681.2	1396.719	1132.2	1132.4	506.9	193	192.2	-16.4	-34.375	-86.025	350.75	23.2
2023-06-27	12:45:00	30.825	6.145	159.8625	189.45	4.665	279.9	24.525	15687.5	6865.196	28.94931	71692.2	1406.219	1133.1	1132.4	506.5	192.5	191.1	-15.1	-31	-83.9625	364.1875	23.16

June 27/2023	Waste Flows							Air Flows				Temperatures						Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	SecondaryA	SecondaryB	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PAC
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFORY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	Lbs/h
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	SC-PAC-FT
Max	31.9	6.3	161.7	192.4	4.8	288.8	24.5	16393.8	6971.9	32.3	80286.5	1418.0	1148.3	1148.6	510.3	195.5	192.2	-6.4	-20.8	-71.3	393.2	24.1
Min	30.2	5.3	159.1	184.9	4.7	279.8	24.5	15450.0	6730.4	28.2	69666.4	1376.5	1132.2	1132.3	506.3	192.5	191.1	-35.3	-57.6	-119.4	309.3	23.0
Average	31.2	5.9	160.5	189.8	4.7	281.5	24.5	15844.8	6872.4	29.7	73240.9	1399.7	1141.6	1141.6	508.5	193.8	191.9	-17.5	-35.6	-87.6	364.0	23.6
Variance	0.13781705	0.06451682	0.24982755	2.66123176	0.00076528	2.75501742	4.6196E-28	49442.9431	3504.5636	0.76983806?	4961319.202	87.4875319	20.7441913	21.0794317	1.20950273	0.48811475	0.21753552	51.5939454	82.0778774	122.808398	477.7712	0.13907825

June 27/2023		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	SecondaryB	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/Hr	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRYHOUR	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-06-27	13:05:00	30.045	5.15	160.1437	185.67	4.76625	285.975	24.525	15818.75	6853.96	29.61159	73855.66	1381.063	1125.9	1126.3	506.1	192.5	191.1	-14.65	-33.75	-84.1875	362.375	24.02
2023-06-27	13:06:00	30.885	5.78	161.28	189.45	4.80125	288.075	24.525	16156.25	6865.196	32.04367	80484.66	1386.219	1125.4	1125.3	506.1	193	191.1	-34.7	-59.5	-112.6875	324.5	23.94
2023-06-27	13:07:00	31.365	5.3	161.1	190.395	4.77875	286.725	24.525	15681.25	6764.072	28.69052	71817.43	1396.125	1127.7	1127.5	506.1	193	191.1	-11.25	-28.75	-78.6	380.625	23.08
2023-06-27	13:08:00	31.41	5.81	160.9537	190.35	4.7825	286.95	24.525	15450	6876.432	28.76549	71375.26	1413.656	1131.9	1131.7	505.6	192.5	191.1	-8.25	-25	-73.7625	393.6875	24
2023-06-27	13:09:00	31.38	5.745	161.3812	190.98	4.78625	287.175	24.525	16000	6971.938	29.82408	73490.37	1393.625	1134.2	1133.8	505.3	192	191.1	-18.55	-34.375	-92.7375	362.0625	24.08
2023-06-27	13:10:00	31.185	6.44	160.7175	189.63	4.7325	283.95	24.525	15750	6870.814	28.64044	70582.61	1402.5	1134.1	1133.8	505.2	192	191.1	-13.9	-33.875	-81.225	377.6875	23.34
2023-06-27	13:11:00	31.035	5.71	160.0538	188.37	4.78875	287.325	24.525	15875	6887.668	31.46951	77703.16	1394.063	1134.6	1133.8	505	192	191.1	-31.65	-56.25	-106.7625	312.6875	23.16
2023-06-27	13:12:00	30.885	6.215	160.6725	189.81	4.785	287.1	24.525	15868.75	6893.286	29.76463	73493.56	1396.531	1133.1	1133.8	505	192	191.1	-16.25	-34.375	-85.875	373.75	23.4
2023-06-27	13:13:00	31.035	5.905	160.2	189.27	4.7475	284.85	24.525	15687.5	6865.196	28.42544	70336.82	1393.031	1134.3	1133.8	505.1	192	191.1	-11.85	-30.875	-79.6875	384.625	24.06
2023-06-27	13:14:00	31.215	6.23	160.7625	188.82	4.72875	283.725	24.525	16168.75	6876.432	29.28802	72545.19	1386.219	1134	1133.8	504.8	191.5	191.1	-19.2	-38.75	-92.325	340.6875	23.98
2023-06-27	13:15:00	31.23	5.9	161.1	189.18	4.7775	286.65	24.525	15718.75	6887.668	29.50958	73468.61	1404.781	1134.2	1133.8	504.9	192	191.1	-11.5	-29.375	-80.3625	356.375	24
2023-06-27	13:16:00	31.14	6.005	160.8075	189.9	4.80875	288.525	24.525	15693.75	6786.544	30.69825	76294.39	1408.5	1135.7	1134.9	504.7	191.5	190.1	-15.9	-42	-86.625	334.5625	23.16
2023-06-27	13:17:00	31.485	6.62	160.9088	191.97	4.8175	289.05	24.525	15625	6764.072	28.92404	71773.01	1405.813	1136.3	1136	504.8	191.5	190.1	-11.3	-30	-78.7875	381.8125	23.12
2023-06-27	13:18:00	30.51	5.885	158.7712	186.84	4.805	288.3	24.525	15506.25	6780.926	29.025	71675.23	1410.125	1139.8	1139.1	504.7	191	190.1	-9.3	-25.75	-73.95	390.6875	23.88
2023-06-27	13:19:00	30.87	5.325	161.6625	189.72	4.8075	288.45	24.525	16181.25	6915.758	30.41905	74870.68	1378.781	1139.7	1140	504.8	191	190.1	-22.3	-41.375	-97.65	355.875	24.04
2023-06-27	13:20:00	30.975	6.23	160.8075	191.025	4.75125	285.075	24.525	15787.5	6915.758	28.88581	71382.69	1397.156	1137.6	1137.8	505.6	191.5	190.1	-13	-31	-83.325	373.875	23.5
2023-06-27	13:21:00	31.065	5.695	160.335	188.955	4.75125	285.075	24.525	15681.25	6809.016	28.8361	71346.62	1405.406	1139.3	1138.9	505.3	191.5	190.1	-11.7	-28.5	-79.05	387.1875	23.82
2023-06-27	13:22:00	31.185	6.345	160.8075	189.045	4.7675	286.05	24.525	15837.5	7011.264	29.15766	72532.41	1395.094	1137.3	1137.9	505.6	192	190.1	-16.25	-33.875	-88.3875	371.875	23.94
2023-06-27	13:23:00	31.26	5.27	160.335	189.9	4.745	284.7	24.525	15812.5	6797.78	28.75194	71229.45	1402.906	1138.8	1137.9	505.9	192	190.1	-11.5	-28.5	-79.05	383.75	23.94
2023-06-27	13:24:00	31.32	6.16	161.3812	189.09	4.8	288	24.525	16337.5	7016.882	29.67768	73560.33	1395.688	1140	1140.1	505.6	192	190.1	-23.95	-42	-101.4	338.375	23.5
2023-06-27	13:25:00	31.545	6.08	160.6163	190.935	4.7825	286.95	24.525	15743.75	6915.758	29.33069	72706.92	1404.563	1139.6	1140.1	505.8	192.5	190.1	-15.45	-34.125	-83.7	357.1875	23.16
2023-06-27	13:26:00	31.065	5.91	159.7163	189	4.7725	286.35	24.525	15637.5	7000.028	28.83092	71583.95	1409.313	1140.8	1140.1	505.9	192	190.1	-12.35	-28.25	-78.825	368.0625	23.98
2023-06-27	13:27:00	31.395	5.435	160.9537	188.46	4.74625	284.775	24.525	15825	6837.106	29.55841	73288.24	1400.438	1139.8	1140.1	505.6	192	190.1	-13.8	-32.75	-81.675	382	23.7
2023-06-27	13:28:00	31.425	5.52	160.0087	190.08	4.76	285.6	24.525	15693.75	6848.342	29.51942	72945.17	1401.688	1142	1141.2	506	192	190.1	-9.5	-27.75	-75.0375	394.4375	23.22
2023-06-27	13:29:00	31.215	6.125	160.29	189.675	4.81	288.6	24.525	16450	6842.724	31.28906	77278.57	1390.125	1141.9	1142.2	505.9	192	190.1	-34.6	-54.25	-116.6625	326.75	23.9
2023-06-27	13:30:00	31.275	5.77	160.5263	190.53	4.785	287.1	24.525	15912.5	6842.724	29.30804	72097.7	1398.188	1139.3	1140	506.2	192.5	190.1	-16.05	-33.75	-87.15	371.125	23.7
2023-06-27	13:31:00	31.2	5.99	160.335	190.215	4.7675	286.05	24.525	15818.75	6842.724	29.05204	71918.31	1401.469	1140.1	1140	506.7	192.5	190.1	-13.8	-30.875	-81.8625	386.3125	23.08
2023-06-27	13:32:00	31.41	5.835	161.19	190.755	4.77125	286.275	24.525	16018.75	6971.938	30.11472	74621.65	1396.125	1139.9	1140	506.9	192.5	190.1	-20.95	-39	-90.9375	369.125	23.02
2023-06-27	13:33:00	31.23	6.09	161.0437	191.7	4.7825	286.95	24.525	15656.25	6971.938	29.19294	72392.38	1408.5	1141	1140	507.2	193	190.1	-12.65	-30.75	-82.2	381.5	23.1
2023-06-27	13:34:00	31.335	6.055	160.29	190.17	4.82	289.2	24.525	15831.25	6876.432	31.52612	78157.74	1406.844	1143.1	1143.1	506.5	192.5	190.1	-31.25	-54.875	-108.75	313.625	23.1
2023-06-27	13:35:00	31.38	6.15	160.5712	190.8	4.7925	287.55	24.525	15718.75	6780.926	29.15069	72162.4	1409.313	1142.3	1143.1	506.9	192.5	190.1	-15.15	-34.875	-84.8625	356.125	23.86
2023-06-27	13:36:00	31.395	5.785	160.0087	190.665	4.775	286.5	24.525	15593.75	6792.162	28.9727	71669.84	1409.313	1143.8	1143.1	506.8	192.5	190.1	-13.35	-28.75	-79.575	368.25	23.9
2023-06-27	13:37:00	31.14	5.99	160.4812	189.855	4.8225	289.35	24.525	15981.25	6887.668	29.28856	72526.08	1398.781	1142.8	1143	507	192	190.1	-14.2	-32	-86.625	379.5	23.92
2023-06-27	13:38:00	31.2	5.745	160.4812	189.9	4.75	285	24.525	15637.5	6775.308	28.52769	70545.79	1407.25	1142.4	1141.9	506.9	192	190.1	-9.05	-26.75	-74.4	389.8125	23.54
2023-06-27	13:39:00	31.245	5.865	160.38	189.45	4.77375	286.425	24.525	15612.5	6780.926	31.87962	78656.55	1406.438	1143.8	1143	506.2	192	190.1	-28.55	-52.625	-98.9625	318.1875	23.86
2023-06-27	13:40:00	31.215	5.55	160.9088	190.35	4.80125	288.075	24.525	15931.25	6870.814	29.45454	72412.55	1396.719	1141.3	1141.9	506.7	192	190.1	-16.6	-34.75	-88.725	371.875	24.02
2023-06-27	13:41:00	31.14	5.76	160.29	190.62	4.70625	282.375	24.525	15681.25	6853.96	29.26034	72036.41	1407.469	1141.8	1141.9	506.4	192	190.1	-10.9	-28.375	-78.4125	381.5	24.02
2023-06-27	13:42:00	31.11	5.925	160.2	190.26	4.69625	281.775	24.525	16131.25	6994.41	29.5599	73020.28	1399.406	1141.4	1141.9	506.1	191.5	190.1	-23	-42.25	-98.2125	363.25	23.92
2023-06-27	13:43:00	31.335	6.235	160.8525	190.17	4.29375	257.625	24.525	15787.5	6887.668	28.90344	71477.41	1404.781	1138.6	1138.9	506.2	192	190.1	-15.9	-35.375	-83.775	380.6875	23.18
2023-06-27	13:44:00	31.155	5.725	160.0988	190.08	4.30125	258.075	24.525	15650	6887.668	28.68743	71136.52	1408.281	1139.7	1138.9	505.7	192	190.1	-10.85	-27.75	-78.075	388	23.04
2023-06-27	13:45:00	31.305	5.62	160.8075	190.89	4.32	259.2	24.525	15850	6887.668	29.67779	73589.98	1401.469	1139.9	1140	506.1	192	190.1	-19	-37.125	-90.525	352.875	23.98
2023-06-27	13:46:00	31.275	5.685	159.8625	189	4.295	257.7	24.525	15737.5	6780.926	28.66456	71098.42	1407.469	1141.6	1141.1	505.8	192	190.1	-14.75	-30.75	-81.5625	363.9375	24.12
2023-06-27	13:47:00	31.2	6.515	160.0988	190.26	4.31625	258.975	24.525	16356.25	6904.522	29.09199	72284.52	1394.063	1141.9	1142.1	505.6	191.5	190.1	-17.75	-37.75	-89.8125	371.8125	23.88
2023-06-27	13:48:00	31.575	6.275	161.1	190.8	4.31875	259.125	24.525	15643.75	6921.376	28.50561	70560.05	1415.5	1142.3	1142.1	505.6	192	190.1	-11.9	-27.125	-78.6375	387.8125	23.76
2023-06-27	13:49:00	31.485	5.855	160.4812	189.27	4.3	258	24.525	15525	6803.398	28.62808	70697.53	1415.5	1145.1	1145.1	505.4	191.5	190.1	-5.35	-20.875	-70.3125	393.25	24
2023-06-27	13:50:00	31.215	5.89	160.9088	190.935	4.30125	258.075	24.525	15906.25	6915.758	29.55522	72785.16	1401.469	1143.8	1144	506	191.5	190.1	-18.65	-38.75	-92.3625	368.4375	23.26
2023-06-27	13:51:00	31.35	5.72	160.38	189.945	4.76875	286.125	24.525	15693.75	6915.758	28.88892	71168.06	1405.188	1143.3	1142.9	506.7	192	190.1	-12.55	-30.125	-82.275	378.3125	23.06
2023-06-27	13:52:00	31.14	5.775	159.9075	189.9	4.7575	285.45	24.525	16275	6926.994	29.67614	73454.12	1390.125	1142.6	1142.9	507.1	192	190.1	-24.65	-42.375	-105.075	353.5625	23.7
2023-06-27	13:53:00	31.365	6.185	160.7625	190.575	4.70625	282.375	24.525	15862.5	6820.252	29.86416	74004.18	1400.844	1142.1	1141.9	507.7	193	190.1	-11.05	-26.75	-79.0875	376.5625	24.06
2023-06-27	13:54:00	31.095	5.72	160.0538	189.315	4.6875	281.25	24.525	15656.25	6820.252	29.36464	72793.44	1406.219	1144.3	1144.1	507	192.5	190.1	-10.6	-26.25	-77.3625	387.8125	23.78
2023-06-27	13:55:00	31.2	5.675	160.8075	189.9	4.66625	279.975	24.525	16075	6837.106	29.93567	67812.67	1393.031	1142.4	1143	506.8	192.5	190.1	-17.2	-36.625	-88.6875	351.9375	23.38
2023-06-27	13:56:00	31.185	6.04	160.335	190.08	4.695	281.7	24.525	15575	6837.106	29.36933	66585.19	1406.219	1141.5	1141.9	506.8	192.5	190.1	-13.1	-30	-81.3	366.5	24.04
2023-06-27	13:57:00	31.245	5.48	161.19	190.26	4.6725	280.35	24.525	15975	6865.196	31.86063	72472.8	1389.938	1143.9	1143	506.7	192.5	190.1	-30.45	-53.75	-107.1	324.9375	23.86
2023-06-27	13:58:00	31.08	5.77	160.8075	190.125	4.69125	281.475	24.525	15556.25	6853.96	29.48199	66714.42	1402.5	1143.4	1143	506.7	192.5	190.1	-11.05	-28.75	-77.8875	385.625	23.02
2023-06-27	13:59:00	31.275	5.995	160.0538	189	4.7025	282.15	24.525	15450	6955.084	28.88524	65183.44	1412.406	1144.7	1144.1	506.4	192	190.1	-7.65	-23.25	-71.8875	393.625	23.76
2023-06-27	14:00:00	31.125	5.39	160.38	189.675	4.67875	280.725	24.525	16131.25	6943.848	29.97939	67793.66	1392	1144.4	1145.1	506.5	192	190.1	-20.65	-38.875	-94.425	361.375	24.04
2023-06-27	14:01:00	31.2	5.55	160.2	190.125	4.695	281.7	24.525	15756.25	6848.342	29.76207	67147.62	1403.531	1143.5	1144	506.9	192.5	190.1	-16.1	-35.25	-85.0875	380.5625	23.74
2023-06-27	14:02:00	31.365	5.87	160.4363	190.305	4.7125	282.75	24.525	15843.75	6949.466	32.11186	72742.35	1401.063	1144.4	1144	506.9	192	190.1	-33.2	-56.125	-110.0625	317.25	23.78
2023-06-27	14:03:00	31.635	5.585	161.145	191.16	4.67	280.2	24.525	15831.25	6842.724	29.7881	67626.66	1406.438	1142.1	1142.9	507.2	192.5	190.1	-17.95	-35.25	-87.3375	373.9375	23.96
2023-06-27	14:04:00	31.14	6	159.8625	190.26	4.68	280.8	24.525	15662.5	6949.466	28.89549	65554.02	1410.563	1144.5	1144	507.2	192.5	190.1	-11.25	-26.75	-78.225	382.375	23.82
2023-06-27	14:05:00	31.02	5.625	160.4812	190.08	4.68	280.8	24.525	16231.25	6842.724	30.08776	62832.51	1397.563	1145.7	1146.1	506.9	192.5	190.1	-19.9	-38.375	-93.45	345.5625	23.08

June 27/2023	Waste Flows							Air Flows				Temperatures						Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	SecondaryA	SecondaryB	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PAC
Test 1	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	Lbs/h
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	SC-PAC-FT
Max	31.6	6.6	161.7	192.0	4.8	289.4	24.5	16450.0	7016.9	32.1	80484.7	1415.5	1145.7	1146.1	507.7	193.0	191.1	-5.4	-20.9	-70.3	394.4	24.1
Min	30.0	5.2	158.8	185.7	4.3	257.6	24.5	15450.0	6764.1	28.4	62832.5	1378.8	1125.4	1125.3	504.7	191.0	190.1	-34.7	-59.5	-116.7	312.7	23.0
Average	31.2	5.9	160.5	189.9	4.7	281.7	24.5	15828.6	6873.7	29.6	71989.4	1401.1	1139.8	1139.7	506.1	192.1	190.3	-16.6	-35.1	-86.8	366.4	23.7
Variance	0.05725131	0.09430822	0.24674977	1.0101375	0.02500769	90.0276701	4.6196E-28	53349.556	4215.2243	0.860355923	9989749.825	64.7085228	20.9058361	21.2756667	0.58514208	0.20095628	0.15027322	48.3093306	78.8638576	115.158347	489.528108	0.13712

		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	SecondaryB	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-06-27	14:23:00	31.005	6.075	160.9088	189.54	4.7	282	24.525	16081.25	6865.196	29.81561	65936.17	1395.688	1142.2	1142.4	506.9	192	191.2	-16.75	-35.875	-88.35	368	23.9
2023-06-27	14:24:00	30.825	5.875	160.6163	189.855	4.67625	280.575	24.525	15631.25	6859.578	28.9797	64266.64	1402.094	1141	1141.4	506.7	192	191.2	-10.8	-29.625	-78.825	380.625	23.22
2023-06-27	14:25:00	30.66	5.89	160.2	189.27	4.68	280.8	24.525	16000	6859.578	32.38561	71915.16	1391.375	1140.9	1141.4	506.2	192	191.2	-31.85	-56.5	-110.4	315.5625	23.76
2023-06-27	14:26:00	30.99	6.035	160.29	190.665	4.7	282	24.525	15781.25	6859.578	29.78893	65366.75	1399.406	1137.2	1137.3	506	192	191.2	-14.5	-31.125	-86.4375	356.375	23
2023-06-27	14:27:00	30.735	5.82	159.9525	190.44	4.68375	281.025	24.525	15675	6741.6	29.69001	65387.43	1402.5	1137.6	1137.3	505.9	192	191.2	-12.05	-31.375	-78.8625	368.25	23.04
2023-06-27	14:28:00	31.17	5.895	160.5263	190.215	4.67875	280.725	24.525	15968.75	6949.466	29.78249	65581.76	1404.156	1137.1	1137.3	505.8	191.5	190.1	-16.35	-34	-86.925	382.0625	23.68
2023-06-27	14:29:00	31.53	5.995	160.7625	192.42	4.31625	258.975	24.525	15531.25	6842.724	28.99569	63557.32	1413.219	1138.9	1138.4	505.4	191.5	190.1	-9.05	-23.125	-76.3125	389.9375	23.46
2023-06-27	14:30:00	30.975	6.05	160.0087	190.44	4.32	259.2	24.525	15481.25	6741.6	32.2632	70254.41	1410.563	1144	1144	504.9	191	190.1	-29.5	-54	-101.438	319.75	24
2023-06-27	14:31:00	30.945	5.81	160.9088	188.955	4.30625	258.375	24.525	15968.75	6853.96	30.05994	65633.19	1399.625	1139.6	1139.6	505	191	190.1	-17	-33.625	-87.7125	367.9375	23.96
2023-06-27	14:32:00	30.675	5.905	159.8625	190.125	4.2925	257.55	24.525	15712.5	6853.96	29.05089	63615.56	1404.969	1138.2	1138.5	504.9	191	190.1	-11.55	-29.625	-79.35	381.3125	23.82
2023-06-27	14:33:00	30.855	5.58	160.4363	189.81	4.3075	258.45	24.525	16312.5	6831.488	30.31422	66765.2	1395.906	1136.9	1137.4	504.8	191	190.1	-20.95	-38.75	-93.15	363.3125	23.74
2023-06-27	14:34:00	30.84	6.1	160.7175	189.9	4.31125	258.675	24.525	15818.75	6949.466	29.88908	65827.45	1405.406	1136.9	1136.4	505.4	191.5	190.1	-14.45	-31.625	-82.5375	379.75	23.12
2023-06-27	14:35:00	30.93	5.865	160.5263	191.205	4.83125	289.875	24.525	15587.5	6831.488	29.53928	65165.87	1410.125	1137.8	1137.5	505.1	191.5	190.1	-8.75	-24.375	-75.3375	388.1875	23.14
2023-06-27	14:36:00	31.425	6.165	162.3262	191.16	4.8	288	24.525	15843.75	6825.87	29.51623	64778.76	1408.688	1137.6	1137.5	504.9	191.5	190.1	-15.2	-33	-84.4125	352.5625	23.94
2023-06-27	14:37:00	31.065	5.81	160.4812	191.115	4.81	288.6	24.525	15693.75	6831.488	28.77237	63384.82	1412	1139.6	1139.6	504.9	191.5	190.1	-13.7	-32.125	-80.625	368.625	23.94
2023-06-27	14:38:00	31.02	5.89	160.38	188.865	4.7175	283.05	24.525	16006.25	6943.848	29.69268	65443.54	1406.438	1139.8	1140.6	505.1	191.5	190.1	-17.15	-37.125	-88.0875	373	23.2
2023-06-27	14:39:00	31.17	5.96	160.0538	190.26	4.71875	283.125	24.525	15543.75	6831.488	29.86471	65466.81	1401.875	1136.6	1137.4	505.6	191.5	190.1	-10.3	-26.375	-77.8875	389	23.96
2023-06-27	14:40:00	30.87	5.79	159.3	189.405	4.69625	281.775	24.525	15462.5	6747.218	29.16505	63598.5	1410.563	1137.3	1136.4	505.3	191.5	190.1	-7.2	-22	-71.325	398.0625	23.04
2023-06-27	14:41:00	31.065	6.025	161.5725	190.35	4.71625	282.975	24.525	16006.25	6859.578	30.12697	65812.9	1392.594	1134.8	1135.3	505.5	191.5	190.1	-16.75	-37.625	-85.9125	368.5625	23.32
2023-06-27	14:42:00	31.095	6.045	159.9525	190.125	4.685	281.1	24.525	15625	6842.724	29.28391	63967.38	1405.406	1137.1	1136.4	505.4	191.5	190.1	-13	-31.375	-81.225	384.5625	24.1
2023-06-27	14:43:00	30.885	5.695	160.1437	188.73	4.69875	281.925	24.525	16212.5	6943.848	30.52457	66995.45	1399	1138.1	1138.6	505.1	191.5	190.1	-25.65	-45.75	-103.65	352.8125	23.06
2023-06-27	14:44:00	31.23	5.8	161.7075	189.9	4.69125	281.475	24.525	15681.25	6814.634	29.86114	65566.11	1409.719	1134.7	1135.4	505.3	191.5	190.1	-13.25	-32	-83.6625	377.25	22.98
2023-06-27	14:45:00	31.095	5.415	160.4363	189.9	4.72125	283.275	24.525	15712.5	6848.342	29.46616	64871.17	1408.688	1137.5	1136.5	505.2	191.5	190.1	-9.5	-21.25	-76.95	385.5	24.04
2023-06-27	14:46:00	31.29	5.72	161.4262	191.385	4.69125	281.475	24.525	15850	6853.96	30.15306	66259.52	1404.969	1137.6	1137.6	505	191.5	190.1	-18.15	-36	-89.1375	351.5625	23.82
2023-06-27	14:47:00	31.035	5.98	160.7625	190.53	4.7	282	24.525	15743.75	6853.96	29.70097	65154.35	1406.219	1137.8	1137.6	505	191.5	190.1	-11.95	-30.125	-80.1	363.6875	23.7
2023-06-27	14:48:00	30.945	5.785	160.0988	189.135	4.7125	282.75	24.525	16262.5	6747.218	31.70585	69759.28	1395.094	1139.3	1138.6	504.4	191	190.1	-34.35	-58.125	-112.65	327.75	23.44
2023-06-27	14:49:00	30.705	5.95	160.7625	190.575	4.70375	282.225	24.525	15668.75	6769.69	29.00665	63339.03	1404.781	1136.9	1137.5	505	191.5	190.1	-10.6	-28.125	-75.4875	382.75	23.1
2023-06-27	14:50:00	30.855	5.965	160.2	189.495	4.75125	285.075	24.525	15450	6887.668	28.81426	62983.2	1410.969	1139.4	1138.6	504.8	191	190.1	-8.55	-24.375	-71.9625	396.5625	23.58
2023-06-27	14:51:00	30.78	5.87	160.245	189.855	4.76875	286.125	24.525	16018.75	6882.05	29.96009	65260.17	1401.469	1138.5	1139.4	504.8	190.5	190.1	-19.75	-38.25	-92.55	362.25	23.06
2023-06-27	14:52:00	31.23	6.245	161.28	191.16	4.73	283.8	24.525	15656.25	7005.646	29.34787	63980.76	1415.906	1137.7	1137.4	504.9	191	190.1	-11.25	-25.75	-80.025	377.5625	22.96
2023-06-27	14:53:00	30.69	6.025	160.0538	189.54	4.8075	288.45	24.525	15787.5	6882.05	31.35845	68754.5	1412.625	1138	1137.4	505.2	191	190.1	-30.45	-52	-106.613	318.75	23.96
2023-06-27	14:54:00	30.96	5.97	161.145	190.665	4.7425	284.55	24.525	15975	6859.578	29.93696	65369.42	1407.656	1134.9	1135.4	505.6	191	190.1	-15.3	-31.75	-86.5125	376.25	23.56
2023-06-27	14:55:00	31.095	5.87	159.8625	190.395	4.765	285.9	24.525	15593.75	6752.836	29.41484	64398.69	1415.719	1137.7	1137.6	505.3	191	190.1	-11.25	-26.375	-77.3625	386.75	23.98
2023-06-27	14:56:00	30.93	5.585	160.4812	189.45	4.7725	286.35	24.525	16175	6876.432	29.92052	65737.5	1402.719	1137.9	1138.6	505.4	191	190.1	-20.2	-38.875	-94.0125	349.3125	23.1
2023-06-27	14:57:00	31.005	5.85	159.9075	190.8	4.76875	286.125	24.525	15662.5	6876.432	29.73776	65328.14	1415.094	1133.1	1133.4	505.6	191.5	190.1	-13.9	-33.25	-80.2875	362.25	23.96
2023-06-27	14:58:00	30.69	5.62	160.5712	189.72	4.7475	284.85	24.525	15656.25	6887.668	31.78327	70130.26	1412.813	1133.2	1132.4	505.3	191.5	190.1	-23.15	-50.875	-87.7125	343	23.76
2023-06-27	14:59:00	30.975	5.965	161.145	191.16	4.75875	285.525	24.525	15525	6887.668	30.09106	66243.97	1418.375	1131.7	1132.4	505	191.5	190.1	-11.9	-28.75	-79.5	385.9375	22.92
2023-06-27	15:00:00	31.005	5.675	160.38	189.495	4.80875	288.525	24.525	15500	6786.544	29.14819	63933.01	1413.031	1134	1133.6	504.9	191	190.1	-9.65	-27.125	-73.2	392	23.1
2023-06-27	15:01:00	31.05	6.295	160.4812	190.17	4.77375	286.425	24.525	16181.25	7050.59	29.78228	65047.34	1397.344	1134.4	1134.5	504.5	190.5	190.1	-24.5	-42.375	-98.1375	360.1875	23.14
2023-06-27	15:02:00	31.05	6.165	160.4812	189.99	4.7525	285.15	24.525	15837.5	6809.016	29.28282	63869.98	1401.281	1132	1132.4	504.6	191	190.1	-12.45	-30	-82.0875	375.125	23.28
2023-06-27	15:03:00	30.72	5.625	160.245	189.72	4.8225	289.35	24.525	15687.5	6820.252	29.25762	64209.9	1413.656	1134	1133.5	504.2	191	190.1	-11.2	-29.25	-79.0875	390.875	23
2023-06-27	15:04:00	31.17	5.92	161.0437	190.71	4.84625	290.775	24.525	15943.75	6966.32	30.00432	65886.81	1402.313	1133.8	1133.5	504.5	191	190.1	-17.5	-35.125	-88.8375	374.75	24.1
2023-06-27	15:05:00	30.795	6.1	160.38	191.79	4.85625	291.375	24.525	15706.25	6966.32	29.41684	64782.94	1419	1134.4	1133.5	504.4	191	190.1	-13.2	-30.625	-80.0625	386.875	23.14
2023-06-27	15:06:00	30.825	5.935	160.6725	189.81	4.8575	291.45	24.525	16237.5	6865.196	30.60178	67450.36	1402.719	1133.7	1134.6	504.8	191	190.1	-20.15	-37.5	-97.4625	342.8125	23.88
2023-06-27	15:07:00	31.065	5.955	161.235	189.945	4.8375	290.25	24.525	15712.5	6764.072	29.82352	65565.29	1413.031	1131.5	1131.4	504.9	191.5	190.1	-12.9	-31.625	-82.5	364.0625	23.14
2023-06-27	15:08:00	30.795	5.625	160.245	189.81	4.81	288.6	24.525	15600	6853.96	29.35395	64774.78	1414.063	1133.7	1133.7	505.3	191.5	190.1	-13.35	-30.75	-78.4125	375.1875	22.96
2023-06-27	15:09:00	30.855	5.765	160.7175	189.945	4.73375	284.025	24.525	15756.25	6983.174	29.53554	65035.08	1412.625	1133.2	1133.7	505.6	191.5	190.1	-14	-31.875	-82.5375	383.75	23.6
2023-06-27	15:10:00	30.69	5.62	160.7175	189.99	4.7725	286.35	24.525	15506.25	6769.69	28.46239	62676.33	1421.469	1133	1133.7	505.4	191.5	190.1	-9.2	-24.625	-74.85	396.5	23.66
2023-06-27	15:11:00	30.99	5.47	160.6163	190.035	4.7275	283.65	24.525	16337.5	6988.792	32.04166	70378.65	1391.375	1135.5	1134.7	505.2	191.5	190.1	-36.5	-55.625	-118.875	330.4375	24.04
2023-06-27	15:12:00	30.975	5.825	160.5712	190.305	4.73125	283.875	24.525	15806.25	6882.05	29.89262	65312.07	1402.5	1134.1	1134.7	505.8	192	190.1	-14.2	-30.75	-84.15	373.125	23.48
2023-06-27	15:13:00	30.735	5.825	160.4812	189.045	4.695	281.7	24.525	15700	6887.668	29.13861	63879.84	1416.313	1134.7	1134.7	505.7	192	190.1	-10.15	-27.75	-77.25	382.8125	23.98
2023-06-27	15:14:00	30.84	5.85	160.8075	188.325	4.7425	284.55	24.525	16062.5	6780.926	30.055	65656.36	1402.313	1134.3	1134.7	506	192	190.1	-17.75	-35.375	-89.7375	368.5	23.16
2023-06-27	15:15:00	30.915	6.05	160.7175	189.9	4.7125	282.75	24.525	15618.75	6887.668	28.77314	63212.04	1408.063	1132.8	1133.6	506.4	192.5	190.1	-12.25	-29.5	-80.8875	382.0625	23.84
2023-06-27	15:16:00	31.005	6.225	161.235	189.855	4.6925	281.55	24.525	16062.5	6893.286	31.39447	69154.44	1407.031	1134	1133.6	505.9	192	190.1	-30.9	-53.75	-108.638	312.25	24.12
2023-06-27	15:17:00	31.215	6.075	161.3363	189.81	4.29	257.4	24.525	15850	6792.162	29.91054	65680.97	1411.375	1132.2	1132.4	506	192.5	190.1	-16.15	-34.25	-85.95	358.9375	22.94
2023-06-27	15:18:00	30.78	5.9	159.7163	189.54	4.30125	258.075	24.525	15706.25	6775.308	29.26395	64418.31	1412	1134	1133.5	505.2	192	190.1	-13.1	-28.125	-78.75	370	23
2023-06-27	15:19:00	30.915	5.855	160.7175	190.98	4.32125	259.275	24.525	15893.75	6904.522	29.38657	64652.7	1408.281	1133.2	1133.5	504.7	191.5	190.1	-16.8	-32	-84.4875	384.0625	23.26
2023-06-27	15:20:00	31.035	5.48	159.8175	190.665	4.29625	257.775	24.525	15631.25	6797.78	29.70789	64883.98	1415.906	1134.2	1133.5	504.2	191.5	190.1	-7.85	-22.5	-72.675	390.75	22.92
2023-06-27	15:21:00	30.9	5.895	161.0437	188.685	4.30375	258.225	24.525	15350	6797.78	32.22453	70340.66	1415.281	1137.4	1136.6	503.6	191	190.1	-28.05	-50	-97.5	322.3125	23.84
2023-06-27	15:22:00	30.78	6.005	161.0437	189.99	4.31875	259.125	24.525	15856.25	6898.904	29.41366	63908.53	1406.844	1135.2	1135.4	504.1	191	190.1	-15.1	-31	-84.075	370.0625	23.06
2023-06-27	15:23:00	30.765	5.84	160.8525	188.685	4.305	258.3	24.525	15618.75	6887.668	29.64482	64633.08	1408.063	1134.5	1134.4	503.9	191	190.1	-11.35	-27.125	-79.5375	387.5625	23.74

June 27/2023	Waste Flows							Air Flows				Temperatures						Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	SecondaryA	SecondaryB	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PAC
	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	Lbs/h
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	SC-PAC-FT
Max	31.5	6.3	162.3	192.4	4.9	291.5	24.5	16337.5	7050.6	32.4	71915.2	1421.5	1144.0	1144.0	506.9	192.5	191.2	-7.2	-21.3	-71.3	398.1	24.1
Min	30.7	5.4	159.3	188.3	4.3	257.4	24.5	15350.0	6741.6	28.5	62676.3	1391.4	1131.5	1131.4	503.6	190.5	190.1	-36.5	-58.1	-118.9	312.3	22.9
Average	31.0	5.9	160.6	190.1	4.7	279.1	24.5	15795.5	6858.4	29.9	65593.5	1407.1	1136.2	1136.2	505.2	191.4	190.2	-16.1	-34.2	-85.8	368.4	23.5
Variance	0.034077	0.035734	0.287254	0.618736	0.035036	126.1278	4.62E-28	55484.55	4771.232	0.815035513	4136717.095	49.9685889	7.52236612	7.52904372	0.4041585	0.18483607	0.09256831	47.990612	83.037842	110.9608	470.1321	0.16491847

		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	SecondaryB	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-06-27	15:44:00	30.51	5.185	160.2	189.45	4.73375	284.025	24.525	15831.25	6713.51	31.93144	70209.93	1396.125	1136.1	1135.8	503.2	190	189.1	-35.25	-56.25	-110.288	323.5625	23.24
2023-06-27	15:45:00	30.66	6.31	160.29	189.81	4.72625	283.575	24.525	15787.5	6932.612	30.11579	66637.37	1397.969	1133.8	1133.8	503.4	190.5	189.1	-17.2	-32.75	-85.9875	377.625	23.82
2023-06-27	15:46:00	30.645	5.8	160.4363	189.45	4.735	284.1	24.525	15643.75	6831.488	29.43045	65300.63	1403.125	1134.9	1134.9	503.4	190.5	189.1	-12.45	-26.75	-78.4125	387.5625	23.74
2023-06-27	15:47:00	30.765	5.855	160.9988	189.225	4.795	287.7	24.525	16112.5	6926.994	30.17909	67145.99	1394.25	1135.4	1136	503.4	190.5	189.1	-20.6	-36	-93.1875	349.625	23.98
2023-06-27	15:48:00	31.155	5.85	160.5263	191.52	4.7725	286.35	24.525	15750	6848.342	30.17582	66730.26	1410.125	1136.6	1136	503.4	191	189.1	-13.7	-28.75	-79.875	364.5	24.08
2023-06-27	15:49:00	29.79	5.325	159.5812	185.985	4.87125	292.275	24.525	15637.5	6848.342	32.14954	71096.71	1397.563	1137.7	1138.3	503.1	190.5	189.1	-22.4	-47	-87.0375	341.8125	23.06
2023-06-27	15:50:00	29.88	5.705	159.48	186.57	4.745	284.7	24.525	15687.5	6949.466	29.22799	64453.85	1390.531	1133.5	1134.3	503.7	191	189.1	-15.4	-30.625	-82.2	390.125	24.06
2023-06-27	15:51:00	29.745	5.56	160.29	186.255	4.74	284.4	24.525	15618.75	6825.87	29.44582	65203.02	1391.781	1131.5	1132.3	504	191.5	189.1	-10.5	-23.5	-72.6375	397.1875	23.72
2023-06-27	15:52:00	29.925	5.52	160.5712	185.13	4.7275	283.65	24.525	16281.25	6932.612	30.20992	66767.11	1371.781	1130.8	1131.3	503.9	191.5	189.1	-25.75	-42.875	-97.9125	362.0625	23.76
2023-06-27	15:53:00	30.15	5.575	160.4363	185.895	4.7075	282.45	24.525	15862.5	6932.612	29.55808	65532.23	1381.25	1128	1129	504.6	192.5	189.1	-16.4	-33	-83.4375	382.6875	24.02
2023-06-27	15:54:00	30.66	5.215	160.7625	187.965	4.745	284.7	24.525	15581.25	6831.488	29.42259	65505.23	1385.594	1128.4	1129	504.9	193	190.2	-12.25	-28.75	-76.65	391	23.52
2023-06-27	15:55:00	30.675	5.99	161.4262	188.595	4.7525	285.15	24.525	15868.75	6825.87	29.86229	66516.58	1400.844	1129.6	1129	504.9	193.5	190.2	-18.55	-34.5	-87.525	373.875	23.78
2023-06-27	15:56:00	31.215	6.16	159.9525	190.395	4.70375	282.225	24.525	15637.5	6949.466	28.60692	63598.15	1412.813	1131.9	1131.2	504.8	193	190.2	-12.15	-26.375	-76.575	383.0625	24.04
2023-06-27	15:57:00	31.005	5.735	160.1437	188.055	4.71375	282.825	24.525	16200	6842.724	29.64479	65384.51	1399.813	1134.9	1134.5	504.8	192.5	190.2	-24.1	-41.125	-97.9125	341.1875	23.6
2023-06-27	15:58:00	31.125	5.855	161.1	189.765	4.72875	283.725	24.525	15800	6915.758	30.01638	65890.07	1407.875	1133.4	1133.4	504.9	192.5	190.2	-15.05	-30.25	-82.5375	364	23.06
2023-06-27	15:59:00	30.615	5.915	160.6163	189.09	4.70375	282.225	24.525	15650	6921.376	29.28063	64288.67	1407.031	1134.7	1134.5	505.4	192.5	190.2	-11.5	-26.375	-76.1625	375.9375	23.08
2023-06-27	16:00:00	31.02	5.58	161.3812	189.495	4.725	283.5	24.525	15781.25	6803.398	29.5989	65223.21	1397.563	1134.2	1134.5	505.7	192.5	190.2	-15.25	-31.75	-79.4625	388	23.98
2023-06-27	16:01:00	30.705	5.46	160.4812	190.665	4.69375	281.625	24.525	15400	6803.398	29.23559	64400.54	1410.969	1136	1135.6	505.3	192.5	190.2	-9.4	-23	-73.3875	396.4375	23.68
2023-06-27	16:02:00	30.945	5.8	160.38	189.765	4.71125	282.675	24.525	16106.25	6910.14	30.97284	67847.16	1399.625	1139.4	1138.6	505	192	190.2	-31.25	-46.125	-110.55	326.875	23.74
2023-06-27	16:03:00	30.75	5.89	160.335	190.8	4.74	284.4	24.525	15875	7022.5	30.08653	65678.96	1401.063	1137.8	1138.6	505.2	192	190.2	-13.8	-30.5	-80.0625	373.375	23.06
2023-06-27	16:04:00	31.125	5.735	160.0087	190.26	4.695	281.7	24.525	15412.5	6814.634	29.49747	64640.18	1412.188	1138.6	1138.6	504.9	192	190.2	-12.1	-26.75	-75.8625	389.0625	23.18
2023-06-27	16:05:00	31.32	5.915	161.8088	190.665	4.67375	280.425	24.525	16075	6809.016	30.71525	67232.7	1400.031	1138.7	1138.6	505	192	190.2	-18.35	-35.125	-87.075	371.5625	22.98
2023-06-27	16:06:00	30.96	5.525	160.4363	191.835	4.6925	281.55	24.525	15600	6809.016	29.71409	65010.16	1414.875	1140.6	1140.6	504.8	192	190.2	-10.85	-24.5	-76.125	384.5625	23.14
2023-06-27	16:07:00	30.54	5.885	159.8625	189.135	4.29	257.4	24.525	15981.25	6921.376	31.75345	69486.97	1405.813	1144	1143.7	504.4	191.5	190.2	-34.15	-55.375	-108.113	321.875	23.96
2023-06-27	16:08:00	30.75	5.795	160.5263	189.945	4.29875	257.925	24.525	15881.25	6915.758	29.21774	63700.86	1404.375	1140.2	1140.4	504.5	191.5	190.2	-15.9	-33.75	-81	363.625	23.1
2023-06-27	16:09:00	30.705	5.675	159.8625	189.45	4.325	259.5	24.525	15662.5	6809.016	29.27319	64529.98	1409.094	1140.5	1140.4	504.2	191.5	190.2	-11.95	-25.625	-76.425	376.4375	23.86
2023-06-27	16:10:00	30.645	5.775	160.245	188.955	4.3275	259.65	24.525	15943.75	7039.354	30.14997	66238.97	1399.813	1139.8	1140.4	504.2	191	190.2	-18.7	-34.25	-85.2	385.125	23.22
2023-06-27	16:11:00	30.84	6.365	160.4363	189.99	4.32	259.2	24.525	15581.25	6837.106	29.30029	64416.57	1406.438	1139.7	1139.4	503.6	191	190.2	-10.4	-20.25	-72.375	395.6875	23.92
2023-06-27	16:12:00	30.735	5.535	160.8075	188.91	4.295	257.7	24.525	15656.25	6859.578	33.19647	72840.44	1406.219	1141.3	1140.5	503.2	191	190.2	-35.55	-53.625	-103.5	329.1875	24.08
2023-06-27	16:13:00	30.945	6.265	160.8525	189.63	4.29875	257.925	24.525	15937.5	6876.432	30.13208	66266.34	1407.031	1139	1139.4	503.4	191	190.2	-18.65	-32.125	-86.85	373.9375	23.72
2023-06-27	16:14:00	30.885	5.955	160.38	189.315	4.32125	259.275	24.525	15725	6758.454	29.68981	65089.77	1404.781	1139.4	1139.4	503.4	191	190.2	-12	-25.75	-77.6625	388.4375	23.42
2023-06-27	16:15:00	31.095	5.97	160.2	189.495	4.3075	258.45	24.525	16275	6853.96	29.56447	65094	1391.781	1139.9	1140.5	502.9	191	190.2	-22.25	-38.875	-92.9625	363.5	23.56
2023-06-27	16:16:00	31.14	6.435	160.0538	191.295	4.28875	257.325	24.525	15668.75	6865.196	29.89042	65792.61	1403.344	1137.8	1138.4	503	191.5	190.2	-14.85	-28.875	-82.5375	382.125	23.16
2023-06-27	16:17:00	30.87	5.335	159.2438	189.63	4.30625	258.375	24.525	15706.25	6971.938	28.98837	63918.64	1411.375	1139.4	1138.4	502.4	191	190.2	-11.5	-25.25	-75.375	392.0625	23.94
2023-06-27	16:18:00	30.795	5.71	160.4363	189.405	4.33125	259.875	24.525	15818.75	6853.96	29.34837	64563.06	1400.844	1136.8	1137.4	502.6	191	190.2	-17.5	-36.875	-85.3875	360.625	23.3
2023-06-27	16:19:00	30.93	6.215	159.9525	190.44	4.8475	290.85	24.525	15618.75	6848.342	29.10755	64226.24	1405.406	1135.4	1135.4	502.6	191.5	190.2	-13.3	-30.375	-78.1125	370.9375	24.16
2023-06-27	16:20:00	31.005	6.085	160.7175	188.82	4.8825	292.95	24.525	16050	6955.084	30.28273	66999.93	1405.813	1135.8	1135.4	502.6	191.5	190.2	-16.15	-31.625	-86.25	379.75	23.3
2023-06-27	16:21:00	31.095	5.84	160.9537	190.8	4.86875	292.125	24.525	15581.25	6747.218	29.90704	65761.52	1410.125	1137.9	1137.7	503	191.5	190.2	-10.05	-22.875	-72.7875	394.25	23.92
2023-06-27	16:22:00	30.765	6.36	160.335	189.225	4.74875	284.925	24.525	15456.25	6848.342	28.46139	62271.94	1411.781	1141.6	1140.7	503.1	191	190.2	-7.25	-23	-71.025	404.25	22.94
2023-06-27	16:23:00	30.855	5.59	161.0437	190.485	4.7675	286.05	24.525	15956.25	6882.05	30.35151	66275.04	1410.969	1140.2	1140.6	503.2	191	190.2	-18.3	-34.625	-87.5625	373	23.36
2023-06-27	16:24:00	31.02	6.265	160.5712	190.35	4.6825	280.95	24.525	15693.75	6809.016	29.17219	63664.15	1388.281	1139.5	1139.5	503.6	191.5	190.2	-11.5	-27.75	-77.2875	386.375	23.6
2023-06-27	16:25:00	30.6	5.8	160.245	189.09	4.73	283.8	24.525	16162.5	6809.016	30.48437	66895.96	1358.375	1138.2	1138.4	503.7	191.5	190.2	-27.1	-43.375	-103.575	356.375	23.3
2023-06-27	16:26:00	30.66	6.15	160.5712	190.215	4.715	282.9	24.525	15718.75	6797.78	29.71621	65222.82	1335.469	1135.5	1135.4	504	192	190.2	-16.1	-28.5	-81.2625	383.625	23.06
2023-06-27	16:27:00	30.66	5.66	160.2	189.36	4.69875	281.925	24.525	15587.5	6949.466	29.09191	64022.73	1340.625	1136.5	1136.5	503.3	192	190.2	-12.05	-25.875	-76.6875	394.8125	23.02
2023-06-27	16:28:00	30.66	5.75	160.7625	189.99	4.67875	280.725	24.525	16037.5	6949.466	30.7161	67410.14	1375.063	1134.2	1134.4	503.3	192	190.2	-19.6	-36.125	-87.5625	357.1875	24.08
2023-06-27	16:29:00	30.975	6.11	161.5725	190.935	4.68625	281.175	24.525	15681.25	6747.218	30.05861	66254.77	1392	1134	1134.4	503.2	192	190.2	-13.65	-28.625	-79.9875	370.5625	23.8
2023-06-27	16:30:00	30.795	6.5	160.9088	188.19	4.73	283.8	24.525	16150	6859.578	31.96614	70717.23	1370.938	1135.3	1135.5	503	191.5	190.2	-34.65	-55.375	-111.75	333.75	23.66
2023-06-27	16:31:00	30.78	6.04	160.4812	188.955	4.74	284.4	24.525	15693.75	6758.454	29.72313	65518.55	1339.594	1133.9	1134.4	503.2	191.5	190.2	-12.45	-25.5	-76.725	388.9375	24.08
2023-06-27	16:32:00	30.66	6.015	161.4713	189.45	4.74375	284.625	24.525	15456.25	6859.578	29.59051	64926.61	1344.563	1135.7	1135.5	502.6	191	190.2	-9.4	-21.75	-71.0625	401.875	23.28
2023-06-27	16:33:00	30.69	5.98	161.3812	189.9	4.73875	284.325	24.525	16062.5	6865.196	30.51625	66703.45	1328.656	1133.5	1134.4	502.1	191	190.2	-22.85	-39.625	-91.4625	370.0625	23.22
2023-06-27	16:34:00	30.87	6.43	160.7625	191.385	4.7925	287.55	24.525	15675	6853.96	30.05536	65945.01	1340.438	1132.9	1133.4	502.7	191	190.2	-16.35	-29.125	-81.6	385.375	23.64
2023-06-27	16:35:00	30.495	5.86	160.1437	189.855	4.7925	287.55	24.525	15831.25	6955.084	31.98497	70439.97	1333.219	1134.7	1134.5	502.6	191	190.2	-33.55	-53.375	-106.2	321.375	24.02
2023-06-27	16:36:00	30.96	5.82	161.0437	190.395	4.74125	284.475	24.525	15806.25	6825.87	29.78418	65664.06	1333.406	1132.6	1133.4	502.8	191.5	190.2	-14.25	-29.25	-82.125	376.5625	23.06
2023-06-27	16:37:00	30.96	5.945	160.4812	189.27	4.7075	282.45	24.525	15575	6831.488	29.53992	65218.7	1349.719	1136.3	1135.6	502.8	192	190.2	-9.65	-24.625	-73.0875	389.5625	24.1
2023-06-27	16:38:00	30.84	5.81	159.1538	188.685	4.73375	284.025	24.525	15993.75	6921.376	30.48288	67082.19	1329.906	1138.6	1138.6	502.6	191.5	190.2	-21.95	-38.875	-94.575	358.875	23.66
2023-06-27	16:39:00	30.855	6.15	160.9988	188.64	4.7175	283.05	24.525	15656.25	6915.758	30.28839	66572.9	1344.75	1136.6	1137.5	503.1	192	190.2	-13.3	-27.75	-80.1375	372.875	23.64
2023-06-27	16:40:00	30.81	5.39	160.245	188.82	4.7	282	24.525	15556.25	6775.308	31.27072	69114.59	1346.813	1138.2	1137.5	503.2	192.5	190.2	-17.05	-41.875	-83.85	346.9375	23
2023-06-27	16:41:00	31.05	5.675	162.045	189.765	4.735	284.1	24.525	15568.75	6898.904	29.7741	65588.37	1342.5	1139.3	1138.6	503	192.5	190.2	-12.05	-26.375	-76.4625	391.4375	23.08
2023-06-27	16:42:00	30.825	6.31	160.0988	189.9	4.73375	284.025	24.525	15437.5	6797.78	29.14261	63950.04	1350.125	1141.6	1141.6	502.8	192.5	190.2	-8.25	-18.5	-73.0125	402.875	23.08
2023-06-27	16:43:00	30.72	5.83	160.5712	189.585	4.71875	283.125	24.525	16206.25	7044.972	29.83689	65487.28	1335.469	1142.4	1142.6	502.3	192.5	190.2	-22.3	-39	-94.05	360	23.08
2023-06-27	16:44:00	30.69	5.885	160.9988	189.765	4.7675	286.05	24.525	15781.25	6921.376	30.26739	66019.75	1340	1140.9	1141.5	502.5	192.5	190.2	-15	-29.875	-81.0375	383.875	23.42

June 27/2023	Waste Flows							Air Flows				Temperatures						Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	SecondaryA	SecondaryB	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PAC
	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	Lbs/h
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	SC-PAC-FT
Max	31.3	6.5	162.0	191.8	4.9	293.0	24.5	16281.3	7045.0	33.2	72840.4	1414.9	1144.0	1143.7	505.7	193.5	190.2	-7.3	-18.5	-71.0	404.3	24.2
Min	29.7	5.2	159.2	185.1	4.3	257.3	24.5	15400.0	6713.5	28.5	62271.9	1328.7	1128.0	1129.0	502.1	190.0	189.1	-35.6	-56.3	-111.8	321.4	22.9
Average	30.8	5.9	160.5	189.4	4.7	279.3	24.5	15787.4	6868.7	30.0	66068.6	1383.6	1136.6	1136.7	503.6	191.6	190.0	-17.1	-32.9	-84.5	372.5	23.5
Variance	0.102489	0.093681	0.322214	1.755775	0.031615	113.8156	4.62E-28	50688.14	5194.213	0.819540703	3985731.424	819.998951	12.0078743	11.2003934	0.8511585	0.52418033	0.16860656	51.105123	83.828031	113.8704	455.2111	0.14818448

June 28/2023		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	SecondaryB	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFORY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-06-28	9:30:00	28.23	6.235	161.1	180.45	5.29	317.4	24.6	15787.5	6466.318	31.3944	67952.59	1393.625	1124.4	1123.9	476.2	195	192.3	-35.3	-58.5	-110.7375	358.375	23.9
2023-06-28	9:31:00	28.485	7.065	161.7075	182.43	5.41375	324.825	24.6	15300	6466.318	30.00488	64735.2	1404.375	1124.1	1123.9	476.2	195.5	192.3	-8.8	-23.5	-74.2125	415.875	23.96
2023-06-28	9:32:00	28.455	6.38	161.3812	181.89	5.3575	321.45	24.6	15156.25	6359.576	28.8896	62255.06	1403.938	1126.6	1126.1	475.9	195	192.3	-6.25	-23.75	-66.7875	425.25	23.76
2023-06-28	9:33:00	28.5	6.29	161.0437	182.115	5.54625	332.775	24.6	15762.5	6471.936	30.10198	64550.9	1390.344	1126	1126	476.2	194.5	192.3	-20.25	-40.375	-89.325	395.75	23.76
2023-06-28	9:34:00	28.785	6.645	160.9088	182.475	5.6325	337.95	24.6	15368.75	6359.576	29.20506	62778.14	1403.938	1125.8	1126	475.8	195	192.3	-9.7	-26.25	-74.6625	407.5625	23.98
2023-06-28	9:35:00	28.38	6.43	160.8525	181.26	5.4025	324.15	24.6	15400	6466.318	31.01327	66698.75	1399.625	1127.2	1127.1	475.8	194.5	192.3	-33.45	-56.125	-105.525	348.5	24.02
2023-06-28	9:36:00	28.62	6.47	161.3812	181.98	5.3425	320.55	24.6	15412.5	6466.318	29.59257	63683.06	1399.406	1126.5	1127.1	475.7	194.5	192.3	-13.5	-30.75	-80.325	403.6875	23.28
2023-06-28	9:37:00	28.71	5.73	159.6263	183.105	5.43875	326.325	24.6	15343.75	6466.318	28.96432	62474.24	1396.313	1127.7	1127.1	475.6	194.5	192.3	-9.75	-27.125	-72.9375	415.5	23.8
2023-06-28	9:38:00	28.485	6.085	160.7175	181.665	5.30625	318.375	24.6	15637.5	6471.936	29.48357	63621.56	1397.75	1127.7	1128.2	475.5	194	192.3	-19.4	-38.625	-89.0625	381.125	23.46
2023-06-28	9:39:00	28.62	6.745	160.9537	182.745	5.4975	329.85	24.6	15268.75	6471.936	29.80426	64224.79	1407.656	1127.2	1127.1	475.8	194.5	192.3	-11.9	-27.125	-76.8	397.125	22.98
2023-06-28	9:40:00	28.515	5.87	160.6725	181.26	5.4	324	24.6	15350	6353.958	31.21146	67485.19	1403.75	1128.1	1128.1	475.4	194.5	192.3	-19.7	-46.875	-78.225	374.8125	23.36
2023-06-28	9:41:00	28.62	6.64	160.9088	182.925	5.4125	324.75	24.6	15412.5	6460.7	29.49291	63561.59	1398.375	1128.9	1128.1	475.6	194.5	192.3	-10.3	-29.375	-74.8125	416.4375	23.28
2023-06-28	9:42:00	28.545	6.245	160.7175	182.07	5.44625	326.775	24.6	15150	6359.576	28.67942	61674.77	1403.938	1130.9	1130.2	475.5	194.5	192.3	-7.35	-24.875	-68.5125	425.75	23.4
2023-06-28	9:43:00	28.32	6.655	160.245	181.215	5.37	322.2	24.6	15837.5	6573.06	29.46044	63067.63	1385.375	1131.1	1131.2	475.3	194	192.3	-24.9	-45.25	-95.9625	388.125	23.12
2023-06-28	9:44:00	28.29	6.88	160.9537	183.285	5.205	312.3	24.6	15368.75	6331.486	29.33728	62893.2	1399.219	1129.7	1130.1	475.7	194.5	192.3	-12.9	-30.75	-77.8875	406.625	24.04
2023-06-28	9:45:00	28.32	6.225	160.5263	181.35	5.145	308.7	24.6	15081.25	6331.486	28.56505	61494.57	1401.469	1131.8	1131.1	475.5	194.5	192.3	-10.5	-28.375	-73.575	417.75	23.88
2023-06-28	9:46:00	28.74	5.895	161.3812	183.015	5.22	313.2	24.6	15512.5	6426.992	30.03607	64736.91	1399.219	1131.2	1132.1	475.5	195	192.3	-18.15	-36.5	-85.425	401.5	23.14
2023-06-28	9:47:00	28.77	5.95	161.28	181.44	5.24625	314.775	24.6	15212.5	6421.374	29.36676	63377.9	1404.781	1131.5	1132.1	475.8	195.5	192.3	-8.75	-26.25	-74.6625	412.25	23.36
2023-06-28	9:48:00	28.89	6.855	160.8525	182.115	5.1225	307.35	24.6	15906.25	6516.88	29.70558	64182.47	1393.844	1131.6	1132.1	475.7	195	192.3	-25.2	-45.625	-97.575	370.6875	23.98
2023-06-28	9:49:00	29.115	6.835	161.4262	185.085	5.2325	313.95	24.6	15206.25	6303.396	28.71826	62033.82	1408.5	1133.2	1133.1	475.8	195.5	192.3	-11.75	-31.125	-78.75	390.25	23.48
2023-06-28	9:50:00	28.59	6.17	160.1437	182.295	5.4025	324.15	24.6	15087.5	6410.138	28.34477	61041.66	1411.594	1136.4	1136.2	475.4	195	192.3	-8.6	-26.625	-73.6875	403.125	23.6
2023-06-28	9:51:00	28.59	6.32	160.8525	181.845	5.33375	320.025	24.6	15387.5	6410.138	28.79205	61768.42	1399.625	1139.1	1138.2	475.7	195	192.3	-11.85	-28.75	-78	412.8125	23.04
2023-06-28	9:52:00	28.5	5.965	160.4363	181.35	5.20125	312.075	24.6	15156.25	6393.284	28.66277	61611.69	1401.688	1141.1	1140.4	475.5	195	192.3	-4.95	-20.625	-66.975	421	23
2023-06-28	9:53:00	28.35	6	160.8075	181.8	5.26375	315.825	24.6	15812.5	6511.262	31.22488	66579.3	1377.75	1141.9	1142.6	475.6	194.5	192.3	-33.65	-54.125	-111.4125	353.75	23.14
2023-06-28	9:54:00	28.545	6.71	160.6163	182.115	5.27125	316.275	24.6	15312.5	6511.262	29.68767	63239.37	1372.594	1138	1138.3	475.8	195.5	192.3	-12.2	-29.75	-78.075	406.25	23.26
2023-06-28	9:55:00	28.275	6.66	161.5725	180.585	5.29875	317.925	24.6	15168.75	6393.284	29.38679	62988.98	1378.375	1138	1138.3	475.6	195.5	192.3	-8.95	-26.125	-73.2	416.625	23.6
2023-06-28	9:56:00	28.815	6.385	161.0437	182.07	5.275	316.5	24.6	15506.25	6421.374	30.16426	65004.68	1374.031	1137.3	1137.3	475.5	195	192.3	-16.65	-35.5	-84.375	397.1875	23.46
2023-06-28	9:57:00	28.59	6.54	161.3363	183.555	5.3125	318.75	24.6	15262.5	6421.374	29.28007	62625.44	1380.438	1137.8	1137.3	475.4	195	192.3	-10.65	-28.125	-73.875	412.5	22.96
2023-06-28	9:58:00	28.485	6.175	160.8525	181.215	5.3675	322.05	24.6	15493.75	6404.52	31.09973	66999.3	1374.031	1137.5	1137.3	475.5	194.5	192.3	-32.35	-56.625	-108.1125	346	23
2023-06-28	9:59:00	28.68	6.155	160.1437	183.33	5.2975	317.85	24.6	15487.5	6303.396	29.6021	63600.54	1374.875	1135.8	1136.3	475.1	194.5	192.3	-14.65	-35.25	-81.6375	389.6875	23.06
2023-06-28	10:00:00	28.335	6.44	160.6163	180.855	5.295	317.7	24.6	15150	6522.498	28.76381	62067.14	1380.844	1133.8	1134.3	475	194.5	192.3	-10.8	-29.375	-73.575	401.1875	23.02
2023-06-28	10:01:00	28.365	5.87	160.9988	182.385	5.2475	314.85	24.6	15462.5	6415.756	28.57932	61706.24	1361.875	1130.4	1131.3	475	194.5	192.3	-14.4	-34.125	-81.7875	409.25	23.74
2023-06-28	10:02:00	28.92	6.145	161.1	182.115	5.30125	318.075	24.6	15006.25	6303.396	28.49253	61399.4	1377.125	1129.9	1129.3	474.7	194	192.3	-8.5	-24.375	-72.15	419.6875	23.9
2023-06-28	10:03:00	28.635	6.16	160.6163	181.71	5.31625	318.975	24.6	15125	6410.138	32.08304	69283.46	1377.125	1131.7	1131.5	474.4	193.5	192.3	-30.45	-54.125	-99.0375	354	23.98
2023-06-28	10:04:00	28.68	6.72	160.9537	183.96	5.33	319.8	24.6	15381.25	6410.138	29.69355	63794.59	1368.688	1130	1130.4	474.5	193.5	192.3	-16	-35.875	-84.0375	402.9375	23.92
2023-06-28	10:05:00	28.77	6.35	161.145	183.24	5.33125	319.875	24.6	15212.5	6410.138	28.78345	62039.64	1383.531	1131.3	1130.4	474.4	193.5	192.3	-8.75	-24.75	-74.175	414.9375	23.7
2023-06-28	10:06:00	28.605	6.075	159.5363	181.935	5.3525	321.15	24.6	15687.5	6415.756	30.02997	64758.16	1362.281	1130.1	1130.4	473.9	193	192.3	-18.75	-37.625	-89.925	392.8125	24.1
2023-06-28	10:07:00	28.65	6.555	160.7175	182.16	5.3475	320.85	24.6	15325	6303.396	29.31623	63230.03	1372.406	1128.9	1129.4	473.7	193	192.3	-10.65	-28.375	-78.375	409.625	23.1
2023-06-28	10:08:00	28.17	6.525	160.5712	182.07	5.2975	317.85	24.6	15206.25	6415.756	28.58994	61700.25	1372.594	1129.1	1129.4	473.5	192.5	192.3	-9.35	-27.875	-73.95	420.875	23.04
2023-06-28	10:09:00	28.47	6.485	161.7525	182.745	5.2975	317.85	24.6	15462.5	6415.756	29.45823	63824.74	1362.5	1126.6	1127.4	473.3	193	192.3	-16.35	-36.125	-84.8625	387.9375	23.32
2023-06-28	10:10:00	28.395	6.725	160.4812	181.89	5.3625	321.75	24.6	15212.5	6314.632	29.5325	64225.56	1372.188	1126.6	1126.4	473.2	193	192.3	-10.4	-26.875	-77.325	399.875	23.96
2023-06-28	10:11:00	28.32	6.595	161.3812	180.855	5.27	316.2	24.6	15718.75	6426.992	29.65259	64880.3	1359.594	1127.9	1128.6	473.4	192.5	191.3	-19.6	-39.625	-88.575	408.5625	23.08
2023-06-28	10:12:00	28.62	6.995	161.4262	182.88	5.21625	312.975	24.6	15125	6426.992	30.19931	65461.34	1370.938	1126.4	1126.4	473.5	193	191.3	-7.25	-22.5	-73.425	421.375	23.46
2023-06-28	10:13:00	28.515	7.44	161.3812	182.88	5.27	316.2	24.6	15018.75	6320.25	28.56842	61830.09	1379.188	1127.8	1127.5	473.4	192.5	191.3	-6.55	-24.5	-68.55	428.875	23.86
2023-06-28	10:14:00	28.695	5.87	162.2813	182.835	5.25625	315.375	24.6	15500	6522.498	29.73452	64055.19	1370.531	1127.8	1127.5	473.3	192.5	191.3	-19.5	-40.625	-88.9125	402.9375	23.08
2023-06-28	10:15:00	28.635	6.435	160.29	182.88	5.26375	315.825	24.6	15237.5	6421.374	29.01768	62630.37	1375.5	1128.9	1128.6	473.2	192.5	191.3	-11.25	-29.125	-79.2375	413.6875	23.78
2023-06-28	10:16:00	28.515	6.18	160.8075	182.025	5.19375	311.625	24.6	16012.5	6421.374	29.11432	62984.46	1355.906	1127.7	1128.6	473.2	192	191.3	-27.1	-47.375	-104.1375	381.6875	23.68
2023-06-28	10:17:00	28.665	6.435	160.9088	181.53	5.26875	316.125	24.6	15368.75	6528.116	29.57431	63915.12	1373.438	1126.3	1126.4	472.8	192.5	191.3	-12.1	-30.5	-79.725	407.1875	23.88
2023-06-28	10:18:00	28.38	6.655	160.4363	182.16	5.20625	312.375	24.6	15256.25	6404.52	28.86712	62680.11	1371.156	1127	1126.4	472.7	192	191.3	-10.85	-28	-75.3	419.125	23.82
2023-06-28	10:19:00	28.665	6.085	161.4262	183.15	5.18125	310.875	24.6	15581.25	6404.52	29.55123	64157.3	1364.563	1126.2	1126.4	472.7	192	191.3	-19.95	-41.625	-89.3625	388.4375	23.94
2023-06-28	10:20:00	28.425	6.495	160.8075	183.015	5.21625	312.975	24.6	15187.5	6410.138	28.86558	62721.38	1373.625	1126.2	1126.4	472.6	192	191.3	-11.8	-30.75	-78.45	399.1875	23.9
2023-06-28	10:21:00	28.695	7.135	161.0437	183.735	5.24625	314.775	24.6	15743.75	6522.498	30.85081	67219.76	1360.844	1127.3	1126.4	472.2	191.5	191.3	-35.7	-60.375	-113.175	358.9375	24.1
2023-06-28	10:22:00	28.605	6.6	161.6175	183.6	5.24375	314.625	24.6	15325	6415.756	29.45687	63774.78	1379.406	1128.1	1127.5	472.4	192	191.3	-8.35	-27.5	-75.975	418.625	23.84
2023-06-28	10:23:00	28.17	6.375	160.5712	180.99	5.27375	316.5	24.6	15050	6415.756	28.78158	62014	1380.656	1128.7	1128.6	472.3	191.5	191.3	-5.85	-24.125	-68.2875	427.4375	23.98
2023-06-28	10:24:00	28.515	5.945	160.7625	182.25	5.31	318.6	24.6	15512.5	6449.464	30.2076	64997.12	1361.875	1126.1	1126.4	472.3	191	190.3	-22	-44.875	-93.7875	400.3125	23.48
2023-06-28	10:25:00	28.92	6.59	161.235	182.475	5.37	321.45	24.6	15250	6348.34	29.47879	63773.96	1371.969	1125.7	1126.4	472.2	191.5	190.3	-12.55	-31	-79.725	414.8125	23.3
2023-06-28	10:26:00	28.26	5.905	160.7625	181.8	5.41	324.6	24.6	15587.5	6348.34	32.16619	69909.81	1371.563	1126.1	1125.4	472.2	191.5	190.3	-34.05	-58.5	-108.45	351.125	23.66
2023-06-28	10:27:00	28.395	6.325	161.145	182.16	5.5525	333.15	24.6	15462.5	6348.34	29.53531	64229.16	1365.188	1123.8	1124.4	472	192	190.3	-18.5	-38.875	-87.375	408.1875	23.58
2023-06-28	10:28:00	28.41	6.005	161.145	181.845	5.395	323.7	24.6	15087.5	6449.464	29.54685	64339.86	1379.406	1123.4	1123.4	472	192	190.3	-11.2	-29	-77.8125	417.5	23.96
2023-06-28	10:29:00	28.65	5.99	160.8525	181.8	5.565	333.9	24.6	15756.25	6449.464	29.58858	64592.58	1364.156	1123.1	1123.4	471.8	191.5	190.3	-19.55	-41.75	-92.2875	381.1875	23.56
2023-06-28	10:30:00	28.905	6.775	161.5162	181.71	5.5125	330.75	24.6	15275	6438.228	28.92143	63091.79	1379	1123.5	1123.4	471.8	192	190.3	-14.75	-36.25	-81.675	396.3125	23.82

June 28/2023		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	SecondaryA	SecondaryB	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PAC
		FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFORY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	Lbs/h
Units		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	SC-PAC-FT
Max		29.1	7.4	162.3	185.1	5.6	338.0	24.6	16012.5	6573.1	32.2	69909.8	1411.6	1141.9	1142.6	476.2	195.5	192.3	-5.0	-20.6	-66.8	428.9	24.1
Min		28.2	5.7	159.5	180.5	5.1	307.4	24.6	15006.3	6303.4	28.3	61041.7	1355.9	1123.1	1123.4	471.8	191.0	190.3	-35.7	-60.4	-113.2	346.0	23.0
Average		28.6	6.4	160.9	182.2	5.3	319.4	24.6	15384.2	6418.6	29.6	63839.8	1382.6	1129.7	1129.7	474.4	193.6	191.9	-15.7	-34.8	-83.1	399.5	23.6
Variance		0.039363443	0.129075806	0.236853347	0.768990984	0.010998748	39.52801844	4.61957E-28	57360.16479	4013.227989	0.745867783	3662474.867	237.1522875	20.89560656	20.87876503	2.081273224	1.80942623	0.484153005	67.56376503	107.9143443	143.1125464	458.5650914	0.1291338

June 28/2023		Waste Flows							Air Flows				Temperatures						Pressures				Flows
		Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	Secondary	SecondaryB	Quench	SDA	Stack	Incinerator	SDA Inlet	BH Inlet	BH dP	PAC
		LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	Lbs/h
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
$Date	$Time	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241	TE-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	SC-PAC-FT
2023-06-28	10:42:00	28.26	6.68	161.3812	181.575	5.19	311.4	24.6	15381.25	6426.992	29.69661	65185.4	1366.625	1115.7	1116.4	470.2	190.5	190.3	-13.2	-33.25	-80.3625	415.75	23.92
2023-06-28	10:43:00	28.485	6.745	160.7175	182.565	5.14625	308.775	24.6	15275	6426.992	29.63345	64670.79	1374.656	1116	1115.4	470.1	191	190.3	-8.2	-28.25	-71.9625	424.1875	23.9
2023-06-28	10:44:00	28.41	5.91	160.8525	182.25	5.08	304.8	24.6	15956.25	6522.498	31.56483	68755.67	1355.469	1117.6	1117.6	470	190	190.3	-39.55	-63.375	-120.825	349.1875	23.94
2023-06-28	10:45:00	28.5	6.46	161.19	182.61	5.12875	307.725	24.6	15531.25	6393.284	29.36323	63850.32	1367.656	1116.4	1116.5	469.8	190.5	190.3	-14.25	-31.75	-83.4	405.625	23.84
2023-06-28	10:46:00	28.455	5.94	160.6163	182.61	5.13625	309.3	24.6	15362.5	6382.048	28.81115	63000.04	1376.094	1116.4	1116.5	469.7	190.5	190.3	-11.5	-30	-77.25	418.5	23.3
2023-06-28	10:47:00	28.395	6.565	160.9088	182.7	5.1325	307.95	24.6	15650	6494.408	30.17663	65932.58	1366.625	1116.1	1116.5	469.7	190	190.3	-19.75	-39.875	-89.6625	401.4375	23.64
2023-06-28	10:48:00	28.545	5.845	161.1	183.105	5.065	303.9	24.6	15293.75	6387.666	29.0271	63689.88	1375.5	1117.1	1116.5	469.7	190.5	190.3	-13.05	-32.5	-80.8125	413	23.38
2023-06-28	10:49:00	28.155	5.935	160.38	180.72	4.92875	295.725	24.6	15587.5	6494.408	31.92397	69937.24	1365.375	1116.7	1116.5	469.3	190	190.3	-36.75	-59.875	-112.6125	347.9375	23.6
2023-06-28	10:50:00	27.99	6.385	161.7075	182.385	5.28	316.8	24.6	15550	6393.284	29.02523	63741.81	1362.906	1114.6	1115.4	469.2	190	189.3	-15.95	-34	-83.7	392.75	23.66
2023-06-28	10:51:00	28.125	6.79	160.29	182.385	5.275	316.5	24.6	15181.25	6393.284	28.90325	63572.71	1371.375	1114.7	1115.4	469.1	190	189.3	-10.65	-27	-76.875	403.5625	23.92
2023-06-28	10:52:00	28.08	6.185	160.6725	182.115	5.22375	313.425	24.6	15562.5	6393.284	29.61933	65075.8	1369.906	1113.2	1113.4	469	189.5	189.3	-13.1	-30.75	-82.5375	412.5625	23.08
2023-06-28	10:53:00	28.68	6.46	160.0087	181.53	5.2875	317.25	24.6	15031.25	6393.284	28.85132	63085.16	1402.719	1114.6	1114.5	469	189.5	189.3	-9.7	-27.5	-73.9875	424.5625	23
2023-06-28	10:54:00	28.5	6.34	160.9988	181.935	5.175	310.5	24.6	15000	6292.16	32.00826	69690.4	1408.281	1116.8	1116.6	469	189	189.3	-32.95	-62.375	-99.75	361	23.16
2023-06-28	10:55:00	28.92	5.98	160.1437	183.285	5.4225	325.35	24.6	15593.75	6432.61	30.21892	65486.63	1401.063	1116.4	1116.6	469.1	189.5	189.3	-17.5	-36.375	-86.5125	409	23.02
2023-06-28	10:56:00	28.665	6.52	160.2	182.925	5.61125	336.675	24.6	15200	6320.25	29.04967	63247.35	1408.063	1117.3	1116.6	469.1	190	189.3	-11.6	-30.5	-79.5	420.5	23.96
2023-06-28	10:57:00	28.485	5.815	160.5712	182.205	5.33875	320.325	24.6	15693.75	6426.992	29.98216	65454.93	1394.25	1117.6	1117.6	469.2	189.5	189.3	-20.75	-43.25	-94.575	399.375	22.98
2023-06-28	10:58:00	28.68	6.535	161.235	182.745	5.4425	326.55	24.6	15300	6426.992	29.01362	63509.13	1408.906	1117.5	1117.6	469.2	190.5	189.3	-11.75	-31.25	-81.525	413.3125	23.52
2023-06-28	10:59:00	28.8	6.625	160.7625	181.8	5.3225	319.35	24.6	15075	6325.868	29.07385	63796.02	1408.281	1121.1	1120.6	469.3	190.5	189.3	-9.6	-29.75	-75.5625	424.125	24
2023-06-28	11:00:00	28.71	5.78	161.3812	182.7	5.26375	315.825	24.6	15500	6353.958	29.58741	64726.14	1402.719	1124	1123.6	469.5	191.5	189.3	-16.8	-38.375	-86.6625	390.875	23.56
2023-06-28	11:01:00	28.56	6.41	160.7175	182.07	5.155	308.25	24.6	15250	6353.958	28.91801	63260.26	1409.531	1126.1	1125.6	469.8	192	189.3	-10.3	-31.25	-77.25	403	23.94
2023-06-28	11:02:00	28.515	6.31	161.0437	182.205	5.3225	319.35	24.6	15818.75	6455.082	29.72974	65058.03	1397.75	1127.4	1127.6	470.2	192	189.3	-19.1	-40.75	-91.575	407.375	22.98
2023-06-28	11:03:00	28.8	6.77	160.7175	183.33	5.25375	315.225	24.6	15137.5	6353.958	29.18467	63468.37	1410.344	1127.4	1127.6	470.4	192.5	189.3	-9.4	-28.5	-75.375	420.25	23.12
2023-06-28	11:04:00	28.665	5.995	161.3812	183.195	5.2075	313.65	24.6	14987.5	6252.834	28.38378	61485.92	1408.281	1129.9	1129.6	470.6	192.5	189.3	-6.6	-24.375	-68.8875	427.5	24.04
2023-06-28	11:05:00	27.93	6.755	161.3812	183.735	5.19	309.675	24.6	15475	6455.082	29.81197	64262.8	1413.438	1129.8	1130.6	470.8	192.5	189.3	-18.05	-38.375	-87.675	405.3125	23.12
2023-06-28	11:06:00	27.915	6.46	160.2	182.79	5.18125	310.875	24.6	15225	6353.958	28.9748	62576.41	1414.875	1129.1	1129.5	471.2	193	190.4	-11.9	-30.75	-76.3125	417.125	23.68
2023-06-28	11:07:00	27.735	5.75	161.5725	182.79	5.09375	304.8	23.7	15975	6353.958	30.16019	65310.19	1407.031	1129.9	1129.5	471.3	192.5	190.4	-27.35	-49	-103.3125	389.625	24.06
2023-06-28	11:08:00	27.96	5.5	160.9988	182.97	5.15375	309.225	23.7	15437.5	6353.958	29.31418	63379.47	1415.281	1128.9	1129.5	471.3	193	190.4	-13.1	-32.5	-79.65	410.125	24.02
2023-06-28	11:09:00	28.005	6.035	161.1	182.295	5.27125	316.275	24.75	15225	6353.958	29.08168	63006.08	1411.594	1129.4	1129.5	471.4	193	190.4	-10.85	-30.125	-75.9	423.375	23.94
2023-06-28	11:10:00	28.29	6.535	161.235	183.195	5.2	312	24.75	15550	6370.812	28.8477	62577.35	1412.188	1130.5	1129.5	471.5	193	190.4	-17	-36.875	-88.2375	386.875	23.16
2023-06-28	11:11:00	28.08	5.875	160.0988	182.205	5.18	310.8	24.75	15325	6370.812	28.9106	62785.46	1420.25	1131.1	1130.6	471.7	193.5	190.4	-13.1	-31.5	-79.3875	402.375	23.7
2023-06-28	11:12:00	27.93	6.84	160.29	181.35	5.14125	307.5	24.75	15712.5	6483.172	31.20975	68060.14	1414.25	1130.7	1130.6	471.6	193	190.4	-34.55	-57.75	-112.1625	361.125	23.64
2023-06-28	11:13:00	27.99	6.125	160.9988	183.24	5.2675	316.05	24.75	15187.5	6370.812	29.42335	63590.75	1412	1129.1	1129.5	471.7	193	190.4	-12.3	-33.375	-75.9	418.75	23.86
2023-06-28	11:14:00	27.945	6.005	160.9988	182.61	5.22125	312.225	24.75	15081.25	6269.688	28.62453	61644.27	1418.594	1128.4	1128.4	471.4	192	190.4	-7.7	-26.25	-69.2625	427	23.38
2023-06-28	11:15:00	27.75	6.3	160.38	181.26	5.36625	321.975	24.75	15800	6376.43	29.70889	63902.8	1410.563	1124.7	1125.4	471.2	191.5	190.4	-19.05	-39.875	-90.975	396.9375	23.92
2023-06-28	11:16:00	28.11	5.985	161.0437	183.06	5.23	313.8	24.75	15300	6376.43	29.14541	62928.7	1416.75	1120.5	1121.4	471	191.5	190.4	-12.7	-31.375	-79.5375	414.25	23.3
2023-06-28	11:17:00	27.705	6.545	159.435	181.89	5.115	306.9	24.75	15431.25	6376.43	31.53204	68282.64	1407.25	1118.8	1119.4	470.8	191	190.4	-35.3	-60.75	-108.525	352.25	24.1
2023-06-28	11:18:00	28.155	5.585	160.7625	183.285	5.11375	308.1	24.75	15575	6477.554	29.62772	64624.47	1404.156	1113.2	1114.1	470.6	191	190.4	-16.1	-36.875	-84.1875	406.6875	23.04
2023-06-28	11:19:00	28.095	5.63	160.4363	182.52	5.20875	311.55	24.75	15237.5	6353.958	29.05347	63618.23	1411.375	1109.7	1109.9	470.2	190	190.4	-12.5	-31.75	-78.75	418.375	23.86
2023-06-28	11:20:00	28.005	7.26	160.9988	182.475	5.3625	321.75	24.75	15881.25	6455.082	30.09653	65943.37	1405.406	1107.1	1107.9	469.6	189.5	190.4	-23.5	-44.375	-95.2875	385.4375	23.48
2023-06-28	11:21:00	28.155	6.06	160.9537	183.78	5.02	301.2	24.75	15293.75	6337.104	29.70997	65241.99	1410.75	1104.7	1104.8	469.3	189.5	190.4	-13.9	-33.875	-81.1875	398.4375	23.98
2023-06-28	11:22:00	28.005	6.16	161.5725	181.575	5.19	311.4	24.75	15293.75	6449.464	29.89011	65831.67	1409.094	1102.8	1102.8	468.8	188.5	189.3	-11.65	-33	-81.075	382.4375	23.08
2023-06-28	11:23:00	28.095	6.475	160.5263	181.08	5.17375	310.575	24.75	15312.5	6449.464	29.59632	64953.33	1401.469	1100.1	1100.8	468.3	188	189.3	-12.4	-29.5	-80.325	419.125	23.74
2023-06-28	11:24:00	28.14	6.8	160.6163	182.7	5.0475	302.85	24.75	15062.5	6331.486	28.77606	63134.87	1405.188	1099.3	1099.8	467.9	187.5	189.3	-8.75	-28.375	-72.375	428.4375	24.08
2023-06-28	11:25:00	27.75	5.8	160.5712	182.025	5.1	306	24.75	15906.25	6443.846	29.9775	65648.63	1391.563	1098.2	1098.8	467.2	186.5	188.3	-28.2	-51.125	-99.225	394.25	23.46
2023-06-28	11:26:00	28.17	6.695	159.8175	182.925	5.01875	301.125	24.75	15350	6550.588	29.56746	64916.54	1402.719	1095.4	1095.8	467.1	186.5	188.3	-14.7	-33.25	-83.8125	412.5	23.12
2023-06-28	11:27:00	28.23	6.345	160.5263	182.34	5.06625	303.975	24.75	15331.25	6325.868	27.89503	61587.26	1370.75	1097	1096.9	466.6	186	188.3	-11.45	-27.75	-77.8875	423.8125	23.86
2023-06-28	11:28:00	28.53	5.795	161.3363	183.555	5.065	303.9	24.75	15556.25	6421.374	29.7314	65671.77	1385.594	1098.2	1098.1	466.4	186	188.3	-19.35	-40.375	-88.875	405.375	23.3
2023-06-28	11:29:00	28.575	6.155	161.0437	183.78	5.09	305.4	24.75	15275	6309.014	29.21602	64545.78	1380.656	1102	1101.1	466.3	186.5	188.3	-14.5	-35.75	-79.575	418.3125	23.96
2023-06-28	11:30:00	28.17	6.275	160.6725	182.79	5.04375	302.625	24.75	15993.75	6421.374	29.62408	65359.4	1384.781	1105.3	1105.1	466.1	186	187.3	-28.1	-49.5	-104.6625	377.5625	22.94
2023-06-28	11:31:00	28.32	6.74	161.6175	183.15	5.13125	308.85	24.75	15400	6421.374	29.51693	65056.02	1377.344	1104.9	1105.1	466.1	186.5	187.3	-15.4	-36.375	-83.175	398.625	23.54
2023-06-28	11:32:00	28.38	5.86	160.8075	183.33	4.77125	286.275	24.75	15281.25	6320.25	28.846	63858.76	1379.406	1108.3	1108.2	465.9	187	187.3	-14.6	-34	-78.6	408.625	23.56
2023-06-28	11:33:00	28.35	6.7	161.3363	179.82	4.85	291	24.75	15468.75	6426.992	29.3891	64875.67	1384.156	1107.9	1108.1	465.9	187	187.3	-15.95	-34.375	-84.525	419.375	23.02
2023-06-28	11:34:00	28.47	6.79	161.235	182.7	4.765	285.15	24.75	15125	6353.958	29.03205	64011.97	1360.031	1110.6	1110.2	466	187.5	187.3	-8.5	-31.875	-75.4875	429.25	23.48
2023-06-28	11:35:00	28.56	6.135	161.145	184.545	4.705	282.3	24.75	15993.75	6460.7	31.36941	68937.63	1354.438	1114.8	1114.2	466.1	187.5	187.3	-41.6	-64.75	-120.5625	353	23.8
2023-06-28	11:36:00	28.59	6.69	161.7075	184.185	4.765	285.9	24.75	15431.25	6460.7	28.98558	63473.76	1357.969	1119	1118.2	466.2	188.5	187.3	-14.45	-34.25	-81.75	412.0625	24.02
2023-06-28	11:37:00	28.365	7.245	161.0437	183.015	4.68875	281.325	24.75	15237.5	6348.34	28.41129	62452.26	1356.719	1123.2	1123.2	466.3	188.5	187.3	-10.95	-31.625	-76.2	421.4375	23.9
2023-06-28	11:38:00	28.215	6.585	161.0437	181.35	4.69375	281.625	24.75	15712.5	6353.958	29.97433	65413.64	1366.406	1122.8	1123.1	466.4	189	187.2	-19	-38.5	-89.925	406.8125	23.36
2023-06-28	11:39:00	28.47	6.085	160.0087	184.005	4.69875	281.925	24.75	15268.75	6359.576	29.38054	64363.17	1366.813	1122.8	1123.1	466.8	189.5	188.2	-13.35	-32.125	-80.6625	417.75	23.12
2023-06-28	11:40:00	28.125	6.07	161.0437	181.8	4.67375	280.425	24.75	15568.75	6359.576	31.44493	69161.64	1363.313	1123.8	1123.1	467.2	189.5	188.2	-35.8	-60.5	-114.3	349.9375	23.96
2023-06-28	11:41:00	28.26	6.83	161.4262	183.555	4.70375	282.225	24.75	15500	6455.082	29.21826	64182.32	1364.344	1122.1	1123.1	467.1	190	188.2	-17.35	-37	-87.1875	396.4375	23.22
2023-06-28	11:42:00	28.41	6.83	160.7175	182.34	4.71	282.6	24.75	15268.75	6342.722	28.99696	64007.53	1361.469	1121.9	1122	467.1	190.5	188.2	-12.1	-30.375	-77.475	406.6875	23.92

June 28/2023	Waste Flows							Air Flows				Temperatures						Pressures				Flows
	Rich	Emulsion	Lean	Alkaline	TDU Flow	TDU Flow	Leachate	Primary	Secondary	Stack Velocity	Stack Flow	Primary	SecondaryA	SecondaryB	Quench	SprayDryer	Stack	Incinerator	SDA Inlet	SD Outlet	Baghouse	PAC
	FT-229	FT-219C	FT-223	PV-207	FT-313B	FT-313	PV-211	PV-236	PV-209	FT-260-VEL	FT-260-REFDRY	TE-240	T-241A	T-241B	TE-203	TE-204	TE-258	PT-242A	PT-249	PT-615	PDT-622	Lbs/h
Units	LPM	LPM	LPM	LPM	LPM	SCFM	LPM	m3/h	m3/h	m/s	Rm3/s	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	Degrees C	mmH2O	mmH2O	mmH2O	mmH2O	SC-PAC-FT
Max	28.9	7.3	161.7	184.5	5.6	336.7	24.8	15993.8	6550.6	32.0	69937.2	1420.3	1131.1	1130.6	471.7	193.5	190.4	-6.6	-24.4	-68.9	429.3	24.1
Min	27.7	5.5	159.4	179.8	4.7	280.4	23.7	14987.5	6252.8	27.9	61485.9	1354.4	1095.4	1095.8	465.9	186.0	187.2	-41.6	-64.8	-120.8	347.9	22.9
Average	28.3	6.3	160.8	182.6	5.1	306.5	24.7	15425.7	6392.6	29.6	64637.0	1390.9	1116.8	1116.9	469.0	189.9	189.3	-17.0	-37.3	-85.8	403.0	23.6
Variance	0.085570328	0.167520328	0.240266252	0.740846803	0.045197466	162.9813996	0.03677459	68466.27391	3729.670834	0.758042261	3695836.497	439.5740839	97.80211475	96.90398907	3.437956284	4.384153005	1.225846995	72.42479508	106.0601776	152.4314308	469.0611424	0.1367843

June 27/2023		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
2023-06-27	11:45:00	30.88	0.21	8.8	41.22	13.4	8.33	2.88	1.8	76.48	13.17	-0.01	37.14	14	9.08	0.3
2023-06-27	11:46:00	30.88	0.21	8.83	41.3	13.8	8.33	3.52	1.8	77.8	11.42	-0.01	31.89	10.6	9.55	0.3
2023-06-27	11:47:00	30.88	0.21	8.84	41.36	15.4	8.33	5.96	1.8	83.68	9.59	-0.01	42.28	13.6	9.12	0.3
2023-06-27	11:48:00	30.88	0.21	8.84	41.41	10.6	8.33	3.3	0.7	96.75	6.6	-0.01	32.81	12.7	9.64	0.3
2023-06-27	11:49:00	30.53	0.21	8.79	41.21	14.6	8.33	3.07	0.7	100.38	8.48	-0.01	33.98	11.2	9.44	0.3
2023-06-27	11:50:00	29.67	0.21	8.77	41.16	13.3	8.33	1.55	0.7	105.07	8.48	-0.01	33.34	12.3	9.02	0.3
2023-06-27	11:51:00	29.47	0.21	8.76	41.19	13.3	8.33	1.96	0.7	95.3	10.03	-0.01	30.95	10.6	9.48	0.3
2023-06-27	11:52:00	29.28	0.21	8.79	41.29	18.9	8.33	4.05	0.7	95.3	8.93	-0.01	47.16	15.1	9.07	0.3
2023-06-27	11:53:00	29.62	0.21	8.82	41.3	8.9	8.33	1.77	4.6	94.13	12.24	-0.01	34.71	11.3	10.02	0.3
2023-06-27	11:54:00	29.51	0.21	8.71	40.93	10.1	8.33	1.96	4.6	91.34	12.24	-0.01	29.71	8.5	9.82	0.3
2023-06-27	11:55:00	27.73	0.21	8.52	40.48	11.9	8.59	1.43	2.3	105.59	11.86	2.3	36.31	10.8	9.4	0.3
2023-06-27	11:56:00	27.73	0.21	8.55	40.57	10.3	8.59	1.93	2.3	104.27	8.93	1.21	31.41	8.3	9.83	0.3
2023-06-27	11:57:00	28.11	0.21	8.62	40.73	14.5	8.59	2.16	1.1	90.36	7.88	1.21	41.05	11.5	9.4	0.3
2023-06-27	11:58:00	30.55	0.21	8.71	40.89	11	8.59	1.77	1.1	90.36	7.88	1.21	46.56	13.4	9.96	0.3
2023-06-27	11:59:00	31.46	0.21	8.75	41	15	8.59	2.12	1.1	90.36	10.46	1.21	37.08	11.2	9.35	0.3
2023-06-27	12:00:00	31.99	0.21	8.82	41.25	15	8.59	1.56	1.1	87.66	11.9	-0.18	45.5	14.5	8.94	0.3
2023-06-27	12:01:00	31.99	0.21	8.83	41.26	12.6	8.36	1.9	1.1	100.1	9.98	-0.18	36.52	11	9.69	0.3
2023-06-27	12:02:00	32.32	0.21	8.79	41.18	15.6	8.36	2.07	1.1	98.73	9.98	-0.18	41.57	13.4	9.27	0.3
2023-06-27	12:03:00	36.28	0.21	8.84	41.3	10.5	8.36	1.65	1.1	84.24	9.98	0.18	45.04	15.9	9.71	0.3
2023-06-27	12:04:00	36.4	0.21	8.79	41.13	13.7	8.36	2.15	4.1	107.54	9.98	0.18	33	10.3	9.5	0.3
2023-06-27	12:05:00	35.08	0.21	8.74	41.12	14.6	8.36	1.63	6.2	113.4	11.23	0.18	37.8	13	9.08	0.3
2023-06-27	12:06:00	33.51	0.21	8.83	41.31	15.4	8.36	1.97	6.2	102.31	11.23	0.18	30.36	10.3	9.51	0.3
2023-06-27	12:07:00	33.51	0.21	8.91	41.48	21.4	8.36	2.2	6.2	101.03	8.58	0.18	47.86	14.8	8.86	0.3
2023-06-27	12:08:00	43.61	0.21	9.02	41.8	18	8.36	1.56	6.2	77.34	6.01	0.18	68.99	21.9	8.65	0.3
2023-06-27	12:09:00	44.05	0.21	8.97	41.59	14.7	8.1	2.07	2.5	84.98	6.01	0.18	31.22	11.2	9.52	0.3
2023-06-27	12:10:00	42.1	0.21	8.93	41.44	14.1	8.1	2.05	2.5	91.8	8.81	0.18	33.39	12.6	8.9	0.3
2023-06-27	12:11:00	35.15	0.21	8.88	41.34	11.4	8.1	1.85	2.5	101.25	8.81	0.18	32.88	13.2	9.74	0.3
2023-06-27	12:12:00	33.8	0.21	8.8	41.18	15.3	8.1	2.16	1.4	99.6	15	0.18	46.76	13.8	9.32	0.3
2023-06-27	12:13:00	33.47	0.21	8.8	41.33	15	8.34	1.62	1.4	106.77	17.18	-0.13	42.67	14.5	8.9	0.3
2023-06-27	12:14:00	33.15	0.21	8.83	41.34	11.5	8.34	2.06	1.4	101.49	13.98	-0.13	30.67	10.3	9.57	0.3
2023-06-27	12:15:00	29.57	0.21	8.81	41.24	17.3	8.34	2.32	1.4	101.49	11.94	-0.13	42.77	13	9.15	0.3
2023-06-27	12:16:00	29.57	0.21	8.87	41.38	10.9	8.34	1.82	1.4	100.46	9.43	-0.13	32.31	12	9.16	0.3
2023-06-27	12:17:00	29.59	0.21	8.89	41.45	17.2	8.34	2.15	1.4	88.32	6.91	-0.13	42.21	13.6	8.98	0.3
2023-06-27	12:18:00	32.77	0.21	8.94	41.62	19.8	8.34	1.52	1.4	88.32	6.91	-0.13	60.77	19	8.77	0.3
2023-06-27	12:19:00	35.67	0.21	8.95	41.54	11.6	8.13	1.96	1.4	91.57	9.28	-0.13	28.38	9.8	9.45	0.3
2023-06-27	12:20:00	35.56	0.21	8.87	41.34	14.2	8.13	2.8	1.4	111.86	9.28	-0.13	36.86	12.3	9.24	0.3
2023-06-27	12:21:00	32	0.21	8.85	41.37	11.5	8.13	1.82	1.4	111.86	9.78	-0.13	34.6	12	9.92	0.3
2023-06-27	12:22:00	30.07	0.21	8.81	41.33	12.3	8.13	2.08	1.4	109.08	11.33	-0.13	30.77	11	9.27	0.3
2023-06-27	12:23:00	28.78	0.21	8.79	41.39	15	8.35	1.7	1.4	109.08	8.93	-0.13	39.11	13.6	9.07	0.3
2023-06-27	12:24:00	28.78	0.21	8.84	41.42	12.1	8.35	1.92	5.9	107.97	11.49	-0.13	36.43	11	9.72	0.3
2023-06-27	12:25:00	29.02	0.21	8.77	41.22	14.6	8.35	2.12	5.9	102.03	11.49	-0.13	34.4	11.8	9.32	0.3
2023-06-27	12:26:00	29.55	0.21	8.77	41.36	13.5	8.35	1.71	4.9	100.38	9.04	-0.13	39.98	14.4	9.1	0.3
2023-06-27	12:27:00	29.86	0.21	8.84	41.48	13.4	8.35	2.23	1.8	96.84	5.58	-0.13	33.25	11.4	9.1	0.3
2023-06-27	12:28:00	29.98	0.21	8.88	41.59	15.4	8.35	1.62	0.7	96.84	8	-0.13	42.33	14.7	9.1	0.3
2023-06-27	12:29:00	30.19	0.21	8.88	41.52	11	8.35	2.01	0.7	96.84	8	-0.13	31.23	9.9	9.74	0.3
2023-06-27	12:30:00	30.32	0.21	8.78	41.18	12.7	8.35	2.15	0.7	91.97	8	-0.13	36.92	11.1	9.32	0.3
2023-06-27	12:31:00	30.32	0.21	8.73	41.08	14.3	8.35	1.77	0.7	103.48	9.19	-0.13	44.79	14.8	9.66	0.3
2023-06-27	12:32:00	30.63	0.21	8.71	41.05	12.7	8.35	2.03	0.7	102.32	9.19	-0.13	44.39	11.8	9.69	0.3
2023-06-27	12:33:00	31.5	0.21	8.71	41.07	15	8.35	2.03	0.7	80.22	7.13	2.22	46.49	13.9	9.26	0.3
2023-06-27	12:34:00	31.75	0.21	8.75	41.22	10.4	8.35	1.97	0.7	84.37	9.44	-0.15	36.71	11.2	9.64	0.3
2023-06-27	12:35:00	31.75	0.21	8.7	41.08	13.4	8.35	2.16	0.7	92.99	9.44	-0.15	37.4	11.5	9.44	0.3
2023-06-27	12:36:00	32.14	0.21	8.7	41.16	15	8.35	1.58	0.7	99.28	6.07	-0.15	42.62	13.8	9.23	0.3
2023-06-27	12:37:00	32.33	0.21	8.76	41.27	15	8.35	2.08	0.7	100.91	6.07	-0.15	35.47	10.6	9.45	0.3
2023-06-27	12:38:00	33.07	0.21	8.8	41.4	17.3	8.35	2.51	2.1	93.77	7.7	-0.15	48.54	15.2	9.02	0.3
2023-06-27	12:39:00	33.28	0.21	8.85	41.52	11	8.35	2.01	6.4	91.93	9.3	-0.15	36.83	12.4	9.63	0.3
2023-06-27	12:40:00	33.13	0.21	8.78	41.26	12.4	8.35	2.23	1.7	91.93	9.3	-0.15	32.6	10.7	9.43	0.3
2023-06-27	12:41:00	31.58	0.21	8.74	41.13	12.5	8.35	1.78	1.7	89.18	8.76	-0.15	37.12	12.2	9.22	0.3
2023-06-27	12:42:00	31.25	0.21	8.67	41	12.2	8.35	2	0.7	86.91	5.97	-0.15	41.88	10.8	9.84	0.3
2023-06-27	12:43:00	32.18	0.21	8.64	40.92	14.9	8.56	2.61	0.7	78.34	5.97	-0.15	46.96	13.7	9.44	0.3
2023-06-27	12:44:00	34.78	0.21	8.71	41.12	12	8.56	1.77	0.7	81.11	8.42	0.8	39.27	13.5	9.7	0.3
2023-06-27	12:45:00	35.22	0.21	8.67	41.07	14.2	8.56	2.11	0.7	90.76	6.23	0.8	38.67	11.6	9.69	0.3

June 27/2023	Main Analyzers											Backup Analyzers			
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
Test 1	PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Units	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
Max	44.1	0.2	9.0	41.8	21.4	8.6	6.0	6.4	113.4	17.2	2.3	69.0	21.9	10.0	0.3
Min	27.7	0.2	8.5	40.5	8.9	8.1	1.4	0.7	76.5	5.6	-0.2	28.4	8.3	8.7	0.3
Average	32.1	0.2	8.8	41.2	13.7	8.35	2.1	2.0	95.5	9.4	0.1	38.7	12.5	9.4	0.3
Variance	11.13894219	9.47686E-32	0.008618852	0.055637213	6.008868852	0.015448306	0.47957623	3.166781421	85.7425894	5.426403661	0.288092787	53.75482464	5.06963388	0.101479454	1.53509E-31

June 27/2023		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
2023-06-27	13:05:00	36.21	0.21	8.61	40.79	11.8	8.42	2.15	10	76.36	11.55	-0.05	36.91	9.2	10.02	0.3
2023-06-27	13:06:00	36.48	0.21	8.44	40.36	14.3	8.7	2.92	5.8	77.7	9.61	2.34	52.59	12.2	9.82	0.3
2023-06-27	13:07:00	37.58	0.21	8.5	40.55	16.2	8.7	1.93	3	83.28	8	2.34	56.71	15.1	9.4	0.3
2023-06-27	13:08:00	44.62	0.21	8.67	41.07	22.1	8.7	2.28	3	87.48	11.84	2.34	64.65	19	9.19	0.3
2023-06-27	13:09:00	51.74	0.21	8.87	41.49	22	8.46	1.6	5.2	85.81	14.67	2.34	68.72	22.9	8.77	0.3
2023-06-27	13:10:00	51.6	0.21	8.9	41.47	14.8	8.23	2.12	6.4	77.11	10.98	0.03	40.35	11.5	9.53	0.3
2023-06-27	13:11:00	43.73	0.21	8.83	41.32	16.2	8.23	4.01	8.8	77.11	9.49	0.03	49.9	15	9.11	0.3
2023-06-27	13:12:00	41.07	0.21	8.79	41.32	11.3	8.23	1.78	8.8	83.48	8.4	0.03	45.15	14.4	9.96	0.3
2023-06-27	13:13:00	40.19	0.21	8.75	41.22	14.6	8.23	2.23	4.6	83.48	8.4	0.03	45.97	12.2	9.55	0.3
2023-06-27	13:14:00	40.05	0.21	8.72	41.16	16.5	8.45	1.65	3	83.48	10.84	0.03	53.7	15.5	9.15	0.3
2023-06-27	13:15:00	40.15	0.21	8.72	41.11	14	8.45	2.05	3	96.03	10.84	0.03	42.07	11	9.85	0.3
2023-06-27	13:16:00	40.15	0.21	8.7	41	15.6	8.45	2.2	3	101.12	10.84	0.03	50.33	15	9.44	0.3
2023-06-27	13:17:00	40.3	0.21	8.72	41.13	16.7	8.45	1.78	3	95.79	13.53	0.03	49.09	14.8	9.23	0.3
2023-06-27	13:18:00	40.45	0.21	8.84	41.44	21.4	8.45	2.17	3	76.99	11.17	0.03	54.34	16.1	9.23	0.3
2023-06-27	13:19:00	41.69	0.21	8.9	41.62	18.7	8.45	1.66	3	83.46	11.17	0.03	61.05	21.7	8.82	0.3
2023-06-27	13:20:00	43.13	0.21	8.84	41.36	12.2	8.23	1.96	3	103.87	5.62	0.03	40.38	10	9.9	0.3
2023-06-27	13:21:00	41.43	0.21	8.71	41.03	16.1	8.23	2.23	1.7	106.78	8.05	0.03	41.74	12.4	9.27	0.3
2023-06-27	13:22:00	40.06	0.21	8.75	41.16	11.3	8.44	1.85	1.7	104.71	8.05	0.22	43.25	15.3	9.66	0.3
2023-06-27	13:23:00	39.2	0.21	8.76	41.15	13.3	8.44	2.2	1.7	104.71	8.05	0.22	38.92	10.4	9.67	0.3
2023-06-27	13:24:00	33.82	0.21	8.71	41.12	16.6	8.44	2.11	1.7	101.94	6.31	0.22	38.63	12.5	9.27	0.3
2023-06-27	13:25:00	33.25	0.21	8.76	41.14	11.8	8.44	2.02	1.7	92.79	6.3	0.22	33.17	12.1	9.64	0.3
2023-06-27	13:26:00	32.51	0.21	8.71	41.07	17.1	8.44	2.28	3	97.11	6.3	0.22	36.71	12.1	9.44	0.3
2023-06-27	13:27:00	32.51	0.21	8.75	41.19	14.8	8.44	1.71	3	97.11	9.21	1.61	37.82	13.8	9.01	0.3
2023-06-27	13:28:00	32.61	0.21	8.82	41.35	15.7	8.44	2.23	5.5	102.41	11.44	0.54	37.08	11.7	9.41	0.3
2023-06-27	13:29:00	32.61	0.21	8.84	41.38	17.3	8.44	2.35	5.5	97.52	11.44	0.54	47.06	16.2	8.98	0.3
2023-06-27	13:30:00	33.37	0.21	8.89	41.44	13.7	8.44	1.81	5.5	97.52	11.44	0.54	37.98	13.5	9.74	0.3
2023-06-27	13:31:00	33.66	0.21	8.83	41.22	13.6	8.44	2.15	3	100.53	8.1	0.54	39.5	12.9	9.32	0.3
2023-06-27	13:32:00	33.24	0.21	8.76	41.15	13.3	8.44	2.27	3	94.98	6.14	0.54	34.12	11.8	9.1	0.3
2023-06-27	13:33:00	31.8	0.21	8.74	41.08	12.1	8.44	2	3	94.98	6.14	0.54	30.71	10.1	9.79	0.3
2023-06-27	13:34:00	31.16	0.21	8.73	41.07	16.4	8.44	2.11	1.7	86.19	6.11	0.54	43.12	13.2	9.16	0.3
2023-06-27	13:35:00	31.52	0.21	8.8	41.29	14.4	8.44	1.82	1.7	86.19	6.1	-0.06	44.14	15	9.6	0.3
2023-06-27	13:36:00	34.46	0.21	8.8	41.25	15.6	8.44	2.17	1.7	100.93	11.73	-0.06	44.94	13.3	9.4	0.3
2023-06-27	13:37:00	34.71	0.21	8.77	41.24	15.3	8.44	1.47	1.7	102.03	7.5	-0.06	40.97	13.6	8.98	0.3
2023-06-27	13:38:00	33.74	0.21	8.83	41.32	10.3	8.44	2.11	1.7	84.11	4.55	-0.06	28.33	9.5	9.62	0.3
2023-06-27	13:39:00	32.85	0.21	8.86	41.44	17.6	8.44	2.18	1.7	71.62	3.5	-0.06	49.45	14.4	8.98	0.3
2023-06-27	13:40:00	33.58	0.21	8.9	41.65	14	8.44	1.67	0.6	82.92	8.76	-0.06	47.11	15.6	9.76	0.3
2023-06-27	13:41:00	35.87	0.21	8.87	41.53	12	8.22	2.03	0.6	98.33	8.76	-0.06	34.13	10.9	9.35	0.3
2023-06-27	13:42:00	35.75	0.21	8.78	41.37	15.2	8.22	1.66	0.6	95.39	8.79	-0.06	47.67	15	9.15	0.3
2023-06-27	13:43:00	35.17	0.21	8.79	41.28	12	8.22	1.92	0.6	95.39	7.44	-0.06	35.69	10.3	9.79	0.3
2023-06-27	13:44:00	34.72	0.21	8.73	41.12	14.2	8.22	2.12	0.6	102.78	5.62	-0.06	40.2	12.6	9.37	0.3
2023-06-27	13:45:00	34.47	0.21	8.72	41.16	13.4	8.43	1.67	0.6	87.42	5.62	-0.06	33.74	12.7	9.69	0.3
2023-06-27	13:46:00	32.7	0.21	8.74	41.13	12.2	8.43	2.08	0.6	86.23	6.65	-0.06	34.28	10.6	9.68	0.3
2023-06-27	13:47:00	31.97	0.21	8.69	41.04	15.1	8.43	1.7	4.1	88.08	9.55	1.4	37.82	13.2	9.27	0.3
2023-06-27	13:48:00	31.97	0.21	8.75	41.25	14.3	8.43	2.01	4.1	97.13	9.55	1.4	32.43	10.7	9.72	0.3
2023-06-27	13:49:00	32.25	0.21	8.81	41.4	21.3	8.43	2.25	4.1	98.87	10.59	1.4	60.3	19.1	9.1	0.3
2023-06-27	13:50:00	37.06	0.21	8.93	41.6	20	8.43	1.55	10.7	88.42	13.94	1.4	50.78	17.7	8.94	0.3
2023-06-27	13:51:00	39.11	0.21	8.93	41.53	13.8	8.2	2.12	10.7	90.53	12.57	0.37	31.9	11.2	9.47	0.3
2023-06-27	13:52:00	38.08	0.21	8.85	41.24	16.6	8.2	2	9.2	90.53	12.57	0.37	44.18	14.2	9.27	0.3
2023-06-27	13:53:00	35.95	0.21	8.81	41.16	11.7	8.2	1.93	9.2	93.92	14.52	0.37	34.28	12.1	9.69	0.3
2023-06-27	13:54:00	34.13	0.21	8.77	41.1	15.3	8.41	2.16	5.6	93.92	14.52	0.37	38.36	11.8	9.26	0.3
2023-06-27	13:55:00	35.99	0.21	9.64	46.2	15.4	9.21	1.6	1.9	102.47	9.49	0	45.81	16.5	9.05	0.3
2023-06-27	13:56:00	35.64	0.21	9.64	46.19	14.3	9.21	1.96	1.9	100.86	6.48	0	35.22	10.3	9.6	0.3
2023-06-27	13:57:00	35.64	0.21	7.65	46	15.7	9.21	2.77	0.8	99.86	8.34	0	44.75	14.8	9.19	0.3
2023-06-27	13:58:00	35.88	0.21	8.78	46.28	11.6	9.21	1.75	0.8	102.22	9.82	0	34.26	12.9	9.19	0.3
2023-06-27	13:59:00	37.5	0.21	8.84	46.44	15	9.21	2.11	3.1	102.22	12.57	0	37.14	12.9	9.21	0.3
2023-06-27	14:00:00	38.25	0.21	8.91	46.58	15.6	9.01	1.47	4.4	93.31	12.57	0	51.63	16.2	9	0.3
2023-06-27	14:01:00	39.63	0.21	8.87	46.44	11.6	9.01	1.97	5.6	105.6	11.49	0	30.47	9.8	9.48	0.3
2023-06-27	14:02:00	39.52	0.21	8.76	46.2	13.4	9.01	3.63	5.6	110.83	11.49	0	43.35	14.8	9.27	0.3
2023-06-27	14:03:00	39.52	0.21	8.76	46.15	11.9	9.01	1.77	5.6	126.45	12.83	0	42.14	14.1	9.88	0.3
2023-06-27	14:04:00	39.42	0.21	8.72	46	15.3	9.01	2.05	4.5	135.44	8.8	0	39.71	11.6	9.46	0.3
2023-06-27	14:05:00	43.13	0.21	9.54	50.6	17.2	10.07	1.58	3.1	132.93	5.46	0	51.12	16.4	9.02	0.3

June 27/2023	Main Analyzers											Backup Analyzers			
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
Test 1	PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Units	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
Max	51.7	0.2	9.6	50.6	22.1	10.1	4.0	10.7	135.4	14.7	2.3	68.7	22.9	10.0	0.3
Min	31.2	0.2	7.7	40.4	10.3	8.2	1.5	0.6	71.6	3.5	-0.1	28.3	9.2	8.8	0.3
Average	37.1	0.2	8.8	42.2	15.0	8.54	2.1	3.7	95.1	9.4	0.4	42.9	13.6	9.4	0.3
Variance	19.76766503	9.47686E-32	0.063076667	4.757379016	7.253010929	0.124139399	0.18713623	7.214808743	151.3863506	7.492359891	0.448464317	75.33285393	7.861344262	0.094584918	1.53509E-31

		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
2023-06-27	14:23:00	58.43	0.21	8.72	47.66	14.3	9.19	1.73	2.8	171.35	7.03	-3.84	3.47	3.9	20.69	0.3
2023-06-27	14:24:00	50.98	0.21	8.65	47.32	13.8	9.19	2.05	4	172.49	9.73	-3.84	37.88	10.1	9.68	0.3
2023-06-27	14:25:00	49.84	0.21	8.65	47.25	15.5	9.19	4.58	4	147.62	12.41	8.08	37.54	12.2	9.27	0.3
2023-06-27	14:26:00	50.16	0.21	8.68	47.93	13.8	9.47	1.93	4	145.64	12.41	-0.07	38.57	13.2	9.82	0.3
2023-06-27	14:27:00	50.03	0.21	8.61	47.74	13.4	9.47	2.16	7.4	133.49	12.88	-0.07	38.36	11.4	9.61	0.3
2023-06-27	14:28:00	50.02	0.21	8.6	47.77	15.5	9.47	1.55	9.3	133.49	12.88	-0.07	40.2	13.2	9.19	0.3
2023-06-27	14:29:00	50.02	0.21	8.67	48.02	18.1	9.47	2	9.3	133.49	14.32	-0.07	37.86	11.2	9.6	0.3
2023-06-27	14:30:00	50.2	0.21	8.78	48.3	20.5	9.47	2.35	2.3	123.73	11.8	-0.07	41.15	15	8.98	0.3
2023-06-27	14:31:00	51	0.21	8.86	48.43	10.7	9.26	1.73	2.3	107.94	10.14	-0.07	39.6	14.8	9.74	0.3
2023-06-27	14:32:00	50.35	0.21	8.73	48.06	14.1	9.26	2.18	2.3	106.25	11.27	-0.07	37.98	11.2	9.52	0.3
2023-06-27	14:33:00	47.2	0.21	8.66	47.88	13.6	9.26	1.75	2.3	130.62	11.27	-0.07	40.32	12.5	9.32	0.3
2023-06-27	14:34:00	46.36	0.21	8.62	47.75	12.2	9.26	2	6.4	144.81	11.27	-0.07	32.59	10	9.9	0.3
2023-06-27	14:35:00	43.87	0.21	8.6	47.64	15.2	9.47	2.21	7.6	129.46	11.27	-0.07	41.71	12.4	9.27	0.3
2023-06-27	14:36:00	42.76	0.21	8.67	47.8	11.1	9.47	1.71	7.6	110.9	12.49	0.17	43.3	13.8	9.76	0.3
2023-06-27	14:37:00	45.03	0.21	8.67	47.77	18.1	9.47	2.05	2.4	119.89	12.49	0.17	44.4	12.1	9.56	0.3
2023-06-27	14:38:00	48.42	0.21	8.68	47.85	17.1	9.47	1.73	2.4	117.58	12.49	0.17	42.41	14.8	9.15	0.3
2023-06-27	14:39:00	51.01	0.21	8.77	48.05	13.1	9.47	1.75	1.4	123.44	12.49	0.17	35.12	11.7	9.6	0.3
2023-06-27	14:40:00	51.01	0.21	8.79	48.13	18.9	9.27	2.17	1.4	129.34	11.11	0.17	45.44	13.9	9.19	0.3
2023-06-27	14:41:00	51.17	0.21	8.84	48.23	16.3	9.27	1.66	1.4	134.76	8.88	0.17	49.24	16.4	9.27	0.3
2023-06-27	14:42:00	51.71	0.21	8.76	48.09	12.8	9.27	2.1	1.4	121.7	11.63	0.17	40	10.4	9.59	0.3
2023-06-27	14:43:00	50.31	0.21	8.68	47.93	15.2	9.27	1.97	6.3	122.72	14.1	0.17	39.95	12.5	9.19	0.3
2023-06-27	14:44:00	48.55	0.21	8.71	47.92	11.7	9.27	1.86	6.3	111.36	14.1	0.17	38.93	11.8	9.77	0.3
2023-06-27	14:45:00	48.25	0.21	8.67	47.77	13.9	9.27	2.2	4.6	124.98	12.23	0.17	38.99	12.3	9.35	0.3
2023-06-27	14:46:00	48.42	0.21	8.68	47.89	16.3	9.27	1.82	2.8	125.22	9.08	1.42	52.14	17.1	9.15	0.3
2023-06-27	14:47:00	48.67	0.21	8.69	47.93	13.8	9.48	2.15	2.8	113.37	10.21	0.36	42.26	11.5	9.67	0.3
2023-06-27	14:48:00	48.67	0.21	8.64	47.81	17.4	9.48	3.05	1.6	114.61	7.51	0.36	45.79	14.1	9.26	0.3
2023-06-27	14:49:00	48.9	0.21	8.72	48.05	12.2	9.48	1.92	1.6	125.14	10.04	0.36	36.61	13.3	9.28	0.3
2023-06-27	14:50:00	49.15	0.21	8.79	48.21	17.4	9.48	2.22	1.6	125.14	10.04	0.36	46.64	14.7	9.1	0.3
2023-06-27	14:51:00	50.09	0.21	8.85	48.39	18.9	9.25	1.56	1.6	140.78	10.81	0.36	46.23	15.9	8.9	0.3
2023-06-27	14:52:00	51.49	0.21	8.83	48.3	12.5	9.25	2.07	0.6	139.15	9.57	0.36	37.29	11.3	9.7	0.3
2023-06-27	14:53:00	50.51	0.21	8.74	48.04	16.3	9.25	2.28	0.6	135.9	11.85	0.36	41.78	13.6	9.07	0.3
2023-06-27	14:54:00	48.16	0.21	8.75	48.07	13.1	9.25	1.82	0.6	117.28	8.24	0.36	39.29	13.2	10.02	0.3
2023-06-27	14:55:00	48.16	0.21	8.73	47.99	15.9	9.25	2.12	2.6	117.28	9.92	0.36	43.68	12.2	9.55	0.3
2023-06-27	14:56:00	48.75	0.21	8.67	47.91	18.3	9.25	1.63	2.6	119.02	9.92	0.36	48.93	16.4	9.15	0.3
2023-06-27	14:57:00	52.21	0.21	8.75	47.95	11.9	9.46	1.93	4.6	124.24	9.46	0.36	39.79	11.8	9.81	0.3
2023-06-27	14:58:00	53.82	0.21	8.68	47.72	15.4	9.46	2.18	3.2	120.62	6.67	0.36	48.23	13.8	9.4	0.3
2023-06-27	14:59:00	55.44	0.21	8.67	47.84	16	9.46	1.71	2.2	120.62	6.67	0.36	57.51	16.7	9.36	0.3
2023-06-27	15:00:00	57.62	0.21	8.7	48.02	18.5	9.46	2.07	1.1	122.73	9.31	0.36	56.37	15.1	9.36	0.3
2023-06-27	15:01:00	59.73	0.21	8.78	48.24	20.7	9.46	1.6	1.1	125.9	13.91	0.36	57.62	16.8	8.94	0.3
2023-06-27	15:02:00	62.66	0.21	8.85	48.31	13.7	9.46	2	5.2	125.54	13.91	0.36	51.18	13.2	9.74	0.3
2023-06-27	15:03:00	63.8	0.21	8.75	48.02	14.1	9.24	2.12	5.2	126.94	13.91	0.36	46.09	13.5	9.32	0.3
2023-06-27	15:04:00	63.8	0.21	8.71	47.96	16.3	9.24	1.77	2.4	133.8	12.32	0.36	57.31	16.8	9.54	0.3
2023-06-27	15:05:00	56.53	0.21	8.66	47.81	13.3	9.24	2.07	2.4	126.36	13.59	0.36	36.4	10.1	9.64	0.3
2023-06-27	15:06:00	55.95	0.21	8.64	47.72	19.2	9.44	2.01	2.4	128.4	13.59	0.36	59.21	17.7	9.23	0.3
2023-06-27	15:07:00	56.06	0.21	8.7	47.9	13.1	9.44	1.88	13.2	127.6	16.43	0.36	44.65	13.3	9.75	0.3
2023-06-27	15:08:00	56.77	0.21	8.66	47.75	18.1	9.44	2.2	13.2	126.31	11.97	0.36	52.8	13.8	9.54	0.3
2023-06-27	15:09:00	57	0.21	8.68	47.84	16.7	9.44	1.62	11.9	136.7	5.05	0.36	46.32	14.4	9.12	0.3
2023-06-27	15:10:00	57	0.21	8.73	47.93	16.7	9.44	2.07	10	127	5.05	0.36	44.65	12.4	9.56	0.3
2023-06-27	15:11:00	57.15	0.21	8.78	48.1	21.5	9.44	2.66	10	111.68	10.54	0.36	67.92	19.7	9.14	0.3
2023-06-27	15:12:00	59.43	0.21	8.82	48.21	12.4	9.44	1.86	5.8	127.16	7.16	0.36	47.16	16.5	9.61	0.3
2023-06-27	15:13:00	58.78	0.21	8.74	47.99	15.7	9.23	2.11	2.1	136.67	7.16	0.36	46.99	12.9	9.4	0.3
2023-06-27	15:14:00	50.53	0.21	8.73	47.96	15.3	9.23	1.6	2.1	145.95	9.7	0.36	45.33	13.9	9.18	0.3
2023-06-27	15:15:00	49.68	0.21	8.7	47.88	14.8	9.23	2.01	7.2	138.47	15.03	0.36	40.38	10.6	9.78	0.3
2023-06-27	15:16:00	51.3	0.21	8.66	47.73	18.7	9.43	4.45	9.8	137.38	15.03	0.36	60.87	16.8	9.36	0.3
2023-06-27	15:17:00	55.8	0.21	8.71	47.82	14.9	9.43	1.77	7.3	122.05	13.96	0.36	49.11	15.3	9.79	0.3
2023-06-27	15:18:00	56.18	0.21	8.67	47.75	17.2	9.43	2.08	1.6	114.77	11.5	0.36	55.94	14.8	9.56	0.3
2023-06-27	15:19:00	56.18	0.21	8.67	47.85	17	9.43	1.45	1.6	114.77	8	0.36	47.91	14.8	9.36	0.3
2023-06-27	15:20:00	56.35	0.21	8.74	48.05	13.9	9.43	1.96	1.6	128.78	10.76	0.36	40.68	11.5	9.77	0.3
2023-06-27	15:21:00	55.72	0.21	8.8	48.27	24.6	9.43	2.11	1.6	134.15	10.76	0.36	61.94	18.3	8.94	0.3
2023-06-27	15:22:00	63.08	0.21	8.92	48.52	16.6	9.43	1.62	3.5	106.37	15.31	0.36	73.74	20.8	9.61	0.3
2023-06-27	15:23:00	64.22	0.21	8.86	48.32	15.8	9.19	2.05	3.5	113.82	10.2	0.36	44.96	12.4	9.4	0.3

June 27/2023		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Units		AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
Max		64.2	0.2	8.9	48.5	24.6	9.5	4.6	13.2	172.5	16.4	8.1	73.7	20.8	20.7	0.3
Min		42.8	0.2	8.6	47.3	10.7	9.2	1.5	0.6	106.3	5.1	-3.8	3.5	3.9	8.9	0.3
Average		52.8	0.2	8.7	48.0	15.6	9.36	2.0	4.2	127.5	11.1	0.3	45.0	13.6	9.62	0.3
Variance		25.71352459	9.47686E-32	0.00508	0.057343443	7.454551913	0.011605027	0.282901	10.70801093	166.8714	6.536884	1.627612	97.81965607	7.206010929	2.147114863	1.53509E-31

		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
2023-06-27	15:44:00	48.7	0.21	8.68	47.72	15.3	9.4	3.07	5.1	147.66	17.39	0.36	37.59	11.6	9.37	0.3
2023-06-27	15:45:00	47.32	0.21	8.65	47.63	10.5	9.4	1.73	5.1	141.92	17.39	0.36	39.59	13	10.09	0.3
2023-06-27	15:46:00	46.69	0.21	8.57	47.44	17.1	9.4	2.16	5.1	124.75	10.54	0.36	41.9	11.3	9.68	0.3
2023-06-27	15:47:00	46.86	0.21	8.58	47.54	15.5	9.61	1.66	6.6	117.55	13.79	0.36	57.27	16.2	9.26	0.3
2023-06-27	15:48:00	48.11	0.21	8.62	47.65	12.6	9.61	2.12	9.4	112.87	17.84	0.36	31.57	9.9	9.89	0.3
2023-06-27	15:49:00	48.11	0.21	8.63	47.66	20.8	9.61	2.26	9.4	118.36	15.4	0.36	43.54	13.6	9.27	0.3
2023-06-27	15:50:00	48.24	0.21	8.71	47.83	9.9	9.61	1.81	9.4	132.31	12.59	0.36	37.73	12.2	9.49	0.3
2023-06-27	15:51:00	48.1	0.21	8.65	47.58	12.6	9.61	2.26	9.4	140.66	9.24	0.36	40.69	10.6	9.68	0.3
2023-06-27	15:52:00	47.98	0.21	8.59	47.51	14.5	9.61	1.62	8.3	133.05	9.24	0.36	47.33	12.5	9.27	0.3
2023-06-27	15:53:00	48.96	0.21	8.58	47.47	10.8	9.61	2.15	6.9	131.15	9.24	0.36	38.33	10.1	9.82	0.3
2023-06-27	15:54:00	49.76	0.21	8.5	47.17	11.9	9.61	2.28	6.9	130.09	14.11	0.36	41.67	10.3	9.82	0.3
2023-06-27	15:55:00	49.76	0.21	8.5	47.11	13.4	9.61	1.73	8.5	115.08	16.69	0.36	44.59	11.3	9.96	0.3
2023-06-27	15:56:00	49.76	0.21	8.52	47.2	13.7	9.61	2.11	5	115.08	16.69	0.36	41.16	12.2	9.73	0.3
2023-06-27	15:57:00	52	0.21	8.64	47.64	21.8	9.61	2.05	2.9	109.21	12.21	0.36	57.56	17.1	9.1	0.3
2023-06-27	15:58:00	55.12	0.21	8.74	47.82	12.6	9.61	2.11	11.8	120.47	15.57	0.36	41.32	14.1	9.66	0.3
2023-06-27	15:59:00	55.32	0.21	8.71	47.69	15.9	9.37	2.22	11.8	121.72	15.57	0.36	44.41	12.5	9.45	0.3
2023-06-27	16:00:00	50.43	0.21	8.69	47.68	13.5	9.37	1.63	4.3	127.35	11.23	0.36	41.63	12.9	9.24	0.3
2023-06-27	16:01:00	50	0.21	8.71	47.74	16.2	9.37	2.23	3.3	138.01	11.23	0.36	40	11.8	9.47	0.3
2023-06-27	16:02:00	50.48	0.21	8.79	48.02	21.5	9.37	3.12	3.3	127.78	9.05	0.36	60.79	18.4	9.07	0.3
2023-06-27	16:03:00	54.86	0.21	8.86	48.21	13.7	9.37	1.92	3.3	107.86	12.37	0.36	43.19	17.1	9.55	0.3
2023-06-27	16:04:00	55.37	0.21	8.81	48	14.2	9.37	2.22	3.3	110.43	13.37	0.36	37.81	11.6	9.35	0.3
2023-06-27	16:05:00	55.37	0.21	8.77	48.07	20	9.37	1.73	3.3	123.11	13.37	0.36	59.02	17.6	8.93	0.3
2023-06-27	16:06:00	55.37	0.21	8.78	48.05	16.3	9.37	2.11	9.9	123.57	10.66	0.36	40.57	11.3	9.52	0.3
2023-06-27	16:07:00	55.37	0.21	8.78	48.05	19.4	9.37	4.37	9.9	123.57	11.77	0.36	52.24	15.9	9.1	0.3
2023-06-27	16:08:00	54.96	0.21	8.84	48.2	12.9	9.37	1.88	8.6	131.04	11.83	0.36	44.11	15	9.82	0.3
2023-06-27	16:09:00	51.37	0.21	8.75	47.92	12.1	9.37	2.32	8.6	131.3	11.83	0.36	33.87	10.7	9.52	0.3
2023-06-27	16:10:00	45.57	0.21	8.64	47.74	16.7	9.37	1.58	8.6	120.99	14.35	0.36	46.14	14.1	9.11	0.3
2023-06-27	16:11:00	45.57	0.21	8.71	47.91	12.2	9.37	2.18	8.6	122.68	14.35	0.36	28.95	9.5	9.74	0.3
2023-06-27	16:12:00	46.93	0.21	8.73	48	19.6	9.37	2.5	8.6	129.27	15.16	0.36	49.17	14.2	9.1	0.3
2023-06-27	16:13:00	51.58	0.21	8.76	48.15	21.1	9.37	1.81	10.1	118.33	17.72	0.36	58.52	17.6	9.85	0.3
2023-06-27	16:14:00	52.73	0.21	8.74	48	14.4	9.37	2.22	10.1	126.49	17.72	0.36	38.93	11.8	9.6	0.3
2023-06-27	16:15:00	52.41	0.21	8.67	47.81	16	9.37	1.78	10.1	133.34	14.46	0.36	41.96	14.2	9.18	0.3
2023-06-27	16:16:00	48.9	0.21	8.69	47.78	12.7	9.37	2.02	10.1	137.86	11.81	0.36	33.84	9.7	9.86	0.3
2023-06-27	16:17:00	48.02	0.21	8.65	47.7	17.5	9.37	2.2	9.1	133.73	6.18	0.36	48.44	13.5	9.44	0.3
2023-06-27	16:18:00	48.22	0.21	8.66	47.81	16.4	9.37	1.92	2.8	117.01	8.83	0.36	44.23	12.9	9.77	0.3
2023-06-27	16:19:00	48.22	0.21	8.65	47.72	14.1	9.37	2.11	1.7	117.01	6.72	0.36	35.84	10.3	9.77	0.3
2023-06-27	16:20:00	47.97	0.21	8.62	47.59	15.5	9.37	1.81	1.7	110.58	6.72	0.36	44.71	13.9	9.15	0.3
2023-06-27	16:21:00	48.22	0.21	8.73	47.89	12.9	9.37	2.05	1.7	126.2	8.33	0.36	35.38	12.1	9.57	0.3
2023-06-27	16:22:00	49.78	0.21	8.82	48.16	22.5	9.37	2.36	0.7	113.15	10.39	0.36	57.86	17.1	8.93	0.3
2023-06-27	16:23:00	70.92	0.21	8.94	48.42	28.2	9.37	1.68	0.7	113.15	12.01	0.36	88.29	29.9	9.15	0.3
2023-06-27	16:24:00	78.88	0.21	8.91	48.27	15.2	9.16	2.15	0.7	113.15	12.01	0.36	39.07	12.2	9.63	0.3
2023-06-27	16:25:00	65.98	0.21	8.8	47.95	15.7	9.16	2.07	0.7	111.5	8.7	0.36	40.77	12.9	9.22	0.3
2023-06-27	16:26:00	54.01	0.21	8.75	47.94	12.6	9.16	1.86	3.3	122.21	12.6	0.36	37.85	12.5	9.76	0.3
2023-06-27	16:27:00	52.42	0.21	8.68	47.79	14.8	9.36	2.16	5.1	151.82	14.46	0.36	44.69	13	9.35	0.3
2023-06-27	16:28:00	51.99	0.21	8.67	47.79	14.7	9.36	1.71	5.1	141.83	9.99	0.36	43.18	14.1	9.15	0.3
2023-06-27	16:29:00	51.8	0.21	8.64	47.73	14	9.36	2.16	5.1	134.24	8.25	0.36	41.34	11.5	9.9	0.3
2023-06-27	16:30:00	51.63	0.21	8.6	47.55	19.4	9.36	2.85	3.4	133.01	8.25	0.36	50.6	13.9	9.48	0.3
2023-06-27	16:31:00	52.72	0.21	8.64	47.75	19.8	9.57	1.92	3.4	125.96	14.01	0.36	50.34	17.1	9.48	0.3
2023-06-27	16:32:00	54.54	0.21	8.71	47.99	16.3	9.57	2.31	7.3	111.38	15.42	0.36	42.84	13.8	9.48	0.3
2023-06-27	16:33:00	57.56	0.21	8.79	48.21	16.9	9.57	1.58	8.4	128.64	18.09	0.36	53.94	17.1	9.07	0.3
2023-06-27	16:34:00	57.58	0.21	8.72	47.98	13.9	9.34	2.28	8.4	128.64	11.94	0.36	37.29	10.4	9.73	0.3
2023-06-27	16:35:00	56.65	0.21	8.64	47.75	15.6	9.34	2.57	6.8	127.63	13.16	0.36	44.7	14.1	9.32	0.3
2023-06-27	16:36:00	52	0.21	8.67	47.73	10.9	9.34	1.9	6.8	115.97	14.77	0.36	37.14	12.4	10.13	0.3
2023-06-27	16:37:00	49.05	0.21	8.66	47.61	16.1	9.34	2.2	6.8	128.2	14.77	0.36	45.29	12.1	9.48	0.3
2023-06-27	16:38:00	49.11	0.21	8.68	47.78	22.5	9.34	1.77	4.5	130.05	17.17	0.36	54.41	17.3	9.07	0.3
2023-06-27	16:39:00	54.47	0.21	8.76	47.9	12.6	9.34	2.07	4.5	124.75	18.73	0.36	33.17	11.1	9.62	0.3
2023-06-27	16:40:00	54.32	0.21	8.69	47.61	18.9	9.34	2.27	4.5	147.49	12.12	0.36	52.09	14.4	9.41	0.3
2023-06-27	16:41:00	54.37	0.21	8.72	47.75	15.3	9.34	1.97	4.5	148.5	10.89	0.36	59.95	17.7	9.2	0.3
2023-06-27	16:42:00	56.49	0.21	8.78	47.94	17.4	9.34	2.62	3.1	145.12	10.89	0.36	44.47	13	9.2	0.3
2023-06-27	16:43:00	61.54	0.21	8.86	48.22	28	9.34	1.73	2	130.56	11.92	0.36	77.18	22.6	8.78	0.3
2023-06-27	16:44:00	69.38	0.21	8.89	48.23	14.2	9.34	2.01	2	126.69	9.98	0.36	39.53	13.3	9.69	0.3

June 27/2023	Main Analyzers											Backup Analyzers			
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
	PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Units	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
Max	78.9	0.2	8.9	48.4	28.2	9.6	4.4	11.8	151.8	18.7	0.4	88.3	29.9	10.1	0.3
Min	45.6	0.2	8.5	47.1	9.9	9.2	1.6	0.7	107.9	6.2	0.4	29.0	9.5	8.8	0.3
Average	52.7	0.2	8.7	47.8	16.0	9.41	2.1	5.9	126.3	12.7	0.4	45.3	13.7	9.5	0.3
Variance	37.75506656	9.47686E-32	0.008940109	0.071075082	14.65817486	0.014137049	0.192354	9.763765027	115.9246	10.00288	7.83E-32	104.8032384	11.25642623	0.095655137	1.53509E-31

June 28/2023		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
2023-06-28	9:30:00	67.26	0.21	8.83	48.35	25.2	8.95	2.58	7.7	127.35	9.69	0.36	60.2	18.8	8.82	0.3
2023-06-28	9:31:00	67.58	0.21	8.88	48.55	15.5	8.95	1.85	7.7	123.18	7.99	0.36	45.57	17.1	9.02	0.3
2023-06-28	9:32:00	67.58	0.21	8.89	48.6	27.2	8.95	2.38	7.7	124.39	9.96	0.36	68.29	22	8.98	0.3
2023-06-28	9:33:00	76.15	0.21	8.95	48.84	29.2	8.95	1.38	1.7	117.38	10.03	0.36	96.31	31.8	8.56	0.3
2023-06-28	9:34:00	82.9	0.21	8.98	48.88	19.2	8.95	1.96	1.7	105.48	7.77	0.36	49.2	15	9.32	0.3
2023-06-28	9:35:00	77.01	0.21	8.92	48.68	30	8.95	3.3	1.7	107.24	9.82	0.36	64.66	20.3	8.9	0.3
2023-06-28	9:36:00	71.45	0.21	8.93	48.67	16.7	8.95	1.86	1.7	117.91	7.69	0.36	48.1	19	9.5	0.3
2023-06-28	9:37:00	66.8	0.21	8.89	48.53	22.5	8.95	2.16	3	131.02	10.38	0.36	46.43	17.3	9.08	0.3
2023-06-28	9:38:00	61.65	0.21	8.87	48.53	28	8.95	1.62	3	131.02	9.27	0.36	72.54	23.1	8.66	0.3
2023-06-28	9:39:00	62.51	0.21	8.91	48.59	19	8.95	1.96	1.9	120.97	11.22	0.36	47.56	16.5	9.22	0.3
2023-06-28	9:40:00	63.33	0.21	8.86	48.46	24.5	8.95	2.15	7.9	131.32	16.77	0.36	55.87	20	8.8	0.3
2023-06-28	9:41:00	63.6	0.21	8.93	48.65	19.3	8.95	1.8	7.9	130.32	14.48	0.36	56.2	20.8	8.6	0.3
2023-06-28	9:42:00	64.06	0.21	8.97	48.75	29.2	8.95	2.35	7.9	110.08	13.03	0.36	61.09	19.9	8.83	0.3
2023-06-28	9:43:00	83	0.21	9.04	48.96	39.2	8.95	1.71	7.9	108.49	17.82	0.36	114.56	35.1	8.4	0.3
2023-06-28	9:44:00	102.79	0.21	9.08	48.97	17.5	8.71	2.15	7.9	108.49	15.47	0.36	55.11	19.6	9.23	0.3
2023-06-28	9:45:00	88.93	0.21	8.98	48.64	23.8	8.71	2.22	7.9	122.51	12.51	0.36	50.84	17	8.82	0.3
2023-06-28	9:46:00	74.28	0.21	8.93	48.58	21.3	8.71	1.82	7.9	132.61	16.38	0.36	67.34	24.2	9.13	0.3
2023-06-28	9:47:00	68.17	0.21	8.92	48.49	23	8.71	2.15	7.9	127.83	13.1	0.36	45.29	15.3	9.18	0.3
2023-06-28	9:48:00	67.39	0.21	8.89	48.42	29.6	8.92	2.11	7.9	119.64	12.49	0.36	72.07	24.3	8.77	0.3
2023-06-28	9:49:00	76.61	0.21	8.97	48.63	19	8.92	1.92	7.9	126.57	12.49	0.36	68.97	27.7	9.1	0.3
2023-06-28	9:50:00	76.72	0.21	8.96	48.6	25.9	8.92	2.35	7.9	139.39	14.71	0.36	55.76	19.1	8.89	0.3
2023-06-28	9:51:00	76.86	0.21	9.02	48.84	31.6	8.92	1.62	7.9	137.38	14.53	0.36	84.57	28.7	8.48	0.3
2023-06-28	9:52:00	73.97	0.21	9.12	49.01	26.6	8.92	2.16	7.9	120.63	18.07	0.36	42.06	16.2	8.92	0.3
2023-06-28	9:53:00	85.53	0.21	9.18	49.13	40.7	8.7	2.55	6.8	110.14	15.66	0.36	131.2	35.2	8.29	0.3
2023-06-28	9:54:00	94.47	0.21	9.22	49.18	14.5	8.7	1.55	2.1	111.51	12.86	0.36	53.33	21.9	9.13	0.3
2023-06-28	9:55:00	81.63	0.21	9.08	48.83	20.1	8.7	2.08	2.1	116.9	15.02	0.36	38.7	13.9	8.92	0.3
2023-06-28	9:56:00	53.15	0.21	9.01	48.71	19.6	8.7	1.55	3.1	131.57	14.8	0.36	41.92	17.6	8.52	0.3
2023-06-28	9:57:00	48.96	0.21	9	48.65	15.8	8.9	1.93	3.1	116.61	13.67	0.36	31.47	12.5	9.25	0.3
2023-06-28	9:58:00	46.62	0.21	8.96	48.57	25.5	8.9	4.18	1.8	113.19	10.56	0.36	51.13	18.2	8.83	0.3
2023-06-28	9:59:00	50.9	0.21	8.98	48.72	14	8.9	1.9	1.8	103.68	11.2	0.36	54.64	20.3	9.36	0.3
2023-06-28	10:00:00	52.69	0.21	8.91	48.52	19.1	8.9	2.2	0.7	103.68	12.6	0.36	40.14	14.5	9.18	0.3
2023-06-28	10:01:00	52.34	0.21	8.88	48.5	18.5	8.9	1.56	0.7	112.51	9.34	0.36	46.29	17.7	8.77	0.3
2023-06-28	10:02:00	51.51	0.21	8.92	48.6	17.3	8.9	2.16	0.7	121.67	13.91	0.36	43.41	12.4	9.43	0.3
2023-06-28	10:03:00	51.63	0.21	8.92	48.71	22.6	8.9	2.2	6.6	121.67	15.19	0.36	50.13	17.7	8.78	0.3
2023-06-28	10:04:00	55.31	0.21	8.96	48.81	15	8.9	1.51	7.6	133.39	13.08	0.36	60.7	20.3	9.33	0.3
2023-06-28	10:05:00	55.61	0.21	8.89	48.6	16.3	8.9	2.07	8.7	134.61	11.48	0.36	40.99	13.8	9.11	0.3
2023-06-28	10:06:00	55.63	0.21	8.88	48.63	23.2	8.9	1.66	10.1	132.9	14.55	0.36	55.73	18.7	8.69	0.3
2023-06-28	10:07:00	55.63	0.21	8.87	48.61	15.2	8.9	2	7.6	115.86	13.02	0.36	35.69	12.9	9.35	0.3
2023-06-28	10:08:00	55.19	0.21	8.82	48.46	18.7	8.9	2.18	3.2	107.98	11.84	0.36	45.53	15.3	9.15	0.3
2023-06-28	10:09:00	53.83	0.21	8.84	48.41	14.2	9.1	1.85	3.2	105.98	11.84	0.36	47.08	17.1	9.65	0.3
2023-06-28	10:10:00	53.64	0.21	8.8	48.25	15.7	9.1	2.18	3.2	108.8	11.84	0.36	38.84	13.3	9.42	0.3
2023-06-28	10:11:00	53.36	0.21	8.74	48.19	17.7	9.1	1.62	2	109.35	9.65	0.36	58.4	20.5	9.01	0.3
2023-06-28	10:12:00	53.09	0.21	8.85	48.43	18.2	9.1	1.78	2	112.61	9.65	0.36	36.9	12.1	9.51	0.3
2023-06-28	10:13:00	53.09	0.21	8.87	48.51	21.8	9.1	2.18	0.9	122.47	11.21	0.36	53.56	18.4	8.86	0.3
2023-06-28	10:14:00	60.94	0.21	8.93	48.76	19.2	9.1	1.47	0.9	103.49	18.93	0.36	67.58	24.9	8.86	0.3
2023-06-28	10:15:00	60.97	0.21	8.9	48.64	17.4	9.1	1.93	7	104.78	12.98	0.36	34.9	13	9.35	0.3
2023-06-28	10:16:00	54.97	0.21	8.84	48.51	21	9.1	2.25	7	104.78	10.36	0.36	40.58	15.6	8.93	0.3
2023-06-28	10:17:00	50.37	0.21	8.84	48.43	14.5	9.1	1.86	2.6	101.38	10.36	0.36	42.37	16.4	9.55	0.3
2023-06-28	10:18:00	50.25	0.21	8.8	48.32	18.6	9.1	2.12	2.6	95.66	14.24	0.36	42.48	15.1	9.14	0.3
2023-06-28	10:19:00	50.25	0.21	8.77	48.36	20.3	9.1	1.7	1.5	91.87	14.24	0.36	47.79	17.4	8.94	0.3
2023-06-28	10:20:00	50.25	0.21	8.78	48.35	14.3	9.1	2.01	1.5	116.2	11.36	0.36	35.78	12.7	9.63	0.3
2023-06-28	10:21:00	50.25	0.21	8.73	48.23	21.3	9.1	2.35	1.5	149.1	6.83	0.36	49.05	18.1	9.02	0.3
2023-06-28	10:22:00	50.46	0.21	8.85	48.57	16	9.1	1.62	0.4	128.59	9.16	0.36	42.18	17.3	9.03	0.3
2023-06-28	10:23:00	50.86	0.21	8.92	48.78	25.9	9.1	2.22	0.4	123.52	9.37	0.36	44.36	16.4	8.86	0.3
2023-06-28	10:24:00	56.9	0.21	8.97	48.92	20.8	9.1	1.47	0.4	114.2	12.73	0.36	57.08	23.2	8.65	0.3
2023-06-28	10:25:00	59.38	0.21	8.91	48.62	15.7	8.89	2.05	0.4	90.42	11.86	0.36	33.77	11.3	9.45	0.3
2023-06-28	10:26:00	57.95	0.21	8.83	48.36	19.4	8.89	3.57	0.4	92.32	9.69	0.36	42.15	15.3	9.02	0.3
2023-06-28	10:27:00	52.64	0.21	8.78	48.33	14.9	9.14	1.77	1.6	126.41	11.78	0.36	35.72	14.4	9.64	0.3
2023-06-28	10:28:00	52.53	0.21	8.75	48.25	17	9.14	2.07	11.1	129.04	14.74	0.36	48.97	15.8	9.44	0.3
2023-06-28	10:29:00	52.26	0.21	8.7	48.12	19.6	9.14	1.57	9.7	119.94	12.29	0.36	45.82	16.4	9.02	0.3
2023-06-28	10:30:00	52.26	0.21	8.77	48.19	14.9	9.14	1.86	7.7	119.94	12.29	0.36	35.52	12.2	9.5	0.3

June 28/2023	Main Analyzers											Backup Analyzers			
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
	PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Units	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
Max	102.8	0.2	9.2	49.2	40.7	9.1	4.2	11.1	149.1	18.9	0.4	131.2	35.2	9.7	0.3
Min	46.6	0.2	8.7	48.1	14.0	8.7	1.4	0.4	90.4	6.8	0.4	31.5	11.3	8.3	0.3
Average	62.4	0.2	8.9	48.6	20.9	8.96	2.0	4.5	117.7	12.3	0.4	53.0	18.5	9.0	0.3
Variance	164.9937919	9.47686E-32	0.010617978	0.052404973	33.79448634	0.017078579	0.227307268	10.63969945	155.5010734	7.020425246	7.83212E-32	327.9115295	27.1458306	0.105265082	1.53509E-31

June 28/2023		Main Analyzers											Backup Analyzers			
		CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
		PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
$Date	$Time	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
2023-06-28	10:42:00	60.95	0.21	8.69	48.2	21.2	9.14	1.43	1.7	117.24	18.37	0.36	58.14	18.7	9.06	0.3
2023-06-28	10:43:00	66.76	0.21	8.73	48.27	20.5	9.14	2.07	1.7	119.53	14.59	0.36	60.42	16.4	9.53	0.3
2023-06-28	10:44:00	70.33	0.21	8.77	48.39	23.3	9.14	2.31	1.7	118.25	8.71	0.36	63.43	20.3	8.9	0.3
2023-06-28	10:45:00	73.29	0.21	8.82	48.55	15.2	9.14	1.63	1.7	138.96	11.35	0.36	62.05	20.2	9.54	0.3
2023-06-28	10:46:00	70.11	0.21	8.76	48.31	18	9.14	1.96	1.7	138.96	13.09	0.36	47.36	14.4	9.33	0.3
2023-06-28	10:47:00	67.25	0.21	8.73	48.21	18	9.14	1.52	1.7	144.18	10.07	0.36	55.24	18.2	8.91	0.3
2023-06-28	10:48:00	62.57	0.21	8.69	48.14	18.6	9.14	1.92	1.7	139.61	10.07	0.36	49.47	13.8	9.6	0.3
2023-06-28	10:49:00	61.77	0.21	8.66	48.06	19.1	9.14	3.78	3.2	136.19	8.85	0.36	46.05	16.7	9.19	0.3
2023-06-28	10:50:00	61.4	0.21	8.68	48.09	15	9.14	1.83	5.2	135.09	14.2	0.36	52.29	17.2	9.68	0.3
2023-06-28	10:51:00	60.73	0.21	8.63	47.92	17.4	9.14	2.16	2.6	114.13	13.98	0.36	54.45	15.1	9.48	0.3
2023-06-28	10:52:00	60.58	0.21	8.6	48	20.2	9.36	1.43	1.5	108.65	12.15	0.36	59.55	17.9	9.07	0.3
2023-06-28	10:53:00	63.16	0.21	8.7	48.26	21.7	9.36	2	1.5	105.89	8.09	0.36	63.23	14.9	9.5	0.3
2023-06-28	10:54:00	75.85	0.21	8.81	48.48	29.9	9.36	2.28	1.5	105.89	8.81	0.36	74.87	22.9	8.86	0.3
2023-06-28	10:55:00	92.05	0.21	8.93	48.71	20.2	9.11	1.66	1.5	105.89	8.81	0.36	93.4	30.5	9.44	0.3
2023-06-28	10:56:00	91.09	0.21	8.93	48.47	18.2	8.9	2.22	1.5	105.89	8.81	0.36	48.89	15.5	9.23	0.3
2023-06-28	10:57:00	79.37	0.21	8.83	48.33	22.2	8.9	1.55	1.5	104.62	8.78	0.36	74.34	24.2	8.82	0.3
2023-06-28	10:58:00	72.94	0.21	8.8	48.17	17.4	8.9	1.95	2.6	101.99	10.21	0.36	48.88	13.6	9.66	0.3
2023-06-28	10:59:00	71.36	0.21	8.74	48.01	30.1	9.11	2.32	4.7	105.26	13.69	0.36	67.69	20.3	9.02	0.3
2023-06-28	11:00:00	72.46	0.21	8.78	48.19	24	9.11	1.66	7.3	111.95	19.61	0.36	68.44	22.1	9.25	0.3
2023-06-28	11:01:00	74.19	0.21	8.83	48.18	19.6	9.11	2.01	7.3	111.95	17.58	0.36	46.44	16.7	9.31	0.3
2023-06-28	11:02:00	69.32	0.21	8.81	48.14	24.9	9.11	1.63	5.7	111.95	16.94	0.36	57.68	20.2	8.88	0.3
2023-06-28	11:03:00	66.21	0.21	8.92	48.44	18.6	9.11	1.78	5.7	117.21	16.94	0.36	44.23	16.7	9.31	0.3
2023-06-28	11:04:00	71.09	0.21	8.96	48.63	34.9	9.11	2.22	13.2	112.19	18.8	0.36	93.06	28	8.69	0.3
2023-06-28	11:05:00	98.86	0.21	9.04	48.86	35.7	8.9	1.43	9.1	103.98	19.92	0.36	121.06	35.4	8.77	0.3
2023-06-28	11:06:00	104.11	0.21	9.04	48.73	18.5	8.9	1.96	9.1	103.98	17.87	0.36	44.81	15.9	9.11	0.3
2023-06-28	11:07:00	77.42	0.21	8.93	48.56	22.6	8.9	2.12	1.1	101.97	15.17	0.36	54.18	19.1	8.69	0.3
2023-06-28	11:08:00	65.28	0.21	8.93	48.64	15.6	8.9	1.71	1.1	104.76	10.29	0.36	44	18.7	9.28	0.3
2023-06-28	11:09:00	63.13	0.21	8.89	48.49	22.5	8.9	2.06	1.1	118.79	10.29	0.36	47.11	16.7	9.07	0.3
2023-06-28	11:10:00	62.41	0.21	8.88	48.47	22.2	8.9	1.45	1.1	116.06	17.39	0.36	62.69	21.1	8.65	0.3
2023-06-28	11:11:00	61.84	0.21	8.88	48.4	16.6	8.9	2.1	4.6	103.48	17.39	0.36	36.19	13.8	9.26	0.3
2023-06-28	11:12:00	57.8	0.21	8.83	48.32	22.7	8.9	2.91	3.4	103.48	16.92	0.36	55.86	18.3	8.86	0.3
2023-06-28	11:13:00	57.95	0.21	8.9	48.66	14.4	9.11	1.81	2.4	128.43	15.92	0.36	41.34	17.6	9.11	0.3
2023-06-28	11:14:00	57.76	0.21	8.91	48.74	23.2	9.11	2.27	2.4	127.76	9.29	0.36	52.34	17.3	8.89	0.3
2023-06-28	11:15:00	59.36	0.21	8.95	48.86	23.2	9.11	1.51	2.4	122.66	12.02	0.36	70.92	23.2	8.69	0.3
2023-06-28	11:16:00	62.83	0.21	8.89	48.71	13.4	8.9	2.05	2.4	137.94	10.66	0.36	35.9	11.7	9.64	0.3
2023-06-28	11:17:00	61.01	0.21	8.74	48.37	17.7	8.9	2.85	1.3	122.7	10.66	0.36	45.51	14.7	9.23	0.3
2023-06-28	11:18:00	56.77	0.21	8.66	48.23	13.7	9.13	1.75	1.3	113.41	10.66	0.36	45.81	15.3	9.85	0.3
2023-06-28	11:19:00	57	0.21	8.56	48.04	19.7	9.13	2.01	1.3	121.64	10	0.36	59.29	14.8	9.65	0.3
2023-06-28	11:20:00	69.68	0.21	8.52	48.03	21.6	9.36	1.58	0.2	125.7	8.4	0.36	75.81	20.5	9.23	0.3
2023-06-28	11:21:00	81.1	0.21	8.51	47.97	19.3	9.36	1.93	0.2	125.7	7.98	0.36	69.18	15.8	9.77	0.3
2023-06-28	11:22:00	88.07	0.21	8.45	47.85	21.7	9.36	2.11	0.2	130.25	10.03	0.36	87.51	23.1	9.36	0.3
2023-06-28	11:23:00	92.34	0.21	8.51	48.08	21.8	9.59	1.58	6.2	115.53	14.17	0.26	95.06	22.9	9.36	0.3
2023-06-28	11:24:00	98.45	0.21	8.53	48.14	28.9	9.59	2.35	9.3	95.47	10	0.26	98.6	21.1	9.58	0.3
2023-06-28	11:25:00	114.79	0.21	8.56	48.27	29.7	9.59	1.48	9.3	97.29	10	0.26	119.67	27.8	9.16	0.3
2023-06-28	11:26:00	119.53	0.21	8.53	48.16	22.6	9.38	1.77	2.3	84.18	10	0.26	79.7	17	9.96	0.3
2023-06-28	11:27:00	119.98	0.21	8.42	47.87	28.1	9.38	2.12	2.3	92.57	10	0.26	110.08	23.3	9.56	0.3
2023-06-28	11:28:00	119.98	0.21	8.43	47.88	24.9	9.38	1.58	2.3	92.57	13.85	0.26	85.94	23.2	9.61	0.3
2023-06-28	11:29:00	113.92	0.21	8.5	47.87	24.9	9.38	2.05	4.2	104.26	13.85	0.26	83.06	19	9.49	0.3
2023-06-28	11:30:00	105.7	0.21	8.52	47.94	31.8	9.38	2.2	2.6	104.26	10.4	0.26	83.38	24	9.07	0.3
2023-06-28	11:31:00	105.85	0.21	8.59	48.05	18.4	9.38	1.97	2.6	97.32	10.4	0.26	61.35	19.7	9.73	0.3
2023-06-28	11:32:00	96.8	0.21	8.56	47.82	24.8	9.38	2.2	1.3	104.85	10.4	0.26	75.04	19.5	9.32	0.3
2023-06-28	11:33:00	88.92	0.21	8.58	47.98	20	9.38	1.55	1.3	115.21	11.79	0.26	70.57	21.6	9.11	0.3
2023-06-28	11:34:00	84.76	0.21	8.62	48.03	20.8	9.38	2.12	1.3	115.21	11.79	0.26	68.76	17.8	9.53	0.3
2023-06-28	11:35:00	83.31	0.21	8.69	48.19	41.9	9.38	2.7	1.3	112.09	8.38	0.26	94.19	29.5	8.9	0.3
2023-06-28	11:36:00	97.73	0.21	8.76	48.33	37.5	9.38	1.75	1.3	99.77	9.4	0.26	85.07	33.8	9.21	0.3
2023-06-28	11:37:00	90.79	0.21	8.79	48.35	25.5	9.13	2.16	0.2	122.03	12.06	0.26	58.95	20.3	8.99	0.3
2023-06-28	11:38:00	73.01	0.21	8.82	48.4	22.8	9.13	1.55	0.2	121.54	12.06	0.26	64.84	23.5	8.57	0.3
2023-06-28	11:39:00	68.51	0.21	8.8	48.23	18.4	9.13	2.05	1.3	118.8	13.64	0.26	42.3	14	9.58	0.3
2023-06-28	11:40:00	58.38	0.21	8.69	48	22.8	9.13	4.1	1.3	102.94	11.96	0.26	44.65	17.7	9.15	0.3
2023-06-28	11:41:00	56.47	0.21	8.7	48.1	20	9.13	1.85	7.1	102.94	10.81	0.26	49.73	18.5	9.58	0.3
2023-06-28	11:42:00	54.75	0.21	8.63	47.88	22.1	9.13	2.32	5.4	118.65	12.27	0.26	48.3	15.6	9.37	0.3

June 28/2023	Main Analyzers											Backup Analyzers			
	CO	HCl	CO2	H2O	THC	O2	Opacity	SO2	NO	NO2	HF	CO	THC	O2	SO2
	PPM	PPM	%	%	PPM	%	%	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM
Units	AT-205-1NEW	AT-213A-1NEW	AT-213B-1NEW	AT-213CB	AT-259-1NEW	AT-261A-1NEW	AT-263	AT-264-1NEW	AT-NO	AT-NO2	AT-HF	AT-205-2NEW	AT-259-2NEW	AT-261A-2NEW	AT-264-2NEW
Max	120.0	0.2	9.0	48.9	41.9	9.6	4.1	13.2	144.2	19.9	0.4	121.1	35.4	10.0	0.3
Min	54.8	0.2	8.4	47.8	13.4	8.9	1.4	0.2	84.2	8.0	0.3	35.9	11.7	8.6	0.3
Average	77.1	0.2	8.7	48.3	22.3	9.17	2.0	3.1	113.8	12.3	0.3	64.9	19.6	9.2	0.3
Variance	346.6618895	9.47686E-32	0.025104973	0.074146284	33.17116393	0.037273224	0.242940546	7.756535519	173.9075897	10.77356869	0.002240437	402.879939	23.80704372	0.11099765	1.53509E-31